



Win-Win-Business

<http://wwwb.jp>



**WWB**

WWB Corporation



**Abalance GROUP**  
We are the group company  
of Abalance

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WWB is committed to promoting ESG / SDGS.



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# Green energy Business domain

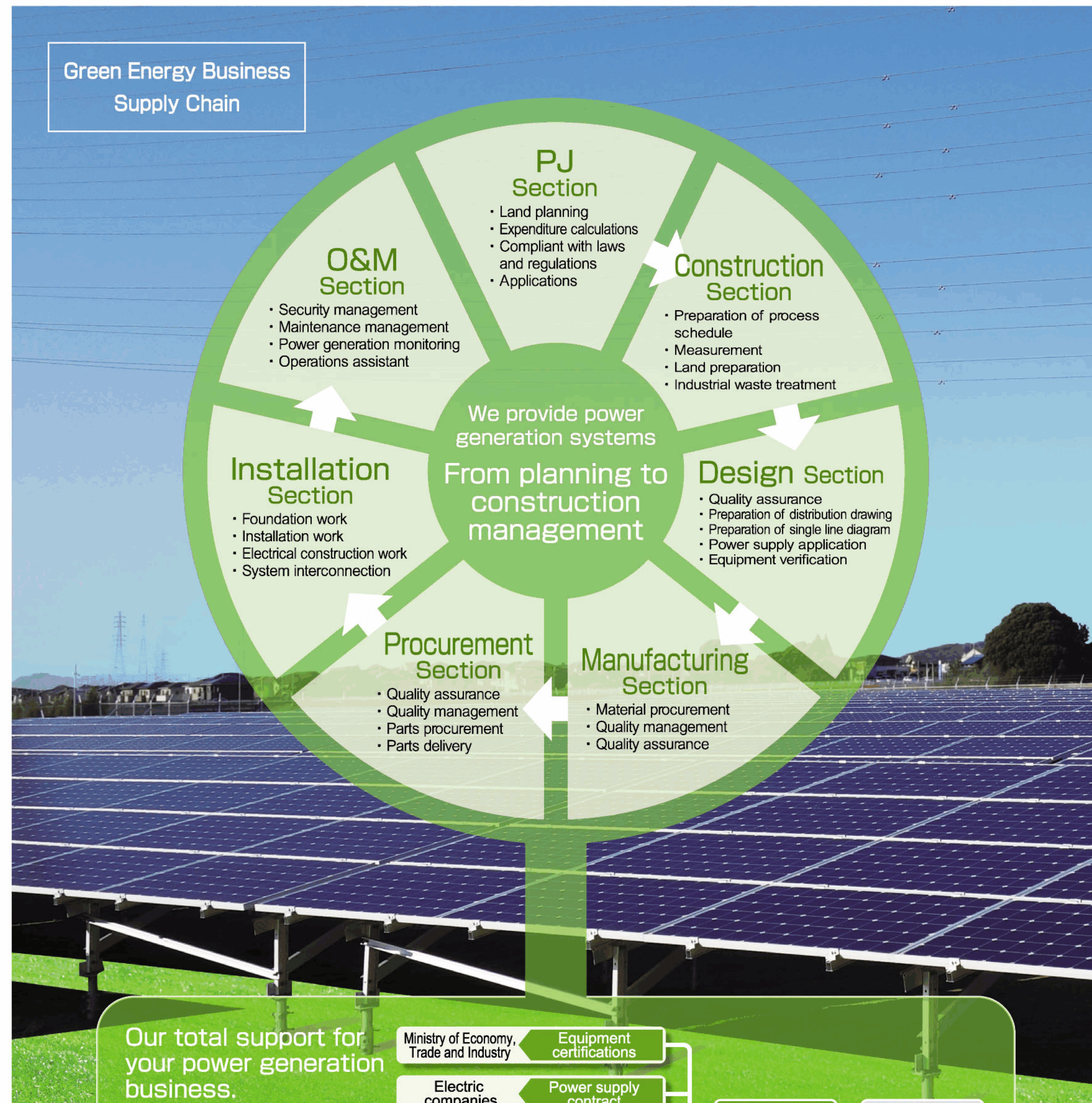
WWB is a comprehensive green energy company.

- Installation of solar panels at company-owned facilities
- Installation of solar panels at public facilities such as schools
- Solar sharing

## 1 Business for industrial use

Contributing to the solar power generation business  
**One stop solution.**

We provide solutions that make the most of our high-quality modules at every step not only from the upstream of solar power generation projects to the completion of installation, but also the operation of a solar power project. By handling all processes in a one-stop service, each process can be coordinated smoothly and provide a stress-free experience. We strongly support your solar power generation business.



**Our total support for your power generation business.**

We provide the total support necessary for starting a power generation business. Specifically, our support includes making contracts with power companies, checking the compliance regarding laws and regulations with local governments, having explanatory meetings with local residents, and obtaining financial institution support.

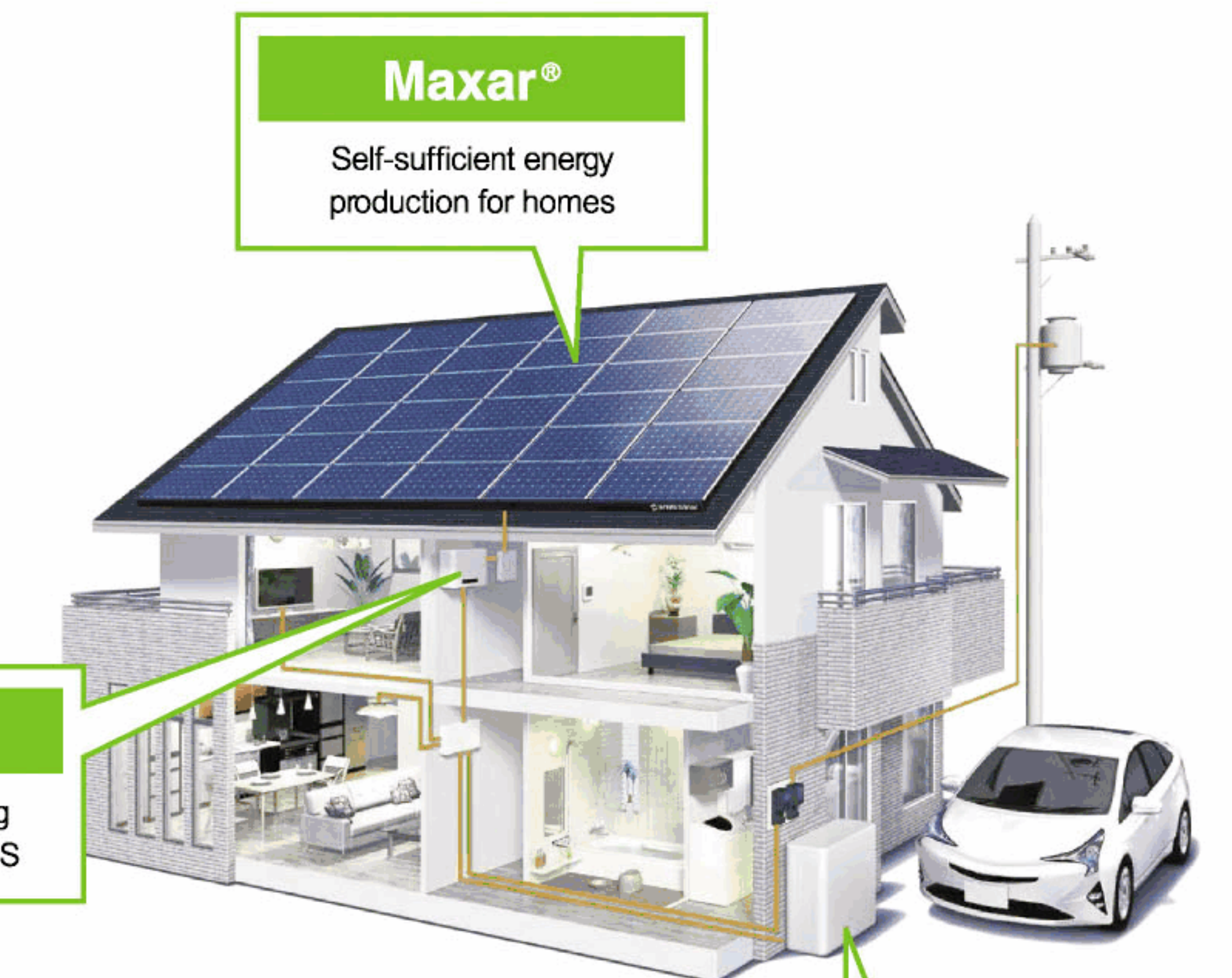


- New and existing solar panels
- Solar carport
- System construction support for ZEH
- solar cell module

## 2 Business for Residential

Start with solar cell modules  
**For a comfortable and joyful life**

A solar cell module system adds new value to your house. It creates the energy used in your house. You can sell the surplus energy and earn revenue. Surplus power can also be stored in a solar cell module for emergencies. You can promote decarbonization and contribute to the global environment. In the future, the use of EV cars parked in car-port for as a house-battery will become standard. Your life will be more comfortable, safe and convenient.



**Sufficient guarantee service**



We guarantee that the module conversion efficiency is 90% for the first 12 years, 83% up to 20 years, and over 80% up to 25 years.



Guaranty on operation of peripheral devices such as modules, mounts, power conditioners, and junction boxes.



Guaranty on repair costs caused by typhoons, lightning strikes, fires, or damage caused by flying objects.

## 3 Product Sales

- Procurement and sale of solar power generation related products

**WWB as a trading company**

A wide selection of solar power generation related products

We have various types of products for various purposes, such as peripheral devices including power conditioners and cell modules, and accessories including cables. By freely combining such devices, we can offer a power generation system which is most suited to your purpose.

- Sales and purchase of power plants (low, high and extra high voltage)
- Sales, purchase and brokerage of used power plants
- Operation of our own power plants
- Acquisition and sales of ID and land
- Power plant construction

## 4 Power Generation Business

**Sale and purchase of power plants**

Experienced over 2,000 transactions including secondary transactions of solar power plants  
Operation of our own power plants



**Operation of our own power plants**

Stable profits from power generation contributes to sound corporate management

We own solar power plants and gain profit. There are only a few fluctuations in the profit by the market trend, and this is the stable foundation for corporate management. In addition, we use the operational know-how, which we obtained from our power generation business, for our customers.

**Sales of Used Generation Plants**

We handle used generation plants in excellent conditions all over Japan

We provide matching services for solar power plants by mediating between those who want to sell and those who want to buy. We loyally support our customers to the end, even if their ownership needs to be transferred for any reason.

## 5 O&M Business

- Security management
- Maintenance management
- Power generation monitoring
- Operations assistant
- Sales of remote monitoring system

**Reliable O&M service**

Providing a one-stop maintenance service

Using the latest remote monitoring system and digital management system, we provide thorough maintenance management. We promptly handle your power generation problems to minimize power generation losses and secure your profits from power sales.



# WWB provides solar power cell modules with “Made in Japan” quality.

We promote Maxar® brand modules by VSUN

We, WWB are a module manufacturer and have developed our own unique business model with module manufacturing functions in our supply chain. The solar module that we manufacture and sell boast the highest output in the industry. We realize the high efficiency, long-term stability, and wide product lineup that is possible manufacturer-specific. Our solar module are applicable to various conditions, from ordinary detached houses to industrial mega solar power generation systems.



### High Quality

The module production plant owned by our group company in Vietnam is certified as a high-tech plant by the Vietnamese government, as well as having the TUV license. Modules manufactured with “Made in JAPAN” quality have achieved a high reputation all over the world.

### Feedback to Manufacturing

Since we handle the development and manufacturing of modules to the maintenance and operation of power plants, we can promptly fulfill any requests from actual operational sites. We quickly deliver high-performance modules that fulfill our users’ wishes.

### Various Product Development

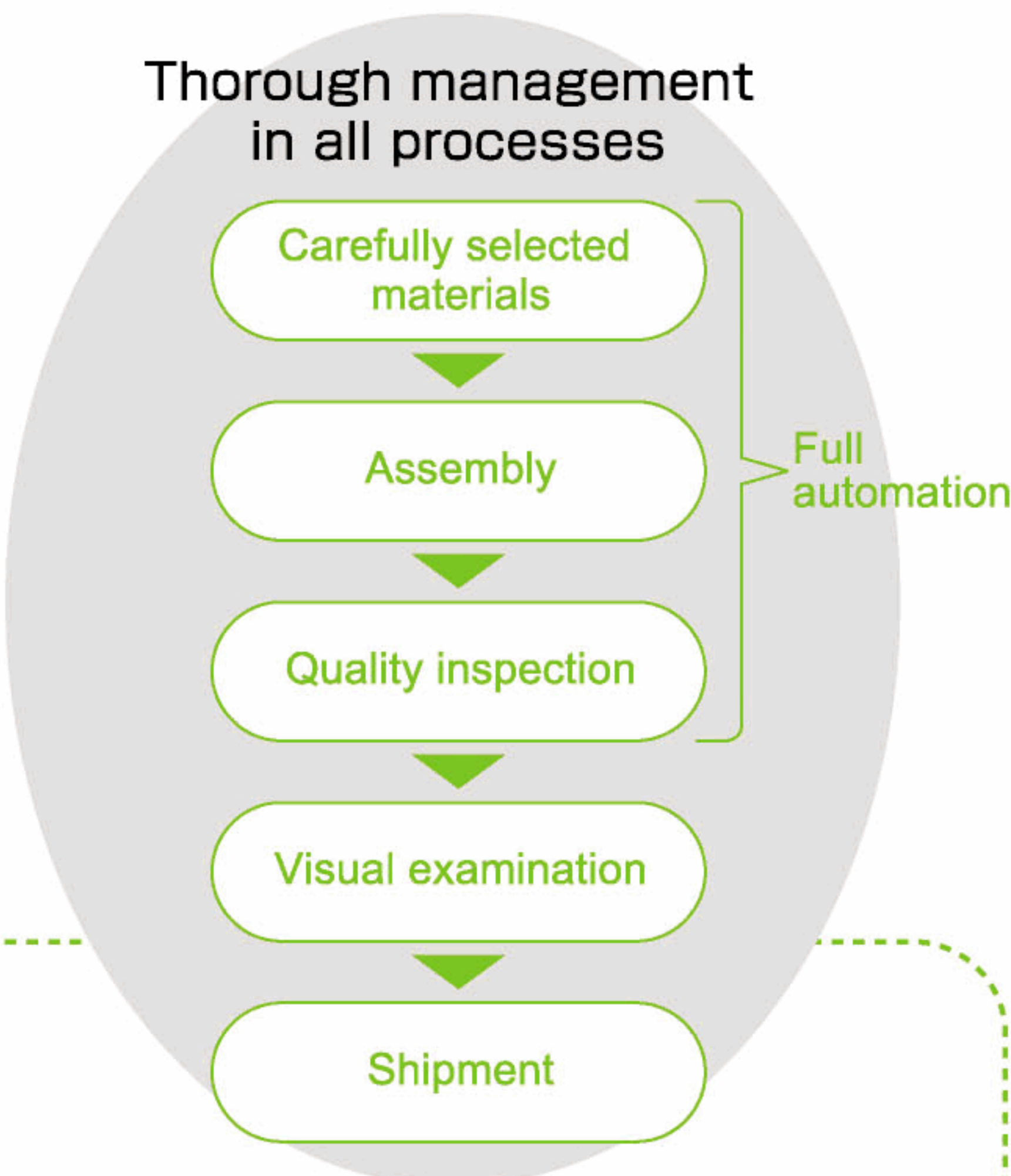
Respond quickly to law changes and market needs, and to commercialize products are the strengths of our in-house development. We support a variety of solar power generation conditions with a diverse product lineup.



High quality solar cell modules to provide high added value

## Manufacturing System for High Quality and Highly Efficient Modules

To ensure product quality, we are making every effort to select raw materials and manage the production processes for stability and durability in severe weather. Every solar module undergoes thorough quality control, and a secondary quality test at the time of shipment. The stability, efficiency and cost performance of our products are incomparable with the products of other companies.



## VSUN, a Group company of WWB

Together with our partners in the world, VSUN promote environment conservation and development of clean energy. We take the responsibility as a company to provide green and clean energy to many people in the world and make contribution on global energy evolution and sustainable development.

VSUN is certified as a high-tech company by the Vietnamese government in April 2018.

We are expanding sales to Southeast Asia in addition to Europe and the United States.



We received EcoVadis bronze medal in 2021 for evaluation on social responsibility for companies.



2021・2022年 PVELより、We were selected as “Top Performer” for the PV Module Reliability Scorecard.



Vietnam Sunergy (VSUN Solar) expanded the production to 3800MW in 1Q of 2023.

| Firm / brand | Annual module capacity, MW/year |
|--------------|---------------------------------|
| VSUN Solar   | 3,800                           |

Table 1: Photovoltaic module manufacturers meeting BloombergNEF's Tier 1 criteria as of 1Q 2023

| Firm / brand          | Annual module capacity, MW/year | Firm / brand    | Annual module capacity, MW/year |
|-----------------------|---------------------------------|-----------------|---------------------------------|
| ZHSHINE               | 10,000                          | Leapfrog Energy | 2,000                           |
| Yingli                | 11,650                          | Jolywood        | 3,000                           |
| Wuxi                  | 9,000                           | Juneng Energy   | 4,000                           |
| VSUN Solar            | 3,800                           | Jerico          | 70,000                          |
| Urica Solar           | 3,000                           | Jelton          | 2,500                           |
| Tina                  | 60,000                          | JA Solar        | 51,000                          |
| Tongwei               | 14,000                          | Helene          | 950                             |
| Suntech               | 15,000                          | Hanwha Q-Cells  | 12,400                          |
| Sungro Power          | 2,000                           | Hanwha Tech     | 400                             |
| Sunco Photo Solar     | 4,000                           | First Solar     | 11,200                          |
| SolarFabrik           | 50                              | Exxon Group     | 700                             |
| Sharp                 | 210                             | E / Solar Inc   | 2,000                           |
| Sengrim               | 7,750                           | Eging           | 10,000                          |
| Risen Energy          | 25,000                          | DMEG            | 7,500                           |
| Puresola              | 3,000                           | Chen Astronergy | 22,000                          |
| Recom                 | 1,200                           | Canadian Solar  | 31,400                          |
| Neo Solar Power / URE | 1,800                           | Bowtel Solar    | 1,500                           |
| Maxeon                | 10,100                          | Anhui Huasun    | 2,700                           |
| Luxen Solar           | 2,200                           | AE Solar        | 1,800                           |
| Longi                 | 80,000                          | Total           | 500,810                         |



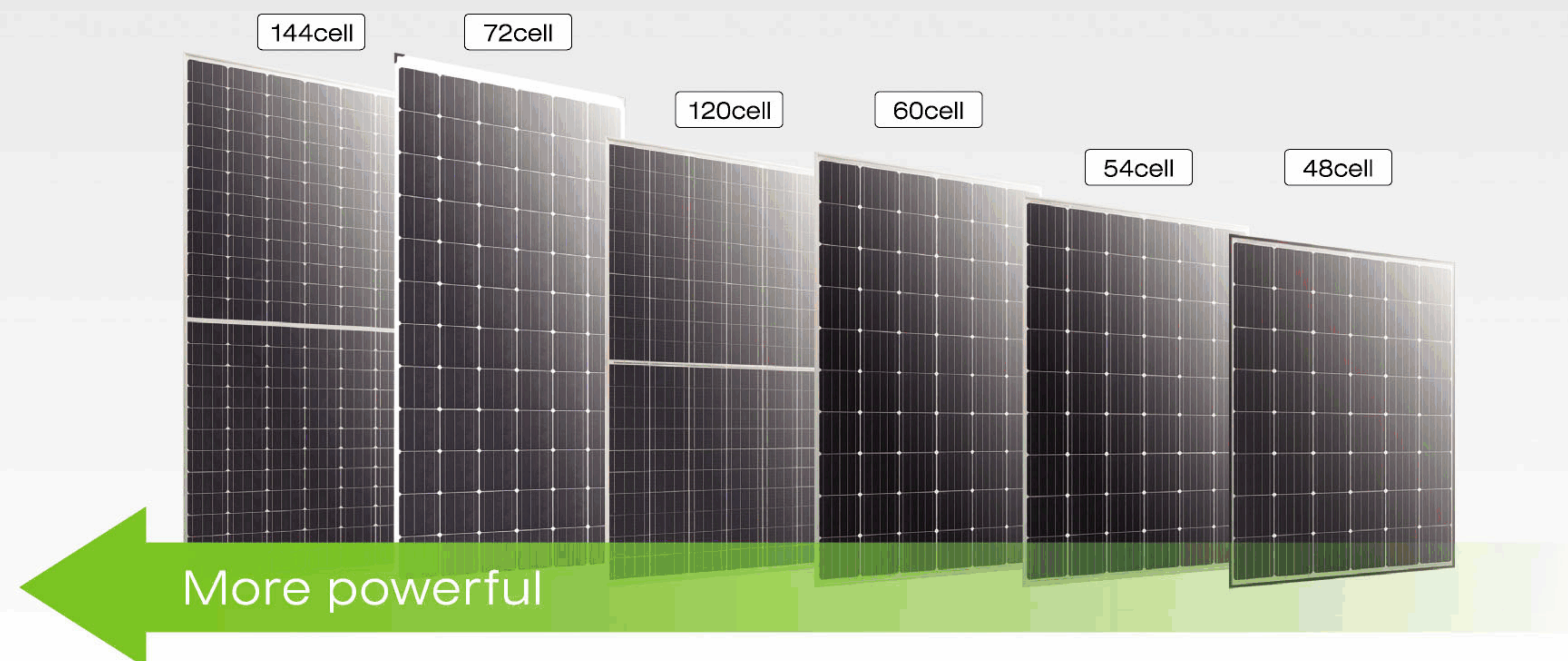


# Aiming for the best in solar power generation

High-output, high-quality modules  
boasting the industry's highest conversion efficiency.

**Maxar®**  
Photovoltaics Module <Maxar>

Development, design, manufacturing and sales of WWB's solar cell modules, Maxar fulfill the international standards. Maxar is widely used in solar power generation systems for general residential house roof, as well as in apartment, factories, commercial facilities, and mega solar power plants.



- Simple as just placing it in position
- Simple design • All stainless steel

**Maxar®**  
**STAND**  
Photovoltaics Simple Base <Maxar>

Utility model patent pending

There is no need to make holes in the roof, and no need for foundations or waterproofing. The Maxar-STAND is the mounting unit to the flat roof that uses wind pressure. The installation of a module is as simple as just placing it in position.

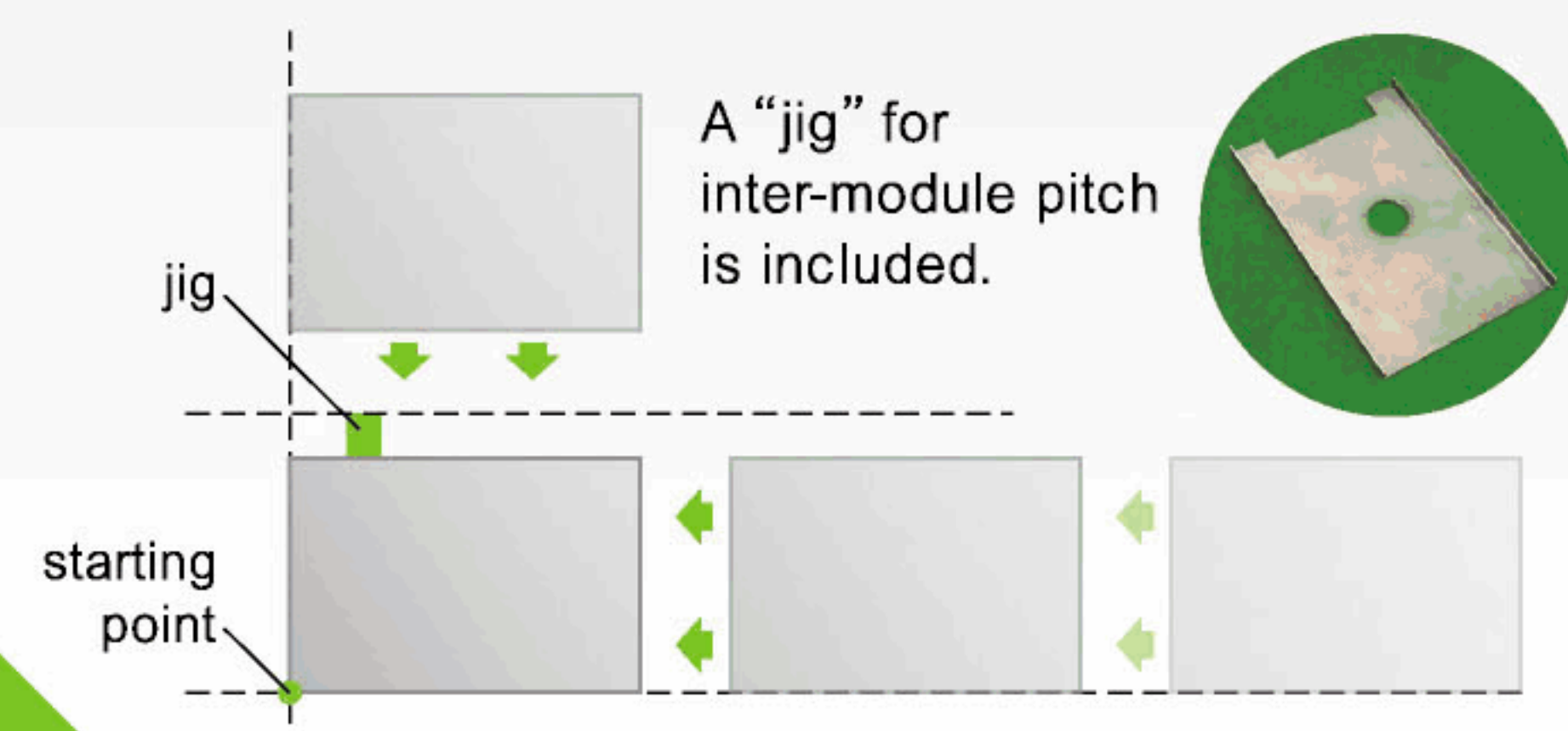
**Type B** M-shaped design  
Gradient **4°**

M-shaped design suitable for east-west layout



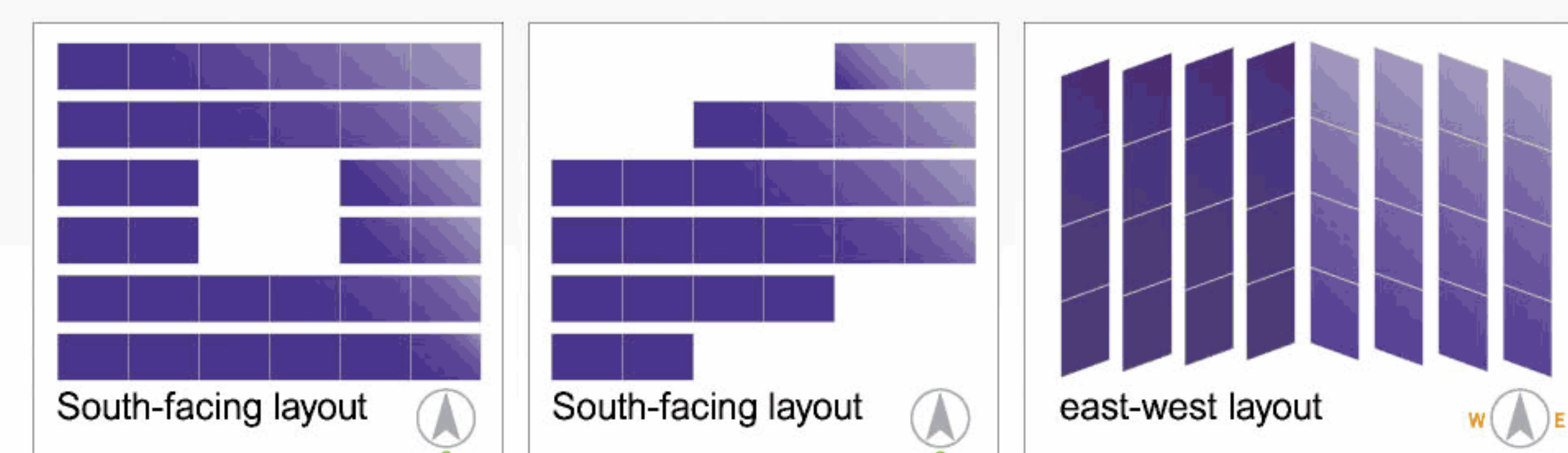
**Type A** : Gradient **8°**, Specification  
**Type C** : Gradient **0°**, Specification

Determine the "starting point" and place the modules one by one. Easy placement using a "jig".



Free design arrangement

There is no choice of conditions, such as placement to avoid obstacles such as skylights and shadows, and east-west placement considering the water slope.



『楽でんくん』『楽でんくん2』 is  
「Flameproof products, etc. Recommended product mark」 acquisition.



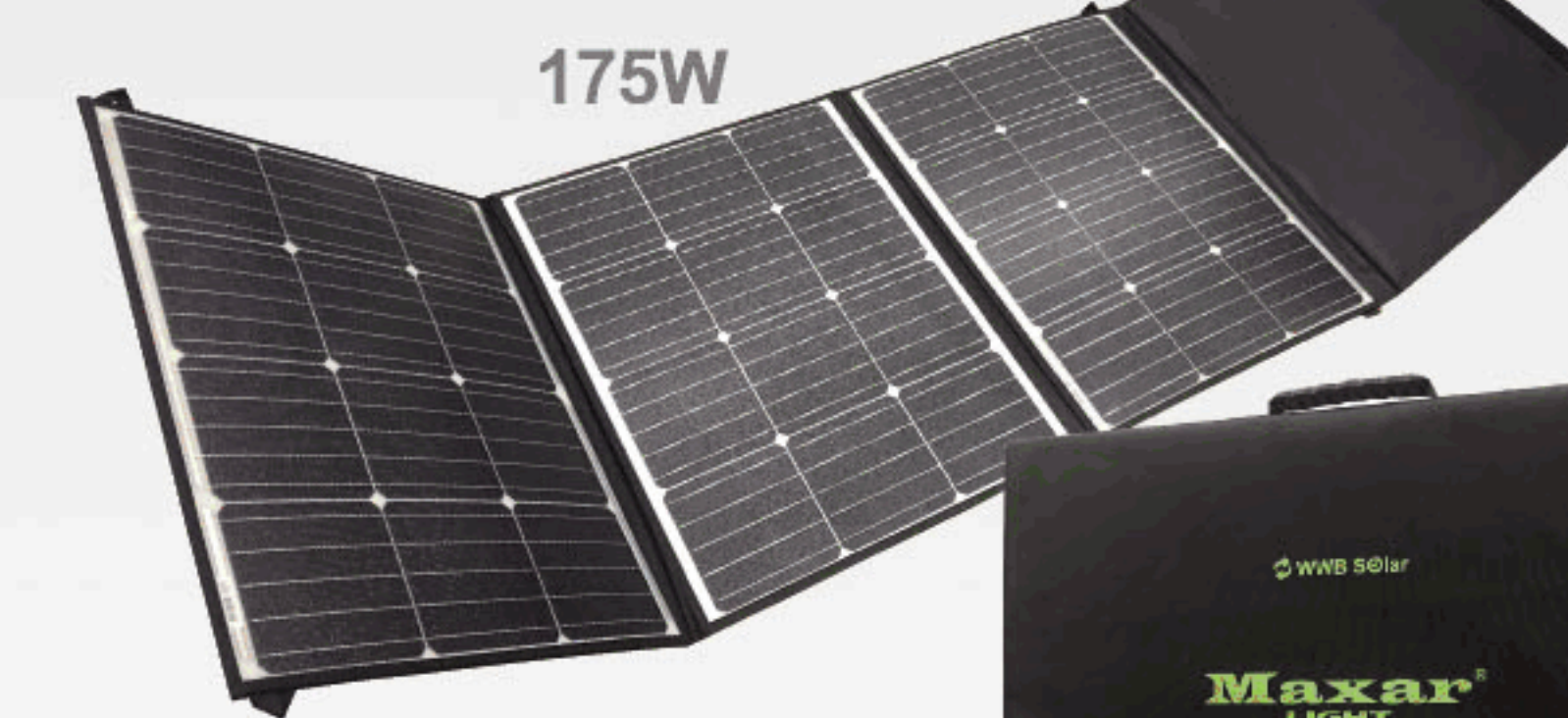
The Rakudenkun series are portable power storage systems.  
You can use electricity anytime and anywhere.

**Maxar®**  
**CHARGE**  
**portable**  
Compact system <Maxar>

**楽でんくん**

400Wh

Compact size  
Only 5.5kg



Foldable  
It is 5kg in weight, so  
you can easily carry  
it in one hand.



Solar panel and battery set.  
portable power storage systems

Fully charged  
in about 4 hours



Just connect the dedicated cable  
Can be charged immediately!  
Bright even during power outages

- Laptops (20~50W) : LED Light (15~30W) : 6.5~13 hours\*
  - Smartphone WiFi : 40~60 times
  - 32inchi TV : 4~5 hours\*
- \* Estimated charging



What is really needed now? Backup system for emergencies

**Maxar®**  
**CHARGE**  
**portable**  
Compact system <Maxar>

**楽でんくん2**

2400Wh

Emergency and portable charging



You can provide generous backups.

\* It varies depending on the model and environment, and is not guaranteed.



40inchi LCD TV : 1 unit  
<Power output : 120W>  
Up to 20 hours\*



Lighting : 2 units  
<Power output : 40W>  
Up to 30 hours\*