

WIN WITH CANADIAN SOLAR

Aug. 2022



Content

Company

Products

Projects

Company Description

A leading manufacturer of solar photovoltaic modules, provider of solar energy and battery storage solutions, and developer of utility-scale solar power and battery storage projects

- Founded in Ontario, 2001
- Listed on NASDAQ (CSIQ) in 2006
- Over 13,000 employees globally
- Presence in >20 countries / territories
- One of the world's largest solar module suppliers, 32 GW module capacity by 2022 December
- Proven utility-scale project development track record, over 6.8 GW solar plants built and connected

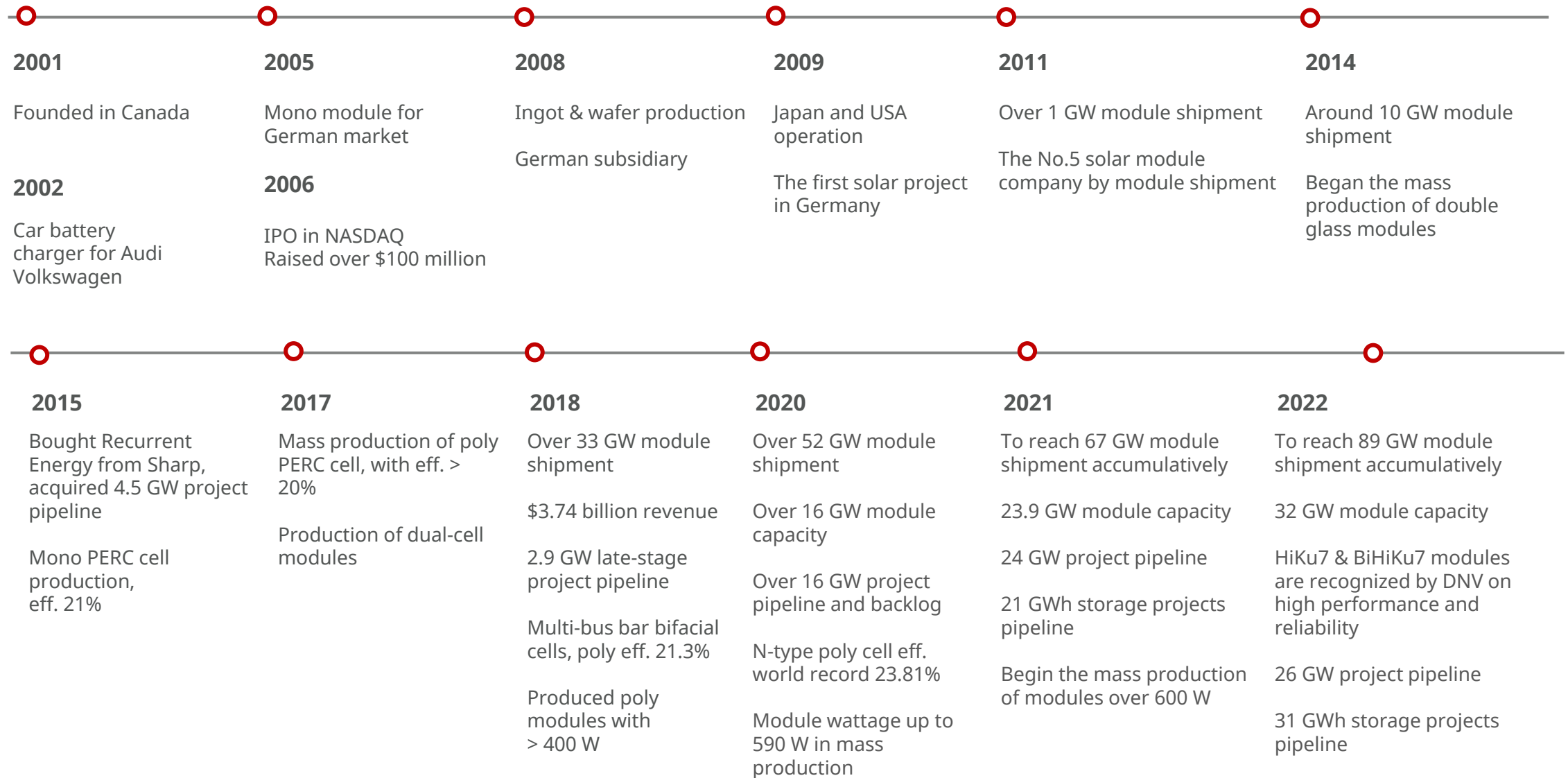
Module and Energy Solutions

- 2021 shipment 14.5 GW, 2022 shipment guidance 20~22 GW.
- The cumulative module delivery: over 75 GW
- 896 MWh in battery storage shipments in 2021
- 1.9 GWh battery storage shipments in 2022

Energy Business

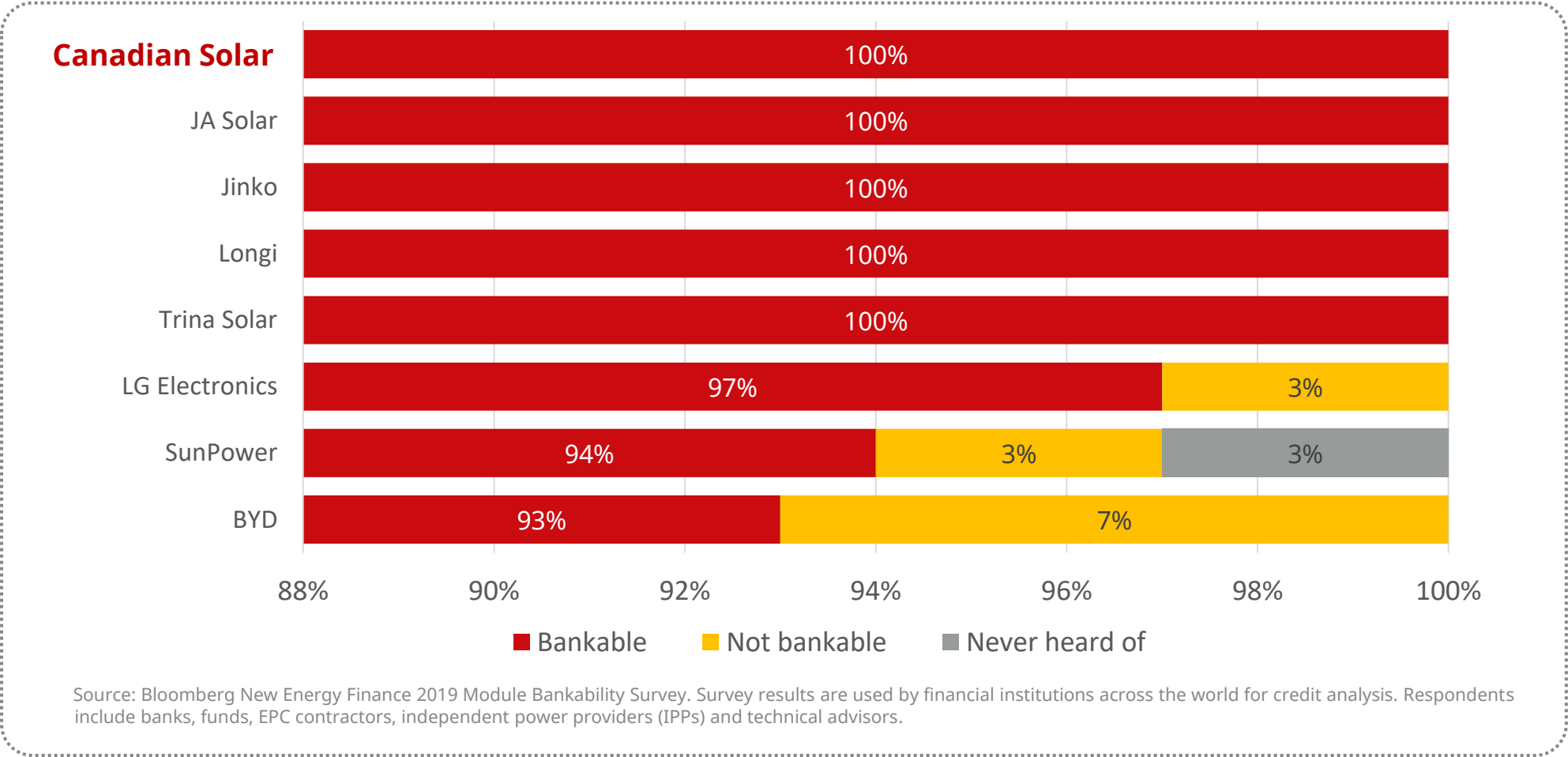
- Development and construction of utility-scale solar plants / projects
- Total project pipeline: 26 GW
- Storage project pipeline: 31 GWh

20 Years' Achievements



World-leading Bankable Brand

- No. 1 Bankable Module Supplier, Bloomberg New Energy Finance 2020 Bankability Survey – top bankable module supplier with **100% bankability for 4 consecutive years**



Globally Supported by Strong Partnerships in the Solar Energy Ecosystem



Winning Third Party Awards

BloombergNEF

2021: Top bankable manufacturer rated by Bloomberg New Energy Finance



2016: No. 1 Module Supplier for Quality and Performance/Price Ratio in IHS Module Customer Insight Survey

BloombergNEF

2017-2019: Tier 1 Solar Company by Bloomberg New Energy Finance

Photon.info

2017 : Leading company in PV Triathlon of PHOTON



2017: No.1 silicon module solar plant developer by Greentech Media Research

Power Finance & Risk

2019: Canadian Solar was named the Latin America Project Finance Borrower of the Year;
the financing of 100 MWp solar project in Cafayate, Argentina was recognized as the Latin America Project Finance Deal of the Year



2018: The dual-tenor green project bond for Gunma Aramaki solar plant won
Best Structured Project Bond Award



2012: The Thunder Bay Airport Solar Park EPC by Canadian Solar named Intersolar Solar Project Award Finalist

Global Presence in over 20 Countries / Territories

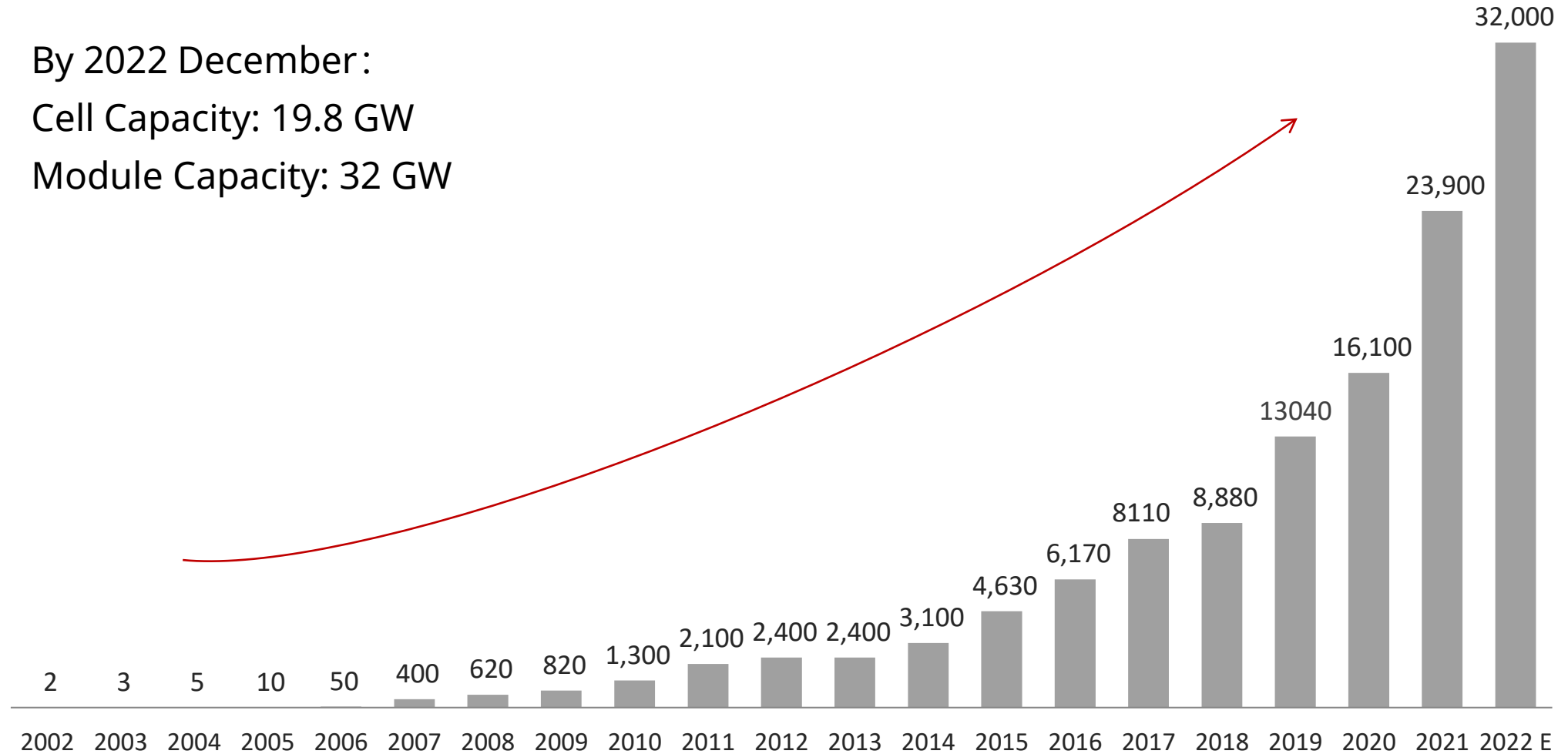


23 Factories in 4 Countries

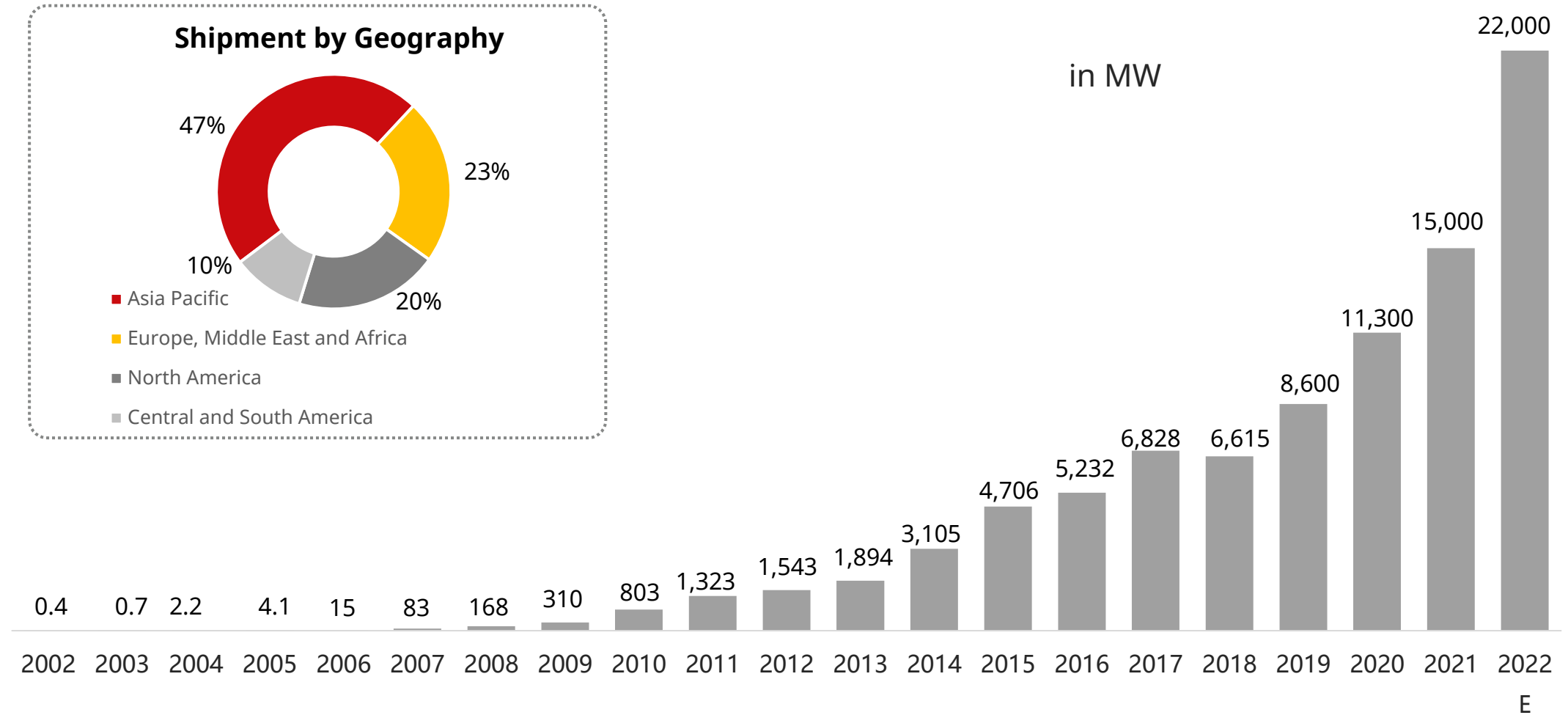


32 GW Module Production Capacity

By 2022 December:
Cell Capacity: 19.8 GW
Module Capacity: 32 GW



Over 75 GW Module Accumulative Shipment (until June 2022)



Industry Leading Customers in over 160 Countries



Globally Diversified Project Pipeline With Strong Competitive Position in Key Energy Markets

Solar plants and energy storage plants
in construction:

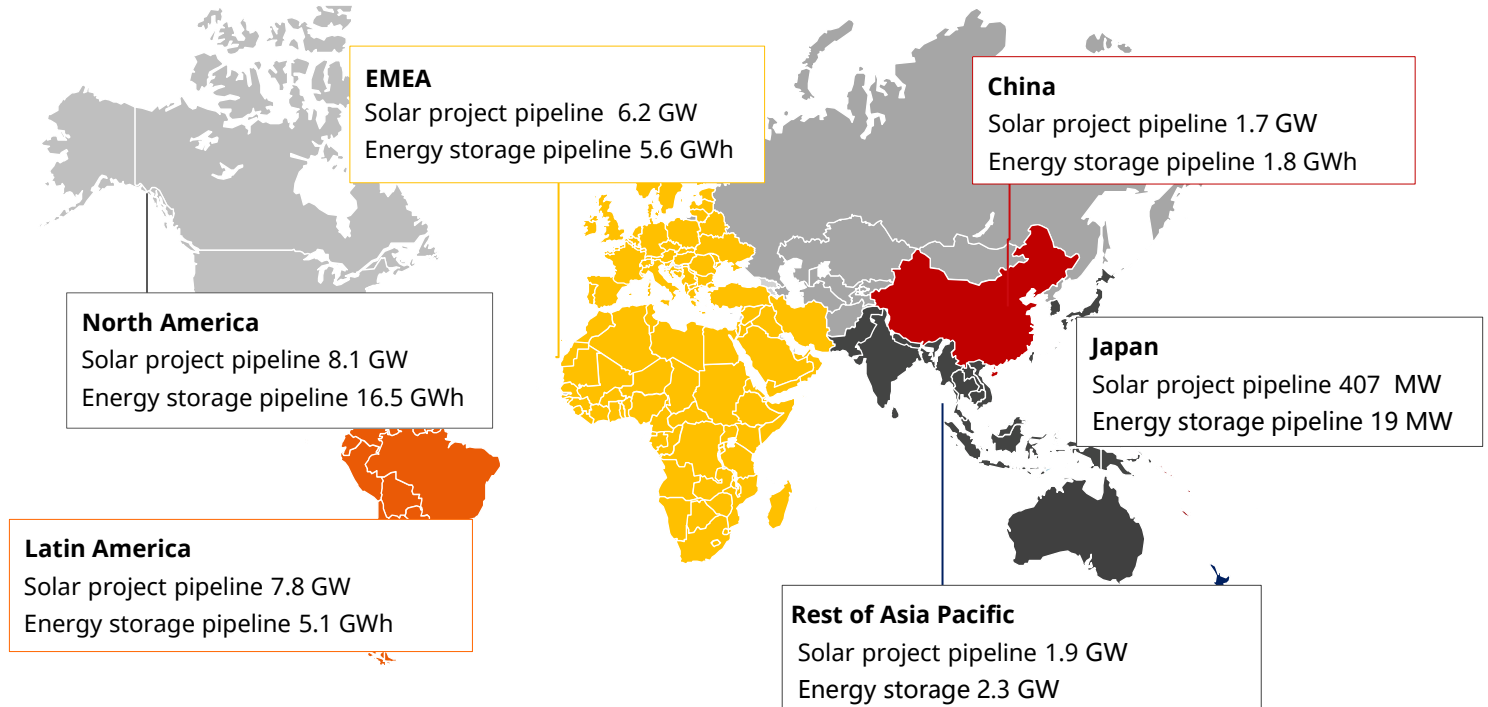
1.3 GW / 1.4 GWh

Late-stage solar project and energy storage project
pipeline:

3.9 GW / 1.7 GWh

Early-stage solar project and energy storage project
pipeline:

21 GW / 28.2 GWh



26 GW of solar project pipeline; 31 GWh energy storage project pipeline.

- Late-stage pipeline include projects that have passed the Cliff Risk Date and are expected to be built in the next 1 to 4 years.
- Early-stage pipeline includes only those projects that have been approved by our internal Investment Committee or projects that are expected to be brought to the Investment Committee in the next two quarters.

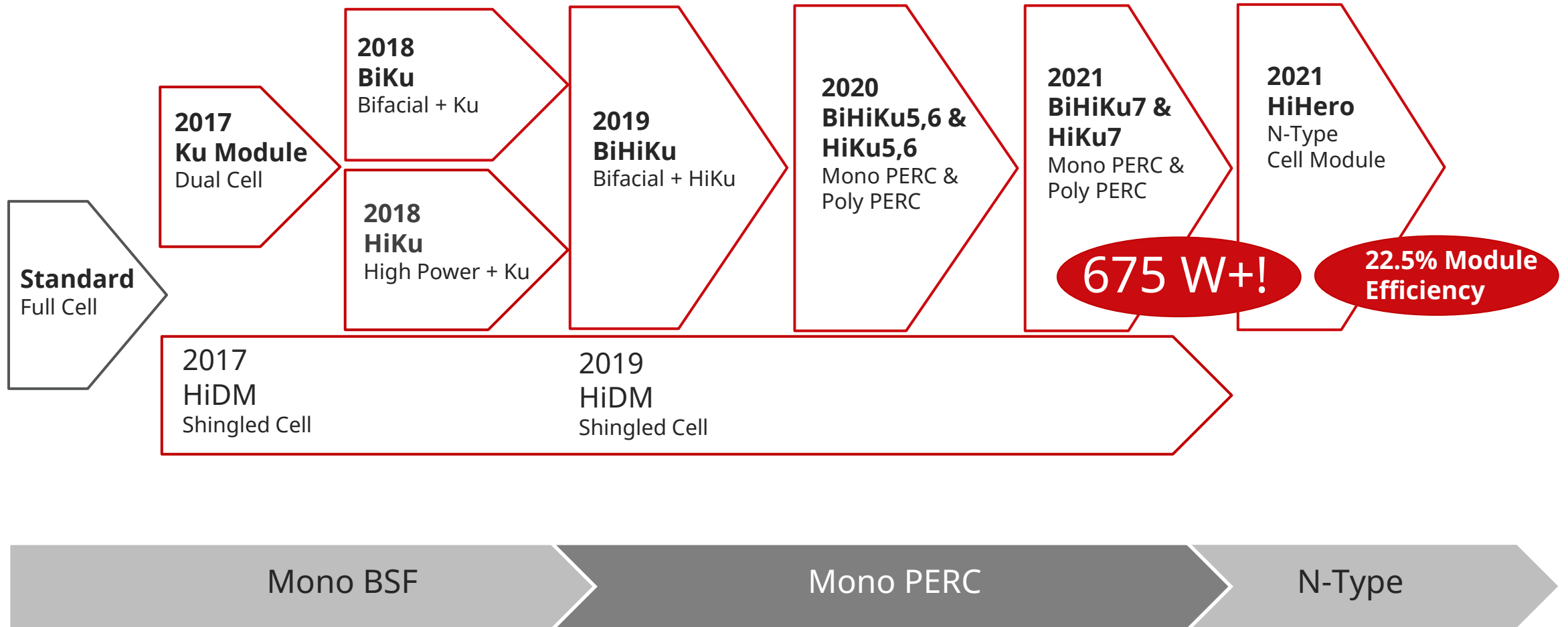
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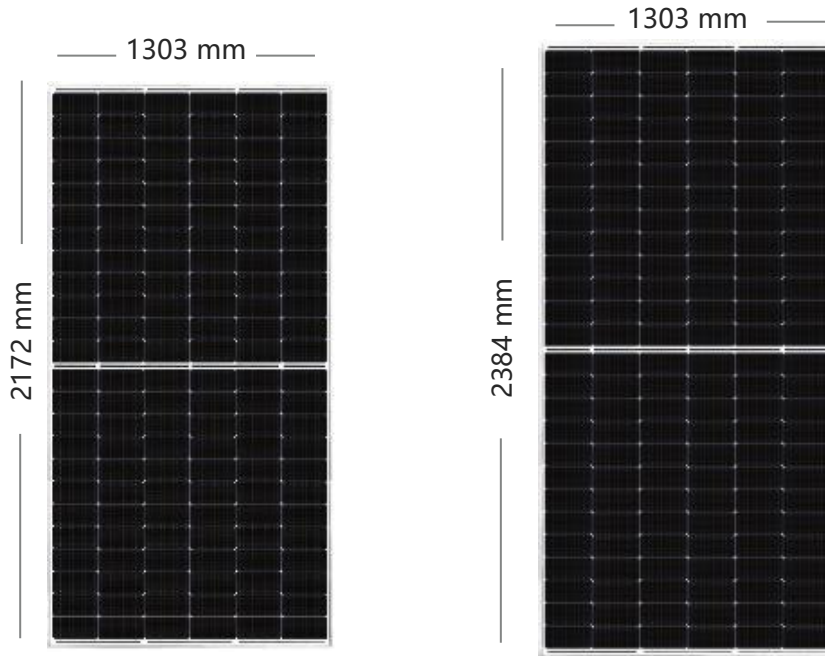
Projects

Cell and Module Technology Roadmap



HiKu7 & BiHiKu7

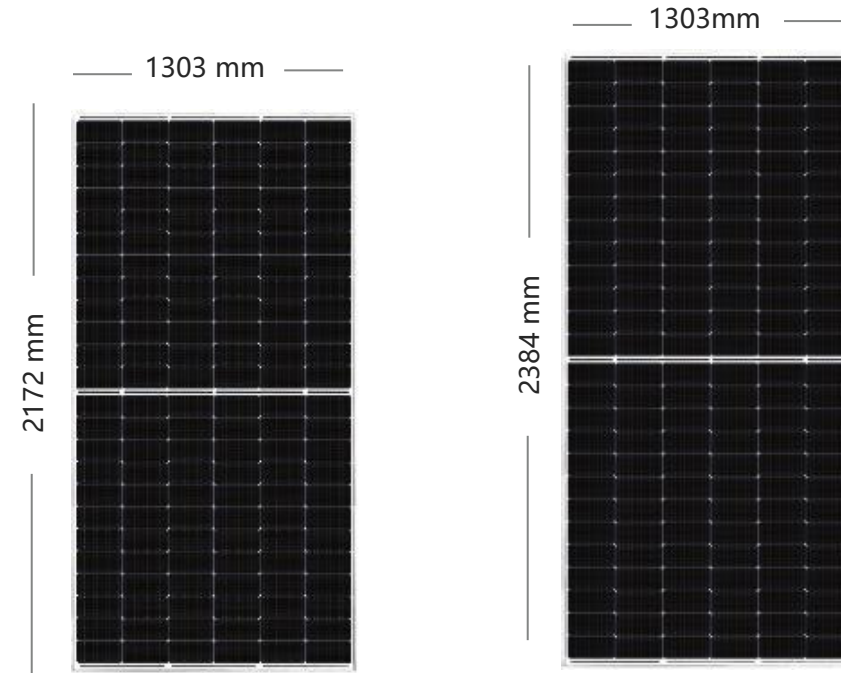
HiKu7



CS7L-MS / CS7L-MS-R
585-610W, 21.6%

CS7N-MS
645-675W, 21.7%

Bifacial BiHiKu7



CS7L-MB-AG
580~605W, 21.4%

CS7N-MB-AG
645~670W, 21.6%

High power and Eff.

675 W, 21.7%

Low degradation

0.55%, 0.45%

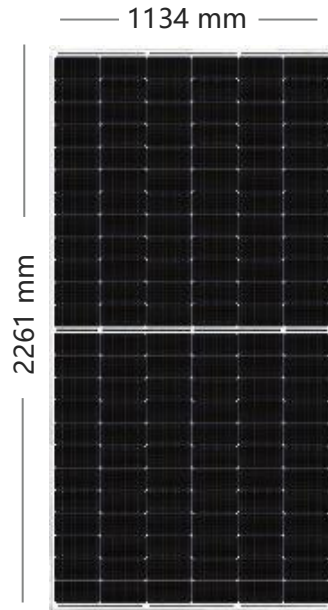
Lower LCOE & BOS

↓ 8.9%, ↓ 5.7%

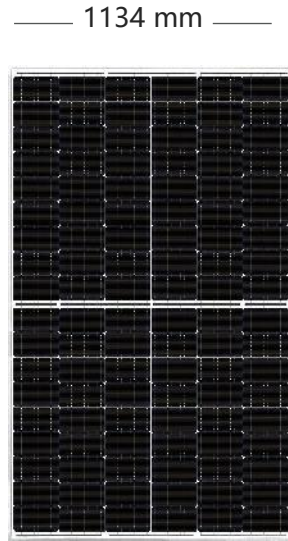
VS. 445W (166mm half cut mono)

HiKu6 & BiHiKu6

HiKu6

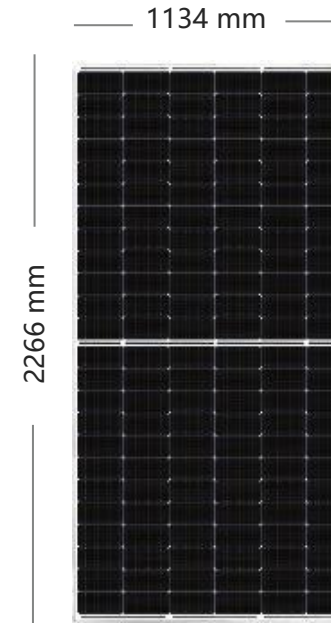


CS6W-MS
530-555W, 21.6%



CS6R-MS
400-420W, 21.5%

Bifacial BiHiKu6



CS6W-MB-AG
525-550W, 21.4%

High power and Eff.

555 W, 21.6%

Low degradation

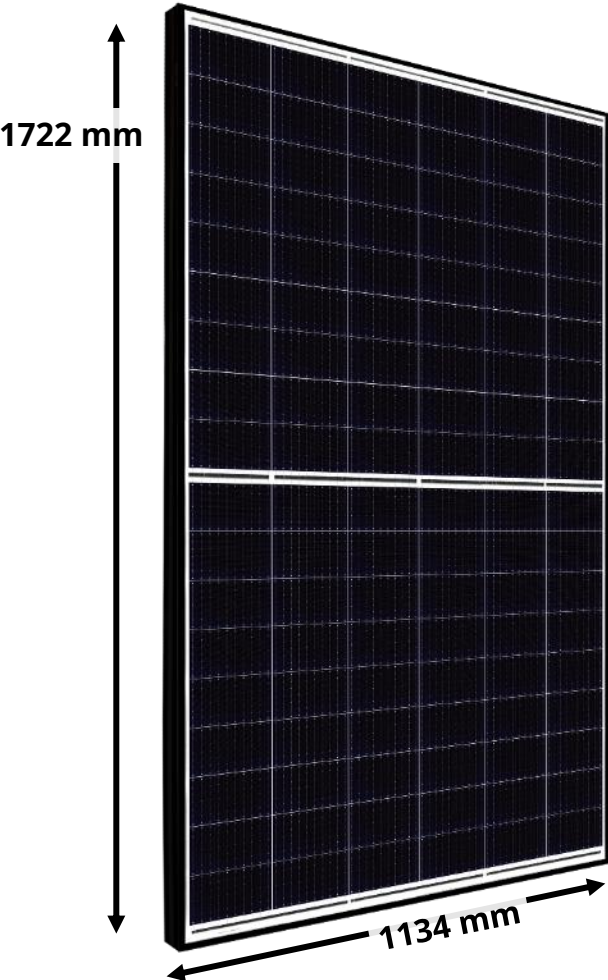
0.55%, 0.45%

Lower LCOE & BOS

↓ 12.3%, ↓ 5.6%

VS. 405W (158.75mm half cell mono)

CSI New Product for Rooftop Market —— HiHero



*Black Frame & Silver Frame Available

N-Type HiHero module CS6R-H-AG

We are 1st to launch

182mm size

Half-cut wafer

MBB

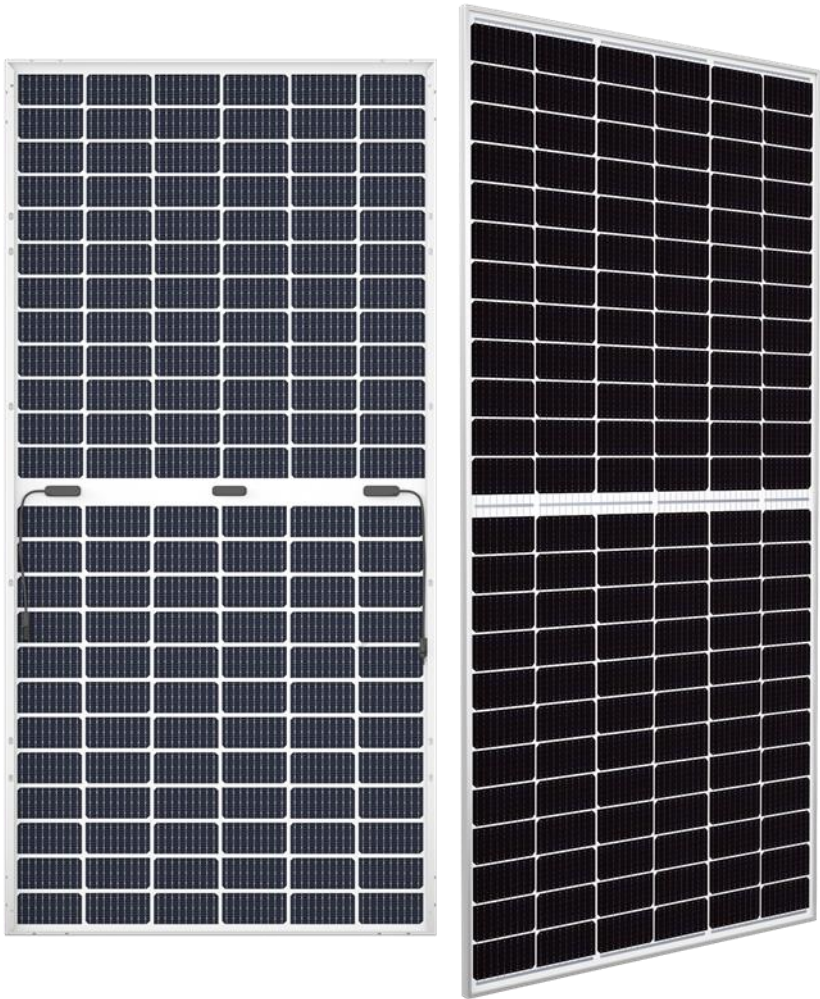
Low-temperature soldering

Double-glass design

Strengthened frame

Module power	Up to 440W
Module efficiency	Up to 22.5%
Module dimension	1722*1134*30 mm
Module weight	23.0kg

BiHiKu Modules



144 format poly CS3W-PB-AG: 400-425W

144 format mono CS3W-MB-AG: 430-460W

More Reliable

- Reduce hot spot temperature by 50°C
- Improved failure redundancy
- Split J-Box, Diode temp. reduced by 10°C

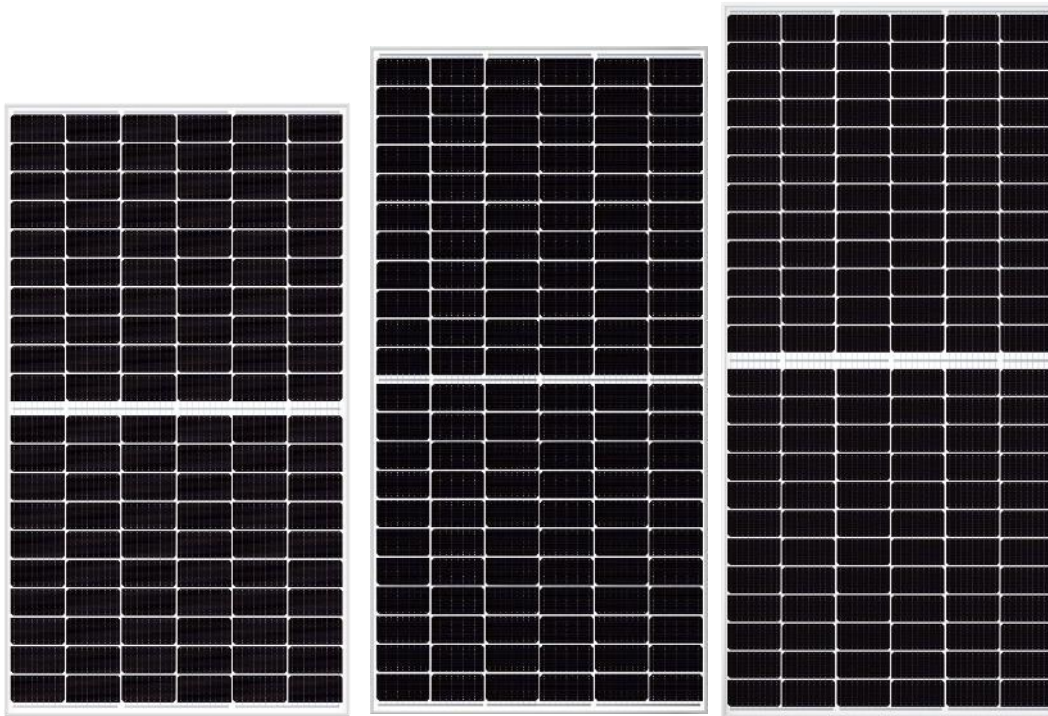
Lower System Cost and LCOE

- 32.8% more energy, 7.3% lower LCOE

System Optimization

- System optimization with tracker package solution

HiKu Modules



120 format
(mono & poly)

CS3L-P: 335-355W
CS3L-MS: 355~380W

132 format
(mono)

CS3N-MS: 400~425W

144 format
(mono & poly)

CS3W-P: 405-430W
CS3W-MS: 435~465W

More Power & More Reliable

- More power output thanks to low NMOT $41 \pm 3^{\circ}\text{C}$
- Low hot-spot risk and lower operation temperature due to Ku Design

Lower System Cost and LCOE

- 2.7% Lower system cost due to savings on labor and mounting structure and DC cabling
- 4.5% LCOE reduction because of higher energy yield and lower system cost

International Quality Certificates

Quality, Environment Health & Safety Certifications	Product Testing Certifications	Product Highlights Certifications
• ISO 9001:2015 • ISO 14001:2015 • ISO 45001:2018	• IEC 61215 & IEC 61730:2016 • UL61730 & UL 790 & CEC • CE conformity, MCS (EN45011) • REACH Compliance	• Salt Mist Certificate • Ammonia Certificate • Blowing Sand Certificate • PID Certificate • Water Resistant IP67 • Fire C1D2

Canadian Solar's Higher Standards

Testing	IEC 61730 / 61215 standards	Canadian Solar standards
Damp Heat	1,000 hours	2,000 hours
Thermal Cycling	200 cycles	400~600 cycles
Humidity Freeze	10 cycles	20~30 cycles
PID	96 hours	192~500 hours



478 quality control points from incoming materials through to product delivery

Higher Energy Yield

CANADIAN SOLAR MODULE =
MORE ENERGY PRODUCTION



The PTC rating is generally recognized as a more realistic measure of PV output because the test conditions better reflect "real-world" solar and climatic conditions.

Canadian Solar Ku series modules ranked highest PTC Rating among all of the silicon modules

Modules	PTC Rating	PTC vs. Nameplate Power	
Bifacial CS6W-...	94.13%	522.4	555
Bifacial CS7L-610MB-...	94.05%	573.7	610
Bifacial CS7N-...	93.19%	624.4	670
Tier 1 Product A	93.17%	512.1	550
Tier 1 Product B	92.93%	616.5	665
Mono Facial CS6W-...	93.95%	526.1	560
Tier 1 Product C	93.67%	521.9	560
Tier 1 Product D	92.75%	506.0	550

Resources: <https://solarequipment.energy.ca.gov/Home/PVModuleList>, 2022 updated

Module Warranty

Normal glass modules



Linear power
output warranty



Product warranty
on materials
and workmanship

Double glass / Bifacial modules



Power output
warranty



Product warranty
on materials
and workmanship

*Please refer to the warranty statements of Canadian Solar for more details.

Canadian Solar Inverter



Residential

Commercial

Utility

Canadian Solar Inverter Advantages



Higher Efficiency, compatible for high power modules

- DC/AC Ratio up to 1.5
- Efficiency up to 98.1%
- Europe efficiency 97.5%
- High string DC input current 12.5A



Higher reliability, suitable for various environmental conditions

- Integrated IGBT module, less components and higher reliability
- IP 65, better waterproof
- With LED indicator lights, more durable than LCD screen
- High quality components from leading suppliers

Canadian Solar Inverter Advantages



Easy installation and O&M

- Simple bracket design
- Light weight
- One-click configuration
- Local mode, remote control and upgrade
- Real-time monitoring with Cloud platform
- Combined wiring box design, reduce installation time



Better safety performance

- DC reverse alarm function
- Leakage current suppression technology
- Overvoltage Class, II(DC), III(AC)
- SPD protection Type II (DC Box Version, DC side)

Advanced Production and Testing

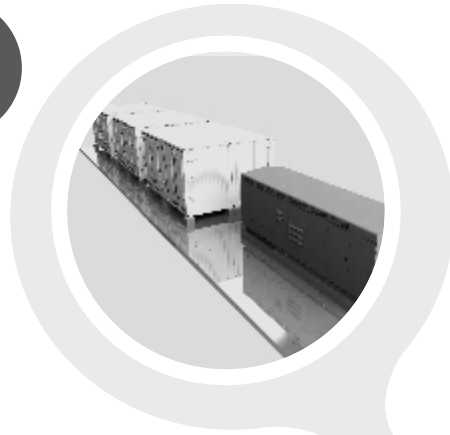


ENERGY STORAGE – ONE STOP VALUE

WE OFFER START-TO-END ENERGY STORAGE SOLUTIONS & SERVICES, MADE POSSIBLE
BY OUR CUTTING-EDGE PRODUCTS AND ROBUST MANUFACTURING CAPABILITIES.

PROJECT PLANNING

- Applications Support
- System Performance Modeling
- Capacity Sizing and Maintenance
- Site Planning



PROJECT IMPLEMENTATION

- EPC & EPCM Contracting
- Integration & Commissioning
- Plant Controllers & Telemetry
- Regulatory Engagements
- Safety Planning
- Supply Chain Management and Logistics

PRODUCTS/ MANUFACTURING



SERVICES

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Solar Plants Installed With Canadian Solar Modules



Tianmen, Hubei, China

Capacity: 100.13 MW

Module: Bifacial CS7N-MB-AG

Installed: 2022



Gonghe, Qinghai China

Capacity: 125.36 MW

Module: Bifacial CS7N-MB-AG

Installed: 2022

Solar Plants Installed With Canadian Solar Modules



Brandenburg, Germany

Capacity: 166 MW
Module: CS6P-P
Installed: 2011



DEWA-III Dubai, UAE

Capacity: 268 MW
Module: CS6X-P-FG
Installed: 2017

Solar Plants Installed With Canadian Solar Modules



Keetmanshoop, Namibia

Capacity: 6 MW
Module: CS6U-P
Installed: 2017



Konya, Turkey

Capacity: 12.1 MW
Module: CS6P-P
Installed: 2017

Solar Plants Installed With Canadian Solar Modules



Tamil Nadu, Kamudi, India

Capacity: 309 MW
Module : CS6X-P
Installed: 2016



Wuhai, Inner Mongolia, China

Capacity: 100 MW
Module: Bifacial CS3U-PB-FG (70MW) and CS6U-P (30MW)
Installed: 2018

Solar Plants Installed With Canadian Solar Modules



Nacaome Valle, Honduras

Capacity: 79.4 MW
Module : CS6X-P
Installed: 2015



Shin Mine Project, Yamaguchi, Japan

Capacity: 56.3 MW
Module: CS6U-P
Installed: 2018

Solar Plants Developed by Canadian Solar



Shizuishan, Ningxia, China

Capacity: 150 MW
Module: Bifacial Module CS3U-PB-FG
Installed: 2018



Oakey Solar Farm, Queensland, Australia

Capacity: 100 MW
Module: CS3U-P and CS6U-M
Installed: 2018

Solar Plants with Canadian Solar Battery Storage



Mustang, California, USA

Project Capacity: 75 MW
Battery Storage: 300 MWh



Slate, California, USA

Capacity: 140.25 MW
Battery Storage: 561 MWh

THANK YOU!

Aug. 2022