



**LG**

Life's Good



# Getting Commercial Solar?

## 7 Reasons LG Panels Will Save You Money

**LG Solar**

Check out: [LGenergy.com.au](http://LGenergy.com.au) or  
call LG Solar direct on **1300 152 179**

## Reason 1

# LG Solar offers strength, stability and reliability

As a global electronics manufacturing pioneer, LG has more than 60 years of experience in product development and innovation. Now, with over 30 years of research and development in the solar industry behind us, we're proud to be one of the leading innovators and manufacturers of solar panels globally and in Australia and New Zealand.



The innovative LG consumer product range makes LG a uniquely diversified and strong partner in the Australian and New Zealand solar landscape. No other solar panel manufacturer operating in Australia has as many employees and a diversified product range.

 **LG Electronics**

## A safe harbour in a stormy solar sea



**LARGEST**  
**Consumer Brand**  
operating in solar in  
Australia and NZ.



More than  
**1.2 MILLION**  
solar panels sold in  
Australia & NZ since 2010



Operations in  
**140 Countries**



Founded in  
**1958**



Revenue (2019)  
**53.47 billion USD**



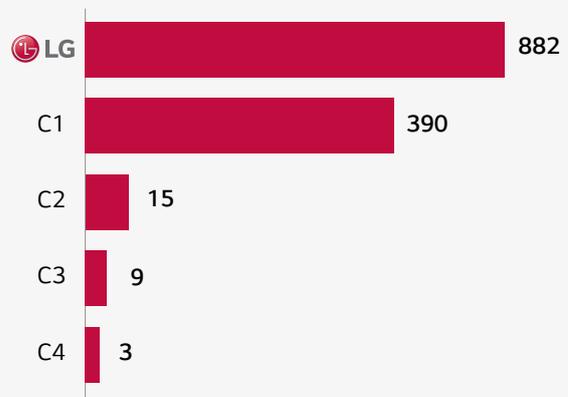
Global Workforce  
**72,600**

## The Warrantor's 2019 Sales in Billions of US Dollars\*



## LG Solar is a Leader in Research

### Solar Patent Applications from Major Solar Companies

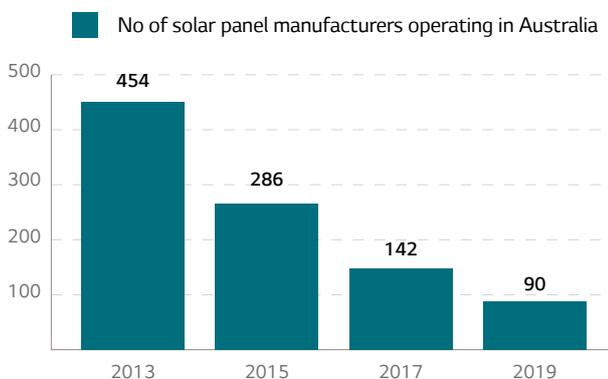


Number of solar patent applications from major competitors (C1 to C4) in Korea, USA and EU. (01/01/2010 to 04/03/2020)

### 18th Most Innovative Company

Boston Consulting Group's (BCG) 2019 Global Innovation Survey ranked LG Electronics the world's 18th most innovative company. LG Electronics is the only solar manufacturer among the world's 50 most innovative company.

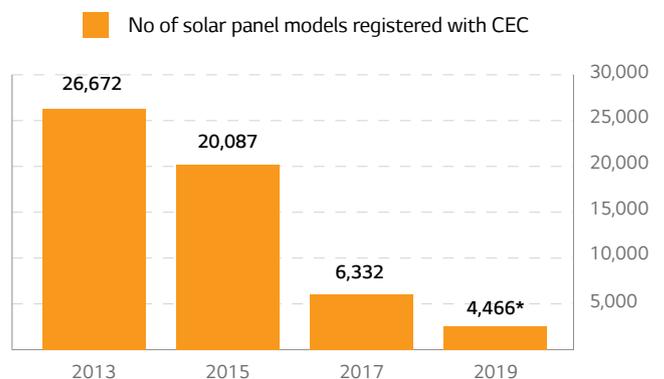
## Reducing Number of Solar Panel Manufacturers 2013 - 2020



### Fewer and fewer Solar Panel Manufacturers operating in Australia

Number of manufacturers offering solar modules with 25 year performance warranty, registered by the Clean Energy Council (CEC) – indicating how many have come and gone – leaving customers very exposed.

## Vastly Reducing Number of Approved Solar Panels 2013 - 2020



### Panel models listed on CEC approved list significantly reduced

The drastic reduction of solar panel models means over 20,000 panels offered for sale only a few years ago are now not supported and have no warranty.

\*as at May 2020



For the past decade, LG Solar panels have been installed in many of commercial premises including this NSW Foodbank warehouse. The 250 kW system offsets a portion of electrical costs associated with running the chiller rooms and freezers.

When you purchase LG solar panels, your business is investing in a product backed by years of experience and manufactured using stringent research and testing standards.

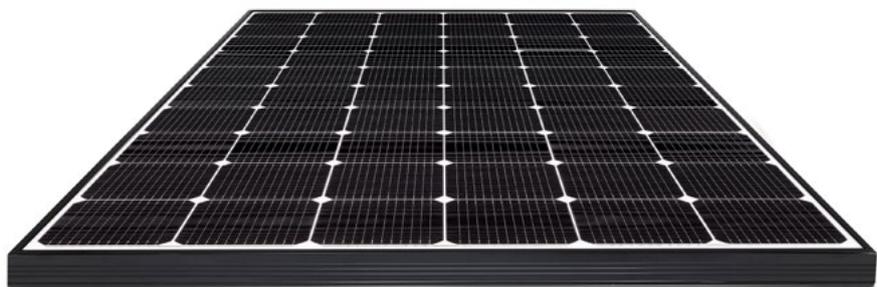
LG sees the last 30 years as just the beginning. We are committed to being a major contributor to the solar industry - and global sustainability efforts - for many years to come.

LG Solar have over the past decade sold many millions of high quality panels around the world with only a very low proportion of warranty claims. That's the type of partner you want for a 25 year plus relationship.

LG Electronics also has the know-how in energy storage, heat pumps, air conditioning and many other electronic appliances. This makes LG Electronics not only the right business partner for you when it comes to solar panels, but also for other business energy solutions.

LG Electronics is a global company with over 70,000 employees located in 140 countries and USD \$53.47 billion\* in annual revenue. We are here for the long term to support your business.

\* 2019 income for LGE



LG NeON<sup>®</sup> 2 have 12 wire bus-bar with excellent temperature performance and a 25 year product warranty. They are LG Solar's most popular panel in Australia.

## Reason 2

# Peace of Mind for your Business

A solar solution with LG panels provides long term return for your business with the assurance of a 25 year product warranty supported by LG Electronics. With over 60 years of operation LG Electronics is dedicated to providing long term support across its range of consumer and business solutions products such as digital signage, commercial air-conditioning and solar panels.



Installing solar on your business premises is an effective way to reduce your electricity bill both now and into the future. The renewable generation for your solar plant creates a long term financial hedge locking in a predictable energy price. Increasingly, businesses from a diverse number of sectors including; education, local government,

manufacturing and hospitality are committing to an investment in high quality solar.

In addition an investment in solar provides a strong signal to your stakeholders of a commitment to reduce CO<sub>2</sub> emissions. As Australia transitions to renewable

energy consumers are becoming more discerning as to the products and services they choose. In choosing a solar system with LG panels, your business is selecting a module which has guaranteed 25 year product life thereby maximising the generation of renewable energy.

## Multi Award Winning Panels

LG panels have won numerous awards over the years and they have been recognised as innovative and cutting edge by industry experts, giving you confidence in the quality and performance of the product. For example the NeON<sup>®</sup> panel range won the Intersolar Award for Photovoltaic Innovation in Germany, three times since 2013. The LG solar brand has won the "Top Brand" in Europe in since 2015 and in Australia each year since 2016. LG Solar Australia also won a 3000 consumer respondent survey in 2020 by Readers Digest as the **most trusted** solar panel brand in Australia.



---

# Not All Solar Panels Are Built The Same

Given that a solar panel is exposed to wind and weather every hour of the day and has to endure many temperature variations, while producing electricity, the build quality of a solar panel is very important.

A solar system only achieves a positive return on investment after a number of years. With non-branded panels, there are variations in build quality, depending on the destination of the product and the originating factory.

LG NeON<sup>®</sup> 2 and NeON<sup>®</sup> R panels come from one factory in Gumi, South Korea and there are effectively no variations as to the build quality meaning our panels shipped to the Philippines are the same as the ones shipped to Germany, the US, NZ or Australia.

Choosing long lasting, high efficient LG solar panels and quality inverter solutions will help ensure you will have a long lasting trouble free system.

Longer lasting systems will in all likelihood provide a higher financial return than poor quality systems.

LG panels may initially cost more than some competitor panels. However over the life of the system, LG panels can create one of the best financial and environmental results for you and your family.



Electroluminescence (EL) image testing for micro cracks before factory shipout

---

## Reason 3

# Better Financial Return Over Time

The majority of customers purchase solar to reduce their electricity bills. Companies selling cheap solar often argue it is worthwhile to buy cheaper solar, as the return on investment is better. This claim is incorrect, as quality solar has a much better long term financial return.

Also from an environmental perspective, cheap, shorter lasting solar systems will not generate as much electricity as high quality durable panels and inverters. This results in quality systems providing a better environmental CO<sub>2</sub> abatement outcome. For the same input of raw materials a much better abatement outcome will be achieved by using high quality panels and inverters.

### Technology in 2020

Cheaper panel sales persons sometimes argue that it is not worthwhile to buy longer lasting panels. The rationale being, that technology changes quickly and it is better to buy cheaper equipment, as it will allow customers to buy newer product with better technology in a few years again. **WE DISAGREE.**

In the early 2000's typical solar panels were 175W. A new generation of panels was developed in 2010/11 and the panels became bigger and heavier and moved to 250W. In the last 10 years changes in raw materials and cell technology have pushed the output to 330W per standard panel and 350-360W for higher efficiency panels.

LG Solar believes the pace of efficiency improvements has now slowed, whereby over the next 10 years an increase in output per panel to around



400W for 60 cell and 480W for a 72 cell commercial panel is expected. This is far less than the efficiency growth we have seen over the past decade. Any new technology

that will increase output also has a higher price point. This means a high efficient panel purchased today will have technological relevance for a long time.

Recent improvements in solar panel technology means that efficiency improvements have slowed. Further improvements in the next 10 years are predicted to be gradual, meaning high efficient panels made in 2020 will likely still have relevant performance in 2030 and beyond.

LG NeON<sup>®</sup> 2 - a highly efficient and great looking panel

## Cheap solar returns less money to your business

An example: Let's say a low cost and poor quality 100 kW solar system delivers a \$32,000 (ex GST) of annual electricity cost saving in Sydney at a system cost of \$95,000. Often these systems comprise of lower quality components and tend to last approx 5 years before major repairs or complete replacement are required.

Over 5 years the business saves \$160,000, being 5 x \$32,000.

Therefore the business owner of such a cheap system had a Net Gain of \$65,000, being \$160,000 in electricity cost saving less \$95,000 (cost of System) = **\$65,000 Net Gain.**

In 5 years when the business has to buy another system, the company will have to pay to remove old panels off the roof. When a new system is purchased the solar rebate will have reduced (as rebates reduce every year). So all of the initial \$65,000 net benefit will be lost in investing once more into a new system, at a lower rebate.



Inspecting cheap panels, that failed after 3 years and were pulled off the roof. The consumer was unable to claim against the manufacturer who had left Australia.

## Quality Solar generates more savings

In most parts of Australia a 100 kW top quality system can cost \$130,000 plus and in the Northern Territory will be more due to special regulations. Such a solar power system will deliver on average 33,500 per year.

This system is supported by a solid 25 year product warranty. This provides peace of mind that if there are any issues, LG Electronics will be available for support.

So as long as the inverter continues to operate a saving of \$690,000 over 25 years is possible.\*

Therefore a net benefit of \$690,000 income less \$130,000 for initial system purchase.

For the initial additional expenditure of \$35,000 – which is the difference between a cheap and a quality system, the purchaser gained a significantly higher income over the life of the system, by going with quality. Of course the longer lasting system generated not only much more renewable energy, but consequently also a much better environmental outcome, via a much larger CO<sub>2</sub> reduction.

A quality system which lasts longer generates a much better long term financial return.

LG panels in commercial systems have a labour component for replacement included in the warranty conditions. Many competitor panels have excluded labour in commercial systems as a warranty inclusion. This means if there are panel failures in years to come, it could cost you significantly with competitor panels.

High quality LG panels provide your business with a solid financial return and can be better for the environment.

\* See page 10 - Standard Solar vs Quality Solar

# Standard Solar versus Quality Solar

## Financial Return Tables

If a high quality solar system last longer than a cheap system then it makes sense that the financial return of the longer lasting system will be higher than the shorter lasting system.

In the case of LG panels, which have a 25 year warranty, the total savings can be significantly higher than the shorter lasting system, even taking into consideration the LG system may initially cost more. Choose quality and enjoy the higher savings.

See below the likely savings and lack of savings when comparing a long lasting system with a standard/cheaper system.

### Sample 1

#### 100kW Standard Panel System in Sydney with 12 year warranty and disposal after year 12

- Powered by a standard no brand panel
- Costs \$95,000 after STC rebate
- Degradation: 3% yr 1 & 0.7% thereafter
- System life span of 12 years.
- No inverter replacement cost allowed for

Sample 1* - Standard Panels			
Years system installed	kWh generated per year	Savings per year	Total savings up to this year
1	130,945	\$28,849	\$28,849
5	127,315	\$28,050	\$142,240
10	122,919	\$27,081	\$279,568
12	121,203	\$26,703	\$333,198
15	System Dead Replacement needs to be purchased again		
20			
25			
<b>Total</b>	<b>1,512,204</b>		<b>\$333,198</b>

Estimated net benefit at end of system life after subtracting system purchase costs.

\$333,162 less \$95,000 for system purchase  
= **\$238,162 saving with standard panel**

### Sample 2

#### 100kW LG Solar Systems in Sydney with 25 year warranty and disposal after year 25

- Powered by LG NeON® 2 360W
- Cost \$130,000 after STC rebate
- Degradation: 2% yr 1 & 0.3% thereafter
- System life span of 25 years.
- \$18,000 cost for new inverter at year 13.

Sample 2* - LG NeON® 2 Panels			
Years system installed	kWh generated per year	Savings per year	Total savings up to this year
1	143,021	\$31,510	\$31,510
5	141,027	\$31,071	\$156,451
10	138,574	\$30,530	\$310,178
15	136,162	\$29,999	\$461,230
20	133,796	\$29,497	\$609,656
25	131,467	\$28,964	\$755,499
<b>Total</b>	<b>3,429,158</b>		<b>\$755,499</b>

Estimated net benefit at end of system life after subtracting system purchase costs.

\$755,499 - \$130,000 for system purchase and -  
\$18,000 for inverter replacement  
= **\$607,499 saving with LG**

Higher income for the LG System against cheaper system sample: **\$369,337**

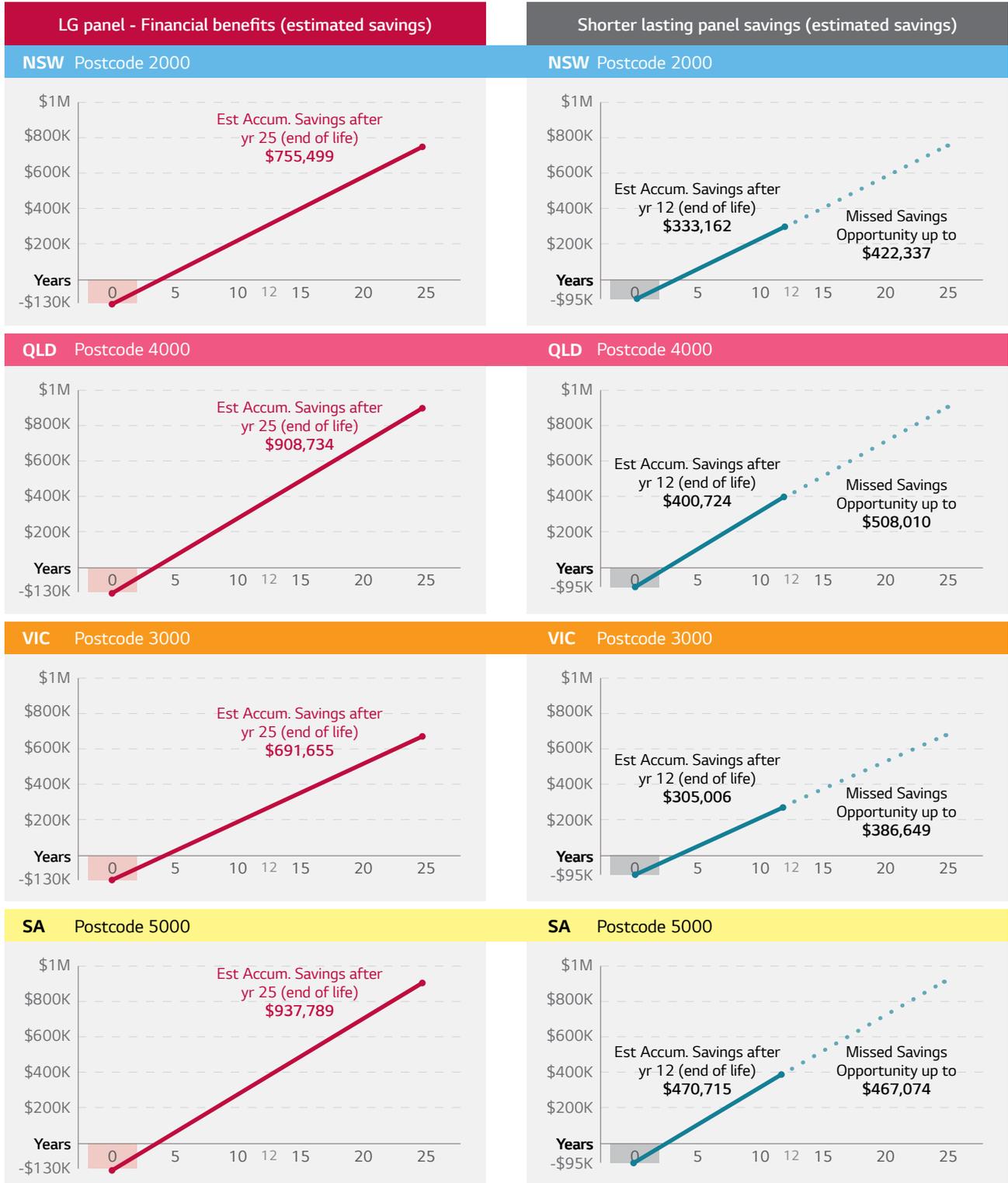
See [lgenergy.com.au/solar-calculators/solar-income-roi-calculator](http://lgenergy.com.au/solar-calculators/solar-income-roi-calculator) for your own calculations

\* The following general assumptions apply: \$5,000 electricity bill every 3 months before installation of solar panels, 27 c/kWh & \$95 fixed charge per 3 months, Zero cents Feed in Tariff (FIT), 80% of solar self-consumption, 20% of solar export, 2% annual increase in electricity price.

# LG Panels Savings Advantages

Using the sample from the left page a similar financial calculation was undertaken for different States. These financial return calculations are based on the assumptions as outlined on page 13.

They are based on a 100kW system - one with a cheaper, less long lasting panel and one for the high quality LG solar product with 25 year product replacement warranty. It shows using long lasting panels and inverter product may give you a great financial and environmental outcome.



# LG Panels Savings Advantages



**\*Solar savings calculation assumptions**

The table below provides the background data to calculate the benefits information on page 11.

	NSW	QLD	VIC	SA
Average Bill per quarter	\$5,000	\$5,000	\$5,000	\$5,000
Calculation for Postcode	2000	4000	3000	5000
Assumed electricity supply charge	\$95	\$95	\$95	\$90
Average electricity purchase rate	\$0.27 c/kWh	\$0.29 c/kWh	0.27 c/kWh	\$0.36 c/kWh
Average Feed in Tariff (FIT)	zero	zero	zero	zero
Assumed average yearly % increase in electricity per kWh	2%	2%	2%	2%
Solar used at business	80%	80%	80%	80%
Solar exported	20%	20%	20%	20%
<b>System One - LG</b>				
Est cost of LG 100 kW system - string inverters	\$130,000	\$130,000	\$130,000	\$130,000
Degradation in 1st year	2%	2%	2%	2%
Degradation after 1st year	0.33%	0.33%	0.33%	0.33%
Life span of system	25 years	25 years	25 years	25 years
Cost of Inverter replacement/maintenance	\$18,000	\$18,000	\$18,000	\$18,000
<b>System Two - Lower Quality Panel</b>				
Est cost of 100kW system - string inverters	\$95,000	\$95,000	\$95,000	\$95,000
Assumed lower output than system one per annum	7.5%	7.5%	7.5%	7.5%
Degradation in 1st year	3%	3%	3%	3%
Degradation after 1st year	0.70%	0.70%	0.70%	0.70%
Life span of system (calculations for a range)	25 years	25 years	25 years	25 years
Cost of Inverter replacement - year 12 onward	\$18,000	\$18,000	\$18,000	\$18,000

**\*Solar savings calculation assumptions**

The table below provides the background data to calculate the benefits information on page 12.

	ACT	NT	TAS	WA
Average Bill per quarter	\$5,000	\$5,000	\$5,000	\$5,000
Calculation for Postcode	2600	800	7000	600
Assumed electricity supply charge	\$120	\$90	\$400	\$90
Average electricity purchase price	\$0.25 c/kWh	0.28 c/kWh	\$0.32 c/kWh	\$0.28 c/kWh
Average Feed in Tariff (FIT)	zero	zero	zero	zero
Assumed average yearly % increase in electricity per kWh	2%	2%	2%	2%
Solar used at business	80%	80%	80%	80%
Solar exported	20%	20%	20%	20%
<b>System One - LG</b>				
Est cost of LG 100 kW system - string inverters	\$135,000	\$160,000	\$130,000	\$125,000
Degradation in 1st year	2%	2%	2%	2%
Degradation after 1st year	0.33%	0.33%	0.33%	0.33%
Life span of system	25 years	25 years	25 years	25 years
Cost of Inverter replacement/maintenance	\$18,000	\$18,000	\$18,000	\$18,000
<b>System Two - Lower Quality Panel</b>				
Est cost of 100kW system - string inverters	\$100,000	\$130,000	\$110,000	\$90,000
Assumed lower output than system one per annum	7.5%	7.5%	7.5%	7.5%
Degradation in 1st year	3%	3%	3%	3%
Degradation after 1st year	0.70%	0.70%	0.70%	0.70%
Life span of system (calculations for a range)	25 years	25 years	25 years	25 years
Cost of Inverter replacement - year 12 onward	\$18,000	\$18,000	\$18,000	\$18,000

---

## Reason 4

# More Electricity For You

Not all solar panels are the same. LG has ensured that our NeON® range delivers some of the best performance on the market.

### Proven field performance

LG and others such as the Australian consumer organisation Choice have been involved in a number of comparison tests of the LG modules against many other panels.

LG NeON® 2 and NeON® R panels are consistently one of the highest performing panels in these tests. This means you get excellent electricity generation in low light and all other weather conditions.

One of the many reasons why the NeON® 2 panels perform so well is that they have a double sided cell structure.

This innovative approach allows the absorption of light from the front and the back of the cell, which raises the panel's performance, as there is additional electricity generation from light hitting the edge and back of the solar cell. This has also been recognised via the prestigious Intersolar Award in 2016.

### Lower degradation than industry standard

Solar panels degrade over their lifetime and produce less electricity each year. The NeON® 2 and NeON® R have a very low annual degradation due to the use of N type treatment of the cells which uses Phosphorous as a replacement for Boron. Over the life of the LG panels your system will typically experience 10% less degradation than cheaper panels. This adds up to many dollars of additional electricity production over the years with LG NeON® panels.

LG in the Choice Test conducted in 2016 won the Number 1 position with the NeON® model.



The Choice consumer organisation has a 100kW LG panel system on their roof in Marrickville, NSW and has tested LG panels in the past.

## Technological Innovation

The LG "CELLO" Multi wire busbar cell technology lowers electrical resistance and increases panel efficiency, providing more power per panel and providing a more uniform look to the panel. LG won the highly recognised Intersolar Award for this innovation as well.

## Improved High Temperature Performance

Australia is getting hotter and a 40°C to 45°C day can see panel temperature as high as 90°C. Cheaper panels are only tested up to 85°C, while LG panel are tested up to 90°C.

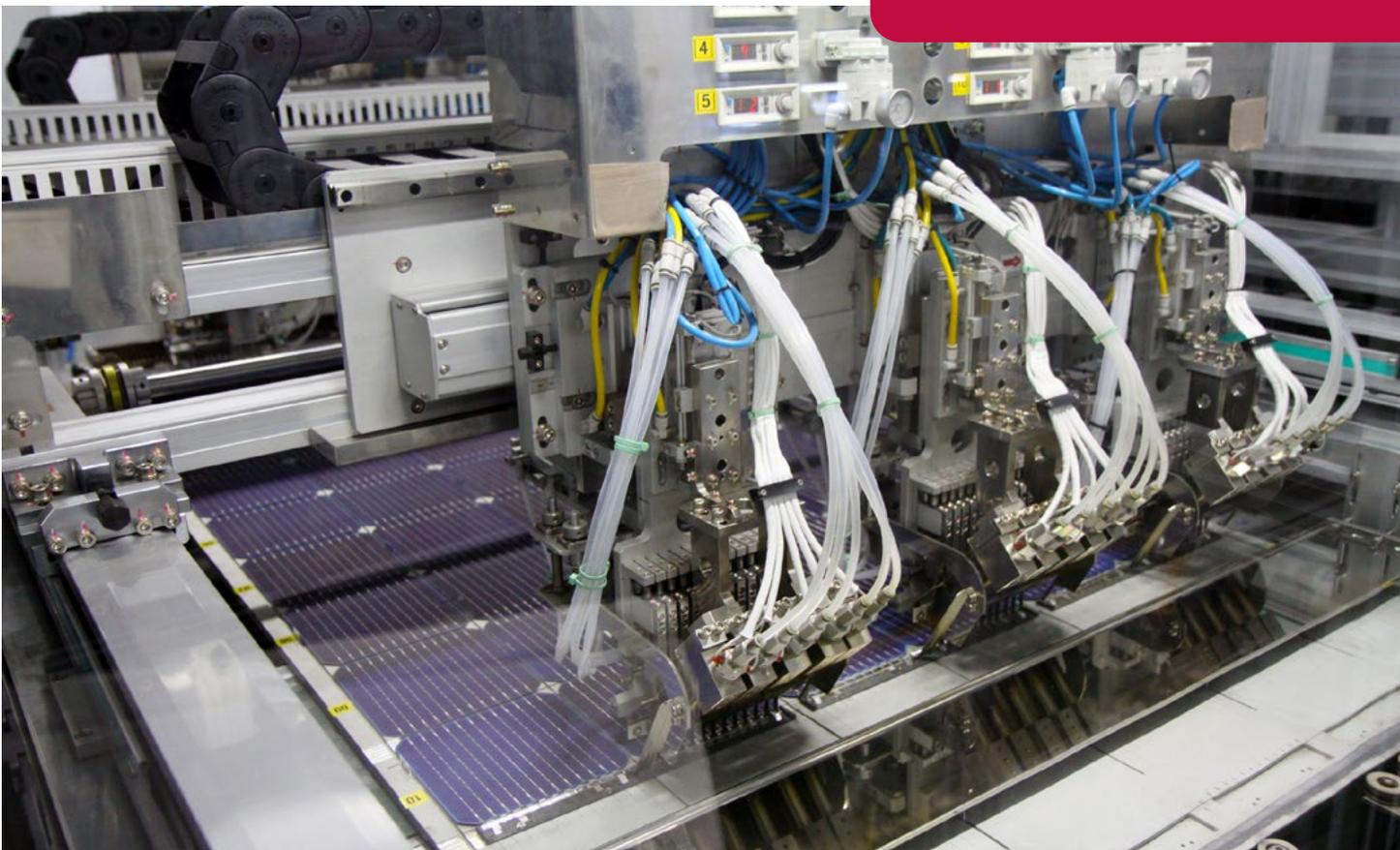
Solar panels slowly lose their ability to generate power as they get hotter, which means for cheaper panels from a significant performance loss from a 25°C summer day to one where temperatures hit 40°C.

LG NeON<sup>®</sup> 2 and NeON<sup>®</sup> R have one of the best temperature performance characteristics, which means even in very high temperatures our panels will deliver higher output than many competing panels. So if you run an air conditioner on a very hot day, your LG panels will still perform well to help support your energy load and not let you down.

## Excellent low light performance

Great performance under low light conditions with LG technology and our own cell manufacturing with low tolerances, helps ensuring highly consistent performing panels. At 200W/m<sup>2</sup> LG panel efficiency drop is -2% while many competitors' panels reduce by -4%. This means an LG system will start generating power earlier in the day and finish later than some other solar systems.

High level quality control at the LG solar panel factory in Gumi, South Korea for NeON<sup>®</sup> 2 and NeON<sup>®</sup> R Panels.



## Reason 5

# Long Term, Reliable Warranty Support for Australia & NZ

### 25 year product warranty, by the established consumer brand in solar in Australia and New Zealand

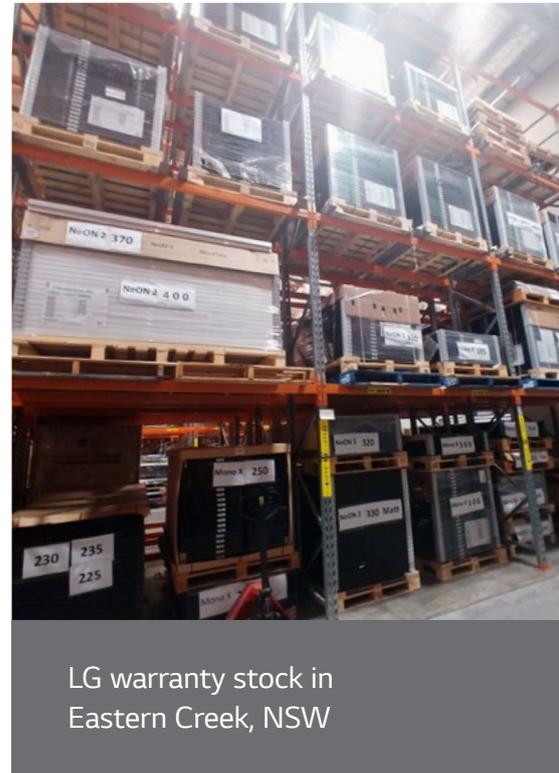
LG offers one of the most meaningful panel warranties in solar. On offer is a 25 year parts and labour warranty which includes the cost of shipping panels for the NeON<sup>®</sup> 2 and NeON<sup>®</sup> R, as well as the labour cost of un-installing and re-installing the panel. This compares very favourably to the 10, 12, 15 or even 25 year manufacturer's warranty offered by manufacturers who do not have the LG brand exposure in the local market. There is no point feeling secure by a long warranty - if the company backing it will not be around.

LG Solar Australia also has a direct help line being: **1300 152179** - so you can reach the LG office easily, should you have any warranty claim. No other panel manufacturer in Australia is offering such a service as per May 2020. If in New Zealand please call **0800 443 120**.

LG has had so few panel warranty claims since 2010, that we still have compatible panels of every model sold since 2010 in our NSW warehouse, available for distribution throughout Australia and New Zealand, in the unlikely event of a product failure.

### Warranty registration within Australia/NZ

LG solar offers a simple warranty registration process via [LGenergy.com.au](http://LGenergy.com.au) in Australia and [LGenergy.co.nz](http://LGenergy.co.nz) in New Zealand. The process also generates a warranty certificate. In case you lose the paperwork over the decades you can be reassured, as LG has a record of your purchase details in case of a warranty claim.



LG warranty stock in Eastern Creek, NSW



## Australia-wide LG Panel Dealer Network

LG has partnered with 80 quality focused and reputable installation companies to install our solar panels Australia-wide. This means wherever you are in Australia an LG installer is only a phone call away. As at January 2020, LG is the only solar panel manufacturer in the market that has such an extensive installation network, selling the majority of panels via their partners.

Being a part of the LG Installer Network is special. It has taken LG Solar about 5 years to recruit across Australia what we believe are the best companies that install solar. What qualities do our partners need to have?

- Excellence in customer service;
- Long term availability for system upgrades (eg batteries);
- Be available promptly if there are any warranty issues.

It's the service level that we really look at when we recruit. Also we want our partners not to just use great panels

but they need to use quality inverter solutions to create a very good long term solution.

The other big issue in Australia is that close to 750 installation companies have left the industry since 2011. That means those customers who have chosen these companies are without support. Even close to 400 panel manufacture brands are no longer supplied in Australia and again there is no support.

LG has been in Australia for over 20 years and internationally for over 60 years. We have close to \$1 billion business in Australia, we don't just have a virtual

office, we are here to commit and give you good long term service.

If one of our partners decides to retire we will make sure that we find another LG installation company for that area. It means you are not without long term support. That's the difference with the LG partner network.



Choosing LG Solar means you will get ongoing long term product support. A peace of mind solution.

## Reason 6

# LG Panels Are Built To Last

Not all solar panels are built the same, and many struggle to achieve the LG build quality. In Australia & NZ some competitors' panels have failed in as little as 3 years. The reasons for failures and low output performance include hot spots, corrosion, water ingress, failed bypass diodes, poor sealants, delamination and micro cracks.

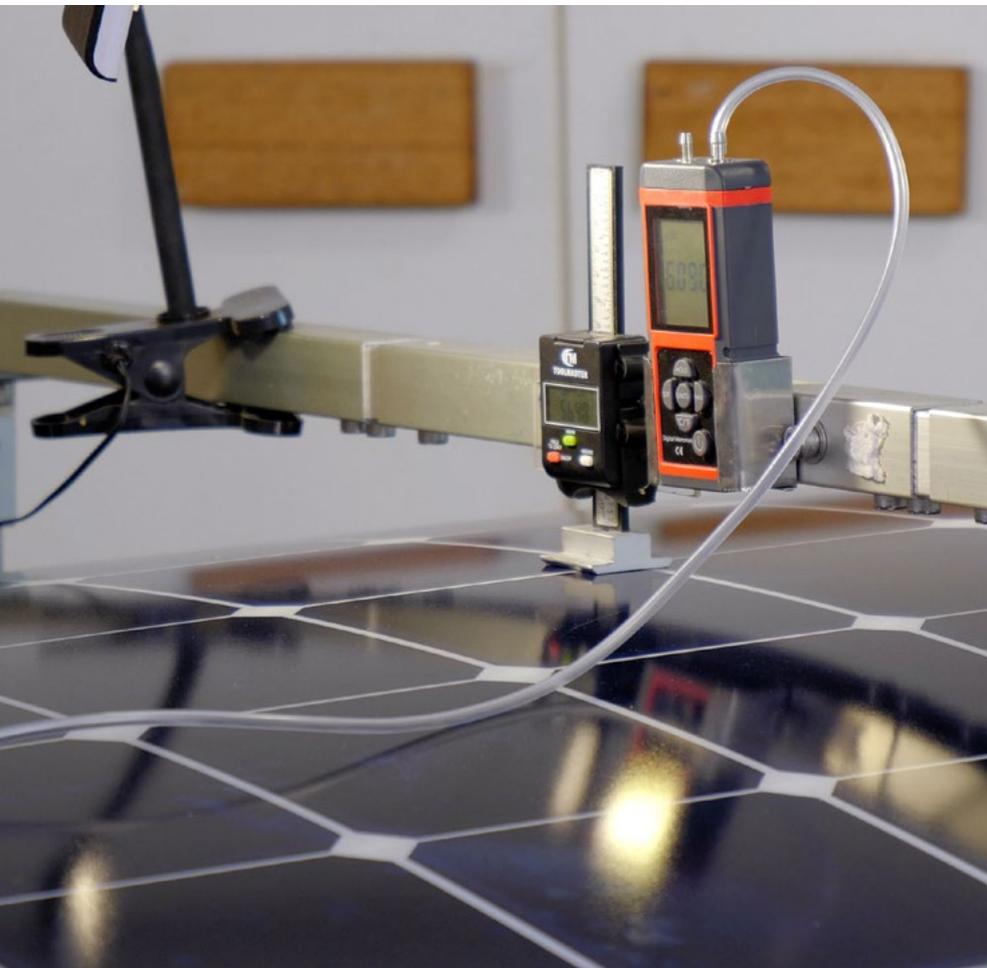
### Extensive testing program

One of the LG strengths is our focus on testing. In order to be sold in Australia solar modules have to be tested and pass the IEC standard tests once. LG solar panels are regularly tested up to 3 times to the IEC standards by LG in-house testing laboratories to ensure a robust module.

LG also invests a significant amount of money on research and development. In fact, 25% of the LG entire solar focused workforce is dedicated to discovering new technologies and improving our solar technology.

### Cyclone wind load resistance

LG panels have a strong double walled frame. When it comes to wind forces (rear load) many competitor panels are certified to 2400 Pascals. LG panels are certified to 4000 Pascal, which can handle the wind load of a 290 km per hour wind. Independent windload tests were conducted in Darwin in 2018 and 2019 where LG panels resisted successfully windloads as high as 350 km per hour. This testing demonstrates LG panels are designed to be very sturdy and are one of the strongest on the market.



LG Solar commissioned separate independent wind load testing in Darwin in 2018 and 2019. The LG panels passed local extreme wind load tests.

### Made in South Korea

LG NeON® 2 and NeON® R panels are manufactured in Gumi, South Korea in a fully automated state of the art factory. The wafers, cells and panels are manufactured in one seamless process production line, which emulates the air purity of a semi-conductor manufacturing environment. The result is a high quality and consistent solar product, with input materials specifically designed to last a long time.

### Stronger Hail Test

While most panels are tested with 25 mm large hail stones being shot at the panel at 82.8km per hour. LG panels are tested with 35mm hail stones shot at 97.24km per hour, meaning LG panels are tested to withstand significantly tougher hail conditions.

In regards to insurance cover for hail it is advisable to let the home insurance know that you now have a solar system.

### High quality components

The LG panels use top quality junction boxes which are highly water resistant (IP68) and use premium Swiss MC4 panel connection plugs. This water resistance is higher than many competitor panels on the market.

LG panels are tested with larger hailstones (35mm) than standard panels (25mm). The stones in this image are approx 35 mm.



## Reason 7

# LG Shows Environmental Leadership

### Lower energy payback time

Energy payback is the time it takes for a solar panel to generate the power it took to manufacture, ship and install the solar system. In January 2020, LG calculated the embodied energy in an LG NeON® R, 375W solar panel as being 297.65kg of CO<sub>2</sub> from resourcing of raw materials, to manufacture including transporting and installing the panel on the roof.



In Brisbane, Australia, the average energy payback of a 375W NeON® R for example is approx. 1 year and 1 month as opposed to a standard 330W panel which is 1 year and 4 months. Because LG panels are also built to last longer, this means each LG panel can create more clean energy during its working life, than panels designed for a shorter life-span.

Therefore LG panels generate higher environmental benefits in regards to CO<sub>2</sub> abatement compared to less efficient, shorter lifespan and faster degradation panels which use a similar amount of raw materials in the manufacturing process.

### LG panels part powering the LG Solar Factory

In 2015 LG installed a 3.2MW solar farm (over 11,000 panels) on the roof of its solar factory in Gumi, South Korea to generate renewable energy for the manufacture of the LG panel range. Overall LG has installed over 18MW of solar across its manufacturing facilities in Korea.

LG has now also decided to work towards making the full LG Electronics manufacturing operations for other appliances carbon neutral and is looking to cut its carbon emissions by over 1 million tonnes annually over the next decade.



Over 11,000 LG panels help produce renewable energy used in the production of LG NeON® panels in Gumi, Korea.

### No Ozone depleting gases in the panel manufacturing process

LG Electronics runs a Homogenous Substance Management system to ensure that no ozone depleting substances are used in the manufacturing of the LG solar panels, or any of the materials supplied to LG for manufacturing of the solar panels.

# Questions to Ask Before You Buy

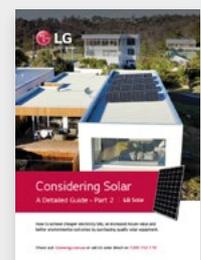
Asking your solar installer a few essential questions may make a big difference to the service and benefits you receive. Make sure you get the answers in writing.

- 1 Get clarity as to what the responsibilities for each of the parties are, including the installer and the customer.
- 2 Who is responsible for connecting my solar PV system to the electricity grid? Is it the installer or another subcontractor? When will it happen?
- 3 What is the estimated monthly and annual production in kWh of my system in its installation position with the chosen inverter solution? Also please check out the LG output calculator on [LGenergy](https://www.lgenergy.com.au) to get an estimate of kWh generation by your purchased system size in your postcode [LGenergy.com.au/solarcalculators/solar-systemoutput-calculator](https://www.lgenergy.com.au/solarcalculators/solar-systemoutput-calculator)
- 4 Who is responsible for my meter change? Make sure this is clarified. Quality installation companies usually offer to accommodate the whole job.
- 5 The Solar System will qualify for either Small-scale Renewable Energy Certificates (STC's) or Large-scale Generation Certificates (LGC's) depending on system size and output. An STC provides an upfront rebate where as an LGC provides an ongoing generation certificate. Ask your installer for more information about these certificates.
- 6 Ask for a detailed hand over manual before you make a final payment.
- 7 Who will service and maintain my solar system? Get an address and contact details in writing, preferably of someone reasonably local and create a maintenance schedule for the first five years so you know when your system and the output is going to be checked. With commercial systems an annual inspection is strongly recommended.



LG Solar has prepared 2 solar guides to give you even more solar info.

They can be downloaded via [LGenergy.com.au](https://www.lgenergy.com.au)



---

# LG Powers Major Australian Businesses

## SYDNEY MARKETS

---

For the past 200 years the Sydney Markets have been providing an extensive range of fresh produce which is consumed by people throughout NSW and ACT. The Flemington site with over 3 MW of solar arrays is one of largest commercial roof top solar systems in Australia.

The Sydney Market solar system has nearly 8,600 LG solar panels which provide 11% of the group's annual power consumption. This is the equivalent of providing enough energy to power about 635\* homes each year.



## SUNSHINE PLAZA

---

Sunshine Plaza Shopping Centre at Maroochydore, QLD has over 1 MW of LG Bi-facial solar panels that have been integrated into the Plaza's existing car park. The solar panels provide shading for 280 vehicles and deliver a reduction in CO<sub>2</sub> of 1,559 tonnes per year.

The renewable energy produced from the solar array is equivalent to powering approximately 256\* homes per year.



\* assumed daily household consumption per day of 19.2 kWh/day

Source: <https://www.energymadeeasy.gov.au/plan?id=PSH14952MRE1&postcode=2000>

---

# LG Powers Major Australian Businesses

## MOOREBANK LOGISTICS PARK

---

The Moorebank 3MW LG powered solar panel installation includes over 7,500 LG NeON<sup>®</sup> 2 panels.

The renewable energy produced each year is 4400 MWh which is the equivalent to powering more than 630\* homes.

Through the selection of high efficiency NeON<sup>®</sup> 2 panels the customer maximised roof yield.



## KEDRON-WAVELL SERVICES CLUB

---

The Kedron-Wavell Services Club has strong drivers in sustainability and solar PV was a natural choice.

A big challenge with this project was to design a system as large as possible with limited roof space. The solution for the club was to select high efficiency LG NeON<sup>®</sup> 2 solar panels.

The club's Solar array is powered by 300 LG NeON<sup>®</sup> 2 panels complimented by Solar Edge inverters and optimisers.



\* assumed daily household consumption per day of 19.2 kWh/day

Source: <https://www.energymadeeasy.gov.au/plan?id=PSH14952MRE1&postcode=2000>



The LG solar panel product warranty includes a labour component payment for Commercial Solar Systems. Many other competitors have a labour contribution excluded from their commercial solar system warranty. Please check with your supplier if labour is included in the commercial system panel warranty.

**HEAD OFFICE**

New South Wales  
2 Wonderland Drive,  
Eastern Creek, NSW 2766

**CONTACT**

**Email:** [solar.sales@lge.com.au](mailto:solar.sales@lge.com.au)

**Enquiries:**

1300 152 179 (Australia)  
0800 54 2273 (New Zealand)

[www.lgenergy.com.au](http://www.lgenergy.com.au)

[www.lgenergy.co.nz](http://www.lgenergy.co.nz)

**STATE OFFICES**

**Queensland**

Unit 4/105 Freight Street,  
Lytton, QLD, 4178

**South Australia**

162 Richmond Road,  
Marleston, SA 5033

**New Zealand**

600 Great South Road,  
Ellerslie, Auckland,  
New Zealand 1051

**Victoria**

3 John Deere Court,  
Parkwest Estate, Derrimut,  
VIC 3026

**Western Australia**

Unit 15/3 King Edward Road,  
Osborne Park, WA 6017

For further information or to find an Authorised LG Partner  
please see: [LGenergy.com.au](http://LGenergy.com.au) or call **1300 152 179**

Issue Date: 08/2020



**LG**

Life's Good