

SOLAR'S MOST TRUSTED



THIS IS REC GROUP

A pioneering solar energy company dedicated to empowering consumers

Public

REC Integrated Production Facility
Tuas, Singapore
REC TwinPeak 72 Series

A silhouette of a rock climber is shown against a dramatic sky with a sunset or sunrise. The climber is positioned on the left side of the image, clinging to a vertical rock face. The sky transitions from a deep blue at the top to a bright yellow and orange near the horizon.

AGENDA

1 REC at a glance

2 Products

3 Reliability

4 Recognitions

5 Sustainability

6 Reference cases



REC is a true innovator in solar technology

1

REC at a glance

Venice, Italy
REC Alpha Series



RENEWABLES
EMPOWERING
CONSUMERS

This is our overall mission.

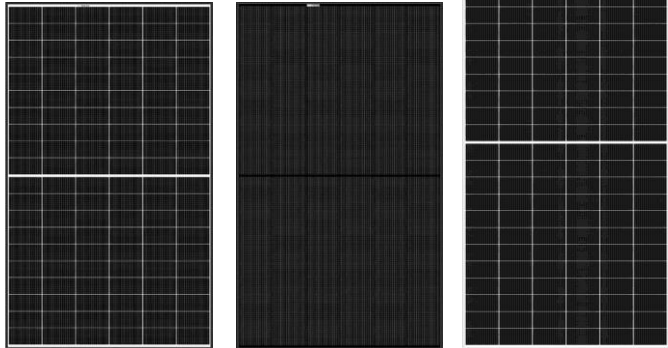
REC donated solar panels to empower remote Himalayan villages
© Global Himalayan Expedition (GHE)

OUR VISION

We want every person to benefit from electricity directly from the sun.



REC manufactures and sells high quality solar panels for use in various applications worldwide



Residential



Commercial



Utility



Floating



REC at a glimpse – 25 years of commitment to solar REC

FOUNDED

1996



>40M SOLAR PANELS
produced and sold



>17M PEOPLE
Powered at home



~1,600
employees globally

A collage featuring the Norwegian flag and a view of a coastal town, and the Singapore flag and a view of the Marina Bay Sands hotel.

NORWAY & SINGAPORE
Manufacturing facilities

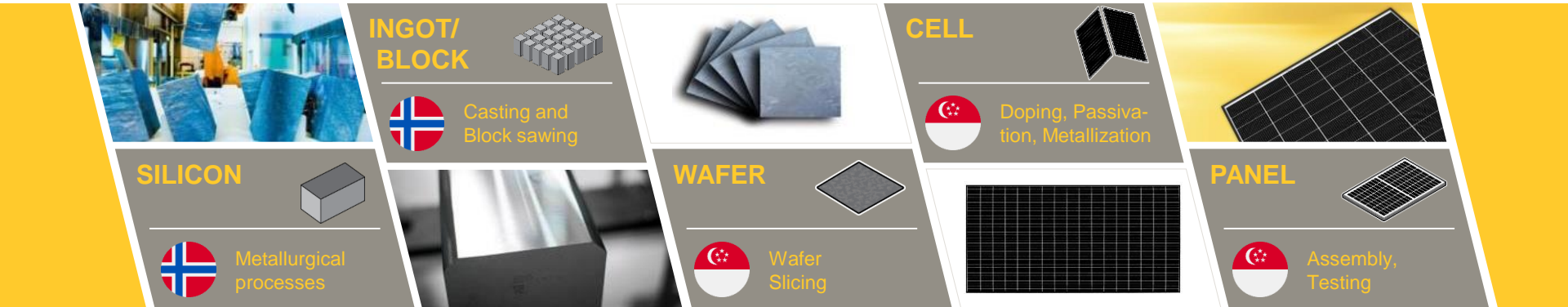
An aerial view of a large industrial facility with many white buildings and solar panels.

~1.5 GW
2021 solar panel
production capacity

A group of people sitting around a table outdoors, possibly at a restaurant or cafe, with a view of a field in the background.

CONSISTENT HIGH QUALITY
4 million panels manufactured each year;
<400 from return from the field (PPM: <100)

Strength throughout the value chain



- International, pioneering solar energy company with Scandinavian heritage
- Founded in Norway in 1996
- Industry pioneer with 25 years of experience
- >40 million panels manufactured, amounting to 11 GW (at end 2020)
- Integrated manufacturing from silicon to blocks, wafers, cells, and panels

History of REC



THE EARLY DAYS

1996 • REC established in Norway

1997 • First wafer washed by hand in summer 1997



INDUSTRIALIZATION

1997 • Production of wafers, solar cells, and solar panels in Scandinavia (Norway and Sweden)

– 2010

2010 • Fully automated and integrated production of wafers, cells, and panels begins at state-of-the-art factory in Singapore

- Launch of REC Peak Energy

2013 • Split of REC from Renewable Energy Corporation ASA (REC Silicon)

2014 • Launch of REC Peak Energy 72

2015 • REC acquired by Norway's Elkem Group (Bluestar Investment Co. Ltd.)

- Launch of REC TwinPeak Series

2016 • Launch of REC TwinPeak 72

2017 • Launch of REC TwinPeak 2

- Launch of REC TwinPeak 2 BLK2
- Launch of REC TwinPeak 2S 72
- Launch of REC Peak Energy 2S Mono 50 BLK

2018 • Launch of REC N-Peak

- Launch of REC TwinPeak 2 Mono
- Launch of REC TwinPeak 2S Mono 72



GROWTH PHASE

2019 • Launch of REC N-Peak Black

- Launch of REC Alpha Series/REC Alpha Black

2020 • Launch of REC Alpha 72

- Launch of REC TwinPeak 3 Mono/REC TwinPeak 3 Mono Black
- Launch of REC TwinPeak 3S Mono 72



CHANGING THE GAME



A global company with ~1,600 employees



Integrated production facility in Singapore



REC Wafer Plant

REC P-Type Cell Plant

REC N-Type Cell Plant

REC Panel Plant



**REC PANEL
PRODUCTION
CAPACITY**

1.5 GW

151,000 m² of production space

#1 European brand of solar panels



Dominated by Chinese players, with some still heavily focused on the domestic market

2019 Panel Shipments ¹ (in GW)		Share of sales to China per Company	Global Market Share ⁴ , %
#1	Jinko Solar	14.3	17%
#2	JA Solar	10.3	27%
#3	Trina Solar	10.1	23% ³
#4	Canadian Solar	8.6	13% ³
#5	LONGi	8.4	40%
#6	Hanwha Q-CELLS ²	7.7	10% ³
#7	Risen	6.3	21%
#8	First Solar	5.2	0%
#9	Shunfeng ²	4.3	37% ³
#10	Astronergy ²	4.1	63% ³ ⚠️
#11	Talesun ²	3.7	46% ³
#12	GCL-SI	3.6	35%
#13	SunPower	2.6	0%
#14	Jinerjy ²	2.4	72% ³ ⚠️
#15	Seraphim ²	2.1	71% ³ ⚠️
#16	ZNShine ²	2.1	6% ³
#17	Eging Photovoltaic ²	1.4	90% ³ ⚠️
#18	LG Electronics ²	1.4	0%
#19	BYD ²	1.3	44% ³
#20	REC GROUP	1.3	0%



¹ Total shipments ² Number by SolarMedia (April 2020) | ³ Split between China and non-China by Solar Media | ⁴ 2019 = 113 GW global PV demand | Source: Quarterly financial reports; Solar Media

⚠️ ≥50% of total shipments to China

Tailored customer programs rich with benefits for distributors, installers, and end customers



REC Partner Program

- For solar distributors/wholesalers
- Added visibility and credibility
- 70 Partners worldwide (at end-2020)



REC Certified Solar Professional Program

- For solar installers
- Sales support and exclusive warranty advantages
- Access to tools that simplify installers' business
- >4,300 installers trained worldwide (at end-2020)



Tools and platforms to support installer success



REC ProTrust Warranty	REC SunSnap app (iOS & Android)	Digital webinars	REC ProPortal
Comprehensive warranty package unique to RCSPs	Mobile app for installers to simplify admin. work	Online RCSP trainings and insightful tutorials	Dedicated portal for RCSP installers
<ul style="list-style-type: none">Covers product, performance, and labor, each for up to 25 years*	<ul style="list-style-type: none">Easily stores projects in a structured wayShowcases success stories to boost salesInstantly unlocks REC ProTrust Warranty	<ul style="list-style-type: none">Installers can boost skillset from anywhereBest practices for an outstanding installation	<ul style="list-style-type: none">Fresh and user-friendly platformLead managementSales toolsMarketing supportInstructional videos



*Some conditions apply; visit www.recgroup.com/warranty for details

Premium brand with blue-chip customers



REC is a driven facilitator of energy
autonomy

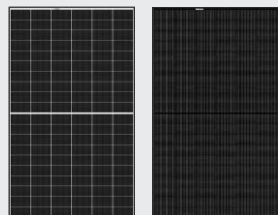
2

Products

Oterleek, Netherlands
REC Alpha Black Series

Ensuring highest power coverage for every application

60-cell HJT 60-cell n-type mono 60-cell p-type PERC 72-cell HJT 72-cell p-type PERC

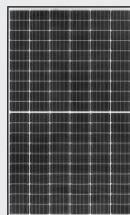


Alpha

Alpha Black

360-380 W

355-375 W



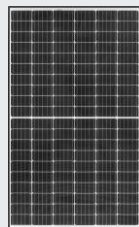
N-Peak

320-330 W



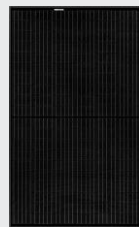
N-Peak Black

315-325 W



N-Peak 2

365-370 W



N-Peak 2 Black

360-365 W

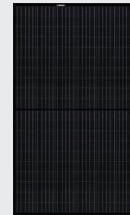
[Production start: July 2021](#)

[Production start: July 2021](#)



TwinPeak 3 Mono

320-340 W



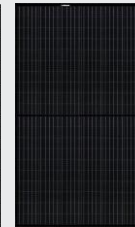
TwinPeak 3 Mono Black

315-335 W



TwinPeak 4

365-370 W

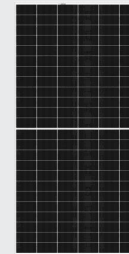


TwinPeak 4 Black

360-365 W

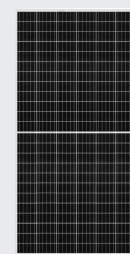
[Production start: July 2021](#)

[Production start: June 2021](#)



Alpha 72

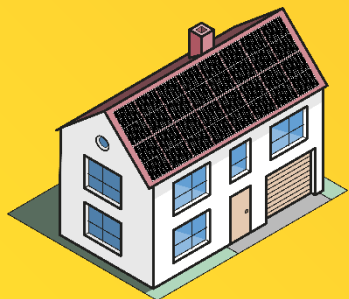
430-450 W



TwinPeak 3S Mono 72 XV

380-405 W

REC Alpha maximizes your system power for maximum savings



Example of a typical residential installation

Conventional panels	P-multi	16 x 300 Wp	4.8 kW
	P-mono	16 x 320 Wp	5.1 kW
REC Alpha	HJT	16 x 380 Wp	6.1 kW

More power with the REC Alpha

+20% more power than p-type mono

+27% more power than p-type multi

High power density

The REC Alpha generates more energy from the same area



Roof size

Panel size

Panels on roof

Panel power

System power

RESIDENTIAL SYSTEM WITH CONVENTIONAL MONO-PERC

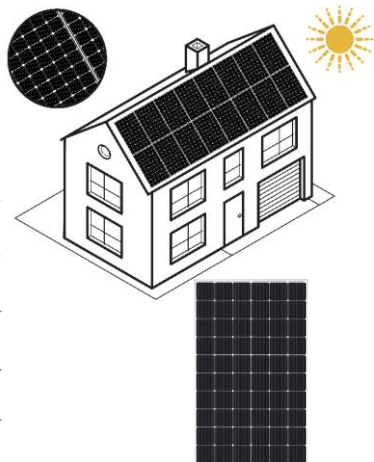
30 m²

1.67 m²

16

320 Wp

5.1 kW



RESIDENTIAL SYSTEM WITH REC ALPHA SERIES

30 m²

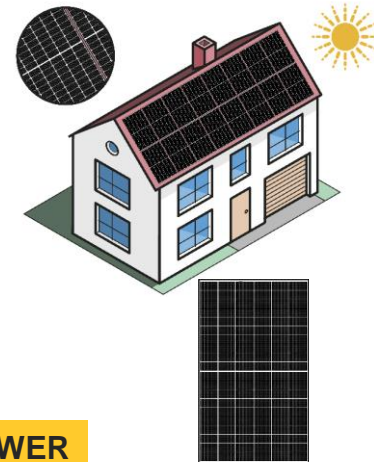
1.75 m²

16

380 Wp

6.1 kW

+20% MORE POWER



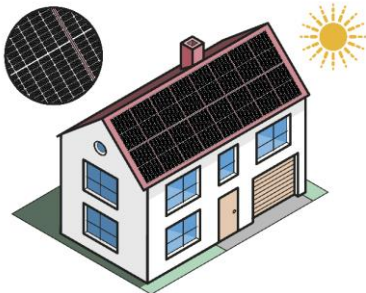
+20% MORE CAPACITY

installed in the same area and same number of panels by using the REC Alpha Series

REC Alpha consistently delivers more power gain than conventional panels



Nr. of panels	System power: Conventional 320 Wp	System power: REC Alpha Series 380 Wp	Extra power: REC Alpha system
12	3.8 kW	4.6 kW	0.8 kW
16	5.1 kW	6.1 kW	1.0 kW
24	7.6 kW	9.1 kW	1.5 kW
40	12.8 kW	15.2 kW	2.4 kW
100	32.0 kW	38.0 kW	6 kW



+20%
POWER DIFFERENCE

Consistently more power with the
REC ALPHA SERIES

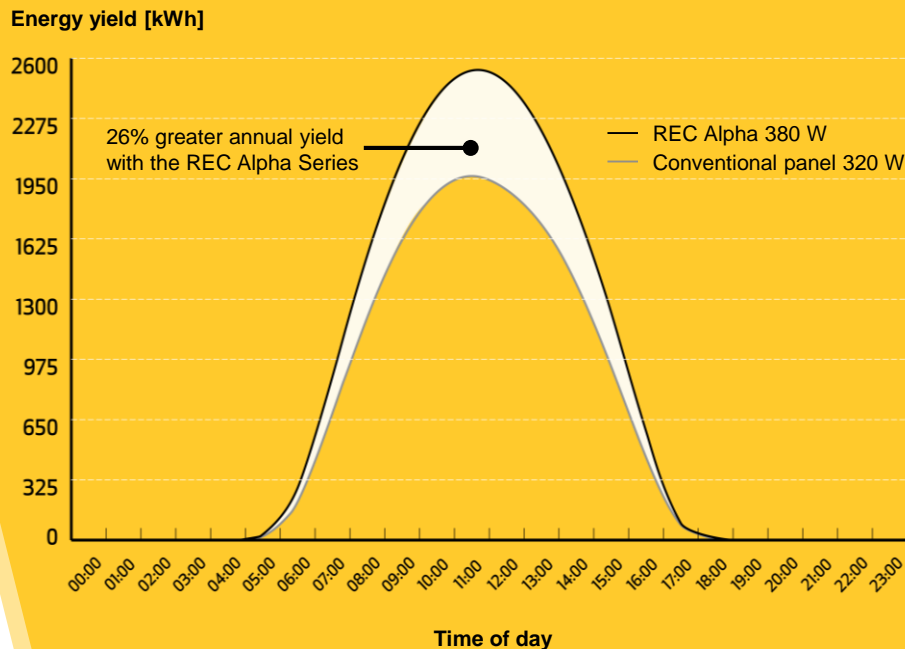
REC Alpha

Leading temperature coefficient produces more energy when the sun is strongest



- The REC Alpha Series packs in even more energy generation
 - Most efficient cell technology
 - No LID
 - Leading temperature coefficient
 - Highest 60-cell power density
- Ideal for making the most of available rooftop space
- Greater annual yields for more savings on electricity bills

More energy from dawn to dusk



Calculations based on simulation results for full calendar year
System details: 8 kWp in Palm Springs, CA, USA
Actual performance may vary dependent on location environment

Product advantages

>20% more power

- Most efficient c-Si cell structure captures more light
- Leading power density for best use of space

More reliability

- Eliminating invasive soldering reduces thermal stress on cells
- Super-strong frame for lasting high power

Lowest temperature coefficient of $-0.26\%/^{\circ}\text{C}$

- More energy produced when sun is strongest

Simplified production

- Reduced chance of cell defects thanks to less-invasive manufacturing
- Energy efficiency through low temperature and automated production

No LID

- No initial drop in power so customers receive the full power purchased

Minimal environmental impact:

- 81% reduced lead content

REC's iconic Twin design

- Improved output under shade

Key info

Power:
380 Wp

Format:
60-cell

Dimensions:
1,721 x 1,016 x 30 mm

Weight:
19.5 kg

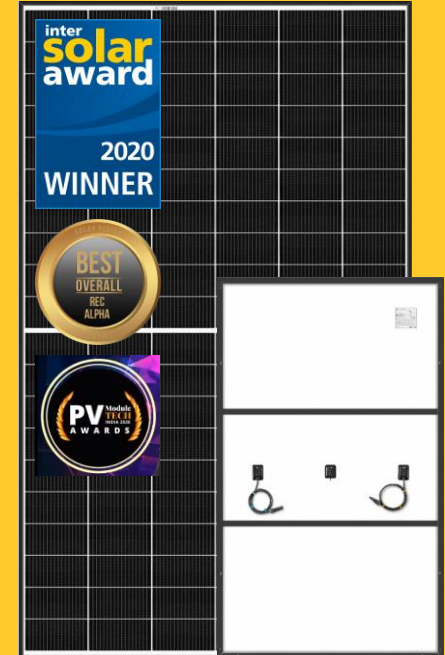
Cell technology:
Heterojunction (HJT)

Efficiency:
21.7%

Power density:
217 W/m²

Max. System Voltage:
1000V

Temperature Coefficient:
 $-0.26\%/^{\circ}\text{C}$



Product advantages

>20% more power

- Most efficient c-Si cell structure captures more light
- Leading power density for best use of space

More reliability

- Eliminating invasive soldering reduces thermal stress on cells
- Super-strong frame for lasting high power

Lowest temperature coefficient of $-0.26\%/^{\circ}\text{C}$

- More energy produced when sun is strongest

Simplified production

- Reduced chance of cell defects thanks to less-invasive manufacturing
- Energy efficiency through low temperature and automated production

No LID

- No initial drop in power so customers receive the full power purchased

Minimal environmental impact:

- 81% reduced lead content

REC's iconic Twin design

- Improved output under shade

Stylish looks

- Fully black variant is an elegant feature for homes

Key info

Power:
375 Wp

Format:
60-cell

Dimensions:
1,721 x 1,016 x 30 mm

Weight:
19.5 kg

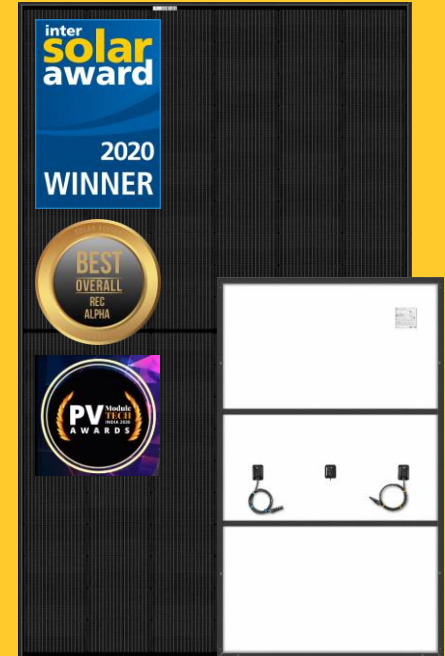
Cell technology:
Heterojunction (HJT)

Efficiency:
21.4%

Power density:
214 W/m²

Max. System Voltage:
1000V

Temperature Coefficient:
 $-0.26\%/^{\circ}\text{C}$



Product advantages

>20% more power

- Most efficient c-Si cell structure captures more light
- Leading power density for best use of space

More reliability

- Eliminating invasive soldering reduces thermal stress on cells
- Super-strong frame for lasting high power

Lowest temperature coefficient of $-0.26\%/^{\circ}\text{C}$

- More energy produced when sun is strongest

Simplified production

- Reduced chance of cell defects thanks to less-invasive manufacturing
- Energy efficiency through low temperature and automated production

No LID

- No initial drop in power so customers receive the full power purchased

Minimal environmental impact:

- 81% reduced lead content

REC's iconic Twin design

- Improved output under shade

Reduces overall installation costs

- Larger format for faster installation and fewer components, reducing BOS cost

Key info

Power:

450 Wp

Format:

72-cell

Dimensions:

2,063 x 1,026 x 30 mm

Weight:

23.5 kg

Cell technology:

Heterojunction (HJT)

Efficiency:

21.3%

Power density:

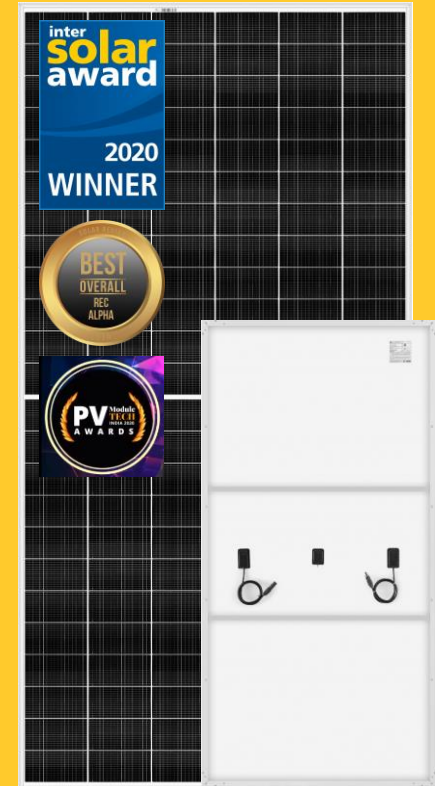
213 W/m²

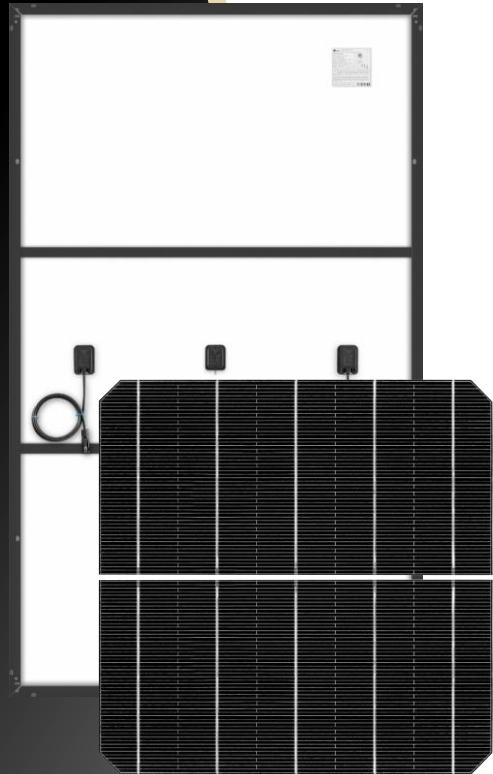
Max. System Voltage:

1500V

Temperature Coefficient:

$-0.26\%/^{\circ}\text{C}$





Advantages of REC N-Peak Technology

No Light Induced Degradation (LID)

- No initial power loss after installation
- Higher guaranteed power output

Super-strong frame design

- Reduces frame deformation under load
- Increased durability and resistance to mechanical degradation

High efficiency

- N-type technology gives boost to efficiency

Lower operating temperature

- Improved reliability through heat reduction
- Avoids build-up of heat, improving cell efficiency

Improved performance in shaded conditions

- Twin section design allows continued operation when partially shaded
- Increases energy yield when other panel types have fully stopped operation

Six key benefits to the REC N-Peak Series

Mono n-type: the most efficient
crystalline silicon technology

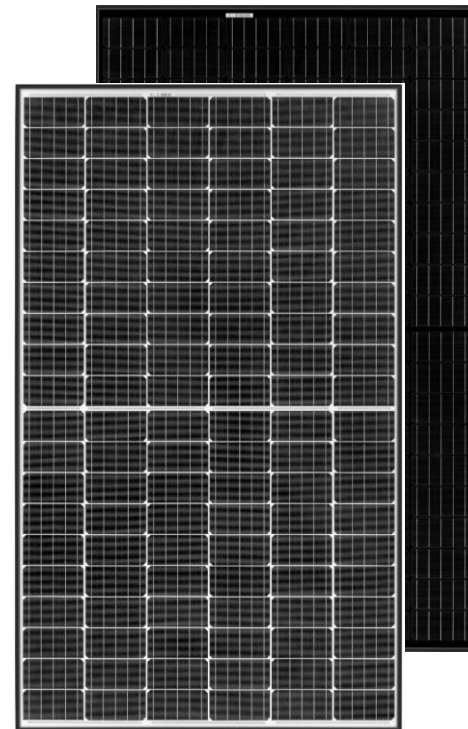
No Light Induced Degradation

Super-strong frame design up
to 7000 Pa snow load

Flexible installation options

Improved performance in shaded
conditions

Guaranteed high power for 25 years



Product advantages

Most efficient crystalline cell technology

- Highest light absorption
- Half-cut cells produce more power

Improved temperature performance

- Class-leading temperature coefficient for more energy generation when the sun is strongest
- PERT technology keeps the cell at a cool operating temperature

Protects from initial drop in installed power

- N-type cell technology protects against light induced degradation (LID)

Increased energy yield when shaded

- REC's Twin design improves performance in shaded conditions

Super-strong frame

- Improved durability for at least 25 years of high power
- 30 mm height for lightweight and compact installation

Key info.

Power:
330 Wp

Format:
60-cell

Dimensions:
1,675 x 997 x 30 mm

Weight:
18 kg

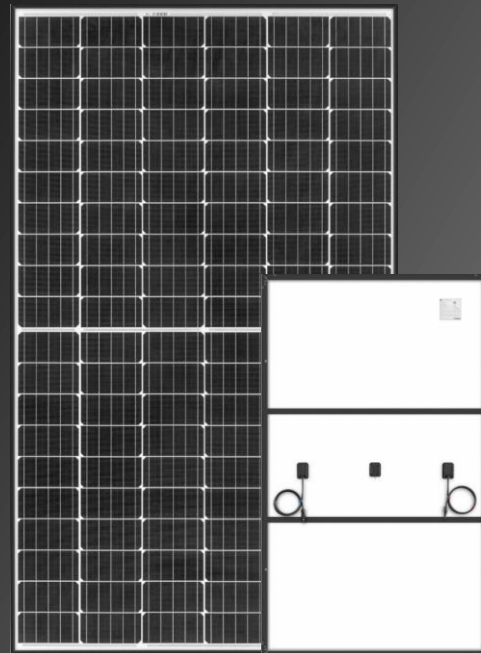
Cell technology:
mono-Si n-type PERT

Efficiency:
19.8%

Power density:
198 W/m²

Max. System Voltage:
1000V

Temperature Coefficient:
-0.35%/°C



Product advantages

Most efficient crystalline cell technology

- Highest light absorption
- Half-cut cells produce more power

Improved temperature performance

- Class-leading temperature co-efficient for more energy generation when the sun is strongest
- PERT technology keeps the cell at a cool operating temperature

Protects from initial drop in installed power

- N-type cell technology protects against light induced degradation (LID)

Increased energy yield when shaded

- REC's Twin design improves performance in shaded conditions

Super-strong frame

- Improved durability for at least 25 years of high power
- 30 mm height for lightweight and compact installation

Stylish looks

- Full-black design for a seamless appearance on roofs

Key info.

Power:
325 Wp

Format:
60-cell

Dimensions:
1,675 x 997 x 30 mm

Weight:
18 kg

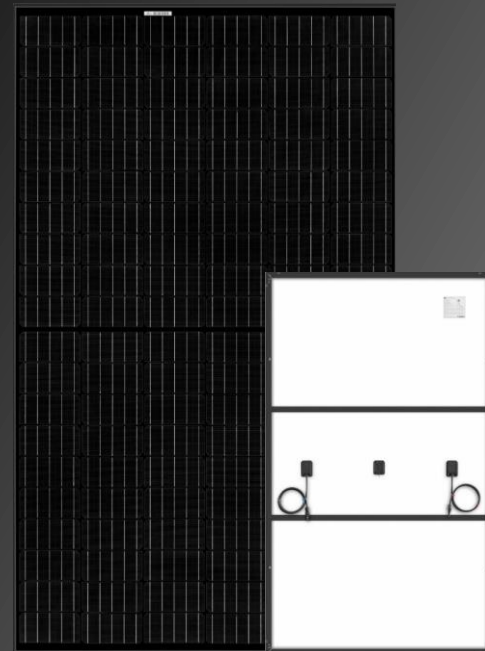
Cell technology:
mono-Si n-type PERT

Efficiency:
19.5%

Power density:
195 W/m²

Max. System Voltage:
1000V

Temperature Coefficient:
-0.35%/°C



Product advantages

High efficiency and energy yield

- PERC cell technology for higher power
- Lower operating temperatures for high efficiency

More power through reduced resistance

- Halfcut cells for more power
- Better electron flow for stable power

Increased yield when shaded

- REC's iconic Twin design generates more energy
- When one half is shaded, the other half can still generate electricity

Darker appearance

- Monocrystalline cells for a uniform dark blue color and high efficiency

Reliable production

- Lower operating temperature for better reliability
- Reduced chance of defects due to lower operating temperature

Key info.

Power:
340 Wp

Format:
60-cell

Dimensions:
1,683 x 997 x 38 mm

Weight:
18.9 kg

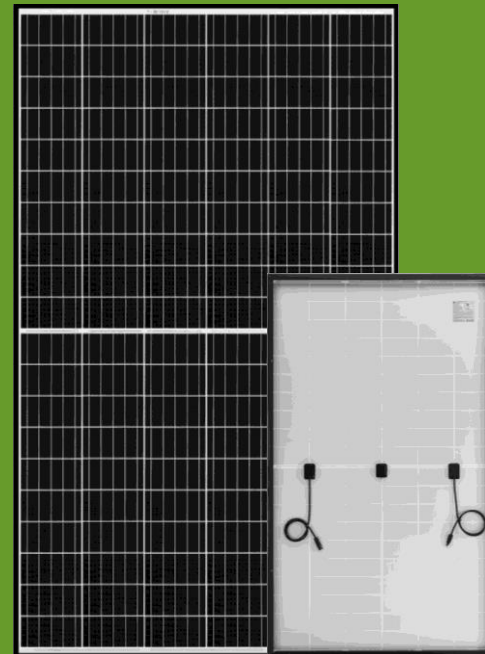
Cell technology:
mono-Si p-type PERC

Efficiency:
20.3%

Power density:
203 W/m²

Max. System Voltage:
1000V

Temperature Coefficient:
-0.34%/°C



Product advantages

High efficiency and energy yield

- PERC cell technology for higher power
- Lower operating temperatures for high efficiency

More power through reduced resistance

- Halfcut cells for more power
- Better electron flow for stable power

Increased yield when shaded

- REC's iconic Twin design generates more energy
- When one half is shaded, the other half can still generate electricity

Darker appearance

- Monocrystalline cells for a uniform dark blue color and high efficiency

Reliable production

- Lower operating temperature for better reliability
- Reduced chance of defects due to lower operating temperature

Stylish looks

- Full-black design for a seamless appearance on roofs

Key info.

Power:
335 Wp

Format:
60-cell

Dimensions:
1,683 x 997 x 38 mm

Weight:
18.9 kg

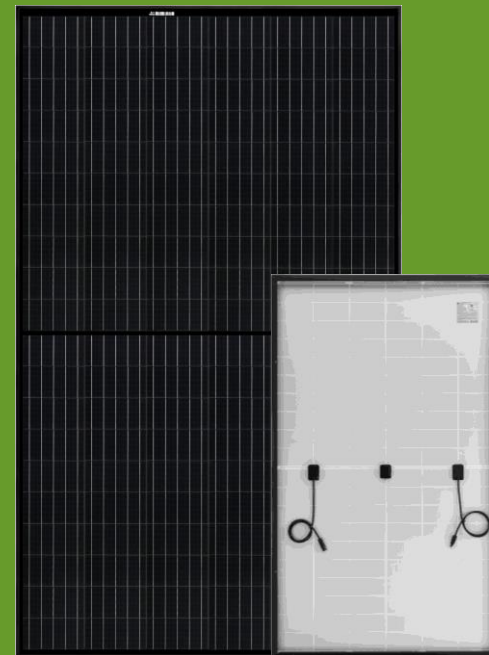
Cell technology:
mono-Si p-type PERC

Efficiency:
20.0%

Power density:
200 W/m²

Max. System Voltage:
1000V

Temperature Coefficient:
-0.34%/°C



Product advantages

High efficiency and energy yield

- PERC cell technology for higher power
- Lower operating temperatures for high efficiency

More power through reduced resistance

- Halfcut cells for more power
- Better electron flow for stable power

Increased yield when shaded

- REC's iconic Twin design generates more energy
- When one half is shaded, the other half can still generate electricity

Reliable production

- Lower operating temperature for better reliability
- Reduced chance of defects due to lower operating temperature

Super-strong frame

- REC's unique frame design makes the panel even more robust
- Extra protection against bending under load ensures a lifetime of high power generation

Key info.

Power:
405 Wp

Format:
72-cell

Dimensions:
2,008 x 1,001 x 30 mm

Weight:
22.3 kg

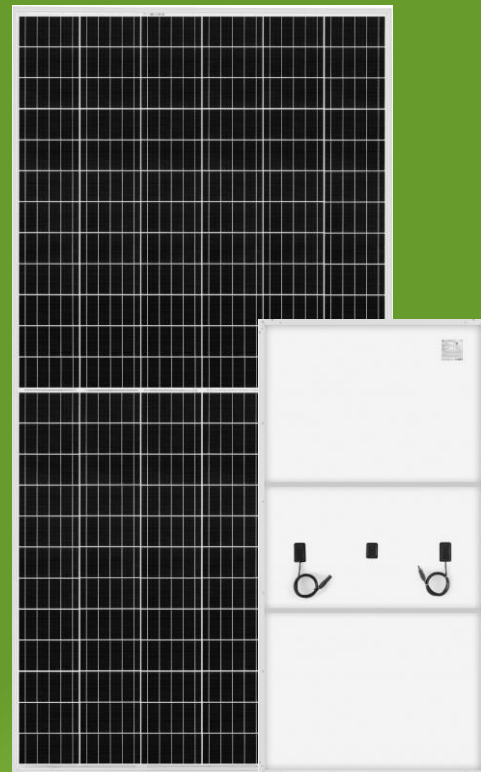
Cell technology:
mono-Si p-type PERC

Efficiency:
20.1%

Power density:
201 W/m²

Max. System Voltage:
1000V / 1500 V

Temperature Coefficient:
-0.34%/°C



Innovation is in our DNA – global energy transitions cannot progress without new means and technology leaps

3

Reliability

Tonon Furniture
Manzano, Italy
REC N-Peak Series



The best warranty is the one you never
have to call on.

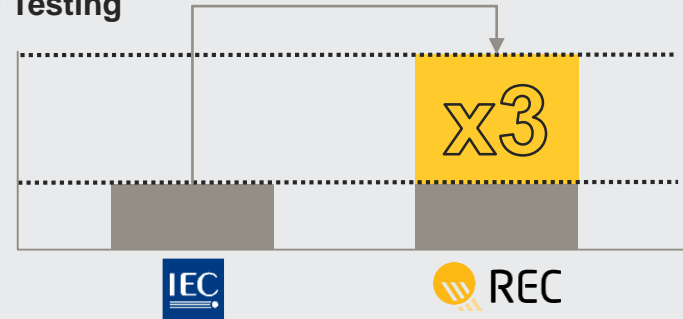
REC's testing program extends beyond the standards

- All design changes at REC go through an extended testing process, where panels are examined at conditions beyond normal industry standards
- Because REC tests its products beyond the pass marks of international standards, an outstanding performance during certification is possible
- Extreme testing ensures performance and reliability in the most severe climates

Extended Testing

REC pass mark

IEC certification pass mark



Combined Cycle Test

Flash

Flash

Humidity Freeze
10 x -40°C to +85°C, 85% hum

Mechanical Load
1 x 5400 Pa

Thermal Cycle
200 x -40 °C to +85°C

Damp Heat
1 x1000 hrs, 85°C,85% hum



Assuring quality throughout production



REC's product certifications show quality performance

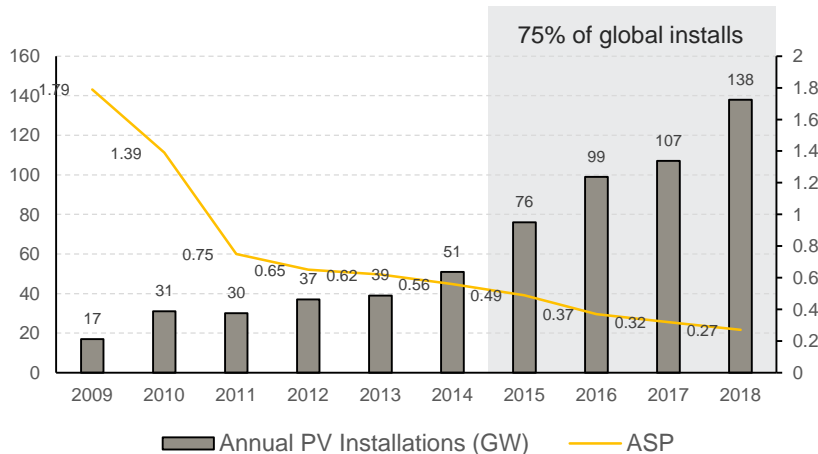
- REC's range of specific product certifications show a high level of all-round product quality
- Specialized climatic testing shows product resistance to the harshest environments
- Worldwide management and operational standards for consistent quality, environmental protection, and safety for workers and the public



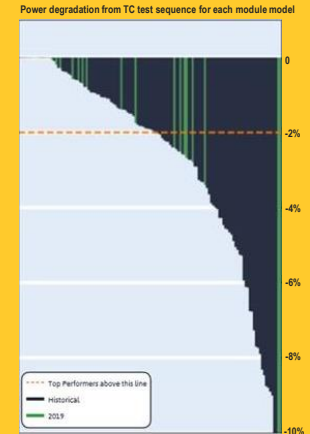
REC quality is recognized year after year by consistent performance in third party tests



- 75% of global installed solar capacity has operated for less than 5 years
- In only 10 years, the average price of solar panels has dropped by over 80%
- Manufacturers need to save costs



- REC is consistently a Top Performer in DNV-GL / PVEL long-term reliability tests


















Source: DNV-GL-2019

External assurance of REC quality



REC's quality shown through product certifications

CERTIFICATION	INTERNATIONAL STANDARD	TEST INSTITUTE
 Ammonia Corrosion Resistance	IEC 62716	
 Salt Mist Corrosion Resistance	IEC 61701 Severity Level 1 & 6	
 Potential Induced Degradation	IEC 62804	
 Non-uniform Snow Load	2PfG 2310/11.12.	
 Dynamic Mechanical Load	IEC 62782	
 Hail Impact	IEC 61215 (35mm)	
 Cyclic Strength Wind Loads	BCA 2012 LH	
 Ignitability/Fire Resistance	ISO 11925-2; UNI 8457/9174; UL 1703	 
 Quality, Environmental & Safety	ISO 9001; ISO 14001; OHSAS 18001, IEC 62941	 

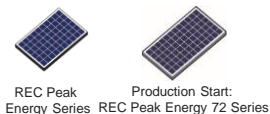
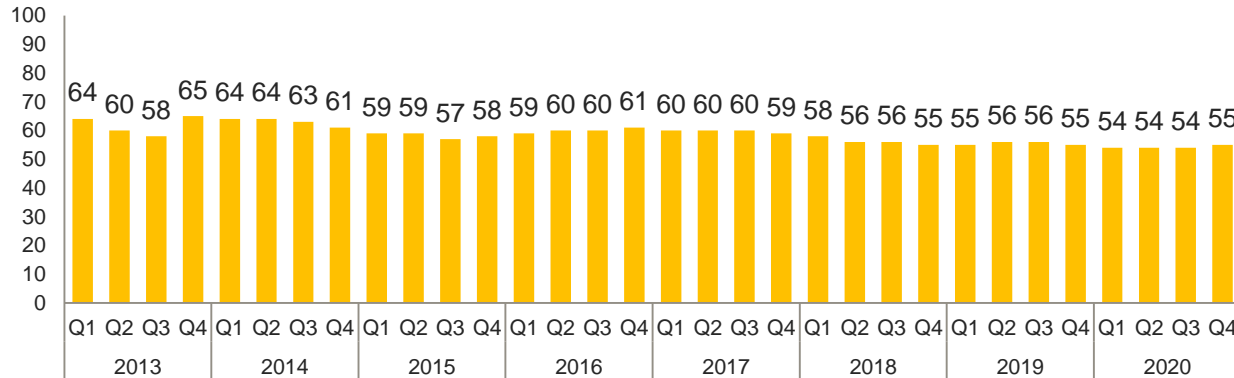


High quality demonstrated by consistently low warranty claim rates



Claims rate at REC

Cumulative PPM – parts per million



Production Start:
REC Peak Energy 72 Series



REC consistently demonstrates a very low warranty claims rate

Even with the introduction of new products, REC's claims rate remains steadily low

Proof of REC's focus on high quality panel manufacturing

Low claims, strong warranty



- A very low warranty claims rate justifies favorable warranty terms
- REC's warranties reflect this, further supporting REC's premium quality

Product Series	Product warranty		Performance warranty		
	Product warranty	Extension eligibility*	Minimum power in year 1	Year 2-25 maximum annual degradation	Guaranteed % of name-plate power in year 25
REC Alpha (60- & 72-cell format)	20 years	+5 years	98.0%	0.25%	92.0%
REC N-Peak				0.5%	86.0%
REC TwinPeak (60-cell format)			97.5%	0.7%	80.7%
REC TwinPeak (72-cell format)				0.5%	85.5%

* Product warranty extension eligibility is exclusive to REC Certified Solar Professional installer as part of the REC ProTrust Warranty; visit www.recgroup.com/warranty for details

(REC TwinPeak products not available in Germany)


REC ProTrust Warranty – exclusively from REC Certified Solar Professional installers



- REC's ProTrust Warranty covers product, performance, and labor
- Comprehensive warranties that provide long-term and value-adding security customers can depend on
- All REC products eligible for REC ProTrust Warranty

REC warranty type	REC ProTrust Warranty		REC's leading standard warranty
Installer group	Exclusive to REC Certified Solar Professional installers		All installers
System size	<25 kW	25-500 kW	Any
Product/Performance/Labor warranties (years)	25/25/25	25/25/10	20/25/0
Registration	Via REC SunSnap app or REC Certified Solar Professional Portal		Not required



An aerial photograph of a port facility, likely Grand Port Maritime de la Réunion. The image shows several large industrial buildings with extensive solar panel installations on their roofs. The buildings are situated along a waterfront with numerous boats docked at piers. In the background, there are hills and a clear blue sky. A white text box in the upper right corner contains the text 'REC is a trusted partner for customers and consumers'. A large white number '4' is positioned on the left side of the image, next to a vertical yellow bar. The word 'Recognitions' is written in large white letters across the bottom left of the image. In the bottom right corner, there is text identifying the location and the solar panel series: 'Grand Port Maritime de la Réunion', 'Le Port, Réunion', and 'REC TwinPeak 2 BLK Series'.

REC is a trusted partner for customers and consumers

4

Recognitions

Grand Port Maritime de la Réunion
Le Port, Réunion
REC TwinPeak 2 BLK Series

Winner of multiple third-party awards



REC's industry strength has been recognized by multiple awards worldwide

- Intersolar Award for REC Alpha
- Best Solar Panel by Solar Review for REC Alpha
- PV Module Tech Award by Solar Quarter India for REC Alpha
- Top Performer Awards by DNV GL for 5 years in a row
- Solar+Power Award for REC TwinPeak 2 Series
- Made in Singapore Award for REC TwinPeak 2 Series
- Norwegian Climate Business of the Year Award for New Silicon Production Methods
- Intersolar Award for REC TwinPeak Series
- Singapore 1,000 Net Profit Growth Excellence Award
- IAIR Awards for Corporate Sustainability and Solar Energy Solutions
- Frost and Sullivan Best Practices Award for Customer Value Enhancement
- Solar Industry Award for Module Manufacturing Innovation




REC on stage



REC is recognized as a valuable industry expert

- REC Senior Management Team @ REC Leadership Panel 2020
- REC CEO @ SNEC in Shanghai
- REC CEO @ All Energy Australia
- REC CEO @ Clean Energy Leader's Dialogue at Singapore International Energy Week
- REC CEO @ Reuters Energy Transition Panel
- Singapore's Minister for Trade and Industry @ REC's manufacturing site in Singapore
- REC CFO @ CNBC
- REC CEO @ CNBC
- REC sharing expertise @ Singapore's Management University





“Solar’s most trusted” is not just a slogan –
it is our promise which all REC employees
live up to every day

5

Sustainability

Giebelstadt, Germany
REC Peak Energy Series



I'd put my money on the sun and solar energy.
What a source of power! I hope we don't have to wait
till oil and coal run out before we tackle that.

Thomas Edison to his friends Henry Ford
and Harvey Firestone (1931)

Rooftop system at REC's solar panel factory directly contributes to manufacturing energy needs



2.37 MW



2.6M kWh



550 HDB
4RM flats



1,400 t CO₂



64,000 trees



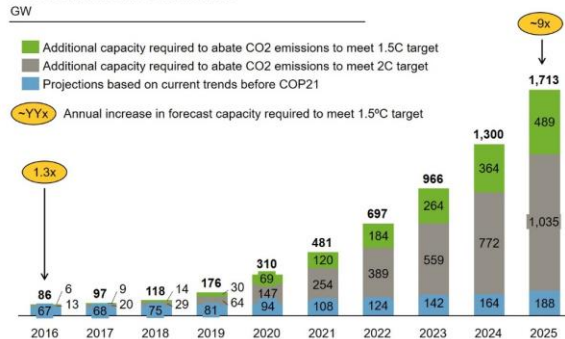
~300 cars

REC salutes COP21 agreement

- One of the first companies to do so, REC published its Climate Change study shortly after the Paris agreement, highlighting how solar can be a key pillar in mitigating emissions and supporting in abating climate change
- To be on track by 2025 to close the emissions gap of the 1.5°C target, the potential solar capacity ramp-up has to be up to 4,800 GW larger than industry analysts have been forecasting before the Paris Agreement



Forecast annual solar PV installations



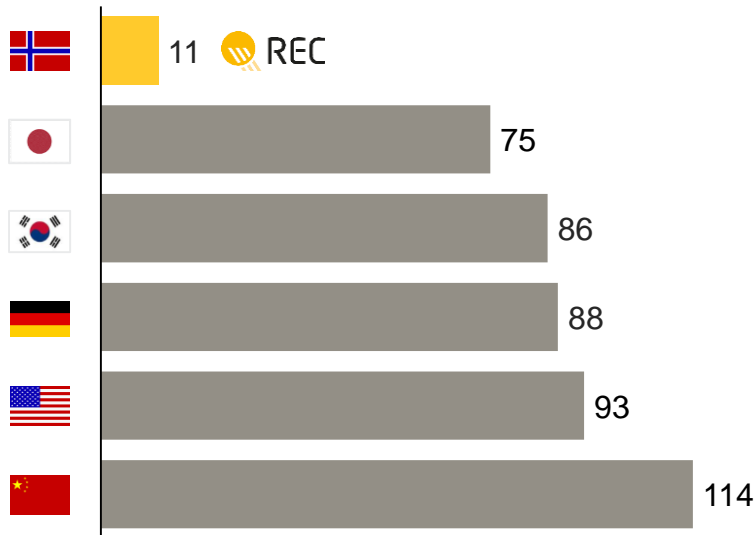
Source: REC analysis

REC leads the industry in terms of sustainable PV manufacturing



- The polysilicon manufactured by REC in Norway has the lowest carbon footprint in the industry thanks to an energy efficient process and hydro powered energy source leading to almost zero emissions – a fact now validated by ADEME and confirmed by CERTISOLIS certification
- Cell and panel manufacturing is done in Singapore under some of the most rigorous environmental standards in the world

Polysilicon CO₂ Footprint based on region of manufacture
Kg CO₂e/kg polysilicon



Recycling brings solar manufacturing full circle



REC PLACES HEAVY IMPORTANCE ON RECYCLING THROUGH THE VALUE CHAIN



REC has partnered with multi-national electronic waste recycling companies to ensure effective solar panel recycling systems



In 2018, REC introduced a silicon recovery process that will make it the first in the world to use silicon waste to produce solar grade silicon

- Unique to REC – not replicable in Siemens or FBR processes



REC has a leading carbon footprint

- Certified by Certisolis (France)



In 2011, REC was the first solar panel manufacturer to demonstrate an Energy Payback Time of only 1 year



In 2012, REC was one of the first manufacturers to make a lead-free panel commercially available

With its strong environmental credentials and top performance, REC panels are a great choice for eco-friendly investors in solar

Manufacturing in both Norway and Singapore provide REC with significant advantages



Global Competitiveness Index

1

Singapore



2

USA



6

Japan



7

Germany



13

Korean



17

Norway



27

Malaysia



28

China



68

India



Transparency (incl. incidence of corruption)

3

Singapore



7

Norway



11

Germany



18

Japan



22

USA



42

Korea



55

Malaysia



66

India



75

China



Corporate governance

2

Singapore



5

Malaysia



7

Norway



15

India



21

Korea



31

USA



41

Japan



52

Germany



72

China



REC's CSR Initiatives



- REConstruct funds solar power systems for communities affected by natural disasters, beginning with donating fully-installed REC Alpha panels to community organizations affected by the 2020 Australian bushfires
- REC solar panels bring clean energy to remote Himalayan communities – 1,500 people powered, 9,000 liters of kerosene and 22.8 tons of CO2 emissions eliminated
- REC's Climate Action Pledge in Singapore by the company and 500 employees
- Karanda Mission Hospital in rural Zimbabwe – a commitment to treat the needy
- REC's SolarBox in the Philippines – in collaboration with Red Cross – lights up lives on the Bantayan after Hurricane Haiyan



Empowering millions people all over the world with clean solar power and in all areas of our daily lives





REC is a credible advocate for the global energy transition and green economy

6

Reference cases

SFO International Airport
San Francisco, CA, USA
REC TwinPeak 2S 72 Series



Shared Ownership Building

109.5 kW

300 x REC Alpha Black

Maassluis, Netherlands

2020



France home

6.57 kW

18 x REC Alpha

Toulouse, France

2020



Catalunya vacation home

13.14 kW

36 x REC Alpha

Alella Parc, Barcelona, Spain

2020



Pauly family home

7 kW

20 x REC Alpha Black

Munich, Germany

2019



Chosei Village

85 kW

232 x REC Alpha

Chiba Prefecture, Japan

2019



Pomeranian Voivodeship

5.4 kW

15 x REC Alpha

Gdynia, Poland

2019



Private residence

7 kW

16 x REC N-Peak

Halle, Belgium

2019



Private residence

5.1 kW

16 x REC N-Peak

Peregian Beach, QLD, Australia

2019



Vegetable Farm

268.56 kW

746 x REC Alpha

Oterleek, Netherlands

2020

Real life, real satisfaction



IKEA, Germany

582 kW

2,476 x REC panels

Regensburg & Freiburg, Germany

2010

Phenix Power Plant

24 MW

100,000 x REC panels

Canino, Italy

2011

Redtag (BMA International)

537 kW

2,016 x REC panels

Dubai, UAE

2016

Real life, real satisfaction



Evans family home

13.4 kW

61 x REC panels

Monterey, CA, USA

2011



Singapore National Stadium

707 kW

2,719 x REC panels

Singapore

2014



Tomakomai Rinku Kashiwabara Plant

1.7 MW

6,528 x REC panels

Tomakomai City, Japan

2015

Real life, real satisfaction



Caeremlyn Farm Whitland Plant

18 MW

69,252 x REC panels

Whitland, UK

2013

Audi Production Plant

2.3 MW

9,288 x REC panels

Brussels, Belgium

2013

BMD Solar Power Plant

5.8 MW

23,200 x REC panels

Bikaner, India

2013

Real life, real satisfaction



Sauter family home

9.8 kW

42 x REC panels

Wain im Allgäu, Germany

2011

Rockville Solar II Project

3.2 MW

12,264 x REC panels

Indianapolis, IN, USA

2014

Nakhon Pathom & Suphan Buri Plants

72 MW

292,608 x REC panels

Nakhon Pathom, Thailand

2014

Real life, real satisfaction



NEXTDC Data Centre

402 kW

1,575 x REC panels

Port Melbourne, Australia

2013



Gibelstadt Power Plant

28 MW

120,000 x REC panels

Gibelstadt, Germany

2011



Virginia family home

18.7 kW

52 x REC Alpha Black

Winchester, VA, USA

2020



Dubai International Airport

635 kW

2,592 x REC panels

Dubai, UAE

2015



Kennis Farm

100 kW

400 x REC panels

East Anglia, UK

2015



Rio Tinto Stadium

2 MW

6,414 x REC panels

Sandy, UT, USA

2015



SOLAR'S MOST TRUSTED