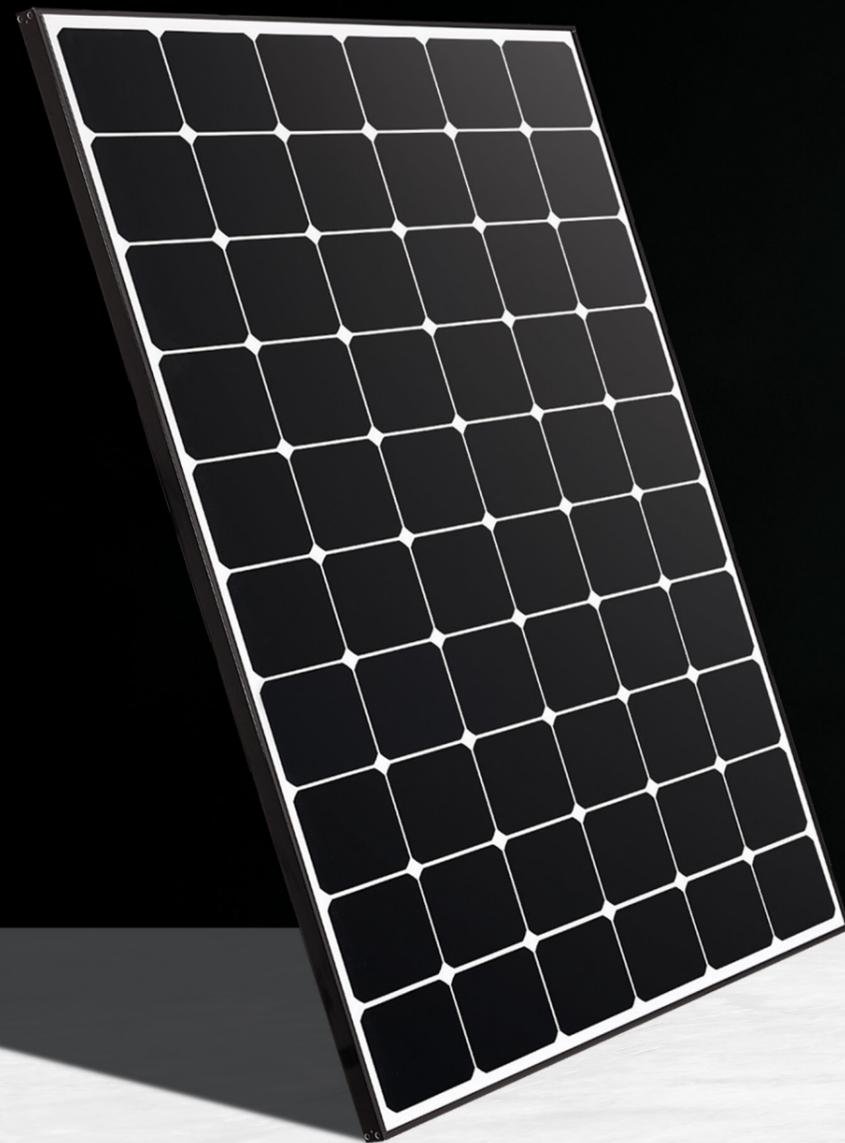




LG SOLAR



LG Electronics Inc.

LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Korea

<http://lg-solar.com>

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CT-ET-GL-EN-F-80525

\* The contents can be changed without notice.

# About LG

## A Company you can trust

LG Electronics was established in 1958 and has led the way into the advanced digital era thanks to the technological expertise acquired by manufacturing many home appliances such as radios and TVs.

With market share in a variety of product categories in addition to Solar-LG offers the stability that no fly-by-night solar competitors can match.

**Revenue**  
\$55.4 billion(2017)

**Workforce**  
75,150

**World Presence**  
118 Global Operations

\* LGE consolidated basis, Exchange Rate KRW 1,108.51 per USD

<b>H&amp;A</b> Home Appliance & Air Solution Company	<b>HE</b> Home Entertainment Company	<b>MC</b> Mobile Communications Company	<b>VC</b> Vehicle Components Company	<b>B2B</b> Business to Business Company
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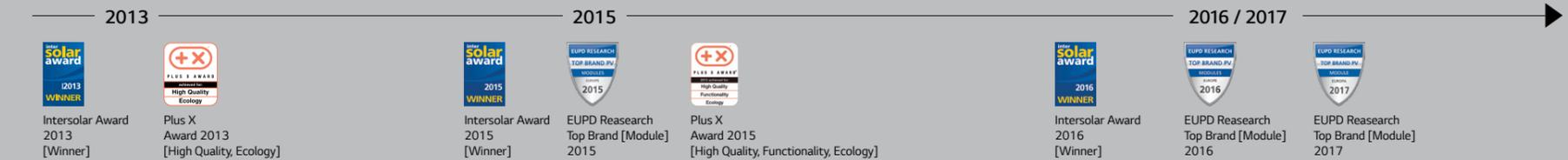
With more than half a century of success, and more than 30 years experience in Solar, LG is fully committed to our 25-year product warranty and beyond.

## 1. LG is stable and reliable

LG Solar is a one product category of LG Electronics. Not 100% solar company. Therefore LG can maintain stable financial situation. As a result, LG can continue its investments for leading solar technology.

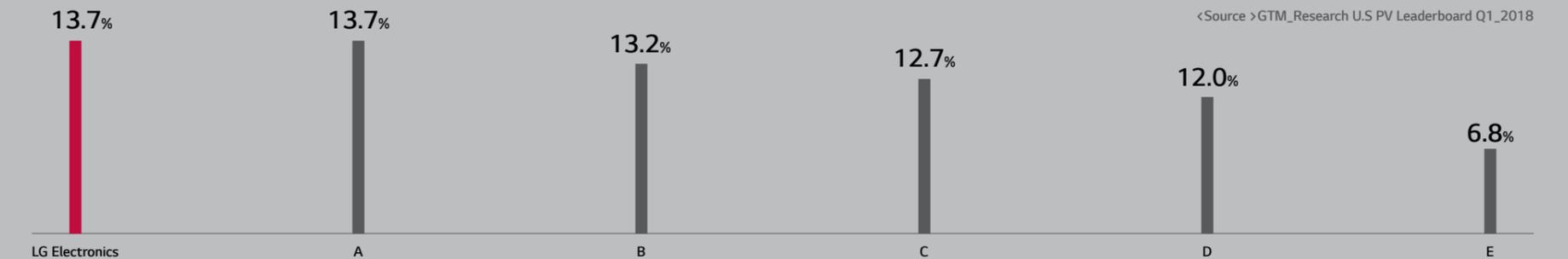
## 2. LG's Solar Award History

LG won the internationally recognized "Intersolar AWARD" in 3times for groundbreaking ideas and technological innovations.



## 3. More Homeowners choose LG Solar

LG became market share No.1 in Unites State's Residential Market in 2017.



# Performance

## LG Solar Panels : Defined by Performance

These are the facts: the earth revolves throughout the day, and weather constantly changes. This means that solar energy varies every day. The amount of available energy can be affected by temperature, weather, shading and other factors.

For this reason, price isn't the only factor to consider when purchasing solar panels. Performance under a variety of conditions is critically important.

Power output comparison of 16 modules

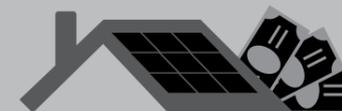


LG Solar panels are unparalleled in quality and performance. Designed and manufactured by LG, the panels in LG Solar's NeON® series generate **21% more energy** than conventional P-type modules in two highly variable conditions: high temperatures and low irradiation.

## Benefit

### 1. Offset more your bill

More Energy is capable of providing enough clean electricity



### 2. Roof Utilization

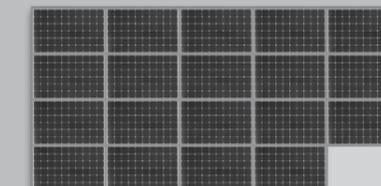
1) Effective even on a small roof. In other words, increase potential flexibility for future home addition.

LG NeON R 370W



16ea / 5.92kWp

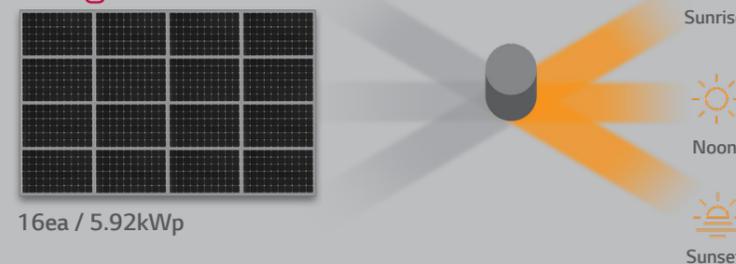
P-Mono PERC 305W



19ea / 5.80kWp

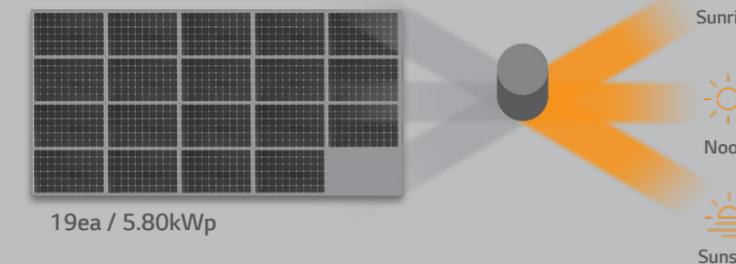
2) Flexibility on roofs where installers must avoid shaded areas.

LG NeON R 370W



16ea / 5.92kWp

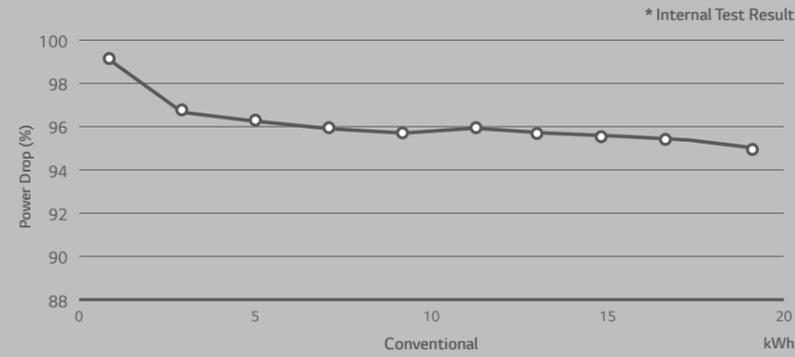
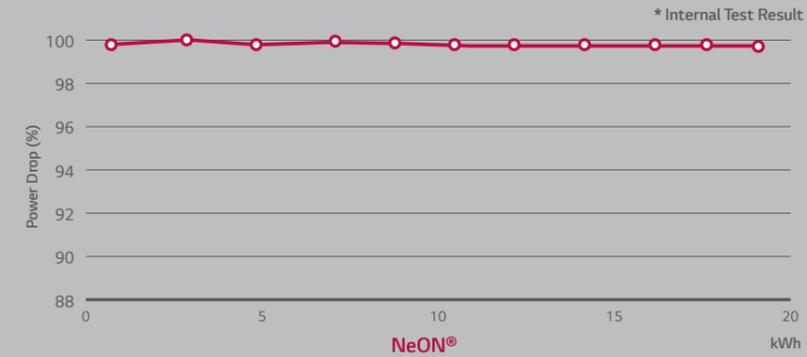
P-Mono PERC 305W



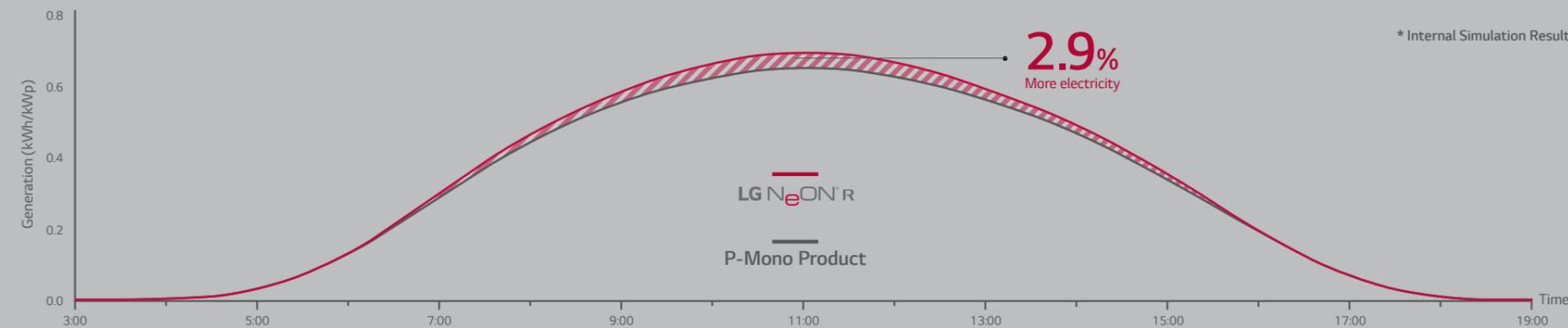
19ea / 5.80kWp

# Why LG Solar Generates More

- 1) Thirty years of cutting edge research, immense preparation, and world class development have propelled LG to the forefront of the renewable energy field.
- 2) By using an N-type wafer, LG's NeON<sup>®</sup> cells, there is almost no power decline as time passes. It is the one of reason that LG provides top-level performance warranty.



- 3) Usually Solar panels slowly lose ability to generate power as they get hotter. LG's NeON Series have better temperature performance characteristics, so even in summer day it can provide more energy than conventional solar panel.



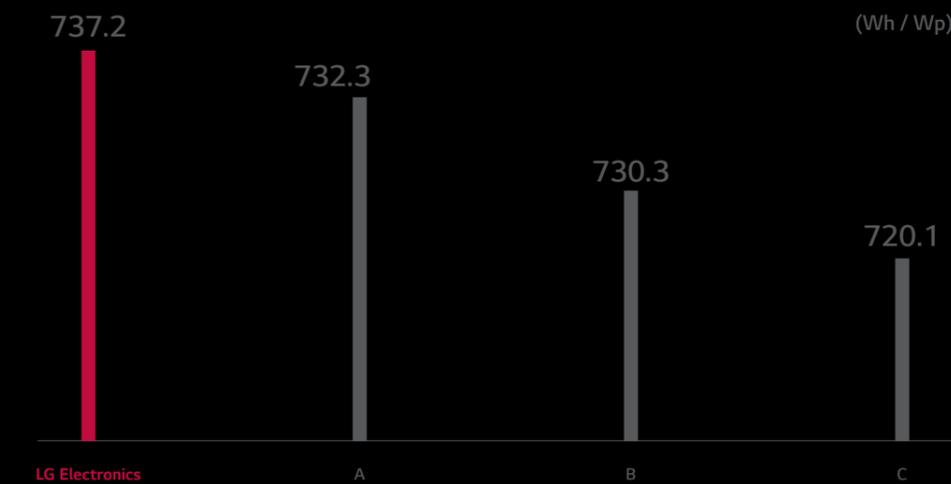
# An Outstanding Performance of LG Solar - TÜV Rheinland Test Result

LG had the most outstanding generation capacity by TÜV's test result. The test system consisted of 4 kinds of solar panels being sold in Germany.

(\* TÜV is a authorized third-party inspection agency)

## Energy Yield Test Result

(Total Energy generation / Measured panel output)



## Specific Result

Company	Total Energy Generation (Wh)	Measured Panel Output (Wp)	Labelpanel Output
<b>LG</b>	<b>234,282.16</b>	<b>317.8</b>	<b>315</b>
A	253,009.65	345.5	345
B	201,854.92	276.4	275
C	195,435.14	271.4	275

LG Electronics

- Source : TUV Test report (Energy Yield comparison measurement of different Photovoltaic (PV) modules)
- Period : 1 year (2015/10/1 – 2016/9/30)
- Test location : Cologne / Germany

\* The results of the test were that there was a possibility that the majority of the standard products sold in 2017 could be discontinued

# Quality

**LG Solar's unmatched quality management system is a key part of our manufacturing process**

LG has been a globally trusted brand for 70 years because of our history of developing innovative products and our strict management of product quality.

## Benefit

1. Fewer incidents of panel failure over 25 years
2. Top-level product and performance warranties based on quality management



## The Characteristics of LG Solar's Quality Management System are

- 1) Product quality is tested and managed at every step of the process, from part selection to shipment.
- 2) Because LG Solar's testing lab is the first manufacturing lab in the solar industry to be certified by all 4 major certification institutions, we manage product quality at a level equivalent to international standards.



- 3) LG Solar has developed tests above and beyond international standards. Every LG Solar panel must pass a stringent testing process that includes materials testing, tests for resistance to weather and breakage, and more.



breakage test



water spray test



hail test



humidity freezing test



burning brand test



Wet leakage current test

- 4) LG Solar has an automated production line.

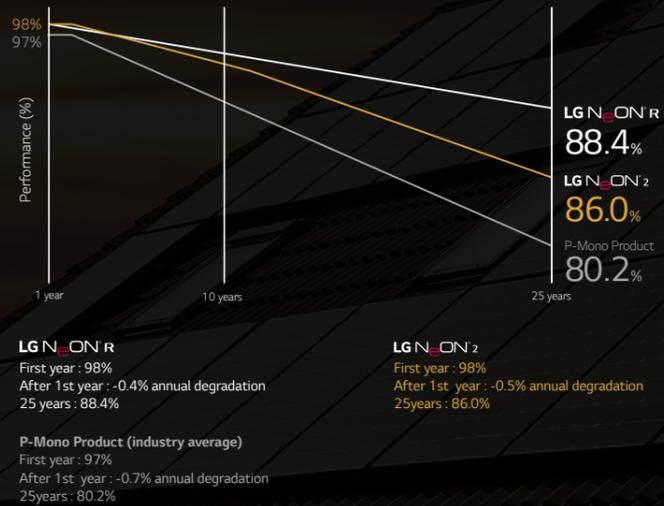
- 5) LG Solar manufactures its panels at its own company factories.

# Warranty

Warranty policies reflect a solar panel manufacturer's confidence in its products.

Solar panels are a long-term investment, so it is critical that the panels remain durable and reliable for many years. Most solar manufacturers advertise a 25-year performance warranty, but the time period is not the only thing to consider. The most important point is annual degradation rate in their warranty policies

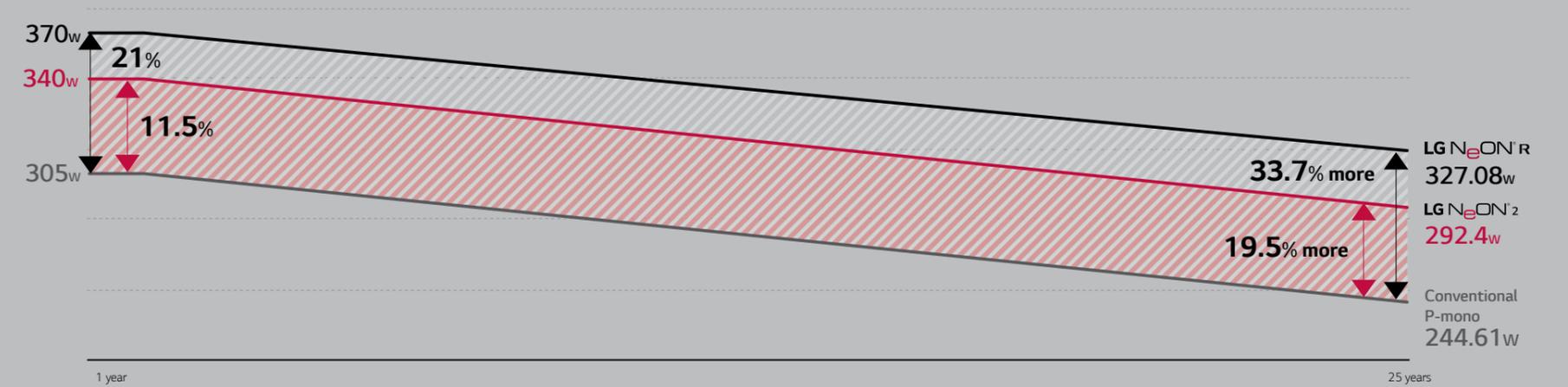
LG Solar's panels remain robust and efficient in diverse environments, so we are able to offer top-level product and performance warranties that feature lower guaranteed degradation rates. This provides peace of mind for our customers.



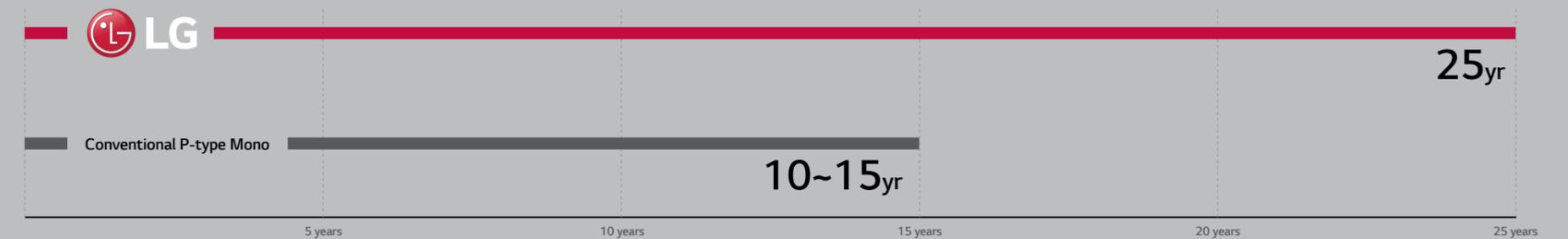
# Benefit

1. Produce more energy over 25 years with a low degradation rate.

(88.4% in 25 years = 327W in 25 years for NeON R 370W)



2. No concerns about panel failure in the rare case that a panel fails ; it will be replaced by LG for 25 years.



3. If a home with LG Solar panels is sold, the new homeowners continue to enjoy LG Solar's warranty benefits.

# Design

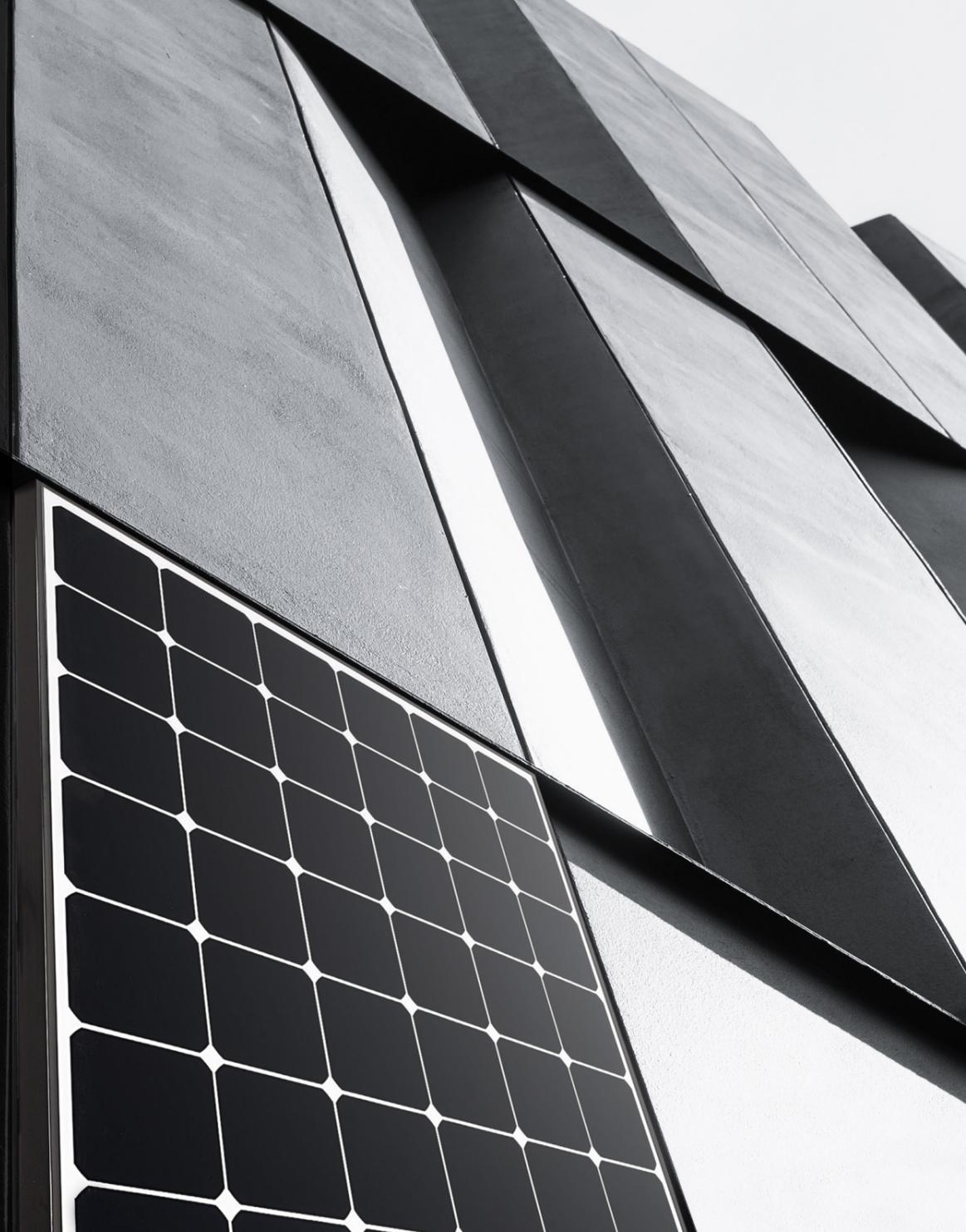
**Find the beauty and Have confidence in your home**

Beauty on the outside – it is important to home owners that their homes are not visually impaired by a solar power system. Solar panels should be unobtrusive in design and fit the roofing type.

Environmental and aesthetic design of LG NeON® Series is ideal for roof, offering a clean and modern exterior and increasing the home's value.

# Benefit

1. Solar power system combines high quality with a timeless design
2. If a home with LG Solar panels is sold, the new homeowners continue to enjoy LG Solar's design benefits.
3. LG NeON® Series have ideal appearance for of any roofs.



# Reference



USA

Thailand\_Bangkok



Netherland\_Venlo

Thailand\_Bangkok

Germany\_Leipzig

Germany\_Grasberg

Switzerland\_Kollikon