

SUSTAINABILITY REPORT 2019

MAKING THE DIFFERENCE



This sustainability report is prepared according to the Global Reporting Initiative™ (GRI) G4 CORE option, the global standard for sustainability reports, and it also complies with Environmental, social and governance (ESG) criteria. For more information contact: support@csisolar.com

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My appreciation also goes out to the report layout team staff: Xiaochen Gu and Hongxiang Zhu

Hanbing Zhang
Vice President
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COMMITTED TO SUSTAINABILITY

Solar energy is a proven effective way to reduce greenhouse gas emissions and to combat global climate change. In the last decade, solar energy has gained increasing prominence as a global source of clean and reliable energy. In 2019, around 125 GW of solar photovoltaic systems were installed globally, 71% of total newly added renewable energy, exceeding the total amount of newly installed fossil fuels and nuclear power.

In 2019, Canadian Solar delivered 8.6 GW solar modules, representing about 7% global market share, and the sales revenue reached \$ 3.2 billion. Until the end of 2020 Q2, we have established 17 manufacturing factories on wafer, cell & module production, and shipped over 46 GW of modules worldwide, generating about 57,911,103 MWh electricity per year. Apart from module delivery, Canadian Solar has built and connected more than 5.6 GW of solar power plants, with a pipeline of around 15.1 GWp and 956 MWp solar power plants in operation. Our goal is to promote solar energy around the world and ensure that more and more people benefit from clean air, decreased pollution, and sustainable economic development.

On solar technology research and development, in 2019, we started the commercial production of high efficiency Black Silicon poly PERC cells and mono PERC P4 modules, and began the mass production of modules over 400 W. In 2020, our technology team set a world record of 23.81% conversion efficiency for n-type large area multi-crystalline silicon solar cell. The record-setting N-type P5 cell conversion efficiency was tested and certified by Germany's Institute für Solarenergieforschung GmbH (ISFH). This is the third time within a span of nine months that we have set multi-crystalline solar cell conversion efficiency world record. We also launched series 5 & 6 module products in 2020 and will mass produce these high power modules up to 590 W at the end of 2020.

In 2019, we continued to make progress on reducing CO2 emissions through reducing electricity and water consumption in manufacturing and increasing product efficiency. For every kW production, we reduced water usage from 0.339 m3 in 2018 to 0.329 m3 in 2019, and reduced electricity usage per kW module production from 6.17 kWh in 2018 to 5.85 kWh in 2020. It is one of our goals to combat the global climate change.

At Canadian Solar, we are committed to our corporate social responsibility. In 2019, our total employees exceeded 14,000, and we created 1,346 new jobs globally and continued to provide the competitive benefit plans and training programs for employees. In 2019, we provided 2,192 training programs to our employees, which enhanced employees' work skills and knowledge.

Canadian Solar is looking at connecting our corporate strategy locally to sustainable goals. To do so we are basing ourselves on the United Nation's 17 sustainable development goals, which address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. For example, in 2019 Canadian Solar donated solar modules for a new solar power of Evans Medical Center at Kirma, Lungi, Sierra Leone. The solar system will directly improve the quality of medical care in the region.

I am honored that Canadian Solar played a role in the global solar energy development.

I am also grateful to all our customers, partners and employees for make all this possible.

I look forward to working with you in future. When we work together, we can make the difference.

Sincerely yours,
Dr. Shawn Qu

October 15th , 2020

HOW WE MAKE THE DIFFERENCE

OVER 46 GW GLOBALLY

Canadian Solar has shipped over 46 GW of modules until the end of 2020 Q2, which generate 57,911,103 MWh electricity per year, equivalent to CO2 absorption of 32,069,521 trees. *



CO₂

**GHG
EMISSIONS**

**Reduced by
39 million
metric tons**



SO₂

**SULPHUR
DIOXIDE**

**Reduced by
23,000 metric
tons**



NO_x

**NITROGEN
OXIDES**

**Reduced by
23,390 metric
tons**



PM

**PARTICULATE
MATTER 2.5**

**Reduced by
2,760 metric
tons**



H₂O

**WATER
USE**

**Reduced by
676.2 billion
gallons**

Annual environmental and health benefits of the 46 GW Canadian Solar modules installed.

* * These numbers are based on a similar study by the US Department of Energy.
See www.nrel.gov/docs/fy16osti/65628.pdf

01 OPERATIONAL HIGHLIGHTS

NO. 1 IN TOP BANKABLE

MANUFACTURER RATED BY

BLOOMBERG NEW ENERGY FINANCE

According to the Solar Module & Inverter Bankability Report 2020 by Bloomberg New Energy Finance (BNEF), Canadian Solar ranked No.1 bankable module manufacturer, based on the stable financial performance, reliable product quality and trustable corporate reputation. It was the sixth time that Canadian Solar was selected as one of the top bankable manufacturers in the survey.

The report covers 32 survey responses from banks, funds, solar engineering contractors, independent power producers and technical advisers and has a global coverage. All participants considered the modules from Canadian Solar are bankable.

CANADIAN SOLAR PV MODULES

GIVEN TOP AA-RATING IN PV TECH'S

LATEST BANKABILITY STUDY

The PV-Tech market research team revealed in August 2019 that Canadian Solar met AA-Rated bankability status. Only four PV module suppliers received the AA bankability rating from PV-Tech. The rating shows Canadian Solar has managed to effectively pursue a dual manufacturing / downstream business, keeping its module output at premium-bankable levels while developing and selling downstream projects on a timely basis.

A WORLD RECORD OF 23.81%

MULTI-CRYSTALLINE CELL EFFICIENCY

Canadian Solar's technology team set a world record of set a world record of 23.81% conversion efficiency for n-type large area multi-crystalline silicon solar cell. The record-setting N-type P5 cell conversion efficiency was tested and certified by Germany's Institute für Solarenergieforschung GmbH (ISFH). This is the third time within a span of nine months that the company has set multi-crystalline solar cell conversion efficiency world record (22.8% and 22.28% records for p-type multi-crystalline cells).

This is a milestone for our revolutionary n-type P5 technology development. It proves that both our p-type and n-type multi-crystalline silicon technology can achieve efficiencies as good as mono. We remain focused on expanding our technology pipeline to provide our customers with the most LCOE-competitive products.

ONE OF THE BEST 50 CORPORATE CITI-

ZENS IN CANADA

Canadian Solar has been named as one of the Best 50 Corporate Citizens in Canada. The ranking is conducted by Corporate Knights, a specialized media and investment research firm. The ranking is meant to be representative of business sustainability in the current socio-economic context. The methodology KPIs included the managements on resource, financial, employee, clean revenue. The ranking shows Canadian Solar has strived to implement the emission reduction in production and management. Canadian Solar will continue to create green energy and clean revenue for its customers, partners and stakeholders.

02 ENVIRONMENTAL HIGHLIGHTS

19% GROWTH IN SOLAR POWER PLANTS BUILT AND CONNECTED

Accumulatively, solar plants built and connected increased to over 5,600 MW by June 2020, around a 19% increase relative to 4,700 MW at the end of June 2019. The development of solar energy can meaningfully reduced greenhouse gas emissions.

REDUCTION IN CO2 EMISSIONS IN THE MANUFACTURING PROCESS

In 2019 and 2020, we cooperated with Solstyce, Smart-greenscans, Certisolis again to track and analyze the GHG emissions for per kW module produced. Our CO₂ emissions for every kW module production (including glass, frame and other raw materials production) are reduced from 318.84 kg in 2018 to 308.96 kg in 2019 and 297.37 kg in 2020.

The reduction in carbon emissions is reflected throughout the manufacturing process and value chain. We have significantly increased the manufacturing efficiency and productivity, reducing the carbon footprint of our modules on a per KW basis. Likewise, using solar panels to generate renewable energy has a lasting effect on the reduction of CO₂ emissions of the power industry.

REDUCTION IN WATER USAGE AND WASTEWATER

Water usage per kW production reduced by 2.9% from 0.339 m³ in 2018 to 0.329 m³ in 2019.

Wastewater volume per kW production reduced by 10% from 0.230 m³ in 2018 to 0.207 m³ in 2019.

Internal electricity usage for per kW module production reduced by 5.2% from 6.17 kWh in 2018 to 5.85 kWh in 2019.

By various measures, we significantly reduced water usage and wastewater. It reduces the environmental impact of every module sold.

03 SOCIAL HIGHLIGHTS

10.4% MORE JOBS

In 2019, we employed 14,346 people worldwide, creating 1346 new jobs. It helped to bring employment in local areas and grow the team of "solar fighters" that will bring more clean energy to the earth.

AVERAGE OF 14.89 TRAINING HOURS FOR PER EMPLOYEE

In 2019, the Company provided 213,645 training hours to employees. Employee trainings enhanced work skills and knowledge which helped employees' performance in control of production qualities.

COMMUNITY WORK IN

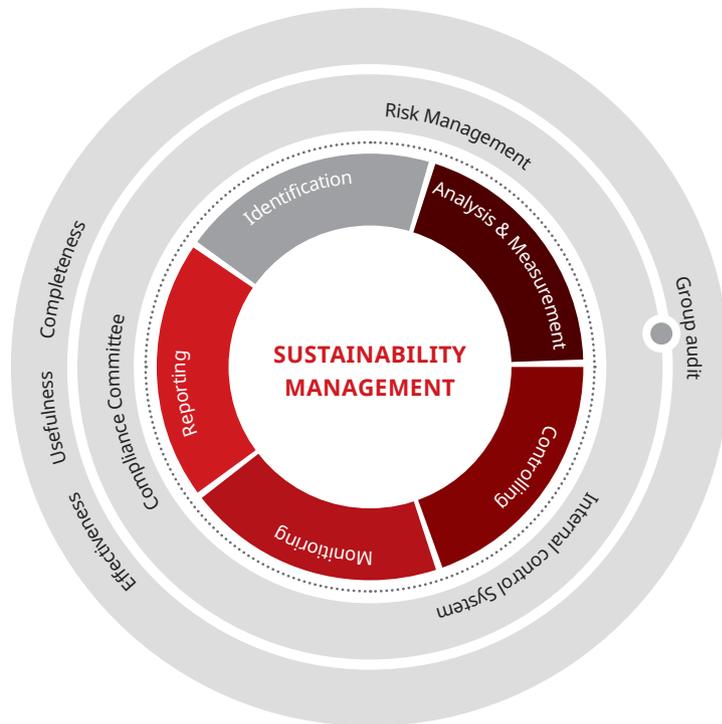
6 CONTINENTS

Canadian Solar is looking at connecting our corporate strategy locally to sustainable goals. In 2019 Canadian Solar donated a 4 kW solar modules for a new solar power of Evans Medical Center at Kirma, Lungi, Sierra Leone. The solar system will directly improve the quality of medical care in the region. The realization of the solar power system for the clinic in Lungi shows how our industry can sustainably improve the situation for newborn babies, children, and the local population in a developing country.

100% FAIR TRADE

Canadian Solar abides by principles of fair trade, zero business with labor violation mines, no minor and forced labor employment. We are resolutely against purchasing conflict minerals and employing child or forced labor. We strive to create a clean, attractive and pleasant work environment for our employees and stakeholders, abiding to the highest ethical standards.

REPORTING METHODOLOGY



REPORTING METHODOLOGY

This sustainability report is prepared according to the Global Reporting Initiative™ (GRI) G4 CORE option, the global standard for sustainability reports, and it also complies with Environmental, social and governance (ESG) criteria.

The GRI G4 standard is widely accepted in the industry globally as the benchmark for sustainable reporting.

The ESG criteria are a set of standards for a company's operations that socially conscious investors use to screen potential investments.

REPORTING DATE

This is the fourth year we have presented a sustainability report in the GRI G4 Core standard and the scope and aspect boundaries remain the same as for the 2018 report.

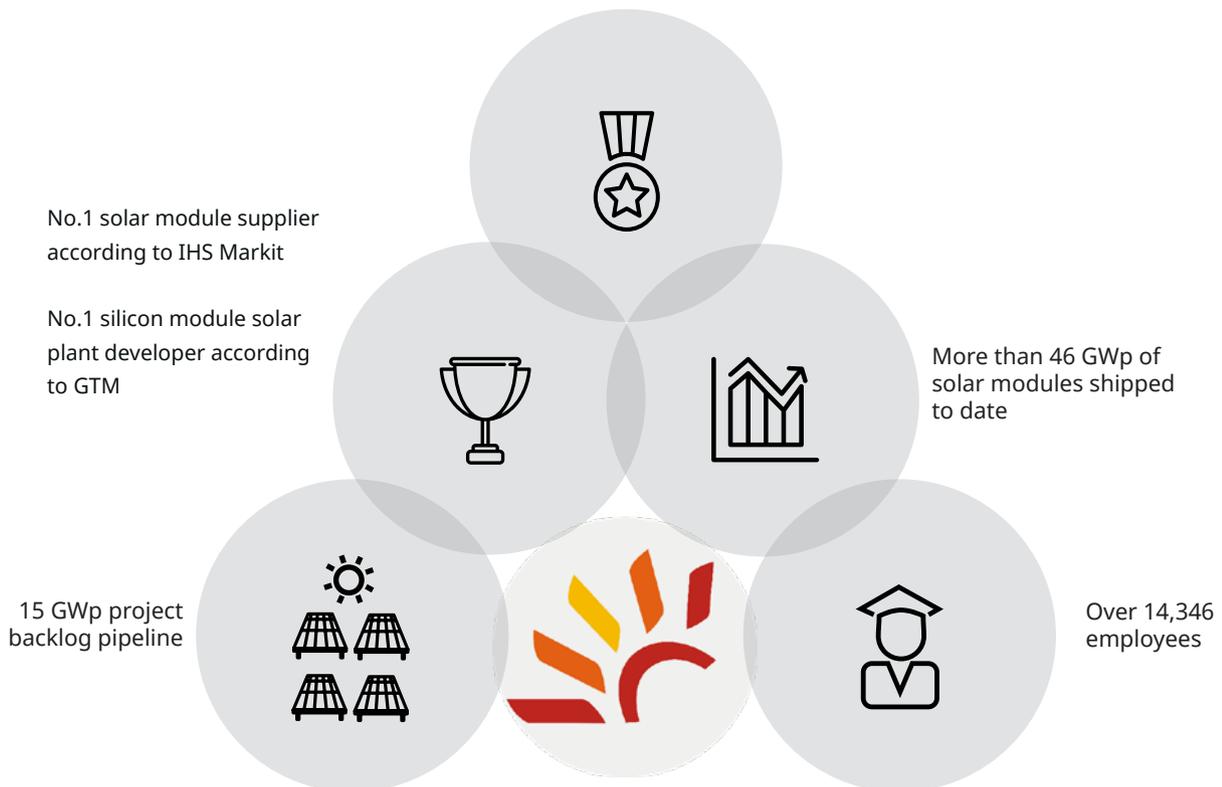
CONTENT

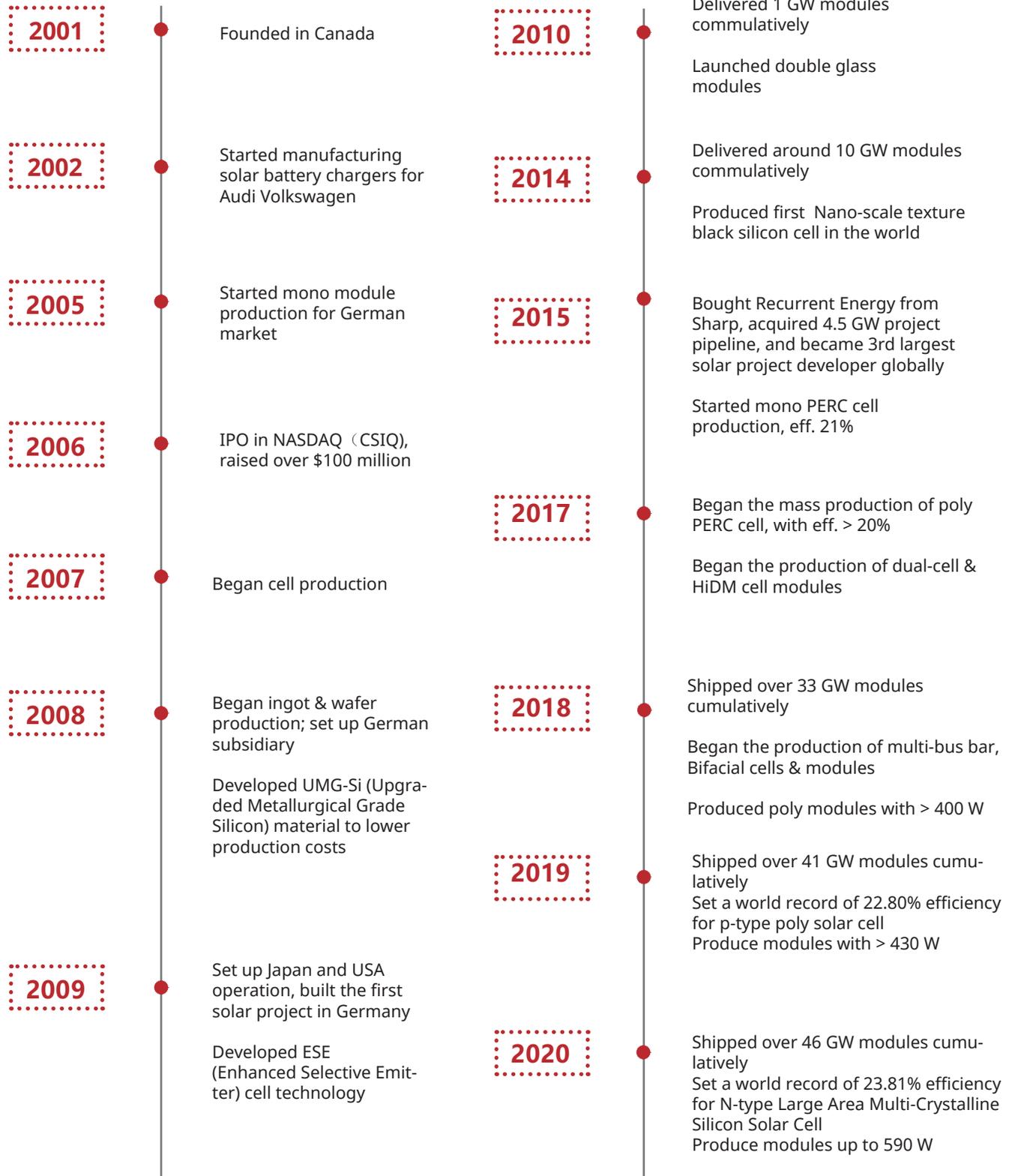
- I. ORGANIZATIONAL PROFILE**
- II. SCOPE OF THE REPORT**
- III. STAKEHOLDER ENGAGEMENT**
- IV. GOVERNANCE**
- V. ETHICS AND INTEGRITY**
- VI. SPECIFIC STANDARD DISCLOSURES**
 - A. ECONOMIC ASPECTS**
 - B. ENVIRONMENTAL ASPECTS**
 - C. SOCIAL ASPECTS**
- VII. APPENDIX**
 - GRI G4 CONTENT INDEX**

I. ORGANIZATIONAL PROFILE

1. COMPANY OVERVIEW

No. 1 bankable manufacturer rated by Bloomberg NEF
Top AA-Rated bankable PV module supplier by PV Tech





COMPANY OVERVIEW

We are one of the world's largest solar power companies and a leading vertically integrated provider of solar power products, services and system solutions with operations in North America, South America, Europe, Africa, the Middle East, Australia and South East Asia.

We design, develop and manufacture solar ingots, wafers, cells, modules and other solar power products and solutions. We are incorporated in Canada and conduct most of our manufacturing operations in China and South East Asia.

As of December of 2019, we had 13 GW of total annual solar module manufacturing capacity, approximately 9.6 GW of which is located in China, 3.1 GW in Southeast Asia and the rest in other regions; 9.6 GW of total annual solar cell manufacturing capacity, approximately 3.1 GW of which is located in Southeast Asia and the rest in China. Until the end of 2020 June, we have expanded the module manufacturing capacity to 13.9 GW.

Our products and services include a range of solar modules and system kits for residential, commercial & industrial solar power generation systems, EPC, O&M and asset management.

We began selling solar system kits in 2010, and in 2019 we sold them primarily to customers in Japan, and China. Our MSS segment started to provide EPC services in 2018 and O&M services in 2012. In 2019, we provided EPC services primarily in Australia and O&M services primarily in the North America, Japan, Australia and China. O&M services include inspections, repair and replacement of plant equipment and site management and administrative support services for solar power projects in operation.

Our energy segment primarily comprises of solar project development and sale, operating solar power projects and sales of electricity. Our global solar power project business develops projects primarily in the U.S., Japan, China, Argentina, Mexico, India, Brazil, the United Kingdom, Australia, Italy and Namibia. As of June 2020, we had built and brought into commercial operation over 5.6 GWp of solar power plants across six continents, and our total project backlog and pipeline reached 15.1 GWp. In addition to these, we have 839 MWp of solar projects in construction, and 956 MWp power plants in operation, with an estimated total resale value of approximately \$773 million.

(2019 Annual Report Page 41-44, 2020 Q2 Financial Report)





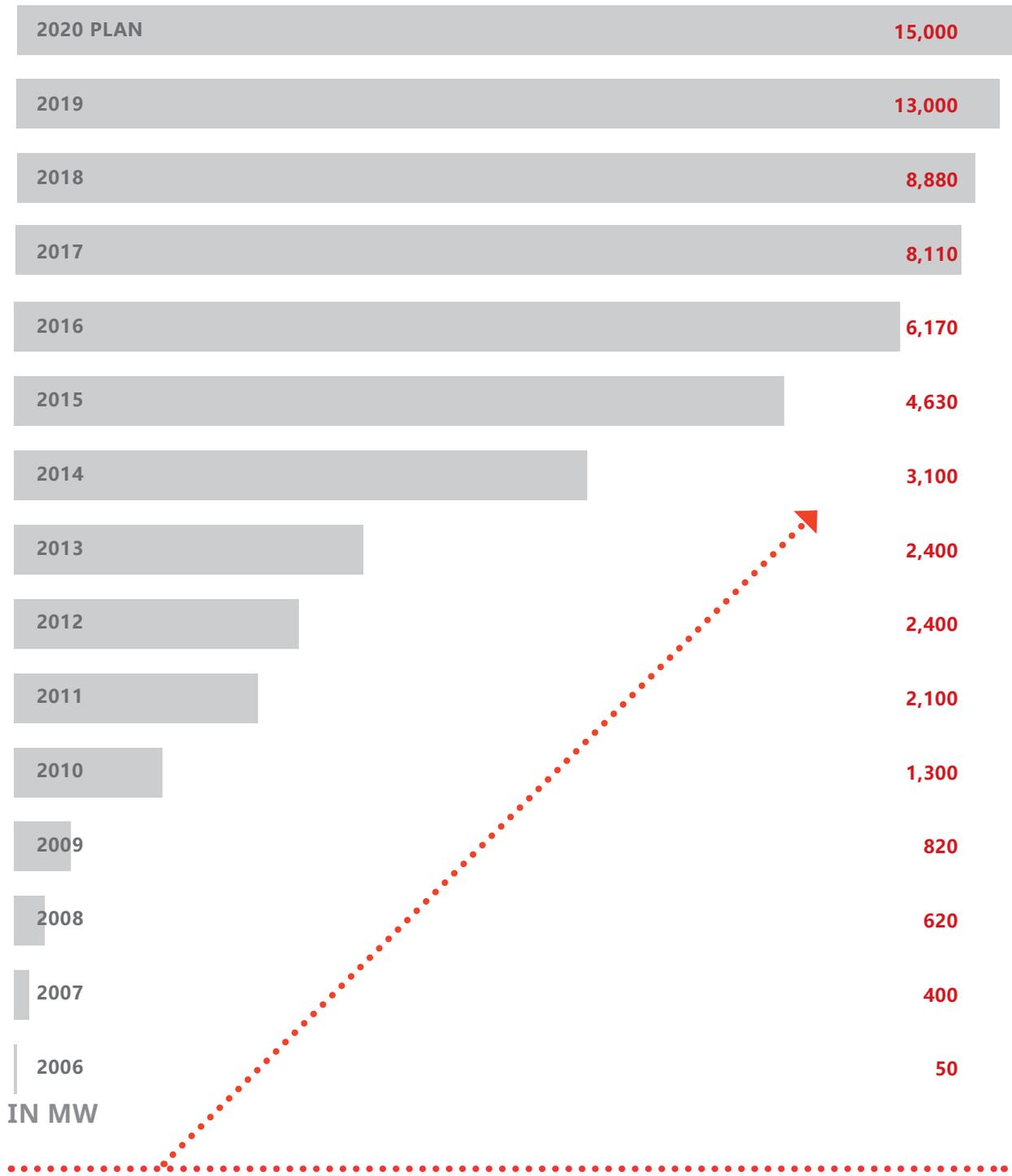
GLOBAL BRAND FOOTPRINT

Guelph, Canada	Global Headquarters
Walnut Creek US	USA Headquarters
San Francisco, US	Recurrent Energy HQ
New York, US	Energy Group and Recurrent
Austin, US	Recurrent Energy Office
Mexico City, Mexico	Subsidiary
Sao Paulo, Brazil	Subsidiary
Ciudad Autónoma de Buenos Aires, Argentina	Subsidiary
Munich, Germany	EMEA Headquarters
London, UK	Sales, Project & Structured Finance Subsidiary
Madrid, Spain	Subsidiary
Milan, Italy	Energy Group Subsidiary
Cape Town, South Africa	Sales Subsidiary
Abu Dhabi, UAE	Subsidiary
Dubai, UAE	Subsidiary
Suzhou, China	China Headquarters
Bangalore, India	Subsidiary
Singapore	Subsidiary
Seoul, South Korea	Subsidiary
Tokyo, Japan	Module & Energy Headquarters
Hongkong, China	Sales Office, Project & Structured Finance Subsidiary
Melbourne, Australia	Module & Energy Subsidiary

MANUFACTURING FOOTPRINT

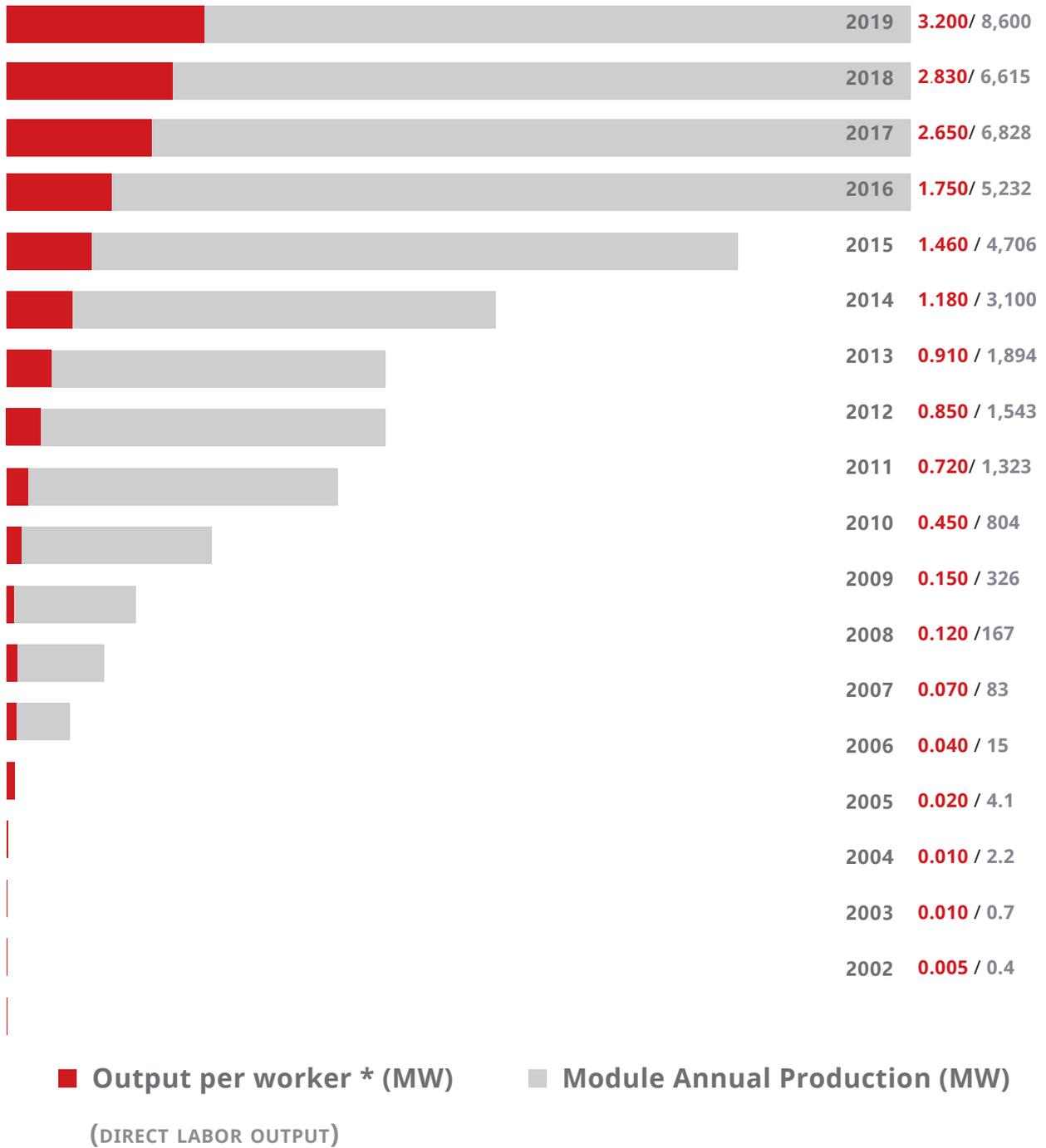
Ontario, Canada	Module Factory
Suzhou, China	Cell, Module Factory
Changshu, China	Module Factory
Luoyang, China	Ingot, Wafer & Module Factory
Funing, China	Cell Factory
Yancheng, China	Cell Factory
Dafeng, China	Module Factory
Baotou, China	Module Factory
Hai Phong, Vietnam	Module Factory
Banten, Indonesia	Module Factory
Sorocaba, Brazil	Module Factory
Rojana, Thailand	Cell & Module Factory

MODULE CAPACITY



IN MW

OUTPUT PER WORKER & MODULE PRODUCTION



2. GROWTH PERSPECTIVE

AS THE DEMAND FOR SOLAR ENERGY GROWS
SO DOES CANADIAN SOLAR.



**THE GLOBAL PV MARKET GREW BY 20.2% IN 2019
(ACCORDING TO RESEARCH FIRM IHS MARKIT)**

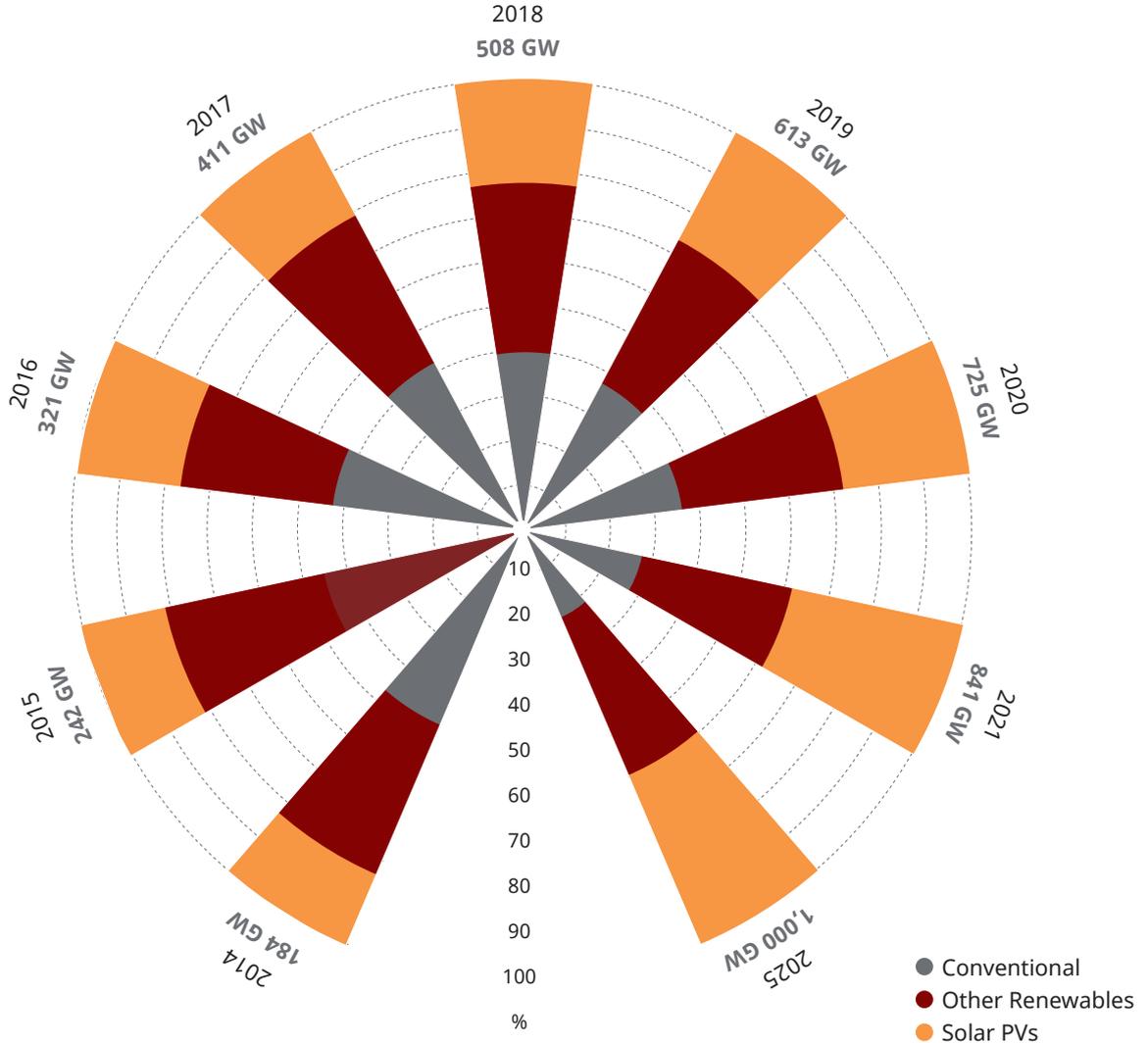
CANADIAN SOLAR POWER PLANTS BUILT AND CONNECTED

Annual Total
Cumulative in MW

*Includes projects of Canadian Solar Subsidiary Recurrent Energy

2011/12	2014	2016	2017	2018	2019
67.9	281.5	1339.5	613.6	769.4	1681.4
67.9	447.0	2535.6	3149.2	3,918.6	5,600

GLOBAL CAPACITY ADDITIONS



Electricity demand will continue to rise as global demand growth tracks GDP growth

- Consumption of electricity is expected to be correlated with growth in GDP.
- Coal and nuclear assets are expected to be decommissioned as they age.
- The cost of conventional sources of electricity will increase as environmental compliance procedures are strengthened.
- Technology improvements and economic growth will continue to drive down the cost of solar energy.

Solar is forecasted to be the fastest growing source of electricity worldwide

- There was a record level of renewable power capacity added globally, with accumulative total 643.96 GWdc of PV installations by the end of 2019 according to IHS Markit. According to the International Energy Agency (IEA), the global PV installations will reach 1,721 GW by 2030.
- Global investment in new power generation capacity is expected to reach \$10.2 trillion between 2017 and 2040. Over 72% of this goes into renewable energy, of which approximately 50% will be in solar sector according to BNEF.

3. COMPANY STRUCTURE

WE WORK TO PROVIDE SUSTAINABLE ENERGY



ON 6 CONTINENTS

The following Standard Disclosures are an overview of our key organizational characteristics in order to provide context for the subsequent, more detailed reporting.

OFFICIAL NAME, ADDRESS AND DETAILS OF OUR ORGANIZATION

Our legal and commercial name is Canadian Solar Inc. We were incorporated under the laws of the Province of Ontario, Canada in October 2001. We are governed by the CBCA. See “—C. Organizational Structure” for additional information on our corporate structure, including a list of our major subsidiaries. Our principal executive office and principal place of business is located at 545 Speedvale Avenue West, Guelph, Ontario, Canada N1K 1E6. Our telephone number at this address is (1-519) 837-1881 and our fax number is (1-519) 837-2550.

We are one of the world’s largest solar power companies and a leading vertically-integrated provider of solar power products, services and system solutions with operations in North America, South America, Europe, South Africa, the Middle East, Australia and Asia.

OWNERSHIP AND LEGAL FORM

Canadian Solar Inc. was incorporated under the laws of the Province of Ontario, Canada in October 2001 and is a publicly held company listed on the NASDAQ (CSIQ). We changed our jurisdiction by continuing under the Canadian federal corporate statute, the CBCA, effective June 1, 2006. As a result, we are governed by the CBCA. (In Canadian Solar [Annual Report 2019](#) see “Item 4. Information on the Company – C. Organizational Structure” for additional information on our corporate structure, including a list of our major subsidiaries.)

MANAGEMENT TEAM

DR. SHAWN QU
Chairman and
Chief Executive Officer

- Founded Canadian Solar in 2001, and has since then stewarded the company to a position of global leadership in the solar industry
- Director & VP at Photowatt International S.A.
- Research scientist at Ontario Hydro (Ontario Power Generation Corp.)

HUIFENG CHANG
Senior Vice President and
Chief Financial Officer

- Co-Head of Sales & Trading at CICC US in New York
- CEO of CSOP Asset Management in Hong Kong
- Vice President of Citigroup Equity Proprietary Investment in New York

ISMAEL GUERRERO ARIAS
Corporate Vice President
and President of the Energy

- President and Head of Origination at TerraForm Global
- Canadian Solar's Vice President of Global Projects

YAN ZHUANG
President, CSI Solar

- Head of Asia of Hands-on Mobile, Inc.
- Asia Pacific regional director of Marketing Planning and Consumer Insights at Motorola Inc.

GUANGCHUN ZHANG
Senior Vice President, Operations
and Technology, CSI Solar

- Vice President for R&D and Industrialization of Manufacturing Technology at Suntech Power Holdings
- Centre for Photovoltaic Engineering at the University of New South Wales and Pacific Solar Pty. Limited.

BOARD OF DIRECTORS

- Founded Canadian Solar in 2001, and has since then stewarded the company to a position of global leadership in the solar industry
- Director & VP at Photowatt International S.A.
- Research scientist at Ontario Hydro (Ontario Power Generation Corp.)

DR. SHAWN QU
Chairman and
Chief Executive Officer

- Director of the Centre for Advanced Nanotechnology, Stanley Meek Chair in Nanotechnology and Prof. of Applied Science and Engineering at the University of Toronto, Canada

DR. HARRY E. RUDA
Independent Director

- Senior Advisor to Board of Directors of Henderson Land Development Co.
- Director of Ace Life Insurance Co. Ltd., China CITIC Bank Corp., Intime Retail (Group) Co. Ltd. and Shenzhen Yantian Port (Group) Co. Ltd.

ANDREW (LUEN CHEUNG) WONG
Independent Director

- Independent director and chair of the audit committee of Daqo New Energy Corp.(NYSE:DQ) China Maple Leaf Educational Systems Limited (HKSE: 1317)
- Independent director of Tarena International, Inc.

ARTHUR (LAP TAT) WONG
Independent Director

- The founder and President of Templeton & Phillips Capital Management, LLC
- Independent director and member of the Audit Committee of Fairfax Financial Holdings Limited

LAUREN C. TEMPLETON
Independent Director

- Operating Partner with Quinbrook Infrastructure Partners
- A partner with the kRoad group of companies which invests in battery storage, waste transformation and e-mobility

KARL E. OLSONI
Independent Director

- Executive Director and Deputy Managing Director of CITIC Pacific limited
- Executive Director and Chief Executive Officer of HKC (Holdings) Limited

LESLIE LI HSIEN CHANG
Independent Director

PRODUCTS OFFERED IN MODULE AND SYSTEM SOLUTIONS (MSS) SEGMENT

Our primary customers are distributors, system integrators, project developers and installers/EPC companies. In 2017, 2018 and 2019, the top five customers of the MSS segment by net revenues collectively accounted for approximately 18.0%, 9.1% and 15.8%, respectively, of our total net revenues. Sales to our largest customer in those years accounted for 7.2%, 2.6% and 6.6%, respectively, of our total net revenues.

As we expand our manufacturing capacity and enhance our brand name, we continue to develop new customer relationships in a wider range of geographic markets to decrease our market concentration. In 2019, we increased our market share in Latin America and Australia, and maintained our leading market share in Japan, Europe, Middle East and Africa. We intend to continue to expand our sales in these areas and develop more emerging markets in 2020.

**ENERGY SEGMENT
SOLAR PROJECT DEVELOPMENT AND SALE**

We develop, construct, maintain, sell and/or operate solar plants primarily in the U.S., Japan, China, Brazil, the United Kingdom, Mexico, India, Australia, Italy and Namibia. We also provide EPC, development and assets management services. We sell our projects to large utility companies, other power producers and asset managers.

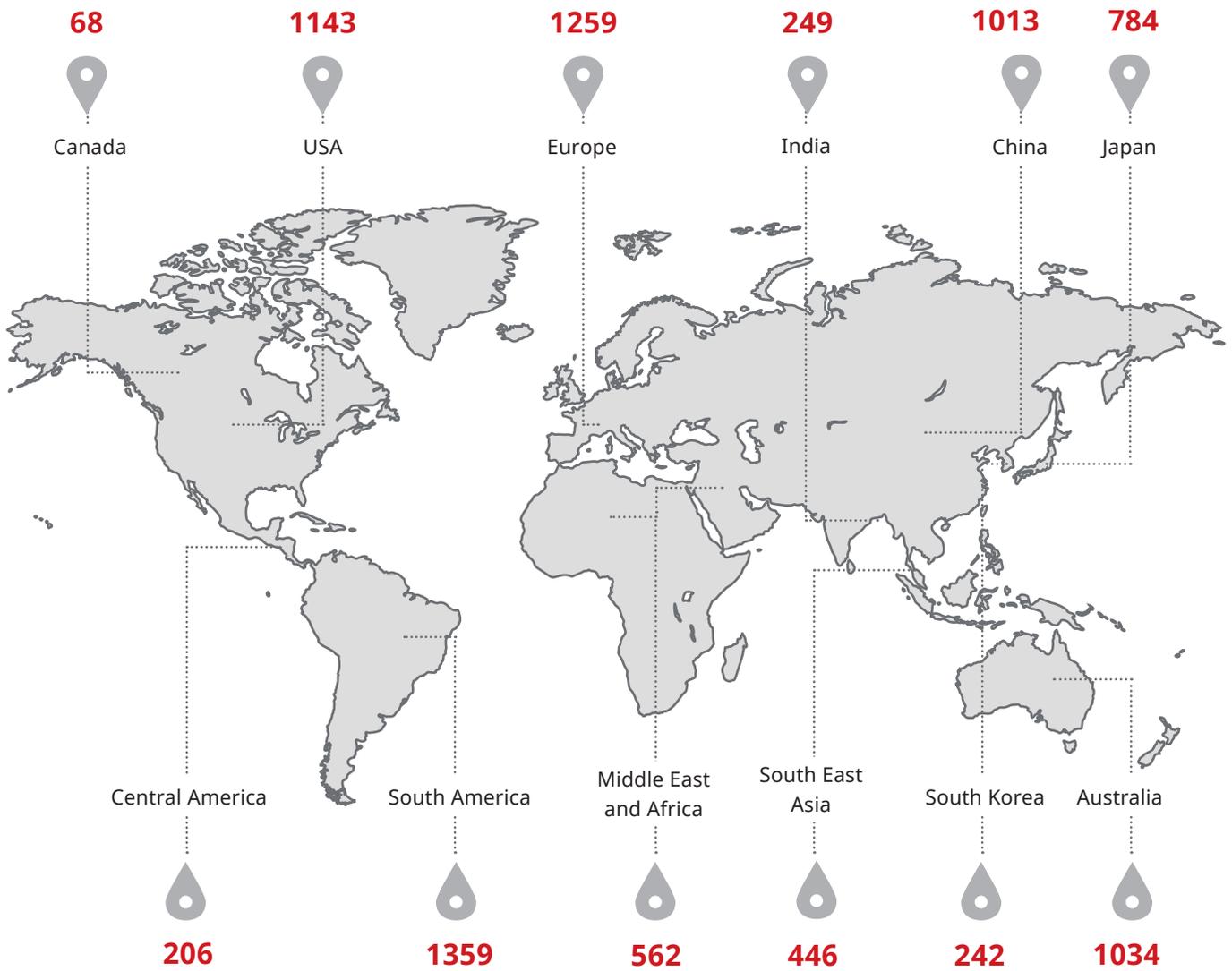
Customers for our EPC, development and asset management services include solar project developers and owners. Our energy segment team has extensive industry expertise and significant experience in working with government authorities and developing new projects for our target markets.

The following table from page 47 of our audited 2019 Annual Report sets forth information on our total net revenues derived from our customers categorized by their geographic locations:

Years ended December 31	2017		2018		2019	
	Total Net Revenues (in thousands of \$)	%	Total Net Revenues (in thousands of \$)	%	Total Net Revenues (in thousands of \$)	%
Asia	1,926,091	56.8%	1,571,287	42%	1,018,083	31.8
Americas	1,108,162	32.7%	1,474,657	39.4%	1,402,041	43.8
Europe and others	356,140	10.5%	698,568	18.6%	780,459	24.4
Total	3,390,393	100%	3,744,512	100%	3,200,583	100%

GEOGRAPHICAL SPREAD OF CANADIAN SOLAR PRODUCTS

MW SOLD IN 2019



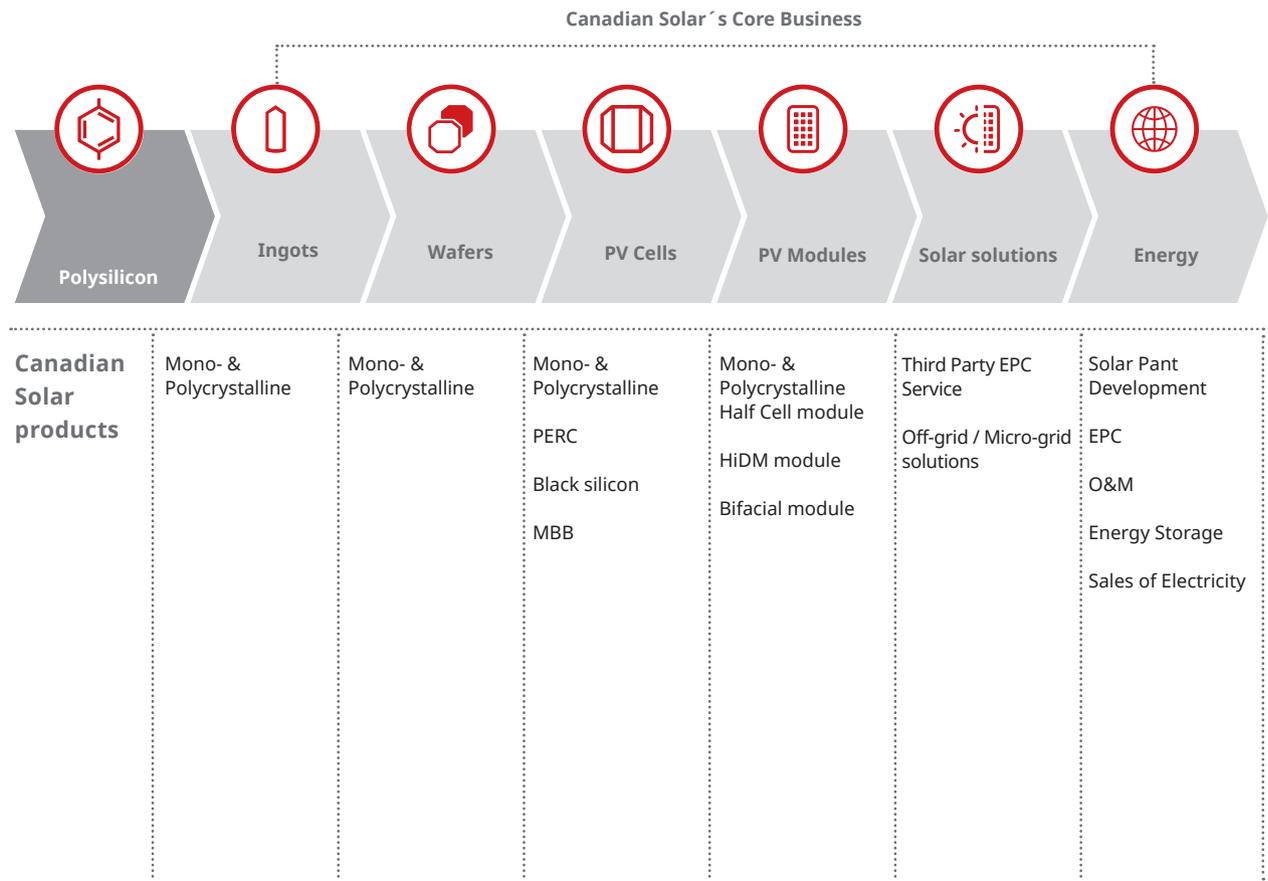
A BRAND THAT MAKES THE DIFFERENCE

While as our products are continuously evolving to meet changing market demands, our core values remain constant: Canadian Solar is here to make the difference.

We are determined to make the difference for our customers, employees, partners, investors and all stakeholders, including the environment.

Our commitment to our core values is illustrated in the numerous stories of impact on our website.

BUSINESS MODEL OVERVIEW



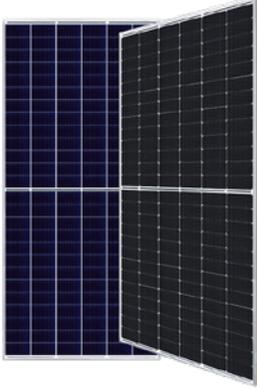
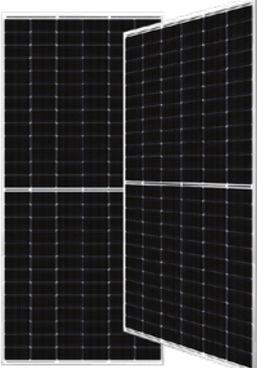
SOLAR MODULES

We produce a wide variety of standard solar modules, ranging from 3W to over 500 W in power and using both multi-crystalline and mono-crystalline cells in several different design patterns, including shingled cells.

(120 half-cells), CS3U (144 half-cells), KuDymond CS3U-P/MS-AG (144 half-cells, double-glass), CS3K-P/MS-AG (120 half-cells, double-glass), BiKu CS3U-PB/MB-AG (144 half-cells, bifacial), CS3K-PB/MB-AG (120 half-cells, bifacial) modules.

Our mainstream solar modules include high power HiKu CS3W (144 half-cells), HiKu CS 3L (120 half-cells), BiHiKu CS3W-PB/MB-AG (144 half-cells, bifacial), HiDM CS1H (60 format, shingled cells), high efficiency CS3K

SOLAR MODULES

<p>HiKu Module</p>  <p>Poly/Mono 120/144 pcs 166+ mm cells</p>	<p>BiHiKu Bifacial Module</p>  <p>Poly/Mono 144 pcs 166+ mm cells</p>	<p>HiKu5 Module</p>  <p>Poly/Mono 132 / 156 pcs 166+ mm cells</p>
<p>BiHiKu5 Bifacial Module</p>  <p>Poly/Mono 156 pcs 166+ mm cells</p>	<p>HiKu6 Module</p>  <p>Mono 144 / 156 pcs 182 mm cells</p>	<p>BiHiKu6 Bifacial Module</p>  <p>Mono 144 / 156 pcs 182 mm cells</p>

In 2019, we expanded our high-power module product portfolio based on 166mm wafers. In July 2019, we started to mass-produce BiHiKu modules. BiHiKu is the bifacial module utilizing our 166mm P4 (multi PERC) cells which have a front side power output exceeding 400 watts. In addition to modules utilizing our 166mm P4 (multi PERC) cells, we launched HiKu and BiHiKu modules using 166mm P5 (casted mono) and mono PERC cells. Our HiKu CS3L (120 half-cells, 166mm wafer) mono PERC modules can achieve power output exceeding 360 watts, which is suited for residential applications.

Our CS3W (144 half-cells, 166mm wafer) mono modules can reach wattage up to 445 watts. By the end of August 2019, we converted 100% of our cell production capacity into PERC and by the end of the year, over one-third of our module capacity was for HiKu and BiHiKu. Our 166mm wafer module products are becoming our new “standard” products. For the residential market, we ramped up the all-black version of our HiDM module with appealing aesthetics and high module efficiency.

In 2020, we launched the super-high power Series 5 and Series 6 PV modules. These new modules will join the HiKu, BiHiKu and HiDM portfolios, expanding the range of high-power, high-efficiency monofacial and bifacial solar modules. These new products incorporate Canadian Solar's proprietary and record-breaking cell technology, as well as the latest cutting-edge module designs, reflecting Canadian Solar's commitment to excellence, research and development of competitive and clean solar solutions. They can offer super-high power classes of up to 590 W and module efficiency of up to 21.3%. They can generate up to 2.7% higher energy yield over the module lifetime, reduce the BOS (balance of system) cost by up to 5.6%, and reduce the LCOE by up to 4.5%, offering excellent value for large-scale installations.



SOLAR SYSTEM KITS

A solar system kit is a ready-to-install package consisting of solar modules produced by Canadian Solar and components, such as inverters, racking system and other accessories, supplied by third parties. We began selling solar systems in 2010, and in 2019 we sold them to customers in Japan, Canada, Australia, China, Brazil.

Turnkey EPC

Canadian Solar's in-house solar experts bring advanced, innovative and cost-effective solutions globally.

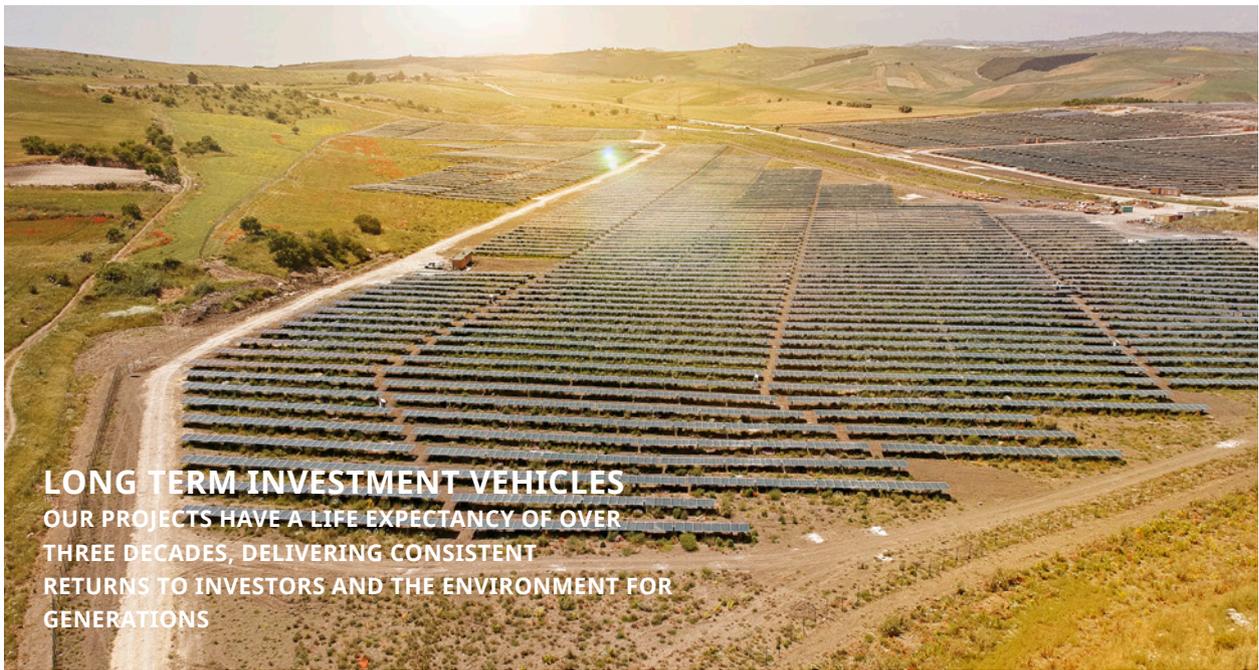
- A strong team of over 100 EPC professionals, engineers, project and construction managers with solid experience in global EPC since 2011.
- A proven track record of over 5.6 GWp PV capacity installed in Canada, USA, Mexico, Australia, Japan, UK, China and other emerging markets etc. as of Q1 2020

- We implement a strict quality and cost control management plan for every project.
- We help to ensure projects is delivered on time, on budget and with a high performance level.

O&M SERVICES

Our O&M services include inspections, repair and replacement of plant equipment, site management and administrative support. In the second half of 2012, we started to provide O&M services for solar power projects in commercial operation. We provided O&M services primarily in North American, Australia and Japan.

As of Q2 2020, we have around 956 MWp O&M portfolio in operation or contracted worldwide.



LONG TERM INVESTMENT VEHICLES
 OUR PROJECTS HAVE A LIFE EXPECTANCY OF OVER
 THREE DECADES, DELIVERING CONSISTENT
 RETURNS TO INVESTORS AND THE ENVIRONMENT FOR
 GENERATIONS

17.6 MW Solar Plant, Sicily, Italy

PRODUCTS AND SERVICES OFFERED IN OUR ENERGY SEGMENT

We develop, build and sell solar power projects. Our project development activities have grown over the past several years through a combination of organic growth and acquisitions. Our global project business is primarily in Canada, Japan, the U.S., China, Brazil, India, Mexico, the United Kingdom and Australia. We have a team of experts who specialize in project development, evaluation, system design, engineering, management,

coordination and financing. Our project sales team actively identifies and pursues suitable buyers for our solar power projects. As of June 30, 2020, the Company's total project backlog and pipeline totaled 15.1 GWp.

(From 2020 Q2 Financial Report)

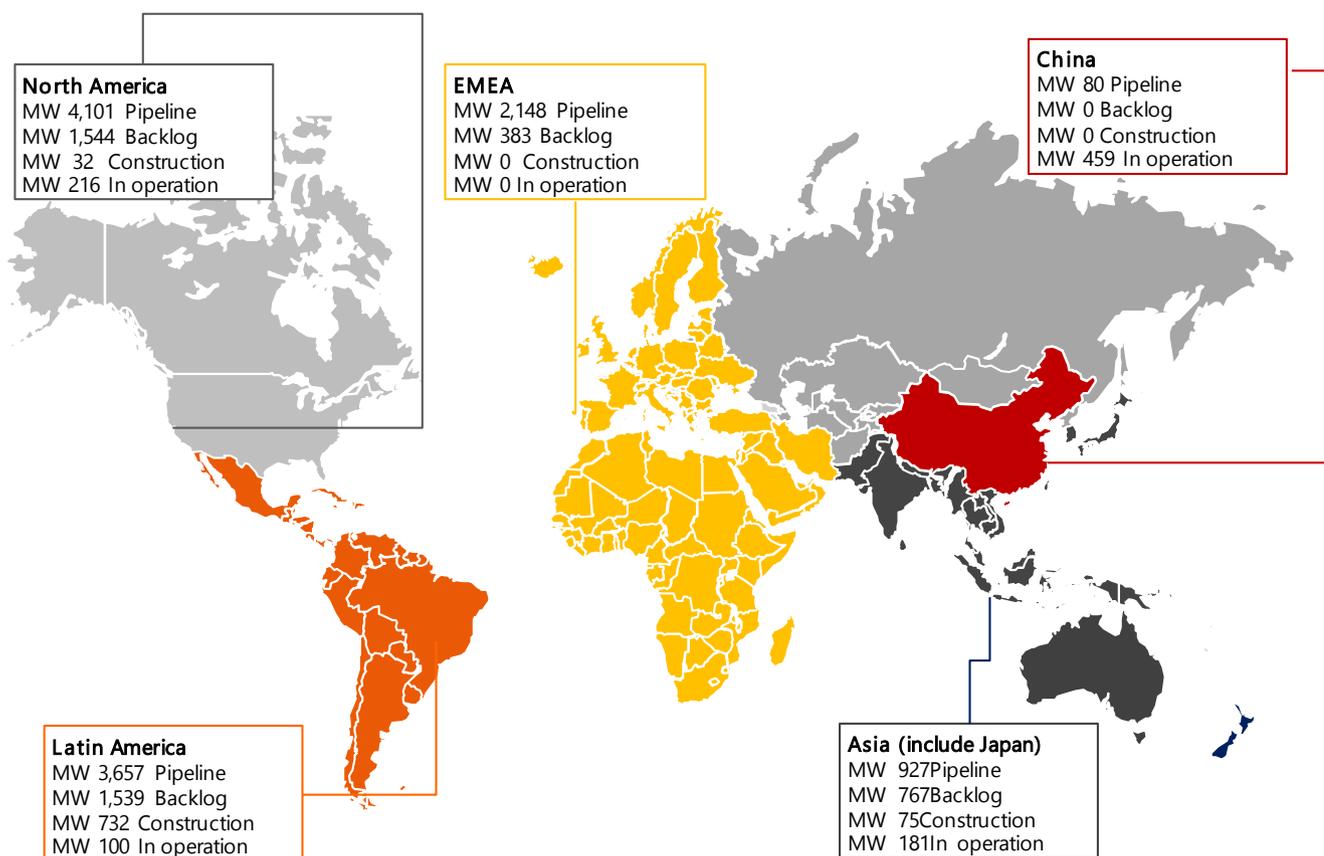


Traditional model.



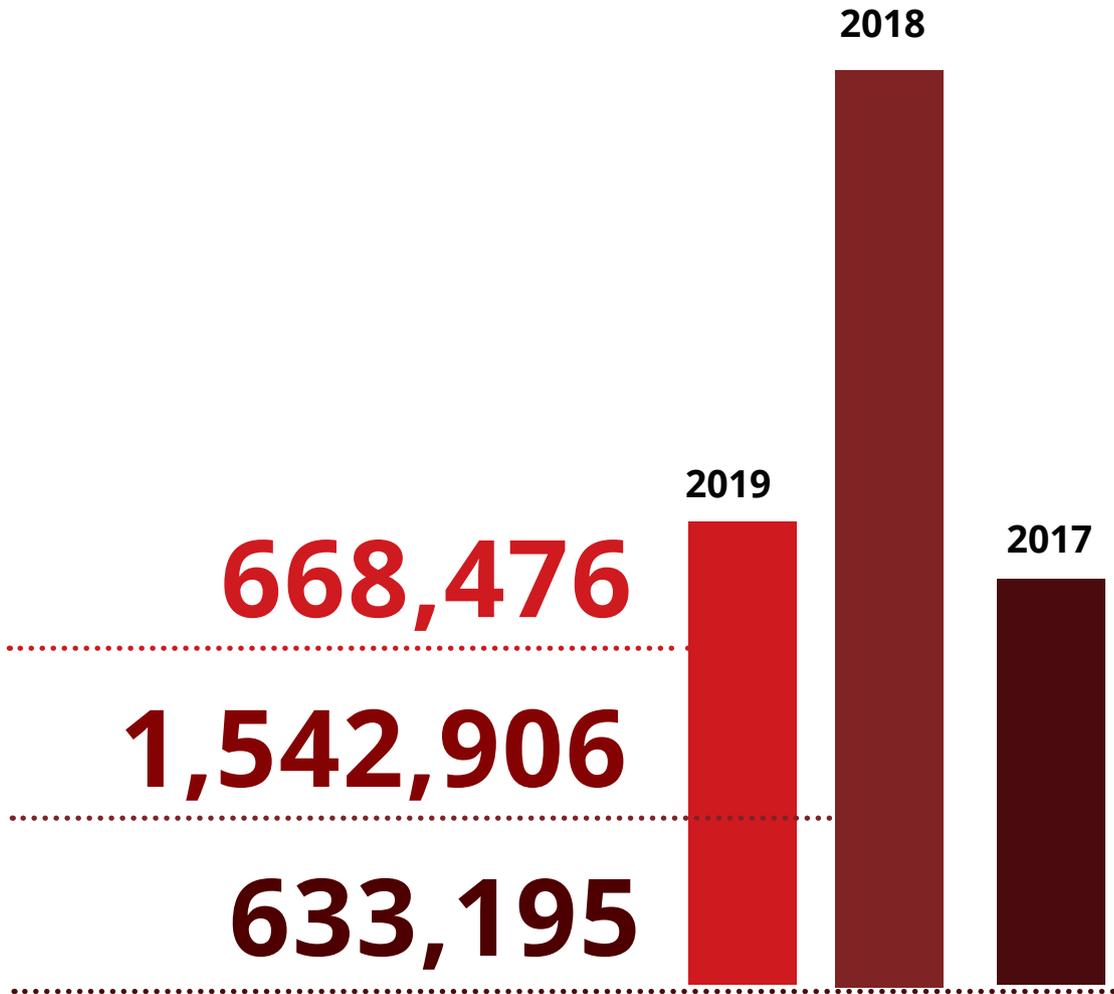
Canadian Solar's "One-Stop-Shop" model.

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

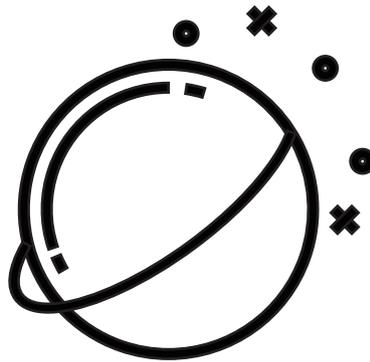


TOTAL REVENUE FROM
ENERGY BUSINESS

***IN THOUSANDS OF USD\$**



**MAKING
THE DIFFERENCE
ON AN
INTERNATIONAL
SCALE**



ONE DREAM:

**CLEAN
ELECTRICITY
FOR
MILLIONS**



65%

35%



**OF OUR
WORKFORCE ARE
WOMEN AND WE
ARE COMMITTED TO
MAKING THE
DIFFERENCE**

EMPLOYEES THAT MAKE THE DIFFERENCE

EMPLOYEE DEVELOPMENT

As of December 31, 2019 we had 14,346 employees in total.

As we aim to reach gender parity, we take pride that we have significantly recruited more women than most high-tech companies.

We should believe that women contribute to the overall diversify and parity of our workplace. We are committed and will continue to support our female talent.

A BALANCE OF FULL-TIME AND TEMPORARY EMPLOYEES

The majority of the workforce at Canadian Solar are on full-time basis while we also offer certain percentage of job opportunities to temporary based employment in manufacturing, R&D, sales and marketing.

10% EMPLOYMENT INCREASE IN ONE YEAR

Our total workforce has expanded by 10% year over year to 14,346 employees in 2019. We are expecting to see a continuous increase of employment in the near future.

PROPORTION OF EMPLOYEES PARTICIPATING IN COLLECTIVE BARGAINING AGREEMENTS

Employer and employee relationship has always been a focus area at Canadian Solar. There were no employment contract collective negotiations for the whole of 2019. We continue to focus on improving our relationships with employees.

SUPPLY CHAIN MANAGEMENT

MSS Segment

Our MSS (Module & System & Solution) segment depends on our ability to obtain a stable and cost-effective supply of polysilicon, solar ingots, wafers and cells. Over the years, we have entered into a number of long-term supply agreements with various silicon and wafer suppliers in order to secure a stable supply of raw materials to meet our production requirements.

In 2019, we purchased a significant portion of the silicon wafers used in our solar modules from third parties. Our largest silicon wafer supplier was GCL. We plan to continue to diversify our external wafer and polysilicon suppliers.

We purchase solar cells from a number of international and local suppliers, in addition to manufacturing our own solar cells and having toll manufacturing arrangements with our solar cell suppliers.

In 2019, our largest supplier of solar cells was Tongwei New Energy. As we expand our business, we expect to increase our solar cell manufacturing capacity and diversify our solar cell supply channel to ensure we have the flexibility to adapt to future changes in the supply of, and demand for, solar cells.

Energy Segment

Our MSS segment supplies part of the solar modules used in our energy segment. For the solar power projects that we develop, we have the option of either using our own engineering and operation teams or hiring third-party contractors to build and operate the projects prior to sale.

For more detail, see pages 44 -45 of our audited 2019 Annual Report.

VIGOROUS QUALITY CONTROL

We are completely committed to quality and sustainability. Every single one of our products and processes are rigorously tested both internally and externally by recognized authorities in order to ensure they meet and exceed recognized quality, health, safety and environmental standards. These external standards are discussed at length in section G4 – 15.

Our tests encompass all aspects of product services, leaving no room for substandard components or workmanship. Tests cover durability, UV resistance, degradation rate and extreme temperature variation, as well as mechanical performance in the face of torrential rains, high winds and heavy snowfalls. These tests ensure that our panels will work across a wide range of environmental applications. A more durable and efficient PV panel translates into a greater positive environmental impact in the long run.

HIGH PERFORMANCE MODULES

Our high performance PV modules have various international product certifications and have been validated by several third party institutions. In California, USA, our products are top-rated by the California Energy Commission's PV module registration list (PTC rating). In Australia, our PV modules outperform other leading brand modules by yielding up to 3% more electricity as recorded by the Desert Knowledge Australia Solar Centre (DKA SC) in Alice Springs, Australia.

OUR INTERNAL TESTS INCLUDE:

- **Electroluminescence (EL) testing**

a 100% EL screen test to eliminate cell or module defects.

- **Visual inspection**

module visual inspection and cleaning before packing.

- **Testing and analysis**

performance reliability, mechanical & chemical tests of raw materials and components. This is done at the warehouse, on the production line, in the testing lab & at other 3rd parties.

- **Testing Equipment**

advanced automatic equipment used in testing and manufacturing process.

- **Testing Lab**

In 2008, we established the first photovoltaic reliability testing laboratory in the industry that met ISO/IEC 17025 standard (Accreditation Criteria for the Competence of Testing and Calibration Laboratories). The laboratory has been accepted for the Mutual Data Acceptance Program by the CSA in Canada, VDE in Germany, Intertek in the U.S. and CGC in China. The PV test laboratory allows us to conduct part of product certification testing in-house, which should reduce time-to-market and certification costs.

EXTERNAL QUALITY AUDITS PROVE WHAT'S INSIDE

The quality of our panels has also been extensively tested and certified by external standards organizations. Contact support@csisolar.com to request the full reports.



QUALITY INITIATIVES THAT MAKE A DIFFERENCE

Our certificates include:
Quality management system ISO 9001:2015;
Environmental Management ISO 14001:2015;
Health and Safety Management OHSAS 18011:2007;
along with a variety of other certifications that speak to the quality of our systems and products.

We also maintain various international and domestic certifications for our solar modules.

For example, we have obtained the International Electrotechnical Commission, or IEC, certifications for sales of our modules in Europe, Underwriters Laboratories, or UL, certifications for sales of our modules in North America, and other necessary certifications for sales of our modules in Japan, South Korea and Great Britain and under several solar programs in China, including Golden Sun, Top Runner.

The IEC certification is issued by Verband Deutscher Elektrotechniker, or VDE, and the UL certification by Canadian Standards Association, or CSA. All newly launched modules will satisfy the latest standards, including IEC 61215/ IEC61730:2016 and UL61730, and have achieved high California Energy Commission, or CEC, PVUSA test condition ratings. All have passed salt mist testing, ammonia testing and PID testing. They have also obtained the certification under the certification schemes of various countries, such as the Microgeneration Certification Scheme of the United Kingdom, the National Institute of Metrology, Standardization and Industrial Quality of Brazil, the Clean Energy Council of Australia, BIS - the Bureau of Indian Standards, KS - Korean Industrial Standards, and the China General Certification Center of China.

All components of our products meet the chemical control requirements under the REACH Directive issued by ECHA (European Chemicals Agency), and TCLP Directive issued by EPA (United States Environmental Protection Agency).

CERTIFICATIONS

Quality, Environment Health & Safety Certifications	Product Testing Certifications	Product Highlights Certifications
<ul style="list-style-type: none">· ISO9001:2015· ISO14001:2016· OHSAS18001:2007	<ul style="list-style-type: none">· IIEC 61215 & IEC 61730:2005· IEC 61215 & IEC 61730:2016· UL 1703 & UL 790 & CEC· CE conformity, MCS (EN45011)· REACH Compliance· UL61730	<ul style="list-style-type: none">· Salt Mist Certificate· Ammonia Certificate· Blowing Sand Certificate· PID Certificate· Water Resistant IP68

GETTING INVOLVED:

INDUSTRY MEMBERSHIPS AND ASSOCIATIONS

We are a member of numerous industry associations globally that promote the positive impact of the solar industry. These associations are listed below:

INDUSTRY ASSOCIATIONS MEMBERSHIPS AND LEVEL OF INVOLVEMENT

Country	Trade Association	Membership Level
Australia	Clean Energy Council	Member
	Smart Energy Council	Member
	Toowoomba and Surat Basin Enterprise	Member
	Australian Industry Group	Member
Africa	SAPVIA (South African Photovoltaic Association)	Member
Brazil	ABSOLAR Brazil (Brazilian Association of Photovoltaic Solar Energy)	Member
	ABGD Brazil (Brazilian Distributed Generation Association)	Member
Canada	Canadian Solar Industries Associations (CanSIA)	Member
Costa Rica	Acesolar Costa Rica	Member
Columbia	SER Colombia (La Asociación de energías renovables Colombia)	Member
China	China PV Industry Association	Member / Vice Director
	CCCMB (China Chamber of Commerce for import and Export of Machinery and Electronic Products)	Member
	SEMI - Industry association for the micro- and nanoelectronics industries, including PV	Member
	Jiangsu Province Photovoltaic Industry Association	Membership /Deputy Director for province
	Jiangsu Province Association of Enterprise Technical Reformation	Director
Japan	Japan Photovoltaic Energy Association (JPEA) Membership	Member
	Japan builders network (JBN) Membership	Member
Mexico	Asolmex Mexico (Mexican Association of Photovoltaic Solar Energy)	Member
Middle East	MESIA (Middle East Solar Association) Africa SAPVIA (South African Photovoltaic Association)	Membership
USA	Solar Energy Industries Association (SEIA)	Board level member
	California Solar and Storage Association	Membership
	Colorado Solar and Storage Association	Membership
	Illinois Solar Energy Association	Membership
	MDV (Maryland-DC-Virginia) Solar Energy Industries Association	Membership
	Northeast Clean Energy Council	Membership
	Solar and Energy Storage Association-Puerto Rico	Membership

II. SCOPE OF THE REPORT BOUNDARIES

The following Standard Disclosures provide an overview of our organization and identifies the scope of our economic, environmental and social responsibility standards.

The standards in this report may relate to material aspects inside or outside the organization, or both.

DEFINING THE SCOPE AND BOUNDARIES OF THIS REPORT

We prepared our report in line with the four basic principles of the Global Reporting Initiative (GRI):

1. Materiality,
2. Engagement of Stakeholders,
3. Sustainability Context and,
4. Completeness.

We consulted our Management Board and individual stakeholders to understand what topics they found most pertinent, and then used materiality analysis to compile a content outline. This was subsequently reviewed by our Global Sustainability Committee, and was approved after incorporating their feedback. To determine the most important aspects and issues, we evaluated the topics from the company perspective (by consulting the Management Board) as well as from the perspective of individual stakeholder groups.

**MATERIAL ISSUES AND
THE LOCATION OF THEIR IMPACTS**





3.77 MW Commercial Solar Rooftop, Dubai, UAE

III. STAKEHOLDER ENGAGEMENT

The Standard Disclosures in this section define our stakeholders and the process that we followed to define them, and describe our stakeholders' participation in events and activities during the preparation of the report.

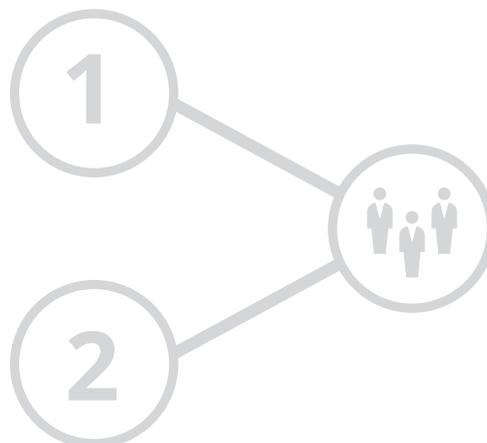
STAKEHOLDERS WE MAKE THE DIFFERENCE TO

Our Primary Stakeholders include:

- Customers: including distributors, system integrators, project developers and installers/EPC companies, utilities, large energy buyers, offtakers
- Suppliers
- Investors
- Employees
- Applicants
- Management
- The environment
- Communities in which we operate

Our Secondary Stakeholders include:

- The media
- Policy makers and legislators
- Investment analysts
- Professional associations
- Employee representatives / Employee associations
- Communities in which we operate
- Banks / Creditors
- Competitors



SELECTION OF STAKEHOLDERS

In seeking to define our stakeholders, we considered the following categories:

- Groups that we may be legally, financially and operationally responsible for
- Groups that may be directly or indirectly affected by or dependent on our activities, or the impact of those activities
- Influential groups or individuals that may provide guidance on the implementation of our activities
- All other groups that may have a material interest in our activities or the results of our activities

STAKEHOLDER ENGAGEMENT

Our Stakeholder Engagement Plan outlines how we identify our stakeholders, who we define as our stakeholders, and provides an overview of our stakeholder engagement programs. The plan acts as a roadmap for the company on appropriate disclosure, how to consult with stakeholders, and how to best solicit feedback on how Canadian Solar operations may impact stakeholders' livelihoods and the environment.

The size and scale of Canadian Solar, and the rapidly changing nature of our industry, means that we have a diverse and varying stakeholder community. We proactively engage with our stakeholders to ensure that we meet their evolving expectations and incorporate their feedback in our business plans. By working with industry associations, participating in multi-sector forums, and speaking with social responsible investors, we demonstrate our continued commitment toward understanding stakeholder views.

Our stakeholder engagement activities are central to our sustainable development commitments, and strategies are tailored to specific communities. In dispersed communities, we identify key stakeholders and solicit their feedback via face-to-face communication. When we can, we work to bring stakeholders together to form multi-stakeholder groups. The benefits of these engagements are two fold. For our stakeholders, benefits include the opportunity to participate in the decision-making process and to contribute with their expertise on policy and program development and a chance. For us, stakeholder engagement opens up to communication channels and allow us to tap into local knowledge. We believe that the earlier the stakeholders are involved in the process, the more likely these benefits are to be realized.

Our goal is to drive long-term sustainability and shareholder value by continuing to align our business practices with societal concerns. To do this, we plan to reduce constraints on our business, allowing us flexibility planning for our future, while also reducing risks and strengthening opportunities by better understanding the fast-changing political, economic, social, technological, and environmental context. This mode of action will also allow us to better adapt to address or refute expectations. We believe that this process will give us greater capacity to address and solve stakeholders' major concerns.

We have varying engagement styles depending on the particular stakeholder types:



1. BUSINESS PARTNERS:

Mutual accountability and responsibility, with two-way engagement and joint learning and decision making.



2. PARTICIPATION:

A part of the team: two-way engagement within limits of responsibility.



3. LOCAL & GLOBAL CONSULTANTS:

Consultants are involved in the process in an advisory capacity with no responsibilities. Role solely within consultation boundaries. Limited two-way engagement: Company asks questions, stakeholders answer.

4. PUSH COMMUNICATIONS:

One-way engagement, where the Company may reach out to particular stakeholder groups using multimedia channels, including emails, physical mail, webcasts, videos etc.



5. PROVISION OF FEEDBACK:

One-way engagement. Information is made available to stakeholders who are willing to participate.

We continuously engage with all of our stakeholders through multiple channels, including our website, informal corporate reports, sales and marketing channels. This is also performed on an ad hoc basis as new sustainability and environmental impact information comes to light. We encourage all stakeholders to share their thoughts on key

issues through in-person meetings, town hall events, direct contact with project managers in the field or through our online inquiry form.

<p>Key concerns</p> <ul style="list-style-type: none"> · Policy delivery · Compliance management · Setting up standards for industries involved <p>Methods of engagement</p> <ul style="list-style-type: none"> · Meetings · Regular statements and reporting · Field work sampling or work instruction <p>Responsible party</p> <ul style="list-style-type: none"> · Investor relations · EHS 	<p>Key concerns</p> <ul style="list-style-type: none"> · Cooperation possibilities · Agenda setting <p>Methods of engagement</p> <ul style="list-style-type: none"> · Direct contact · Community contribution activities <p>Responsible party</p> <ul style="list-style-type: none"> · Legal · Sales 	<p>Key concerns</p> <ul style="list-style-type: none"> · Product and service quality · After-sales support or warranty <p>Methods of engagement</p> <ul style="list-style-type: none"> · Sales process · Service center · Customer surveys · Website · Publicity · Advertising · Trade fairs <p>Responsible party</p> <ul style="list-style-type: none"> · Sales · Marketing · Service 	<p>Key concerns</p> <ul style="list-style-type: none"> · Co-development · Mutual growth · Support for suppliers' CSR activities <p>Methods of engagement</p> <ul style="list-style-type: none"> · Supplier portal · Supplier events · Satisfaction surveys · Proposal system · Supplier code of conduct <p>Responsible party</p> <ul style="list-style-type: none"> · Sourcing · Manufacturing
GOVERNMENT & AUTHORITIES	PROF. ORGANIZATIONS	CUSTOMERS	SUPPLIERS

An overview of our ongoing stakeholder engagement plan is represented in this infographic

EMPLOYEES	THE MEDIA	INVESTORS	COMMUNITIES
<p>Key concerns</p> <ul style="list-style-type: none"> · Staff involvement in corporate operations · Solving staff disputes and ensuring employees' rights · Staff career path development · Working environment · Responses to staff's appeals <p>Methods of engagement</p> <ul style="list-style-type: none"> · Open communication · Direct contact · Training · Intranet · Newsletter <p>Responsible party</p> <ul style="list-style-type: none"> · HR 	<p>Key concerns</p> <ul style="list-style-type: none"> · Advertising campaigns · PR topics · Technical information <p>Methods of engagement</p> <ul style="list-style-type: none"> · Digital marketing · Press releases <p>Responsible party</p> <ul style="list-style-type: none"> · PR · Investor relations · Marketing 	<p>Key concerns</p> <ul style="list-style-type: none"> · Financial performance and significant information disclosure · Company development <p>Methods of engagement</p> <ul style="list-style-type: none"> · Website and emails · Presentations · Direct contact · Investor days <p>Responsible party</p> <ul style="list-style-type: none"> · Investor relations 	<p>Key concerns</p> <ul style="list-style-type: none"> · Solving energy problems · Minimizing environmental effects near factories · Respecting local culture · Contributing to the local economy through local hiring · New development in coordination with local governments <p>Methods of engagement</p> <ul style="list-style-type: none"> · Open dialogue with local stakeholders · Informed consultation and participation, particularly considering Indigenous People · Disclosure of information and consultation with external experts · Grievance procedures to be applied at individual facilities · Community engagement e.g. in education, arts and sports · Annual corporate sustainability reporting on website <p>Responsible party</p> <ul style="list-style-type: none"> · Ehs in coordination with Manufacturing · Local project development teams

RESPONSE TO TOPICS AND CONCERNS RAISED BY STAKEHOLDERS

1. Investors

We diversified our business operations from pure manufacturing to include solar project development. In March 2015, we purchased Recurrent Energy and expanded the scale and scope of our operations. Recurrent Energy is a leading US utility-scale solar project developer.

2. Customers

a. Market feedback tells us that our customers are expecting safer and more reliable products with higher investment returns. In response, our R&D team has been working hard and has achieved technological breakthroughs. Our bifacial module warranty has been extended to 30 years, a 5 years gain from the standard warranty of 25 years, thanks to the R&D team's contributions.

b. Many communities around the world do not have access to a reliable grid and depend on kerosene , a dangerous fuel with a myriad of safety and health hazards. We have developed specialized, portable, off-grid solutions that provide clean, safe and green energy at lower cost. This market remains a strategic priority for us.

c. Socially conscious customers and investors have requested that the minerals we use be conflict-free. We are stringent in our policy to not use conflict minerals, and we require key suppliers to report on any such use.

3. Communities

Canadian Solar is engaged in the positive development of local communities across the world, with both management and employees teaming up to drive various local community initiatives. We have a long-term commitment to the communities where we conduct business. We pledge to offer our help in the form of financial assistance and donations to educational, R&D, sports, arts, and charity organizations. We hope that our ability to give back to others will be a true measure of our success.

4. Suppliers

Our Procurement Management Strategy is vertically integrated and managed from the top level and supported by divisional staff. Our goal is to create an efficient and sustainable supply chain that meets the development needs of our company, the interests of all our stakeholders and protects the environment.

IV. GOVERNANCE

Canadian Solar has a comprehensive set of policies and/or guidelines for all the following governance topics listed below. These are available online at <http://investors.anadiansolar.com/phoenix.zhtml?c=196781&p=irol-govHighlights>

COMMITTEE CHARTERS

- a. Audit Committee
- b. Compensation Committee
- c. Nominating and Corporate Governance
- d. Technology Committee

GOVERNANCE DOCUMENTS

- a. Corporate Governance Guidelines
- b. Code of Business Conduct and Ethics
- c. Whistleblower Policy
- d. Insider Trading Policy
- e. Policy on Related Party Transactions
- f. Anti-Bribery and Anti-Corruption Policy (Prohibition against Giving Bribes)
- g. Anti-Bribery and Anti-Corruption Policy (Prohibition against Accepting Bribes)

COMPLIANCE WITH ANTI-BRIBERY AND ANTI CORRUPTION LAWS, RULES AND REGULATIONS

We observe and comply with the United States Foreign Corrupt Practices Act (FCPA), the Canada Corruption of Foreign Public Officials Act (COFPA), the United Kingdom Bribery Act (Bribery Act), the relevant Chinese Anti-Corruption Laws and Regulations and other anti-bribery and anti-corruption laws, rules and regulations applicable in countries where the Company operates. The laws, rules and regulations prohibit companies from corruptly offering, promising, paying, or authorizing the payment of anything of value, directly or indirectly through a third party, to any government official in a position of authority or trust to influence that government official in the performance of his or her duties. The Company does not allow any commercial bribes in private sector.

Thus, the Company shall perform Anti-bribery and Anti-corruption due diligence in advance for any prospective "Intermediary", Joint-venture partner or acquisition and business combination.

The full Canadian Solar Anti-Bribery and Anti-Corruption Compliance document is available here: http://media.corporate-ir.net/media_files/IROL/19/196781/corpgov_5182017/CSI-4A-Anti-Bribery-and-Anti-Corruption-Policy-Giving-Bribes-Amended-to-May-18-2017.pdf

http://media.corporate-ir.net/media_files/IROL/19/196781/corpgov_5182017/CSI-4B-Anti-Bribery-and-Anti-Corruption-Policy-Receiving-Bribes-Amended-to-May-18-2017.pdf

FRAUD PREVENTION

Through many years of diligent research and examination, Canadian Solar has created a fraud and corruption prevention system that holds education and supervision as its key elements. We have a zero tolerance policy towards any form of illegal conduct and firmly believe that prevention is the best way. Accordingly we have implemented a number of measures aimed to strengthen the controls over the risk of fraud. We have continuously updated the Company's Anti-bribery and Anti-corruption Policies, improving the systems and procedures of reimbursement, procurement and internal auditing, and providing stricter guidelines for managing undisclosed information. Concrete details regarding these changes can be found under Section IV. Governance in G4-34 above.

Our responsibility to our employees, shareholders, customers, suppliers and other stakeholders requires only the highest standards of business ethics. To that end, we are committed to conduct business honestly, fairly, and transparently. We know that meticulous examination and careful auditing can effectively prevent fraud, so we ask all our departments to provide detailed reports of their finances and activities.

V. ETHICS & INTEGRITY

Since Canadian Solar's founding 19 years ago, we have steadfastly held onto our core values. They are the bedrock on which we have built our business, and our guiding principles as we continue to expand.

MAKING THE DIFFERENCE

We are here to make a difference – in the lives of our investors, partners, colleagues, customers, and all others whose lives we may touch. We believe we are here to make a positive contribution to society and the environment. We do this by providing exceptional, sustainable products and services for all of our stakeholders.

HONESTY

Honesty is the foundation of a company's success. Progress can only be made through consistent and clear communication with our customers and shareholders.

COOPERATION

Cooperation is a type of trust. Whether it be between business partners and our company, or between the various departments within the company, we view cooperation as the primary ingredient in the foundation of our a brand.

PROFESSIONALISM

Professionalism is a fundamental aspect of our business. Our staff is required to follow strict standards when carrying out responsibilities. Our uncompromi-

sing devotion to professionalism allows us to provide the best service to customer.

EFFICIENCY

In today's fast-paced and ultra-competitive society, efficiency is key to meeting the fluctuating demands of today's market. We create a work environment that encourages employees to take initiative and reward behaviors that optimize management styles and manufacturing protocols.

INNOVATION

In a field full of fresh ideas and new technology, innovation is essential to staying ahead of the curve. We view everything from multiple perspectives and are unafraid of test new ideas in order to supersede the ordinary and conquer the most pressing energy problems.

PRESERVING FAIRNESS IN INTERNATIONAL TRADE

Canadian Solar strictly abides by the standards of international trade. Only through fair trade and fair competition can international trade become a win-win situation. We have assembled our team of lawyers and have cooperated with international trade organizations such as the WTO in an effort to uphold our responsibilities as a company.

VI. SPECIFIC STANDARD DISCLOSURES

This part of our standard disclosures explains our sustainability work affecting our stakeholders from an economic, social and environmental standpoint. For each disclosure, we specify the management approach and key indicators for the company.

ASSESSMENT AND MANAGEMENT OF

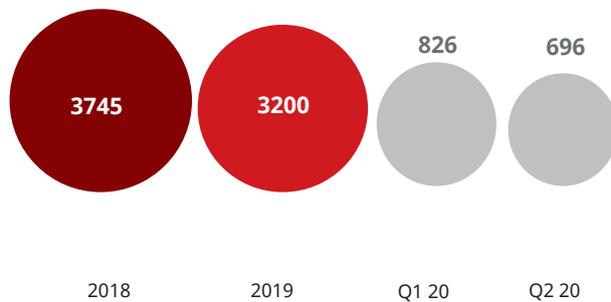
ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

Our management views Environmental, Healthy and Safety (EHS) as central to our corporate strategy. We are committed to continuous improvement of our EHS policy and performance. The company has developed and implemented EHS management systems in the plants of Changshu Module, Suzhou Module, Suzhou Cell, Funing Cell, Luoyang Wafer, Module, Baotou Ingot & Module, Vietnam Module, Thailand Cell & Module, Dafeng Module and Taiwan Module. These factories are also certified against ISO 14001 and OHSAS 18001 management systems. In 2020, we plan to update the version of management system certificate from ISO14001 to ISO45001. All of our key products are ISO9001 quality management system certified.

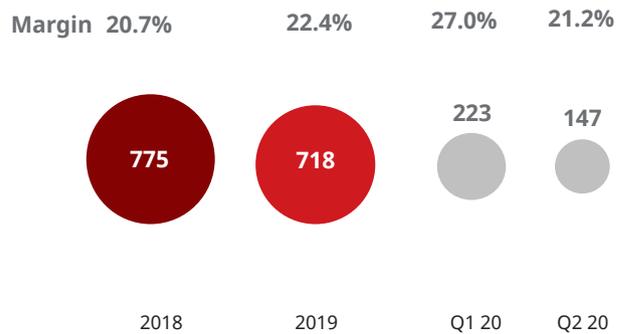
VI.A. ECONOMIC ASPECTS

ECONOMIC PERFORMANCE

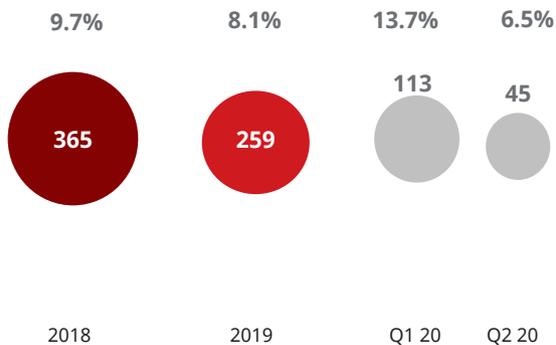
Revenue – USD\$ million



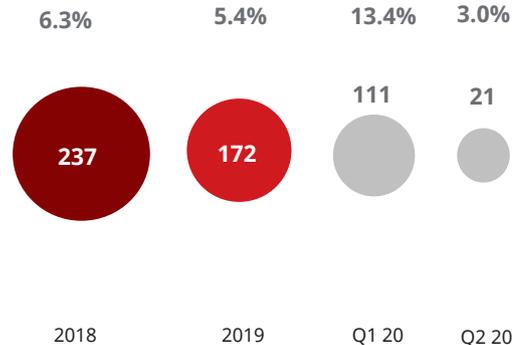
Gross Profit – USD\$ million



Operating Income – USD\$ million



Net Income attributable to Canadian Solar Inc, – USD\$ million



The above financial and operating data illustrates Canadian Solar enjoyed significant financial growth in 2019 and 2020. We are confident in the financial success of our company and the benefits we are able to pass on to our stakeholders.

The numbers shown vouch for the success of our management approach. Above all, however, we believe that the environment is one of our most important stakeholders, and we are proud of the clean solar

energy products we produce. The following selected statement of listed data for the years ended December 31, 2015, 2016, 2017, 2018 and 2019; balance sheet data as of December 31, 2015, 2016, 2017, 2018 and 2019 have been derived from our consolidated financial statements in our annual report each of these years, respectively. All of our financial statements are prepared and presented in accordance with U.S. generally accepted accounting principles, or U.S. GAAP.

**FOR THE YEARS ENDED, OR AS OF,
DECEMBER 31, 2019**

(in thousands of \$, except share and per share data,
and operating data and percentages)

Excerpt from page 5 of the Canadian Solar
[2019 Annual Report](#).

	2015	2016	2017	2018	2019
Statement of operations data					
Net revenues	3,467,626	2,853,078	3,390,393	3,744,512	3,200,583
Income from operations	247,371	93,164	269,345	364,657	258,879
Net income	173,316	65,275	102,983	242,431	166,555
Net income attributable to Canadian Solar Inc.	171,861	65,249	99,572	237,070	171,585
Earnings per share, basic	3.08	1.13	1.71	4.02	2.88
Shares used in computations, basic	5,728,903	57,524,349	58,167,004	58,914,540	59,633,855
Earnings per share, diluted	2.93	1.12	1.69	3.88	2.83
Shares used in computation, diluted	60,426,056	58,059,063	61,548,158	62,291,670	60,777,696
OTHER FINANCIAL DATA					
Gross margin	16.6%	14.6%	18.8%	20.7%	22.4%
Operating margin	7.1%	3.3%	7.9%	9.7%	8.1%
Net margin	5.0%	2.3%	3.0%	6.5%	5.2%

**FOR THE YEARS ENDED, OR AS OF,
DECEMBER 31, 2019**

(in thousands of \$, except share and per share data,
and operating data and percentages)

Excerpt from page 5 of the Canadian Solar
[2019 Annual Report](#).

⁽¹⁾ Numbers are calculated after inter-segmentation
elimination and represent solar power products
sold to third parties.

⁽²⁾ Numbers are calculated after inter-segmentation
elimination.

	2015	2016	2017	2018	2019
Selected operating data:					
Solar power products sold (in MW)					
MSS segment ⁽¹⁾	4,085.0	5,138.1	6,538.8	5,916.1	7,979.7
Energy segment ⁽²⁾	298.8	65.7	354.3	901.1	435.2
Total	4,383.8	5,203.8	6,893.1	6,817.2	8,414.9
Average selling price (in \$ per watt) Solar module business	0.58	0.51	0.4	0.34	0.29
BALANCE SHEET DATA					
Net current assets (liabilities)	-392,231	69,697	-22,709	125,964	160,939
Total assets	4,413,928	5,406,606	5,889,627	4,892,658	5,467,207
Net assets	832,510	899,390	1,059,775	1,272,845	1,425,058
Long-term borrowings	606,577	493,455	404,341	393,614	619,477
Convertible notes	146,674	125,569	126,476	127,428	-
Common shares	677,103	701,283	702,162	702,931	703,806
Number of shares outstanding	55,965,443	57,830,149	58,496,685	59,180,624	59,371,684

QUALITY

The longer a product lasts, the less it needs to be replaced, reducing its environmental impact. We do not believe in “built-in obsolescence”. On the contrary, our PV modules are designed and warranted to last 25 years and beyond.

QUALITY
OUR CUSTOMERS CAN BELIEVE IN

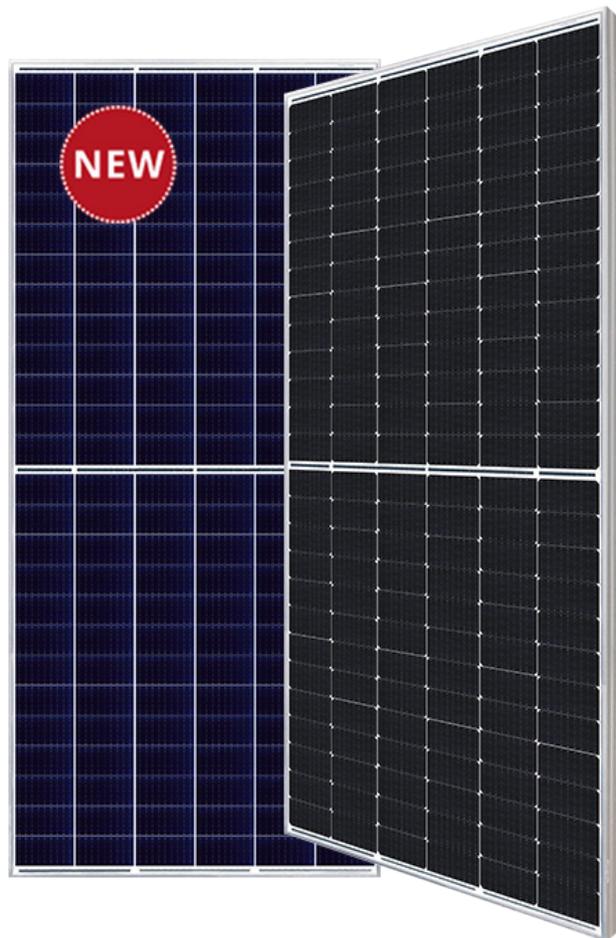
- 12- or 15-year limited product warranty
- 25- or 30-year limited power output warranty

For Ku / Hiku Modules:
Twelve (12) year limited product warranty
Twenty-five (25) year limited performance warranty

For Bifacial BiKu/ BiHiKu Modules:
Twelve (12) year limited product warranty
Thirty (30) year limited performance warranty

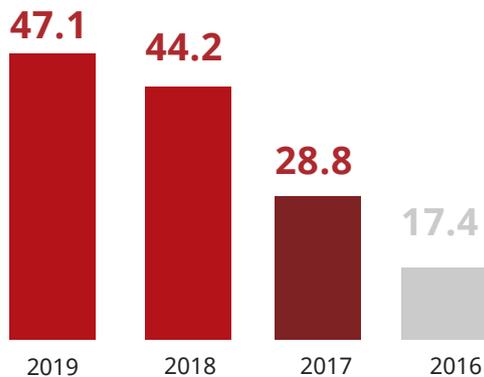
For HiDM modules:
Fifteen (15) year limited product warranty
Twenty-five (25) year limited performance warranty

For Double glass modules:
Twelve (12) year limited product warranty
Thirty (30) year limited performance warranty



RESEARCH & DEVELOPMENT INNOVATION

INVESTMENT IN RESEARCH & DEVELOPMENT IN MILLION \$USD



The above table is taken from page 75 of the 2019 Annual Report

SUSTAINABLE THINKING

By definition, any improvement in the efficiency or cost of solar technology has a positive impact on environmental and economic sustainability.

As a globally recognized innovator in the solar industry, Canadian Solar has consistently achieved improvements in solar cell efficiency and cost, leading to affordable panels that can harness more of the sun's energy.

As of March 31st, 2020, more than 2847 global patents have been filed, of which 1,682 patents are granted. Additionally, Canadian Solar has strategic R&D partnerships with EDF, Fraunhofer, University of Toronto, Case Western Reserve University, ECM and other research institutes.

As of December 31, 2019, we had 515 employees engaged in research, product development and engineering.

We operate four state-of-the-art PV research facilities in China and Canada.

1. Canadian Renewable Energy Laboratory (CANREL): Canadian Renewable Energy Laboratory located in Guelph, Canada, focuses on hybrid energy solutions, designing and engineering microgrid power systems with high renewable energy penetration and energy storage, and providing effective project development and performance validation services.
2. Canadian Solar Photovoltaic Testing Laboratory (CPTL): Canadian Solar Photovoltaic Testing Laboratory is the first module manufacturer owned PV reliability testing and PV material testing laboratory since 2009 according to ISO/IEC 17025 (Accreditation Criteria for the Competence of Testing and Calibration Laboratories).
3. Canadian Solar Cell Research and Development Lab (CCRDL): Canadian Solar Cell Research and Development Lab is equipped with industry leading solar cell testing devices, including electroluminescence imager, infrared thermal imager, quantum efficiency measurement tool, etc. The center has an annual production and testing capacity of 50 MW high efficiency cells.
4. The Center for System Product: The center aims to develop high quality and low cost off-grid products such as kits, energy storage systems, as well as smart grids. It also provides system performance evaluations and LCOE benchmarking.



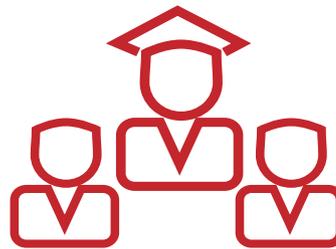
**WORLD RECORD OF
POLY CELL EFFICIENCY
23.81%**



**BIFACIAL MODULE
POWER UP TO 585 W
SINGLE FACIAL MODULE
POWER UP TO 590 W**



**1682 PATENTS
AWARDED
AS OF MARCH 2020**



**515 STAFF
IN SOLAR
TECHNOLOGY R&D**



381 kW Commercial Solar Rooftop System, Netherlands

VI.B. ENVIRONMENTAL ASPECTS

DMA ENVIRONMENTAL

COMPLIANCE

The potential threats associated with climate change and the environmental impact from non-renewable energy sources are well known. In addition to delivering products that are part of the solution to these problems, we are committed to implementing policies and government directives that help minimize negative environmental impacts, as disclosed in our 2019 Annual Report (pages 52 – 53): “We believe we have obtained the environmental permits necessary to conduct the business currently carried on by us at all our existing manufacturing facilities. In addition, we have also conducted environmental studies in conjunction with our solar power projects to assess and reduce the environmental impact of such projects.”

Further, our products comply with the environmental regulations of the jurisdictions in which they are installed. For example, we have ensured that our products comply with the EU’s Restriction of Hazardous Substances Directive, which took effect in July 2006, by reducing the amount of lead and other restricted substances used in our solar module products.

Our operations are subject to regulation and periodic monitoring by local environmental protection authorities. If we fail to comply with present or future environmental laws and regulations, we could be subject to fines, suspension of production or cessation of operations.



7.3MW Solar Plant, UK

OUR ENVIRONMENTAL GOALS



**1.
TO CONTINUE TO
SATISFY CUSTOMERS'
NEEDS FOR CLEAN
AND COMPETITIVE
SOLAR ENERGY
SOLUTIONS**

2.

TO REDUCE HARMFUL EMISSIONS AND THEIR EFFECTS ON THE ENVIRONMENT

3.

TO MAXIMIZE ACTIVITIES THAT HAVE A POSITIVE IMPACT ON THE ENVIRONMENT, WHICH IS DIRECTLY CORRELATED TO THE NUMBER OF PV MODULES WE CAN PRODUCE AND SELL

4.

TO PROMOTE A HEALTHY AND SAFE WORKING ENVIRONMENT THROUGH PREVENTATIVE MEASURES

5.

TO MOTIVATE AND EDUCATE OUR EMPLOYEES ON THE QUALITY, HEALTH, SAFETY AND ENVIRONMENTAL ASPECTS OF THEIR WORK

6.

TO PRIORITIZE SUPPLIERS AND BUSINESS PARTNERS THAT PRACTICE ABIDE SIMILAR STANDARDS OF QUALITY, HEALTH, SAFETY AND ENVIRONMENTAL POLICY

7.

TO ENSURE COMPLIANCE WITH LAWS, LEGISLATION AND APPLY RECOGNIZED NORMS AND STANDARDS

8.

TO SET TARGETS, EVALUATE RESULTS, AND CONTINUOUSLY IMPROVE THEM AND STRIVE TO BE BEST IN THE INDUSTRY

9.

TO COMMUNICATE OPENLY ABOUT QUALITY, HEALTH, SAFETY AND ENVIRONMENTAL TARGETS AND RESULTS

RESOURCE EFFICIENCY & POLLUTION PREVENTION

Our general policy is to minimize all potentially harmful emissions and effects on the environment and to maximize those activities that have a positive impact.

We monitor our energy and water consumption and use the data we collect, to better plan how to reduce consumption.

Canadian Solar has always been committed to water and raw material recycling programs. Canadian Solar has successfully implemented projects for the collection and recycling of RO (reverse osmosis) rejected water, HVAC (Heating, Ventilation and Air Conditioning) condensate water, and preliminarily-treated waste water. This water is used for washing, heating, cooling, cleaning and gardening.

We conduct quarterly tests and collect data on discharged waste water as part of the control of routine procedures, and we measure chemicals and metals of fluoride, nitrogen ammonia, oil and oxygen. In 2019, we treated 3,990,000 m³ of waste water during production in all our factories to reduce harmful chemicals.

The company also takes all possible measures to manage and control harmful waste materials other than waste water and gases. The fluoride waste, chemical tanks, waste oils and other chemicals are contained, handled and disposed by authorized and licensed waste control contractors.

With our production increasing and our new factories gradually reaching the full capacity, we took energy saving measurements to reduce our energy and resource consuming for per MW.

1. Baotou Ingot Factory

In 2019, Baotou Ingot Factory adopted medium water and concentrated water recovery measures.

Using the reclaimed water recycling system, around 700 tons of waste water produced in the workshop were treated with a precision filter every day, and the waste water was sent back to the workshop for recycling after all the indexes of the water meet the standards of the workshop. It saved about 255,500 tons of water each year.

With the concentrated water recycling project, about 100 tons of concentrated water will be collected every day, some of which were directly used in the workshop, and some of which were used in the toilet as flushing water. With these measures, the concentrated water entered the wastewater station again and then were recycled. It saved about 36,500 tons of water per year.

2. Luoyang Wafer Factory:

In 2019, Luoyang Wafer Factory has adopted disposal measures such as candle filter to conduct in-depth treatment and recycling of the wastewater discharged according to the standards for the purpose of degumming and greening, thus saving about 420,000 tons of tap water per year. The factory also recovered the waste heat from the air outlet of the air compressor and heated the 700 tons/day process water required by the process, saving 13,000 tons/year of steam.

3. Funing Cell Factory :

In the process of pure water production, Funing Cell Factory concentrates and used the concentrated water again. The reuse of the concentrated water saved the purchase amount of tap water by 580,000 tons/year.

Besides these measures to save water and energy consumption, our factories also recycle foam, wood, plastic and other packaging materials.

We use lighting electricity usages by adding automatic adjusting equipment. More information can be found in “module and other material recycling” in this report.

MATERIALS USED

Global	2019	2018	2017
Total materials used (in metric tons)	780,083	571,008	464,075
... materials purchased from external suppliers	127,209	93,380	36,092
... materials obtained from internal sources	624,030	477,934	427,962
... non-renewable materials	679,966	499,228	401,680
... recycled input materials use	98,954	66,852	61,678
... recycled input materials as a % of total materials used	12.69%	11.7%	13.3%

2019 Materials used by factories' location	China	Canada	Brazil
Total materials used (in metric tons)	666,969	3,211	462
... materials purchased from external suppliers	59,758	73	462
... materials obtained from internal sources	578,555	2,950	0
... non-renewable materials	574,036	2,436	0
... recycled input materials use	92,932	75	0
... recycled input materials as a % of total materials used	13.9%	2.3%	0%

2019 Materials used by factories' location	Thailand	Vietnam
Total materials used (in metric tons)	72,241	37,200
... materials purchased from external suppliers	66,916	0
... materials obtained from internal sources	5,325	37,200
... non-renewable materials	71,842	22,750
... recycled input materials use	399	5,548
... recycled input materials as a % of total materials used	0.6%	14.9%

NOTE :

1. Internal sources is a reference to domestic procurement procedures.
2. In 2019, the production output of our Indonesia factory were few , and there were very little raw material and energy consumption.

ENERGY CONSUMPTION

Global	2019	2018	2017
Energy consumption – Total kWh consumed	38,314,734	43,225,038	50,991,824
... of which gas	7,688,665	3,690,639	1,731,983
... of which diesel	505,043	590,664	643,856
... of which gasoline	247,763	185,876	992,580
... of which steam	29,873,262	38,757,858	47,623,406
Total electricity consumed – kWh	968,338,843	686,593,504	499,704,557
Self-generated electricity in kWh	464,681,449	267,681,872	287,639,991
Proportion of renewable energy produced relative to total energy consumed in %	47.99%	38.99%	57.56%

2019 Energy consumed by factories' location	China	Canada	Brazil
Energy consumption – Total kWh consumed	38,091,267	0.0	223,467
... of which gas	7,688,665	0.0	0.0
... of which diesel	505,043	0.0	0.0
... of which gasoline	247,763	0.0	0.0
... of which steam	29,649,795	0.0	223,467
Total electricity consumed – kWh	773,347,327	56,487	804,481
Self-generated electricity in kWh (from own PV systems) fed into the grid	463,876,968	0.0	804,481
Proportion of renewable energy produced relative to total energy consumed in %	59.98%	0.0%	0.0%

2019 Energy consumed by factories' location	Thailand	Vietnam
Energy consumption – Total kWh consumed	0.0	0.0
... of which gas	0.0	0.0
... of which diesel	0.0	0.0
... of which gasoline	0.0	0.0
... of which steam	0.0	0.0
Total electricity consumed – kWh	182,351,979	11,778,568
Self-generated electricity in kWh (from own PV systems) fed into the grid	0.0	0.0
Proportion of renewable energy produced relative to total energy consumed in %	0%	0%

NOTE :

1. Internal sources: domestic procurement procedures.
2. In 2019, the production output of our Indonesia factory were few , and there were very little raw material and energy consumption.

**GLOBAL
WATER CONSUMPTION**

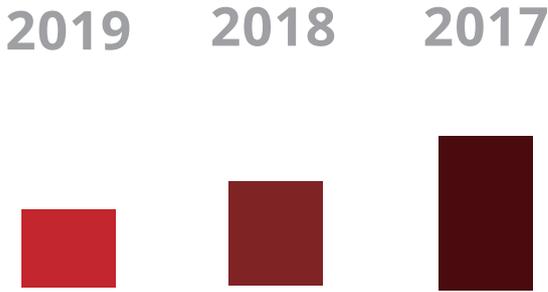
	2019	2018	2017
Total water withdrawal in m³	7,817,901	6,340,237	6,301,226
... municipal water supply	7,451,200	6,332,677	6,286,202
... surface water	0	0	0
... rainwater	60	0	0
... ground water	429	7,560	15,024
Total water use in m³/MW	329	339	593

**GLOBAL WATER USE OF ALL PLANTS IN TONS
PER MW REDUCED BY 44.5% IN THREE YEARS**





**GLOBAL WASTEWATER DISCHARGE VOLUME
IN M³ PER MW PRODUCED.
A REDUCTION OF OVER 13.8% IN ONLY THREE
YEARS.**



	2019	2018	2017
Total Discharge Volume in m ³	4,911,332	4,303,301	2,311,652
Discharge Volume in m ³ /MW produced	207	230	217

WATER CONSUMPTION

2019 Water Consumed by factories' location	China	Canada	Brazil
Total water withdrawal in m ³	6,330,411	5,935	488
... of which water from municipal water supply	5,964,198	5,935	0
... of which surface water	0	0	0
... of which rainwater	0	0	60
of which ground water	0	0	429

2019 Water Consumed by factories' location	Thailand	Vietnam
Total water withdrawal in m ³	1,470,953	10,114
... of which water from municipal water supply	1,470,953	10,114
... of which surface water	0	0
... of which rainwater	0	0
... of which ground water	0	0

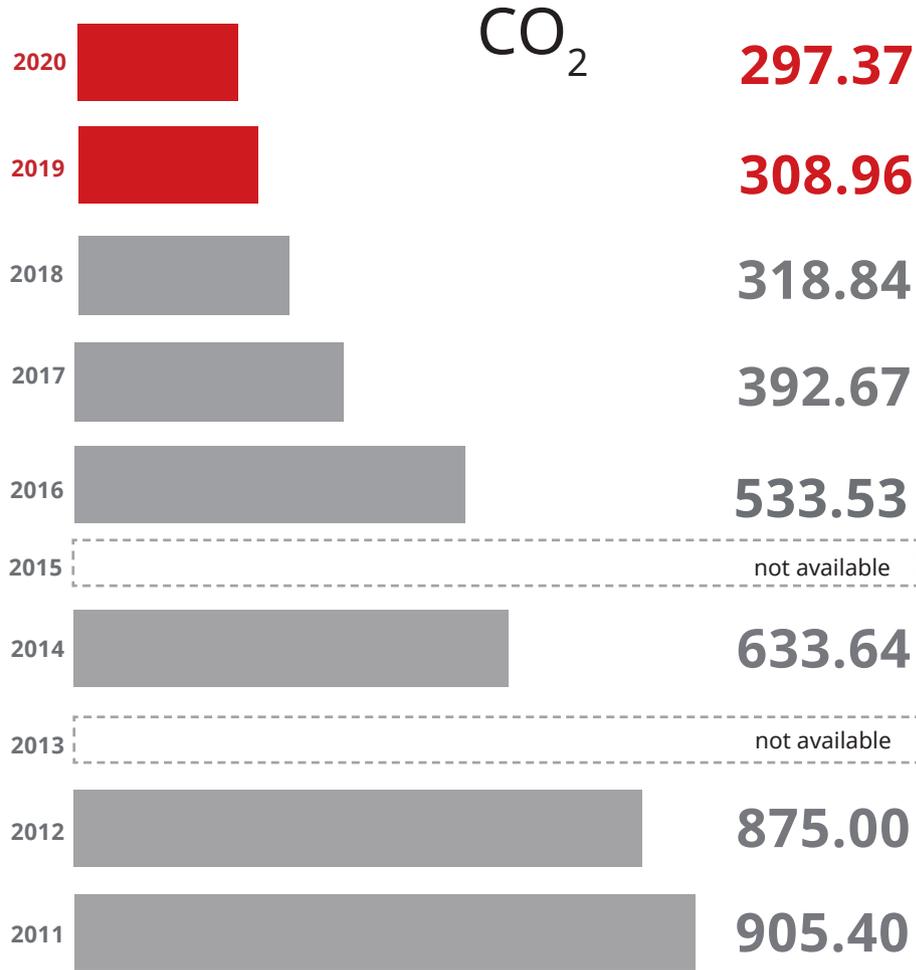
WATER RECYCLED AND REUSED

Global	2019	2018	2017
Water recycled/reused in m ³	2,159,360	1,410,363	1,637,176
Total wastewater discharge in m ³	5,374,388	4,303,301	2,323,394

2019 Water Recycled and Reused	China	Canada	Brazil
Water recycled/reused in m ³	2,074,094	0	0
Water recycled/reused as % of total water withdrawal	32.8%	0	0
Total wastewater discharge in m ³	4,911,332	0	242

2019 Water Recycled and Reused	Thailand	Vietnam
Water recycled/reused in m ³	85,266	0
Water recycled/reused as % of total water withdrawal	5.8%	0.0%
Total wastewater discharge in m ³	454,724	8,091

CO₂ EMISSIONS IN KG PER KW PRODUCED



Our CO₂ emissions per kW of solar modules produced decreased by 6.7% from 2018 to 2020. For more information, please contact service@canadiansolar.com

MANAGING OUR CARBON FOOTPRINT

As a frontrunner of the photovoltaic industry, Canadian Solar cares a great deal about the environmental footprint of its products. As such we were one of the first solar companies worldwide to implement holistic environmental management systems to reduce our carbon emissions. To meet our carbon reduction ambitions, Canadian Solar has partnered with

Intertek in 2009 – 2012 and with TÜV SÜD in 2014 and 2015 to quantify and improve our GHG emissions.

In 2017 and 2018, Canadian Solar continues to carry out the recommendations put forth by Solstice, Smartgreenscans and Certisolis to improve product efficiency and lower carbon emissions. In 2019 and 2020, we cooperated with Solstice, Smartgreenscans, Certisolis again to track and analyze the GHG emissions for per kW module produced.

*2019 and before: according to CRE3. Since 2020: according to French new methodology CRE4. 2020: 420.31 kg/kwp as CRE4, equivalent to CRE3 297.37 kg/kwp

NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS

As is standard practice in our organization, we observe all local and international laws and regulations related to emissions. We monitor and assess all relevant

emissions regularly and employ sophisticated exhaust and filtration technology in all manufacturing facilities to minimize emissions.

Air emissions - Global	2019	2018	2017
Total Hazardous air pollutants – Tons Emitted	62.98	70.45	41.56
Total Hazardous air pollutants – Tons / MW	0.00262	0.004	0.004
NOX – Tons Emitted	37.97	41.41	30.34
NOX – Tons / MW	0.002	0.002	0.003
Fine dust (PM10) – Tons Emitted	9.05	7.82	3.70
Fine dust (PM10) – Tons / MW	0.00038	0.0004	0.0003
Persistent organic pollutants – Tons Emitted	0.00	0.00	0.00
Persistent organic pollutants – Tons / MW	0.00	0.00	0.00
SOX – Tons Emitted	0.14	0.19	0.08
SOX – Tons / MW	0.000006	0.00001	0.00001
Exhaust gas and fugitive emissions – Tons Emitted	0.18	0.23	0.16
Exhaust gas and fugitive emissions – Tons / MW	0.000008	0.0000121	0.00002
VOC – Tons Emitted	7.03	3.31	12.27
VOC – Tons / MW	0.00030	0.00018	0.0012
Other standard air emissions – Tons Emitted	6.13	17.64	2.65
Other standard air emissions – Tons / MW	0.00026	0.000944	0.0002

**OVERVIEW OF TOP SUPPLIERS FOR
CANADIAN SOLAR 2019**

Top 3 Suppliers	Wafer	Cell	EVA	Backsheet	Glass	Aluminum Frame	Junction Box
1	GCL	Shunfeng	Tegu	Cybird	Caihong	Mi Huang	Tlian
2	JP	Tongwei	First	Fusite	Ancai	Yurun	Friend
3	RIETECH	Hongxi	/	Jolywood	Xinyi	Hua Chang	/
% of materials from the top 3 suppliers	82%	64%	99%	100%	56%	63%	100%

ENVIRONMENTAL DATA OF TOP-3 WAFER SUPPLIERS 2019

	GCL	JP	RIETECH
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	47,218	3,600	13,743
Products sold to Canadian Solar (tons)	7,667	2,880	1,225
% of products supplied to Canadian Solar	16%	80%	9%

ENERGY CONSUMPTION			
Steam (tons)	23,530	0	/
Diesel (tons)	25,601	1	/
Gasoline (tons)	0	0	/
Gas (m ³)	0	0	0
Total energy consumption (kWh)	755,728,300	60,000,000	273,179,400
Energy consumption per t	16,005	16,667	19,877

WATER CONSUMPTION			
Total water consumption (m ³)	1,819,000	15,000	1,900,564
Water consumption per t	39	4	138

WATER RECYCLED AND REUSED			
Total water recycling (m ³)	1,062,540	3,500	340,464
Water recycling per t	23	1	25

GREENHOUSE GAS EMISSIONS			
CO ₂ emissions (tons)	57,134	/	188,802
CO ₂ emissions per t	1	/	14

NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO _x (t)	9	0	1
Fine dust PM10 (t)	4	/	1
SO _x (t)	/	0	/
Exhaust gas and fugitive emissions (t)	/	/	/
VOC (t)	/	1	/
Other standard air emissions (t)	/	/	/

ENVIRONMENTAL DATA OF TOP-3 CELL SUPPLIERS 2019

	Shunfeng	Tongwei	Hongxi
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	2,400	13,470	/
Products sold to Canadian Solar (tons)	432	406	/
% of products supplied to Canadian Solar	18%	3%	/
ENERGY CONSUMPTION			
Steam (tons)	0	0	/
Diesel (tons)	0	0	/
Gasoline (tons)	0	0	/
Gas (m ³)	75,118,461	714,154,765	/
Total energy consumption (kWh)	31,300	53,016	97,645,800
Energy consumption per t	13	4	/
WATER CONSUMPTION			
Total water consumption (m ³)	684,026	7,320,320	923,746
Water consumption per t	285	543	/
WATER RECYCLED AND REUSED			
Total water recycling (m ³)	7,848	0	15,203
Water recycling per t	3	0	/
GREENHOUSE GAS EMISSIONS			
CO ₂ emissions (tons)	9,096	173,248	68,694
CO ₂ emissions per t	3.8	12.9	/
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO _x (t)	0.9	20.7	/
Fine dust PM10 (t)	0	2.0	/
SO _x (t)	0	0	/
Exhaust gas and fugitive emissions (t)	1.5	0	/
VOC (t)	1.2	14.5	/
Other standard air emissions (t)	0	0	/

ENVIRONMENTAL DATA OF TOP-2 EVA SUPPLIERS 2019

	Tegu	First
PRODUCTION		
TOTAL ANNUAL PRODUCTION (TONS)	13,557	100,000
Products sold to Canadian Solar (tons)	13,557	15,000
% of products supplied to Canadian Solar	100%	15%
ENERGY CONSUMPTION		
Steam (tons)	0	0
Diesel (tons)	13	0
Gasoline (tons)	0	0
Gas (m ³)	0	0
Total energy consumption (kWh)	8,892,185	28,000,000
Energy consumption per t	661	280
WATER CONSUMPTION		
Total water consumption (m ³)	21,204	60,000
Water consumption per t	2	1
WATER RECYCLED AND REUSED		
Total water recycling (m ³)	16,054	150
Water recycling per t	1	0
GREENHOUSE GAS EMISSIONS		
CO ₂ emissions (tons)	0	1,708
CO ₂ emissions per t	0	0.02
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS		
NO _x (t)	0.0	2.9
Fine dust PM10 (t)	0.0	0.0
SO _x (t)	0.0	0.1
Exhaust gas and fugitive emissions (t)	0.1	0.0
VOC (t)	0.5	0.3
Other standard air emissions (t)	0.0	0.0

**ENVIRONMENTAL DATA OF TOP-3
ALUMINIUM FRAME SUPPLIERS
2019**

	Mihuang	Yurun	Huachang
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	60,000	27,360	62,000
Products sold to Canadian Solar (tons)	14,000	14,400	8,000
% of products supplied to Canadian Solar	23.3%	52.6%	12.9%
ENERGY CONSUMPTION			
Steam (tons)	10,500	2,958	/
Diesel (tons)	58	43	/
Gasoline (tons)	/	/	/
Gas (m ³)	0	0	0
Total energy consumption (kWh)	67,800,000	22,123,949	47,016,500
Energy consumption per t	1,130	809	758
WATER CONSUMPTION			
Total water consumption (m ³)	984,679	132,382	537,330
Water consumption per t	16	5	9
WATER RECYCLED AND REUSED			
Total water recycling (m ³)	563,000	92,666	62,000
Water recycling per t	9	3	1
GREENHOUSE GAS EMISSIONS			
CO ₂ emissions (tons)	57,029	992	1,980
CO ₂ emissions per t	1	0.04	0.03
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO _x (t)	/	2	15
Fine dust PM10 (t)	/	/	7
SO _x (t)	/	0	1
Exhaust gas and fugitive emissions (t)	/	/	35
VOC (t)	/	/	3
Other standard air emissions (t)	/	0	/

ENVIRONMENTAL DATA OF TOP-3 BACK SHEET SUPPLIERS 2019

	Cybird	First	Jolywood
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	49,756	30,000	54,050
Products sold to Canadian Solar (tons)	7,463	3,500	1,526
% of products supplied to Canadian Solar	15%	12%	3%

ENERGY CONSUMPTION			
Steam (tons)	13,360	0	585
Diesel (tons)	2	0	11
Gasoline (tons)	0	0	21
Gas (m ³)	0	0	0
Total energy consumption (kWh)	13,361,618	10,000,000	48,560,000
Energy consumption per t	269	333	898

WATER CONSUMPTION			
Total water consumption (m ³)	69,031	5,000	34,378
Water consumption per t	1.4	0.2	0.6

WATER RECYCLED AND REUSED			
Total water recycling (m ³)	62,119	50	29,221
Water recycling per t	1.2	0.002	0.5

GREENHOUSE GAS EMISSIONS			
CO ₂ emissions (tons)	6.8	610.1	23,782.0
CO ₂ emissions per t	0.00	0.02	0.44

NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO _x (t)	0.26	8.00	2.23
Fine dust PM10 (t)	0.13	0.00	0.19
SO _x (t)	0.00	0.33	0.00
Exhaust gas and fugitive emissions (t)	0.07	0.02	0.00
VOC (t)	0.44	1.30	1.92
Other standard air emissions (t)	0.00	0.00	0.00

ENVIRONMENTAL DATA OF TOP-3 GLASS SUPPLIERS 2019

	Caihong	Ancai	Xinyi
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	441,600.00	203,600.00	1,311,237.90
Products sold to Canadian Solar (tons)	42,039.40	22,417.82	131,488.34
% of products supplied to Canadian Solar	9.52%	11.01%	10.03%

ENERGY CONSUMPTION			
Steam (tons)	0	29,047	0
Diesel (tons)	0	213	0
Gasoline (tons)	0	0	0
Gas (m ³)	90,724,290	25,091,979	340,485,101
Total energy consumption (kWh)	206,732,591	77,397,181	631,921,423
Energy consumption per t	468.14	380.14	481.93

WATER CONSUMPTION			
Total water consumption (m ³)	1,422,079	168,105	3,317,006
Water consumption per t	3.2	0.8	2.53

WATER RECYCLED AND REUSED			
Total water recycling (m ³)	0	4,411,569	0
Water recycling per t	0	22	0

GREENHOUSE GAS EMISSIONS			
CO ₂ emissions (tons)	/	/	/
CO ₂ emissions per t	/	/	/

NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO _x (t)	172	53	1094.9
Fine dust PM10 (t)	20	2	65.46
SO _x (t)	110	7	360.502
Exhaust gas and fugitive emissions (t)	0	0	0
VOC (t)	0	0	0
Other standard air emissions (t)	0	0	0

ENVIRONMENTAL DATA OF TOP-2 JUNCTION BOX SUPPLIERS 2018

	Tlian	Friend
PRODUCTION		
TOTAL ANNUAL PRODUCTION (TONS)	6,617	3,670
Products sold to Canadian Solar (tons)	6,617	1,101
% of products supplied to Canadian Solar	100%	30%

ENERGY CONSUMPTION		
Steam (tons)	/	0
Diesel (tons)	8.39	60
Gasoline (tons)	/	69.75
Gas (M3)	0	0
Total energy consumption (kWh)	12,335,639	3,915,000
Energy consumption per t	1,864	1,067

WATER CONSUMPTION		
Total water consumption (m ³)	34,355	608
Water consumption per t	5.19	0.17

WATER RECYCLED AND REUSED		
Total water recycling (m ³)	21,000	546.75
Water recycling per t	3.17	0.50

GREENHOUSE GAS EMISSIONS		
CO ₂ emissions (tons)	5399	4359
CO ₂ emissions per t	0.82	1.19

NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS		
NO _x (t)	0	0
Fine dust PM10 (t)	0	0
SO _x (t)	0	0
Exhaust gas and fugitive emissions (t)	0.0272	0
VOC (t)	0.0029	0
Other standard air emissions (t)	0.041	0

WASTE AND RECYCLING



IMPROPER DISPOSAL OF WASTE WILL NOT ONLY CAUSE LAND POLLUTION AND DAMAGE TO SOIL BALANCE, BUT ALSO CAUSE WATER POLLUTION AND AIR POLLUTION. CANADIAN SOLAR MANAGES WASTE AS A RESOURCE, ADHERING TO THE 3R'S (REDUCE, REUSE, RECYCLE) TO COLLECT AND STORE WASTE BY CLASSIFICATION.

In order to gradually reduce waste discharge or emissions per unit, we have taken the following measures:

- To consider ways and means to reduce waste generation before the plant is built.
- To maximize the use of recyclable materials for packaging, reducing landfill disposal and improving waste recycling.
- To establish waste management procedures that collect and register hazardous waste, implement a hazardous waste transfer application and waste management systems, and entrust a qualified vendor to

properly dispose the waste; all in compliance with the national hazardous waste regulations.

- To raise employee awareness in waste utilization, reduce waste generation, and proper waste separation training.

WASTE GENERATION IN 2019

Waste Generation / Factory	Baotou Wafers	Luoyang Wafers	Luoyang Modules	Suzhou Cells
Total solid waste generated – Metric tons	3,972.67	16,365.65	5,404.78	10,284.02
Total solid waste recycled – Metric tons	3,809.67	9,488.65	4,841.50	8,394.54
Percent solid waste recycled – %	96%	58%	90%	82%
Solid waste generated – Tons / MW	2.24	3.06	3.42	4.70
Total hazardous waste generated – Metric tons	142.04	7.207	24.506	20,004.04
Total hazardous waste recycled – Metric tons	23.54	6.705	10.842	0.00
Percent hazardous waste recycled – %	0.17	0.93	0.44	0.00
Total hazardous waste generated Tons / per MW	0.08	0.0013	0.0155	9.10

Waste Generation / Factory	Funing Cells	Yanchen Cells	Changshu Modules	Suzhou Modules
Total solid waste generated – Metric tons	11,844.23	9,285.633	8,390.29	835.40
Total solid waste recycled – Metric tons	10,370.81	287.243	8,390.29	615.68
Percent solid waste recycled – %	87.56%	3.09%	100%	70%
Solid waste generated – Tons / MW	5.84	5.92	1.37	1.51
Total hazardous waste generated – Metric tons	1,473.42	6.4	38.96	6.00
Total hazardous waste recycled – Metric tons	263.15	0.0	33.99	-
Percent hazardous waste recycled – %	17.86	0.0	0.87	0.00
Total hazardous waste generated Tons / per MW	0.73	0.0	0.01	0.01

Waste Generation / Factory	Dafeng Modules	Thailand	Vietnam	Canada
Total solid waste generated – Metric tons	1,514.17	9,610.40	711.00	121.10
Total solid waste recycled – Metric tons	1,434.00	3,169.71	691.24	71.50
Percent solid waste recycled – %	95%	33%	97%	59%
Solid waste generated – Tons / MW	1.16	3.52	1.53	2.13
Total hazardous waste generated – Metric tons	2.11	10,180.59	20.35	0.00
Total hazardous waste recycled – Metric tons	0.00	10,090.00	4.93	0.00
Percent hazardous waste recycled – %	0.00	0.99	0.24	0.00
Total hazardous waste generated Tons / per MW	0.02	3.72	0.04	0.00

HAZARDOUS WASTE DISPOSAL 2019

Suzhou Cell, China	Paste wiper (t)	Waste oil (t)	Waste packing container (t)	Waste activated carbon (t)	Waste activated carbon (POCL3) (t)	Pasludge (contain F-) (t)	Waste salt (t)
Total	5.8900	8.60	17.00	18.15	2.1	643.08	3966.2
Collection frequency	Montly	Quarterly	Monthly	Quarterly	Quarterly	Daily	Daily
Contractor	The Environmental Protection Service Center of SND				Everbright Environmental Protection Solid Waste Disposal (Suzhou) Co., Ltd		
Treatment method	Incineration				Landfill		
Disposal facility location	No. 61 Zhongfeng Street, Suzhou New District				Qi Zi Village, Mudu Town , Wuzhong District, Suzhou		

Suzhou Modules, China	Waste mineral oil (t)	Waste oil duster (t)	Waste organic solvent (t)	Waste activated carbon(t)	Waste oil bucket (t)
Total	3.81	0.242	0.973	0.1	0.874
Collection frequency	Irregularly				
Contractor	Suzhou Environmental Protection Service Center				
Treatment method	Incineration				
Disposal facility location	No. 126 Qihe Road, Weitang, Xiangcheng, Suzhou				

HAZARDOUS WASTE DISPOSAL 2019

Changshu Modules, China	Waste mineral oil (t)	Waste organic solvent (t)	Waste activated carbon (t)	Waste oil bucket (t)	Waste tube peace
Total	20.429	3.5807	5.915	3.5646	0.4977
Collection frequency	Irregularly				
Contractor	Zhengjiang Fenghua Waste Disposal Co. LTD	Jiangsu Kangbo Industrial Solid Waste Treatment Co., Ltd			Suzhou Huisu Recycle Co.,Ltd
Treatment method	Outsourcing processing				
Disposal facility location	No. A6-1, Taigong Industry Park, Danyang City	Daixi Road, Huangdai Road, Xiangcheng District, Suzhou			No. 11 Chengpu Road, Shengpu, Suzhou Industry Park

Funing Cells, China	Waste PP garland filler(t)	Waste activated carbon (t)	Waste mineral oil (t)	Waste silver sludge (t)	Spent lye (t)	Sludge (Biochemistry) (t)	Sludge (containF-) (t)
Total	5.85	2.3995	6.17	271.77	1199.2	449.3	9674.99
Collection frequency	Irregularly					Monthly	
Contractor	Yancheng Qian Enviroment Protection Co., Ltd	Jiangsu Sen-mao Energy Development Co., Ltd	Huai An Wuyang Recycling Co., Ltd	Lianyungang Lvrn Environment Protection Co., Ltd	Yancheng Honghua Building Material Factory		
Treatment method	Incineration	Waste oil refining or reuse	Other Methods	Physicochemical treatment	Comprehensive utilization		
Disposal facility location	Funing Aoyang Industry Park	Xuyu Economic Development	No. 8 Kaiming Road, Qingpu Industry Park, Huaian"	No. 8 Huanghe Road, Donghai Economic Zone, Donghai, Lianyungang	Tianshe Village, Shizhuang Town, Funing, Yancheng		

HAZARDOUS WASTE DISPOSAL 2019

Luoyang Wafers & Modules, China	Waste oil (t)	Waste organic solvent (t)	Waste oil rag (t)	Waste rubber, waste resin (t)	COD (t)
Total	17.547	12.37	0.014	1.28	0.502
Collection frequency	2 times/ year"	3 times / year	1 times / year	1 times / year	2 times / year
Name of contractor	Luoyang Dezheng	Zhonghuanxin Environment Protection Co., Ltd			
Treatment method	Recycle	Incineration			
Disposal facility location	Abrasives Industrial Park Yichuan County, Luoyang, Henan	Zheshan Town, Zhengping Town, Nanyang, Henan			

Baotou Wafers & Modules, China	Waste oil (t)	Other waste (chemical reagent) (t)	Waste acid (t)
Total	21.016	6.8	111.7
Collection frequency	By half year	Irregularly	Irregularly
Name of contractor	Baotou Jiurui Energy Technology Co.,Ltd	Treat internally	Treat internally
Treatment method	Waste oil refining or reuse	Neutralization and sedimentation	Neutralization and sedimentation
Disposal facility location	Baotou Jiuyuan Indstry Zone,	Chemicals Warehouse	Waste water station

HAZARDOUS WASTE DISPOSAL 2019

Vietnam	Paste wiper (t)	Waste oil (t)	Plastic drum (t)	Iron Drum (t)	Selica gel (t)	Activated carbon (t)
Total	1.49	3.92	0.64	4.93	3.69	0.13
Collection frequency	Monthly					Quarterly
Name of contractor	Dai Thang Co,Ltd					
Treatment method	Incineration			Recycle	Incineration	
Disposal facility location	No 318 - To Hieu Street - Le Chan District - Hai Phong City					

Thailand	Waste mineral oil (t)	Waste organic solvent (t)
Total	5.6	0.21
Collection frequency	4 time / year	1 time / year
Name of contractor	Professional waste technology 1999 company	Professional waste technology 1999 company
Treatment method	Fuel blending	Fuel blending
Disposal facility location	Sakaew province, Thailand	Sakaew province, Thailand

**HAZARDOUS WASTE DISPOSAL
2018**

Brazil	Materials & Containers Contaminated (impregnated) (t)	Solder dross lead-free (t)
Total	153.51	9.4485
Collection frequency	Weekly	Quarterly
Name of contractor	Resiclean	CRM Synergies
Treatment method	Incineration/Use as fuel	Recycling
Disposal facility location	"Barueri - SP Brazil"	"São José - SC Brazil"

SOLAR PANEL RECYCLING



DO SOLAR MODULES POSE CONCERNS REGARDING TOXIC MATERIALS LEACHING INTO THE GROUND?

The short answer is no - based on material composition, manufacturing processes used, as well as extensive testing. Testing confirms that both during normal operation as well as in the event solar modules are damaged, leaching of potential toxic contaminants is governed by regulatory limits and deemed non-hazardous according to the REACH Directive issued by ECHA (European Chemicals Agency) and the TCLP Directive issued by EPA (United States Environmental Protection Agency).

DURING NORMAL OPERATION

The lamination process used during manufacturing of solar photovoltaic (PV) modules would capture any potentially hazardous material within the glass assembly, preventing exposure to the environment.

IN THE EVENT A SOLAR MODULE IS BROKEN IN THE FIELD

A test called the toxicity characteristic leaching procedure (TCLP) is used to determine if, in the event of breakage of a solar module, any toxic contaminants could potentially leak into the environment. The Resource Recovery and Conservation Act (RCRA) lists 8 metallic elements, commonly referred to as the RCRA 8 metals, that are toxic at small concentrations. A TCLP test includes - among other potentially hazardous materials - the solar module's results for these heavy metals, which are Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver. Strict limits are set by the EPA as to what levels are considered non-hazardous to the environment and human health.

The results of a TCLP test is used to identify if any contaminants could leach into the environment in several different scenarios, including:

- If a solar module is broken during its operational lifetime
- If a solar module becomes located in a landfill environment

Of note, the TCLP test involves breaking a solar module into small pieces for testing in order to determine potential leaching issues, which is a worst-case scenario test. In a real-life scenario - for example a solar module damaged by a weather event - the damage would likely result in shattered glass but not realistically in a solar module being broken into many small pieces.

TCLP TEST RESULTS FOR CANADIAN SOLAR PV MODULES

Canadian Solar modules utilize silicon cell based solar technology that notably does not contain cadmium, unlike some other solar modules available in the market. Canadian Solar's modules have successfully passed TCLP testing for 37 potentially hazardous materials, including the RCRA 8 metals. This means that a Canadian Solar module - during normal operations as well in the event a solar module is damaged - will not exceed any toxic contaminant leaching limits as governed by strict EPA guidelines and are therefore deemed non-hazardous.

MODULE RECYCLING IN EUROPE

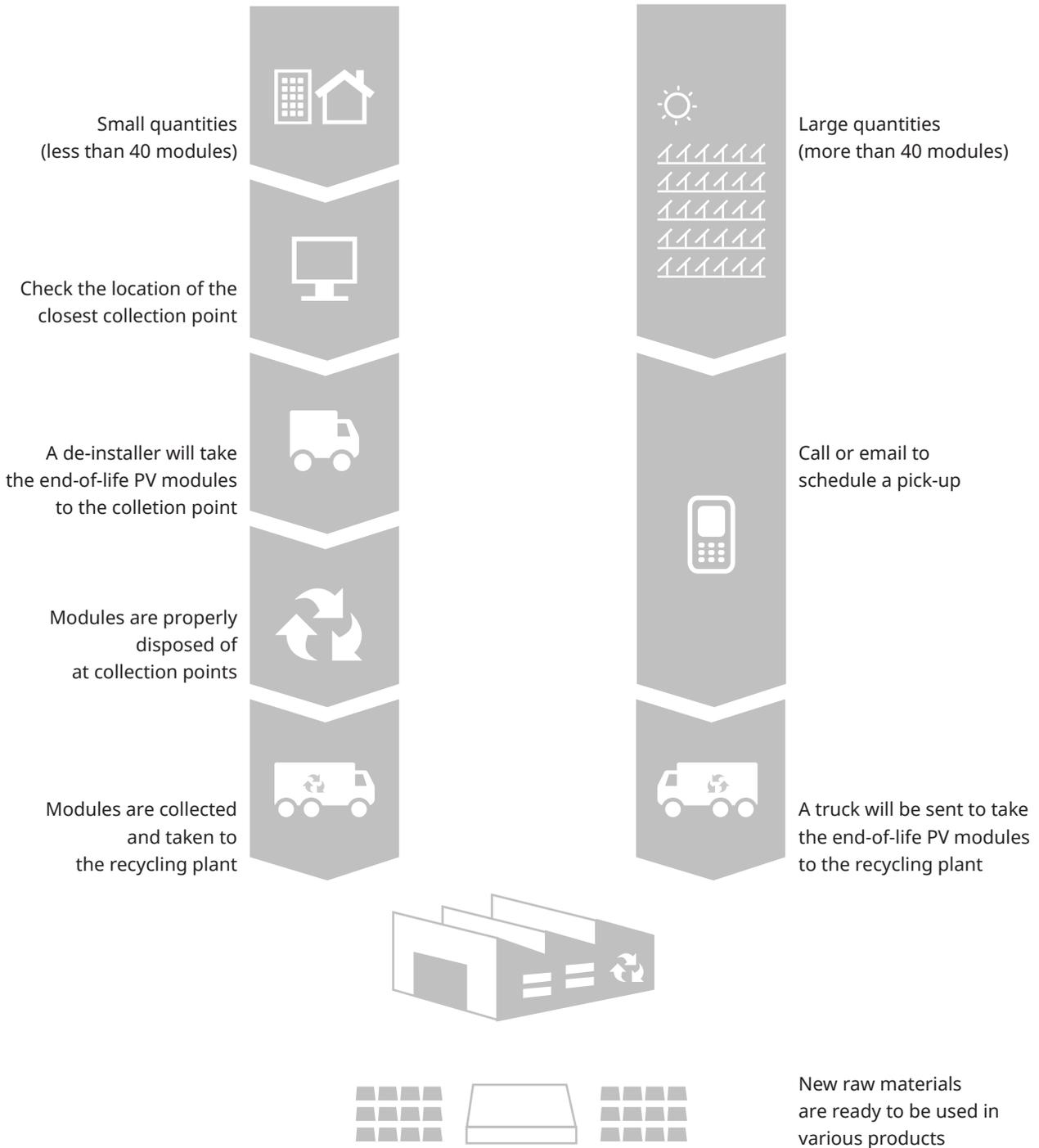
Since February 2014 PV solar modules comply with the WEEE (Waste of Electric and Electronic Equipment) European Directive. This standard is implemented through local laws in all the EU-country members and it regulates the disposal of solar modules as well as many other electronic devices such as computers and cell phones.

Canadian Solar is working closely with recycling service providers, such as Take-e-way and PV Cycle, to ensure that all legal WEEE obligations towards its customers are satisfied and appropriate market import actions are followed.

For non-EU countries, Canadian Solar assists its customers in finding an appropriate PV equipment disposal solution.

TAKE-E-WAY STANDARD OPERATING PROCEDURE

TAKE-BACK AND RECYCLING SYSTEM



PV MODULE RECYCLING PARTNERSHIP IN AUSTRALIA

As a global leader in the solar industry, we take environmental issues seriously. Canadian Solar Australia has partnered with a recycling program known as, Reclaim PV Recycling, to recycle old and damaged solar panels. This is a very necessary program for the environment protection, which started in 2015.

Currently, PV waste management is a challenge to our solar industry, and the partnership is expected to start an efficient recycling system to significantly decrease the overall environment footprint of solar modules. This program will also build sensible awareness for the development of solar industry in minimizing effects of waste materials produced.

The crystalline panels are composed of: aluminum, glass, and silicon. Over 90% of the panel materials can be recycled. A recent global report predicts that “by 2035, the annual recycled value of crystalline silicon solar panel will reach \$12 billion.”

SEIA PV RECYCLING PROGRAM IN US

Since 2016, Canadian Solar has been a member of the SEIA PV Recycling Program. From the program administrator: Members of the Solar Energy Industries Association® (SEIA) are committed to responsible end-of-life management and are proactively developing collection and recycling processes for the solar industry. Many SEIA member module manufacturers already operate take-back and recycling programs for their products.

By creating a member-based program that aggregates the services offered by recycling vendors and PV manufacturers, SEIA is making it easier to select a cost-effective and environmentally responsible end-of-life management solution. This effort also enables others in industry to access recyclers for their disposal needs.

SEIA's PV Recycling Working Group chooses Preferred Recycling Partners through an evaluation process that may include a site visit. These vendors outline specific pricing and program benefits only available SEIA members, such as:

- Access to SEIA vetted PV recycling vendors and service providers
- Single point of contact for vendors
- Exclusive pricing regardless of size / volume for members vs. public pricing (note that this discount varies by vendor)

- Minimum quantities normally aggregated at the waste generator level are now aggregated at a total member-level (may vary by vendor)
- Engagement in recycling process improvement as waste volume increases and as vendor network grows
- Access to data on industry-level recycling (approx. 2-3 years into process)

These partners are capable of recycling PV modules, inverters and other related equipment today. We are developing new partners across the country to help them become capable of recycling PV modules.

RECYCLING AND WASTE REDUCTION

We recycle and classify daily wastes across all offices, and encourage employees to dispose of electronics and battery waste appropriately.

1. Baotou Ingot Factory

•Reclaimed water reuse: About 700 tons of wastewater produced by the workshop is treated with precision filter every day, and then sent back to the workshop for recycling after all the water indexes meet the workshop water standards. The measure could save about 255,500 tons of water per year.

•Concentrated water recovery: About 100 tons of concentrated water is collected every day. Some is directly used in the machine shop, and the other part is used in the toilet as flushing water. The concentrated water used by the machine adding workshop will be recycled to the workshop after it enters the wastewater station for standard treatment. The input of this project saves about 36,500 tons of tap water per year.

•Make full use of waste heat of ingot casting furnace to provide heating: In heating season (6 months), it can save 21310 M³/month of natural gas and 4320 kWh of electricity.

•Energy-saving modification of lighting in the distribution room and power station: By adding a time-control switch and contactor at the lower end of the original switch, the lighting can start and stop automatically, saving 1728 kWh of electricity/month.

•Stop the using of the square rod wooden tray: It can reduce the consumption of 167 pallets per month by recycling original silicon and crucible pallets to square rod pallets.

•Recycling of foam packaging boxes: About 35,000 foam boxes are recycled every month, reducing the pollution of waste packaging materials to the environment.

2. Luoyang Wafer Factory:

·The factory uses a series of measures to increase the concentrated water recovery rate. These measures can save around 1,300 tons of water per day.

·The factory invested 2.6 million RMB to rebuild the wastewater treatment plant and installed the reclaimed water recycling facilities. 3,000 tons of water can be saved per day.

·Deep treatment of wastewater: Candle filter and other disposal measures are adopted to conduct deep treatment and recycling of wastewater discharged to meet the standard for degum process and greening, so as to save about 420,000 tons of tap water per year.

·The factory collected the water from the dehumidifier to clean the floor. Around 18 kg of water were collected per day on average and 0.45 tons of water can be saved every month.

·Collect the waste heat from the air compressor outlet to heat the 700 tons of production process water every day. It can save 13,000 tons of steam per year.

·The factory cyclic utilized package materials to reduce the resource consumption. Instead of wood pallets, iron pallets are used to reach 100% recycling. So the wood consumption is reduced and more forests can be protected.

·Plastic packaging boxes are used to replace carton.

·Styrofoam boxes are collected and recycled.

·In the staff canteen, the reusable tableware are used to replace one time food box to reduce white pollution.

3. Suzhou Cell Factory:

In 2018, Suzhou Cell Factory used individual humidifiers to replace steam to keep the humidity inside workshops. It reduced the steam consumption and reduced carbon emissions. Since July of 2018, the factory began to collect and recycle dust-proof clothes. More than 400 sets of such clothes were recycled every year.

4. Funing Cell Factory:

We upgraded the wastewater treatment technology in 2018. The original triple effect evaporators were replaced by high-performance nitrogen removal equipment to reduce energy consumption. The concentrated water in the pure water production process is re-concentrated and utilized, which can save 580,000 tons of fresh tap water per year.

It reduced the steam consumption and reduced carbon emissions. Since July of 2018, the factory began to collect and recycle dust-proof clothes. Until the end of 2018, more than 400 sets of such clothes were recycled in total.

6. Funing Cell Factory:

We upgraded the waste water treatment technology. The original triple effect evaporators were replaced by high-performance nitrogen removal equipment to reduce energy consumption. More information can be found in pages 64-73 of this report.

ENVIRONMENTAL INITIATIVES

In addition to the relevant formal initiatives described in disclosure G4-15 of this document we also actively engage in community initiatives like the following:



Tree-planting Day

we organize tree-planting day activities every year.

Earth Day

we published a "Green Proposal", advocate energy conservation, consumption reduction, and low-carbon lifestyle.

No Tobacco Day

we advocate for a smoke-free workplace

Healthy Life Style

we advocate aerobic exercise, sensible diet and environmentally friendly lifestyle.

Public transportation

Busses pick up employees to avoid individual transportation.

No Car Day, Lights Out Time, Family & half marathon, Tournaments for Basketball, Soccer, Badminton & Table tennis

VI.C. SOCIAL ASPECTS

OUR SOCIAL ACTION PLAN

While we focus on strengthening our business and financial success, we are determined to further fulfill our commitment to social responsibilities with the growth of our business. We believe the contributions as a return to society is the best expression of the success of the company business.

DELIVERING CLEAN ENERGY

We subscribe to the vision that everyone on earth should have access to clean energy regardless of their location and or financial standing.

SUPPORTING LOCAL COMMUNITIES

The communities where our facilities and projects are located are important to us. Every community is unique, so our team works closely with local stake-

holders to answer questions and address concerns. We seek to have a consistently positive impact that supports the priorities of the community.

We regularly support community projects that promote environmental awareness.

REPORTING

We are committed to report on our progress every year so that stakeholders can monitor our developments.

SPONSORING AWARENESS

We are always on the lookout for opportunities to sponsor projects that create greater awareness of clean energy.

In addition, we create awareness of the need for more rapid adoption of clean energy by publishing stories in social media and on our website.

PROMOTING EDUCATION

At Canadian Solar, we regularly support academic research and talent development at universities and colleges by donating funds and other resources.

DONATING TO ENVIRONMENTAL RESEARCH

To better understand and protect the environment we live in, we are open to making donations to environmental research facilities.



At Canadian Solar, we are an equal-opportunity employer and recognize that our employees are the single most important factor to the company's success. Over and above the legal requirements of the regions we operate in, we are committed to creating a cooperative, healthy and pleasant working environment with a good work-life-balance. In addition, we want each of our employees to realize his or her full potential and have subsequently put in place numerous programs designed to develop talent and nurture professional growth. A full overview over our workforce by employment type, gender and contracts can be found on the following pages.

TOTAL LABOR COMPOSITION

Canadian Solar has established branches in more than 20 countries and created more than 14,000 jobs so far. Currently, over 46 GW of Canadian Solar photovoltaic products are used in industrial, commercial, residential, and other markets across more than 150 countries. Canadian Solar strictly adhere to labor laws to protect

the legal rights and interest of our employees in each region and country we operate in. We are an equal opportunity employer and will not discriminate against any employee or applicant on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, veteran status, or any classification protected by federal, state, or local law.

GLOBAL WORKFORCE COMPOSITION

IN 2019



65%



35%

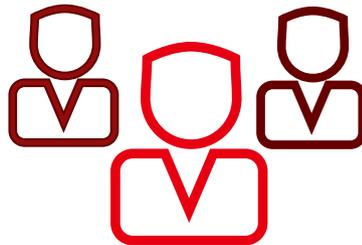
GLOBAL WORKFORCE COMPOSITION	2019	2018	2017	2016
Total employees	14,346	13,034	12,473	9,724
Women	5,065	4,563	4,384	3,446
percentage	35%	35%	35%	35%
Men	9,281	8,471	8,089	6,278
percentage	65%	65%	65%	65%
Below age 30	6,402	6,733	7,376	6,243
percentage	45%	52%	59%	64%
Age 30 and above	7,944	6,301	5,097	3,481
percentage	55%	48%	41%	36%
Length of service ≤3 years	10,073	10,074	9,565	7,196
percentage	70%	77%	77%	59%
Length of service > 3 years	4,273	2,960	2,908	2,528
percentage	30%	23%	23%	26%

WORKFORCE COMPOSITION IN 2019	China	Thailand	Vietnam	Indonesia
Total employees	10,938	1,468	541	19
Women	3,530	838	211	3
percentage	32%	57%	39%	16%
Men	7,408	630	330	16
percentage	68%	43%	61%	84%
Below age 30	5,233	558	308	11
percentage	48%	38%	57%	58%
Age 30 and above	5,705	910	233	8
percentage	52%	62%	43%	42%
Length of service ≤3 years	7,843	1,441	312	10
percentage	72%	98%	58%	53%
Length of service > 3 years	3,095	27	229	9
percentage	28%	2%	42%	47%

WORKFORCE COMPOSITION IN 2019	Americas	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Aust- ralia, Korea)
Total employees	437	155	249	539
Women	151	53	103	176
percentage	35%	34%	41%	33%
Men	286	102	146	363
percentage	65%	66%	59%	67%
Below age 30	132	26	8	126
percentage	30%	17%	3%	23%
Age 30 and above	305	129	241	413
percentage	70%	83%	97%	77%
Length of service ≤3 years	213	64	101	89
percentage	49%	41%	41%	17%
Length of service > 3 years	224	91	148	450
percentage	51%	59%	59%	83%
	437	155	249	539

WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER

Total headcount



2019 **14,346**
 2018 **13,034**
 2017 **12,473**
 2016 **9,724**
 2015 **8,969**

GLOBAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER	2019	2018	2017	2016
Total headcount (excl. temporary workers or part time workers)	13,687	12,418	11,288	9,724
Employees excl. trainees	14,285	12,343	10,923	9,565
... women	5,042	4,293	3,897	3,390
... men	9,243	8,050	7,026	6,175
Trainees	61	75	365	159
... women	22	14	78	40
... men	39	61	287	119
Part-time workers	11	12	14	18
... women	8	6	7	2
... men	3	6	7	16
Temporary workers	648	604	1,171	551
... women	145	250	402	921
... men	503	354	769	1,868

GLOBAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER(2019)	China	Thailand	Vietnam	Indonesia
Total headcount (excl. temporary workers or part time workers)	10,405	1,468	541	19
Employees excl. trainees	10,897	1,468	541	19
... women	3,517	838	211	3
... men	7,380	630	330	16
Trainees	41	0	0	0
... women	13	0	0	0
... men	28	0	0	0
Part-time workers	0	0	0	0
... women	0	0	0	0
... men	0	0	0	0
Temporary workers	533	0	0	0
... women	106	0	0	0
... men	427	0	0	0

GLOBAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER(2019)	America	EMEA	Japan	APAC (HK, India, Singapore, Australia, Korea)
Total headcount (excl. temporary workers or part time workers)	429	146	202	477
Employees excl. trainees	423	149	249	539
... women	144	50	103	176
... men	279	99	146	363
Trainees	14	6	0	0
... women	6	3	0	0
... men	8	3	0	0
Part-time workers	2	7	1	1
... women	1	6	0	1
... men	1	1	1	0
Temporary workers	6	2	46	61
... women	2	0	37	0
... men	4	2	9	61



**WE VIEW OUR EMPLOYEES AS
FAMILY AND WE ARE EXCITED
TO ANNOUNCE THAT 598
BABIES WERE BORN TO OUR
STAFF IN 2019**



PARENTAL LEAVE

Global	2019	2018	2017	2016
Women entitled to take parental leave	3,745	4,058	2,073	All
Men entitled to take parental leave	5,376	4,638	3,242	All
Women who took parental leave	228	211	182	147
Men who took parental leave	370	368	344	262
Percentage of employees who took parental leave	7%	7%	10%	4%
Return rate after parental leave (% of the total workforce)	85%	86%	95%	92%

Parental leave 2019	China	Thailand	Vietnam	Indonesia
Women entitled to take parental leave	3,048	251	150	3
Men entitled to take parental leave	4,502	184	166	16
Women who took parental leave	118	59	35	1
Men who took parental leave	333	0	26	2
Percentage of employees who took parental leave	6%	14%	19%	16%
Return rate after parental leave (% of the total workforce)	88%	95%	54%	100%

Parental leave 2019	Americas (total)	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Australia, Korea)
Women entitled to take parental leave	147	24	44	78
Men entitled to take parental leave	279	33	74	122
Women who took parental leave	9	2	2	2
Men who took parental leave	6	2	0	1
Percentage of employees who took parental leave	4%	7%	2%	2%
Return rate after parental leave (% of the total workforce)	87%	25%	100%	67%

TRAINING

In order to provide professional and personal growth opportunities, Canadian Solar has set up a Department of Training. The department's focus is to enhance trainings and ensure constant growth and promotion of the employees.

In China, there has been a consistent and significant growth in the average number of hours invested in training employees. The following table illustrates the number of trainings led by senior management. This indicates that as our business grows, our investment in employees grow.

213,645 HOUR TRAININGS

53,841 PERSON-TIMES TRAININGS IN 2019

TRAINING PROGRAMS

Global	2019	2018	2017	2016
Number of hours spent on training (total)	213,645	675,401	184,434	174,818
Number of training programs	2,192	2,491	1,695	1,665
Number of employees having completed training programs	53,841	43,266	31,707	31,205
Percentage of employees undergoing training per year	395%	236%	281%	321%
Average number of hours spent for training	15.7	11	16.34	5.60

Employees Training 2019	China	Thailand	Vietnam	Indonesia
Number of hours spent on training (total)	193,738	218	9,544	0
Number of training programs	1,736	62	57	0
Number of employees having completed training programs	49,834	1065	541	0
Percentage of employees undergoing training per year	467%	87%	102%	0
Average number of hours spent for training	18.1	0.2	17.6	0

Employees Training 2019	Americas (total)	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Australia, Korea)
Number of hours spent on training (total)	143	35	295	9,673
Number of training programs	8	6	24	299
Number of employees having completed training programs	73	41	174	2,113
Percentage of employees undergoing training per year	17%	105%	83%	561%
Average number of hours spent for training	0.3	0.9	1.4	25.7



DIVERSITY IN GLOBAL POWER AND UTILITIES SECTOR

Canadian Solar had 24% female representation in top tier management in 2019. A recent Ernst & Young survey found that women made up only 5% of board executives across the global power and utilities sector in 2016, and only 16% of utility senior management teams had female representation. This, despite the fact that the top 20 most diverse utilities significantly outperformed the lower 20 on a return on investment basis.

We are an equal opportunity employer and do not discriminate on the basis of gender, ethnicity, nationality, age, physical disability, or anything else. While the tables below show that there is an overall employment bias toward men, this is an industry-wide phenomenon.

Women are better represented at Canadian Solar than at most other organizations in the technology manufacturing sector. People with disabilities are underrepresented in terms of the total proportion of disabled people in the population but we are limited by the number of people with disabilities who apply to work in our organization. We have very few applicants with disabilities.

Global	2019	2018	2017	2016
Number of employees in management position	737	851	789	586
... women	176	211	191	137
percentage	24%	25%	24.2%	23%
... men	561	640	598	449
percentage	76%	75%	75.8%	77%
Number of non-executive employees	13,609	12,183	11,684	9,254
... women	4,886	4,352	4,193	3,318
percentage	36%	36%	36%	36%
... men	8,723	7,831	7,491	5,936
percentage	64%	64%	64%	64%
Total workforce (incl. trainees)	14,346	13,034	12,473	9,724
... women	5,065	4,563	4,384	3,445
percentage	35%	35%	35%	35%
... men	9,281	8,471	8,089	6,279
percentage	65%	65%	65%	65%
Employees with disabilities	95	44	28	49
percentage	0.66%	0.34%	0.22%	0.50%

2019	China	Thailand	Vietnam	Indonesia
Number of employees in management position	444	13	3	4
of which women	117	3	3	0
percentage	26%	23%	100%	0%
of which men	327	10	0	4
percentage	74%	77%	0%	100%
Number of non-executive employees	10,494	1,455	538	15
of which women	3413	835	208	3
percentage	33%	57%	39%	20%
of which men	7081	620	330	12
percentage	67%	43%	61%	80%
Total workforce (incl. trainees)	10,938	1,468	541	19
of which women	3530	838	211	3
percentage	32%	57%	39%	16%
of which men	7408	630	330	16
percentage	68%	43%	61%	84%
Employees with disabilities	94	0	0	0
percentage	0.86%	0%	0%	0%

2019	Americas (total)	EMEA	Japan	APAC (HK, India, SGP, Au, Korea)
Number of management board	140	23	58	52
of which women	31	6	9	7
percentage	22%	26%	16%	13%
of which men	109	17	49	45
percentage	78%	74%	84%	87%
Number of non-executive employees	297	132	191	487
of which women	122	47	94	164
percentage	41%	36%	49%	34%
of which men	175	85	97	323
percentage	59%	64%	51%	66%
Total workforce (incl. trainees)	437	155	249	539
of which women	151	53	103	176
percentage	35%	34%	41%	33%
of which men	286	102	146	363
percentage	65%	66%	59%	67%
Employees with disabilities	0	0	0	1
percentage	0%	0%	0%	0.19%



HEALTH AND SAFETY

Canadian Solar is not only committed to providing clean energy to its customers around the world, but also stresses the importance of environmental, health, and safety (EHS). We pledge to the constant advancement in EHS management.

Through the development of strict rules and regulations, we have created a safe, sanitary and cooperative environment. In order to maintain this environment, we have established an EHS management teams within the company. In addition, we have also strictly implemented a three-stage management system, using a series of regulatory measures and policies that track EHS results. This policy has earned ISO14001 Environmental

Management and the OHSAS18001 Occupational Health and Safety Assessment Series certificates. Canadian Solar has established a clear code of responsibility on EHS management. The overall coordination and communication of EHS management is based in Suzhou. Each facility in China reports key EHS data to the centralized EHS team on a monthly basis.

Global	2019	2018	2017	2016
Actual hours worked	40,856,101	32,855,815	28,001,534	23,364,714
Number of reportable occupational accidents	27	6	20	30
Number of fatalities	0	0	0	0
Absence due to accidents in hours	3,693	796	2,653	3,201
Accident rate (per 100 employees)	0.188	0.046	0.160	0.309
Absence rate due to accidents (per 100 employees)	0.009	0.002	0.01	0.014
Number of emergency drills performed	297	60	109	58

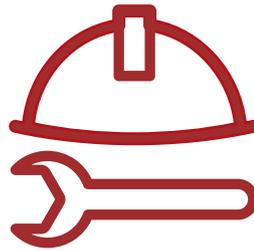
Canadian Solar has taken all necessary measures to improve safety during production. In the case where an incident occurs, a formal investigation will be carried out, then improvement measures will be implemented.

All incidents listed by our human resources department follow a global standard for incident classification – the Occupational Health and Safety Administration (OSHA) Recordability Standard, which is the standard of the US Department of Labor and the world's most commonly.

MISCELLANEOUS

Global	2019	2018	2017	2016
Number of discrimination cases	0	0	0	0
Number of child or forced labor cases	0	0	0	0

OUR FIVE CORE EHS PRINCIPLES



1. COMPLY WITH ALL ENVIRONMENTAL AND HEALTH & SAFETY LAWS AND REGULATIONS AS WELL AS RELATED RULES AND REQUIREMENTS.
2. IMPLEMENT SAFEGUARDS AGAINST POLLUTION, AND REDUCE THE NEGATIVE EFFECTS ON THE ENVIRONMENT. PREVENT WORK HAZARDS AND DISEASES, ENSURING THE SAFETY AND HEALTH OF OUR EMPLOYEES.
3. STRENGTHEN EMPLOYEE AWARENESS OF ENVIRONMENTAL PROTECTION AND OCCUPATIONAL HEALTH. ENCOURAGE EMPLOYEES TO ACTIVELY PARTICIPATE IN ENVIRONMENTAL-AWARENESS ACTIVITIES AND COMMUNITY EVENTS.
4. CONTINUALLY IMPROVE CORPORATE EHS MANAGEMENT POLICIES.
5. UPHOLD SOCIAL RESPONSIBILITIES BY BEING TRANSPARENT IN ENVIRONMENT AND EMPLOYEE HEALTH MATTERS.

FOCUS ON SAFETY

For the past 19 years, Canadian Solar has firmly adhered to the principle of "Safety First", always prioritizing the well-being and safety of its employees. Therefore, we provide various employee benefits and organize numerous events to ensure a safer, healthier, and better lifestyle.

Due to the rigorous safety procedures and effective protocols, Canadian Solar's EHS management is highly successful. The company, as a whole, firmly believes that "to manage production, one must first manage the safety of the crew." As such, the heads of each department, the managers of the assembly line, and the regular staff members are all accountable for checking the safety of their individual area. Only when all areas are declared safe, then production starts.

SAFETY & EMPLOYEE HEALTH

- Safety Inspections: Daily / weekly / monthly inspections. Holidays and pre-holidays are subject to special inspections.
- Risk Prevention: We have established a hazard and risk reporting system, as well as a risk response mechanism.
- Traffic Safety: We have organized various traffic safety campaigns and events, so that employees are attentive to safety even after work hours.
- Health in the Work Place: We provide employees with annual health inspections and small clinics in the factory to provide medical services to employees. Additionally, we regularly audit the safety of the work environment and hold frequent meetings to discuss potential safety hazards.
- Emergency Drills & Safety Measures: We adhere to regular emergency drills to enhance evacuation procedures, and performed 297 emergency drills in 2019.

All Canadian Solar manufacturing facilities are designed and installed according to the requirements of local Fire Protection Regulations. The facilities are built in remote areas to decrease disturbance. The facilities are well equipped with firefighting gear and trained fire response teams, including demarcated emergency routes and exits, fire extinguishers, hydrants, smoke detectors and alarms. Emergency response procedures have defined roles and actions in case of emergency to ensure rapid response. Fire drills as well as training on various emergencies (e.g., leakages of hazardous materials) are regularly implemented. The transportation of chemicals is organized by professional third party suppliers.

HUMANE BASED MANAGEMENT

Canadian Solar is committed to a cooperative and pleasant working environment. We want each of our employees to realize his or her full potential by having the opportunity to developing his/her talents and grow professionally.

Canadian Solar has developed a Corporate HR Policy stipulating key principles on labor rights and working conditions. This policy specifies rights related to non-discrimination and equal opportunities and includes procedures related to recruitment, working hours and overtime, leave, complaints, occupational health and safety, training and development. Overall the policy is fully aligned with the World Bank Group's International Finance Corporation (IFC) Performance Standard 2 requirements.

LIFESTYLE

At Canadian Solar, we care about the health of our employees. In addition to offering training and assistance for a variety of needs, we have also worked many events (corporate activities, field-trips and sporting events) so that employees can have a fun and have a healthy work experience.

REGARDING SPECIFIC GROUPS

- Women's Day Recognition
Every year on Woman's Day (March 8th), all female employees in China will receive a small present as a token of appreciation from the company.
- Migrant Worker Benefits
(workers from outside provinces):
Benefits follow directly from conditions stipulated by Chinese law. Canadian Solar also handles any Collective Registered Residence. During extended holidays, Canadian Solar confirms that factory staff-members have holiday plans set. In addition, the company is willing to help with any problems and hardships employees might have, work-related or not.

WORKING OVERTIME

We ensure employees do not exceed the 36 – 40 hour/week limits laid out by Chinese laws.

CHILD AND FORCED LABOR

WE DO NOT ENGAGE IN THE EMPLOYMENT OF EITHER CHILD OR FORCED LABOR OF ANY KIND, AND NEVER HAVE. BESIDES BEING CONTRARY TO THE LAWS OF MOST COUNTRIES IN WHICH WE OPERATE, CANADIAN SOLAR IS COMMITTED TO MAKING A POSITIVE DIFFERENCE TO ALL THOSE WHOSE LIVES WE TOUCH AND BOTH CHILD AND FORCED LABOR RUN CONTRARY TO THIS COMMITMENT.

GRIEVANCE MECHANISMS REGARDING SOCIAL ASPECTS

Canadian Solar is actively involved itself in local communities across the world. We understand that good relationships and communication with local communities is part of our business success for our ultimate goal of supporting the generation of more green energy across in the world.

Every solar project developed and brought to operation is the product of a highly collaborative process of related groups and teams. All the project participants from developers, EPC contractors, site survey professionals to local government and stakeholders come to the platform of diligence and collaboration to ensure projects succeed in passing every process point in design, permitting, construction, commissioning and operation.

We have a long-term role in the communities where our projects are sited. Community outreach and consultation is an integral part of our project development process, from very early stages and onward. Every project and community is unique, so our teams work closely with regional authorities as well as local residents in order to better understand priorities for the community and address questions. We believe that our solar farms should fit in with the communities within which we operate. As a key part of our process, we engage directly with local residents to identify, understand and address any concerns and to help illustrate why solar PV is well suited to communities of all sizes.

As part of federal, state, local or regional required permitting processes, the solar industry regularly works with regulatory agencies and environmental groups, and employs agency-approved biologists at project sites to identify and address potential concerns.

With each individual site, first and foremost we will ensure that neighbors bordering a proposed site will be consulted, and all efforts will be made to ensure that our neighbors are kept informed with the most up to date information regarding the project. During any time in the process, we will meet directly with communities and neighbors. Once a project is approved by the local authority, we develop a unique engagement plan specific to the construction process to

execute communications based on the requirement of the local authority, often surpassing their requirements, to the relevant community stakeholders.

We welcome comments, suggestions or feedback from community members anytime via a number of channels including local meetings, open house events, local hotline numbers, direct email, website communications and 1:1 direct contact and ensure a timely response.

CONFLICT MINERALS

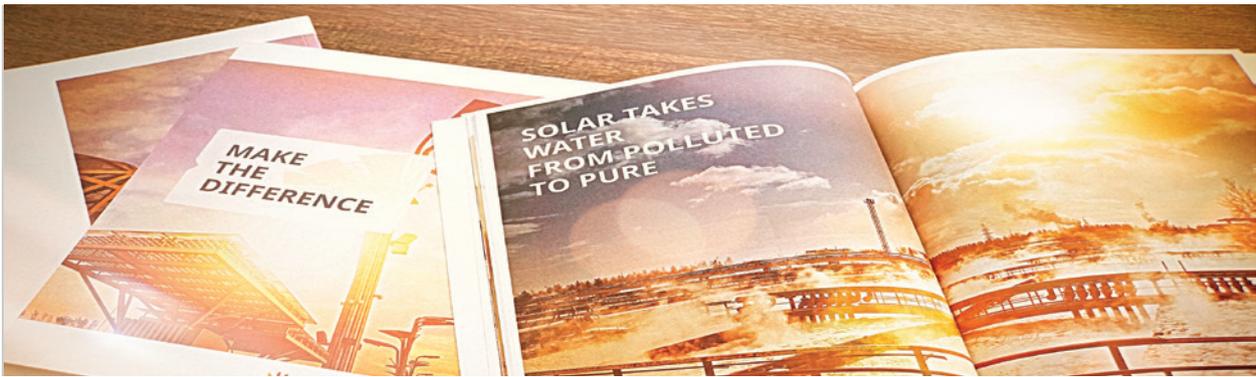
At Canadian Solar, we have no reason to believe that we use any resources from mineral businesses that violate human rights or environmental protection principles.

There is no reason either to believe that CSI has any supplies provided from "conflict" miners as that may have originated in the Democratic Republic of the Congo or an adjoining country based on the following steps mandated by the United States Securities and Exchange Commission.

As of the beginning of 2013, we have taken the following steps as part of our "reasonable country of origin inquiry" to determine whether minerals may have originated in the Democratic Republic of the Congo or an adjoining country:

- Listed the materials and equipment used during the production of our products
- Determined which conflict minerals were necessary to the functionality or production of our products
- Requested our suppliers to provide information on where they obtained their products and materials

Canadian Solar determined that during the reporting periods, the only possible conflict mineral used in our production lines was tin. We requested all our suppliers of tin-containing products to describe the source of the tin used in their products and provide supporting documentation. Canadian Solar does not make purchases of raw ore or unrefined conflict minerals and makes no purchases in the Democratic Republic of the Congo or adjoining countries.



GLOBAL PROMOTION OF SOLAR AND SOCIAL RESPONSIBILITY

Canadian Solar is looking at connecting our corporate strategy locally to sustainable goals. To do so we are basing ourselves on the United Nation’s 17 sustainable development goals, which address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. Canadian Solar wants to take this blueprint to apply to our local business and make the improvements in the daily operations for achieving a better and more sustainable future for the business and all.

CHINA

2019, Canadian Solar initiated to establish Women in Solar Energy (WISE) Alliance. July 8th 2020, WISE Alliance, Canadian Solar and Jolywood Solar hold the

salon seminar on the opportunity and challenge of digital transition & how can women seize opportunities to break through the barriers to promotion”. Women representatives from leading photovoltaic enterprises, research consultancy and University of California, Berkeley Haas School of Business shared their views on enterprise digital transition path and the best practices, and how women can seize the opportunities breakthrough the bottleneck promotion.

On 2020 Aug.1st Canadian Solar successfully held the first Solar Science Summer Camp. More than 40 primary and middle school students who are interested in solar power participated in this activity. Under the guidance of masters from Canadian Solar, the small campers launched a vigorous "save the earth battle". Here, they learn about the latest solar technology, feel the high-tech solar products research and development and manufacturing charm. The masters lead the students to think and discuss the problems that the earth are facing, and encourage the students to find the secret to save the earth.



AUSTRALIA

Donations and sponsorships

Collingwood Children's Farm

In December 2019, Canadian Solar donated 21 pieces of Ku modules for a 6 kW solar system to Collingwood Children's Farm which is the oldest continually farmed piece of land in Victoria, Australia, and a not-for-profit community resource providing country experiences for city people.

Mullumbimby Community Food Box (<https://www.canadiansolar.com/au/make-the-difference/mullumbimby-community-food-box/>)

Canadian Solar donated 24 solar panels and a solar inverter to help provide power to Mullumbimby Community Food Box, a local charity based in NSW, Australia in mid-2019. The Mullumbimby Community Food Box works with their parent charity Foodbank, which helps to source and distribute over 20 million meals to over 660 schools and charity partners each year. Producing an average of 21kWh per day, the solar system creates cost savings of \$660 per quarter, which can now be used to provide for more households in need.

Raising for the Read Triplets

Canadian Solar sold 90 pieces of CS3K-P 295W solar modules at a discount rate to Raising for the Read Triplets in country NSW, which is a wider community initiative to help meet the special needs of the Read Triplets. The solar system was installed by TLE Electrical Thornleigh for running hydrotherapy pool heating in May 2020.



Canadian Solar donated all household furniture and linens that we had purchased for the houses we hired for our employees working on Kiamal Solar Farm to a local charity - Mallee Track Health and Community Services located in the heart of the Mallee in North West Victoria in July 2020. The Community Response team works collaboratively to meet the needs of the Ouyen and Mallee Track communities in regard to welfare and emergency relief assistance and has been helping local residents on health service across all ages throughout the community.

Community work

Canadian Solar and Total Eren employees at Kiamal Solar Farm shared career pathway talk and inspiration at Ouyen P-12 College on their annual Leaders and Mentors Day in December 2019. The learning day presentations covered the topics about what skills are important in workplace; which would make a person valuable to any project; what jobs are on a solar farm; gender diversity on the solar farm, etc. followed by a healthy wrap creation lunch provided by Canadian Solar. By providing the students with access and direct communication with local employers and community leaders, Canadian Solar believes it would help the young generation to be effective members of society and leaders of tomorrow.

Canadian Solar is proud to help make a difference and support the MND foundation (Motor Neuron Diseases). In October 2019, Signal Energy on site organised a fundraising barbecue at Darlington Point Solar Farm and the MND representative was handed a cheque for \$7,491 plus \$811.50 from cash donations on the day. The entire team wore blue shirts made in support of the foundation as well as to raise awareness.



AMERICAS

United States

Once again, Canadian Solar and Recurrent Energy employees in the San Francisco Bay Area came together to install solar on low income homes using donated Canadian Solar modules in partnership with GRID Alternatives. Two crews of ten employees climbed roofs to install residential solar systems on two homes in San Francisco, CA USA. Each residential installation provided the following benefit:

- \$7,631.03 of savings for the family over the lifetime of the system
- 24 tons of carbon emissions prevented (equivalent of planting about 556 trees!)

Canadian Solar and Recurrent Energy partnered with Junior Achievement to support high-school aged girls for their SHE Leads STEM Summit. Female employees volunteered their time to mentor girls to enter the competitive fields of science, technology, engineering, and mathematics, with a particular focus on the energy industry.



Brazil

Canadian Solar produced a training roadshow throughout Brazil in 2019, visiting 39 cities and travelling 18,693 km. In each city, Canadian Solar trained prospective solar installers, and the price of admission was only to make a donation of food or clothing. Over the course of the roadshow, Canadian Solar collected and distributed over 1154 donations of food and clothing to the needy, while training 1154 new solar installers throughout Brazil.



EMEA

In 2019 Canadian Solar donated solar modules for a new solar power of Evans Medical Center at Kirma, Lungi, Sierra Leone. The charity project was initiated a year ago by Melanie Evans from the 'Lungi Sierra Leone Charity' and was realized with Canadian Solar-MaxPower CS6U-P 330W solar modules for a 4 KW solar system. The solar system will directly improve the quality of medical care in the region. The realization of the solar power system for the clinic in Lungi shows how our industry can sustainably improve the situation for newborn babies, children, and the local population in a developing country. More information can be found: <http://investors.canadiansolar.com/news-releases/news-release-details/new-power-system-canadian-solar-modules-helps-medical-center>

COVID-19 Initiative: medical masks donations to hospitals and Red Cross Associations in German, Italy and Spain:

COVID-19 has led to a global shortage of masks, which are essential for the healthcare sector. We are pleased that we have been able to support the hospitals and Red Cross Associations actively with a donation of masks, enabling them to protect themselves and their patients during this critical time.

We are proud to offer this donation to the heroes on the front lines to ensure they receive the support they need to continue carrying out their critical work.

Although we are physically distant today, we must stand together to overcome the global fight against the coronavirus pandemic.



Canadian Solar donated food and hygiene packages to 120 families in the Northern Cape, South Africa to help vulnerable families at this challenging time. These areas are extremely economically depressed and have little to no access to support or medical services. The COVID-19 pandemic and its consequences have been particularly severe for poor households. We would like to thank our local team and all the volunteers on site who helped us in the distribution process.



The coronavirus COVID-19 pandemic is the defining global health crisis of our time and the greatest challenge we have faced since World War Two. The virus has spread to every continent except Antarctica.

As a response to this devastating crisis, Canadian Solar has made a donation to the "Rice Appeal" fundraising program to help supplying rice for underprivileged families. The Lungi Sierra Leone Charity set up the fundraising program to raise money to feed the children in the Lungi area during the COVID-19 pandemic. Each 50 kg rice bag feeds a family circle of 6-10 people for approximately 1 month.



AWARDS & RECOGNITIONS



NO. 1 IN TOP BANKABLE MANUFACTURER RATED BY BLOOMBERG NEW ENERGY FINANCE

According to the Solar Module & Inverter Bankability Report 2020 by Bloomberg New Energy Finance (BNEF), Canadian Solar was ranked the No.1 bankable module manufacturer, based on the stable financial performance, reliable product quality and trustable corporate reputation. It was the sixth time that Canadian Solar was selected as one of the top bankable manufacturers in the survey.

BNEF's survey asked banks, developers and technical due diligence firms of 49 module manufacturers about the bankability (can be used in solar projects with nonrecourse debt). All participants considered Canadian Solar bankable.

ASIA

China

In March 2020, Canadian Solar won the Excellence Award of Key Projects of Jiangsu Intellectual Property Strategy Promotion Plan. As of March 31, 2020, Canadian Solar has applied for a total of 2,847 patents worldwide, including 2,735 patents in China and 112 patents in foreign countries. 1,682 patents have been granted. It has accumulated more than 200 registered trademarks worldwide, covering China, the United States, Europe, Japan and other major countries and regions.

AMERICAS

Canada

Canadian Solar Inc. was selected as one of 2020 The Best 50 Corporate Citizens by Corporate Knights Inc. Selected from a pool of Canadian companies with revenues over \$1 billion – each evaluated based on 21 environmental, social and governance indicators, relative to their industry peers and using publicly available information – the Best 50 companies set the standard for sustainability leadership in Canada. The Best 50 Corporate Citizens project is supported by the Canadian Industry Partnership for Energy Conservation (CIPEC). CIPEC offers energy management solutions, financial support, technical tools and networking opportunities to help Canadian industry save money through energy efficiency. More information: www.corporateknights.com/best50

United States

Canadian Solar's subsidiary Recurrent Energy won the Finalist of Corporate Deal of the Year by Platts Global Energy Awards. The S&P Global Platts Global Energy Awards, now in its 21st year, recognizes top performers - industry leaders and innovators. The Awards program offers 18 categories both for business and individual achievement. More information: <https://www.spglobal.com/platts/global-energy-awards/finalists>



VII. APPENDIX

DISCLAIMER

This report is for information purposes only and no legal consequences may be drawn from it. The entities in which Canadian Solar directly or indirectly owns interests are separate legal entities. Canadian Solar shall not be held liable for their acts or omissions. This document may contain forward-looking information and statements that are based on business and financial data and assumptions made in a given business, financial, competitive and regulatory environment. They may prove to be inaccurate in the future and are subject to a number of risk factors. Neither Canadian Solar nor any of its affiliates assumes any obligation to investors or other stakeholders to update in part or in full any forward-looking information or statement, objective or trend contained in this document, whether as a result of new information, future events or otherwise. Additional information concerning factors, risks and uncertainties that may affect Canadian Solar's financial results or activities is provided in the [Canadian Solar 2019 Annual Report](#).

GRI CONTENT INDEX

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