CanadianSolar

SUSTAINABILITY REPORT 2018

MAKING THE DIFFERENCE

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Acknowledgements

The 2018 Canadian Solar Corporate Social Responsibility report was a result of a joint team effort involving many departments in Canadian Solar, including EHS, Supply Chain Management, Human Resources, Marketing, Finance, and R&D to name a few. This comprehensive report would not have been possible without the efforts of our entire team – to everyone involved, we extend our thanks.

Hanbing Zhang
Senior Director, Global Marketing
Canadian Solar

COMMITTED TO SUSTAINABILITY

The use of photovoltaic power is a proven and effective way to reduce greenhouse gas emissions and environmental pollution over the years. It has gained increasing prominence as a global source of clean and reliable energy.

We are glad to see that in 2018, around 104 GW of solar photovoltaic systems were installed globally, 62.4% of total newly added renewable energy in the year, and exceeding the amount of newly installed fossil fuels and nuclear power.

Canadian Solar continued to push solar development around the world. We delivered 6.6 GW solar modules in 2018, representing around 6.3% global market share. To date, we have shipped over 36 GW of modules worldwide, which can generate 45,321,600 MWh electricity per year. We have already built and connected more than 4.7 GW of solar power plants and have an additional pipeline of around 13 GWp. Our goal is to spread solar energy across the globe and ensure that more and more people can reap the benefits of clean air, decreased pollution, and sustainable energy.

To reduce the cost of solar electricity and spur the advancement towards grid parity, Canadian Solar continues to push for the development of new technologies and applications. In 2018, we began the mass production of high efficiency Black Silicon Poly PERC cells and Mono PERC cells, and successfully launched high efficiency HiKu modules, BiKu bifacial modules and HiDM modules. Now our poly cell efficiency reached 22.8%, and it became a new world record of poly cell efficiency that certified by Germany's Institute für Solarenergieforschung GmbH (ISFH).

At Canadian Solar, we deeply commited to our coperate and social responsibility. In 2018, we created 561 new jobs globally and continued to provide the competitive benefit plans and training programs for employees. We have adopted effective methods to reduce energy consumption and GHG emissions.

In 2018, in Bangkok Thailand, we helped the International Network of Engaged Buddhists to build a 12 kW solar system. In Lungi, Sierra Leone, we built solar power system for the Evan Medical Center at Kirma. We also built solar systems for a kindergarten and elder people's home in Bauru, Brazil. We believe that our participation and direct contribution to the society is the best expression of our business success.

Through this Report, we hope to highlight our mission to promote sustainable development and provide clean energy to communities across the globe. Looking to the future, the solar industry looks brighter than ever. I feel very proud of the work that Canadian Solar has done, but there is still much left to do. We will continute to to be a leader in solar energy worldwide and bring a better and cleaner life for people all over the world.

Together let us make the difference.

Sincerely yours,
Dr. Shawn Qu

HOW WE MAKE THE DIFFERENCE

OVER 36 GW GLOBALLY

Canadian Solar has shipped over 36 GW of modules to date, equivalent to 45,321,600 MWh electricity generation per year, or CO_2 absorption of 25,097,886 trees. *

CO_2

GHG EMISSIONS

Reduced by 31 million metric tons

SO_2

SULPHUR DIOXIDE

Reduced by 18,000 metric tons

NO_x

NITROGEN OXIDES

Reduced by 18,540 metric tons

PM

PARTICULATE MATTER 2.5

Reduced by 2,160 metric tons

H_2O

WATER USE

Reduced by 529 billion litres

Annual environmental and health benefits of the 36 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 2019 by Bloomberg New Energy Finance(BNEF), Canadian Solar was ranked the No.1 bankable module manufacturer, based on the stable financal preformance, reliable product quality and trustable corporate reputation. It was the fifth 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 48 module manufacturers and 17 inverter manufacturers about the bankability (can be used in solar projects with nonrecourse debt). All participants considered Canadian Solar bankable.

With a team of experts spread across six continents, BNEF leverages the world's most sophisticated data sets to create clear perspectives and in-depth forecasts that frame the financial, economic and policy implications of industry-transforming trends and technologies.

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.

PV-Tech's Bankability Ratings system for the PV industry is a credible, fully-independent, transparent and professional ranking system to differentiate between the hundreds of companies selling PV modules today.

A WORLD RECORD OF 22.80% MULTI-CRYSTALLINE CELL EFFICIENCY

Canadian Solar's technology team set a world record of 22.80% conversion efficiency for p-type large area multi-crystalline silicon solar cell. The record-setting P5 (casted mono) cell conversion efficiency was tested and certified by Germany's Institute für Solarenergieforschung GmbH (ISFH) in September 2019. It surpasses the previous multi-crystalline cell efficiency world record of 22.28% which was also set by Canadian Solar in April 2019.

This is a milestone for Canadian Solar P5 technology development. It proves that our multi-crystalline silicon technology can achieve efficiencies very close to mono while still enjoying the cost advantage of multi. We remain focused on expanding our technology pipeline to provide our customers with the most LCOE-competitive products.

02 ENVIRONMENTAL HIGHLIGHTS

46% GROWTH IN SOLAR POWER PLANTS BUILT AND CONNECTED

Accumulatively, solar plants built and connected increased to over 4,600 MW by March 2019, a 46% increase relative to 3,149 MW at the end of 2017. The development of solar energy can meaningfully reduced greenhouse gas emissions.

REDUCTION IN CO_2 EMISSIONS IN THE MANUFACTURING PROCESS

CO_2 emissions for every kW module production is reduced from 905.4 kg in 2011 to 318.14 kg in 2018, a decrease of 65%.

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 CO_2 emissions of the power industry.

REDUCTION IN WATER AND ELECTRICITY USAGE

Water usage per kW production reduced by 70% from 1.138 m^3 in 2014 to 0.339 m^3 in 2018.

Wastewater volume per kW production reduced by 74% from 0.882 m^3 in 2014 to 0.230 m^3 in 2018.

Electricity usage per kW production reduced by 81% from 12.23 kWh in 2014 to 2.31 kWh in 2018.

By various measures, we significantly reduced water and electricity use in our operation, contributing to sustainable development.

03 SOCIAL HIGHLIGHTS

4.5% MORE JOBS

In 2018, we employed more than 13,000 people worldwide, creating 561 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.

COMMUNITY WORK IN 6 CONTINENTS

In 2018, in Bangkok Thailand, we helped the International Network of Engaged Buddhists to build a 12 kW solar system. In Lungi, Sierra Leone, we built solar power system for the Evan Medical Center at Kirma. We also built solar systems for a kindergarten and elder people's home in Bauru, Brazil. We believe that our participation and direct contribution to the society is the best expression of our business success.

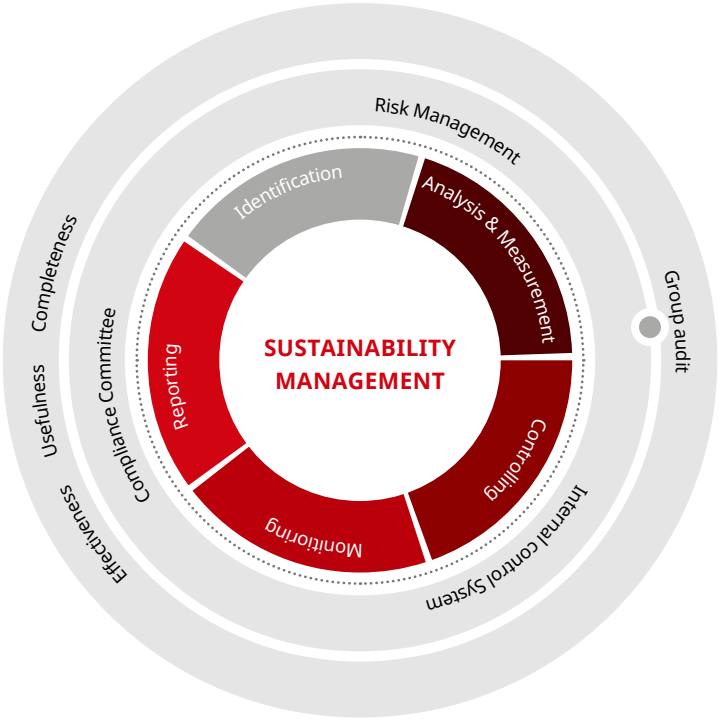
ANVERAGE OF 2.5 TRAINING PROGRAMS FOR PER EMPLOYEE

In 2018, the Company provided 43,266 training programs to over 13,000 employees. Employee training programs enhanced work skills and knowledge which helped employees' performance in control of production qualities.

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

REPORTING DATE

This is the forth 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 2017 report.

CONTENT

I. ORGANIZATIONAL PROFILE

1. COMPANY OVERVIEW

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

No.1 Solar module supplier according to IHS Markit

No.1 silicon module solar plant developer according to GTM

More than 36 GWp of solar modules shipped to date

13 GWp project pipeline

Over 13,000 employees

2001
Founded in Canada

2002
Started manufacturing solar battery chargers for Audi Volkswagen

2005
Started mono module production for German market

2006
IPO in NASDAQ（CSIQ), raised over $100 million

2007
Began cell production

2008
Began ingot & wafer production; set up German subsidiary

Developed UMG-Si (upgraded metallurgical grade silicon) material to lower production costs

2009
Set up Japan and USA operation, built the first solar project in Germany

Developed ESE (enhanced selective emitter) cell technology

2010
Delivered 1 GW modules commulatively

Launched double glass

2013
Rolled out ELPS (back contact MWT cell and module), world 1st in mass production

2014
Delivered around 10 GW modules commulatively

Produced first Nano-scale texture black silicon cell in the world

2015
Bought Recurrent Energy from Sharp, acquired 4.5 GW project pipeline, and became 3rd largest solar project developer globally

Started mono PERC cell production, eff. 21%

2016
Delivered around 20 GW modules cummulatively

Started black silicon texture cell production, capacity over 4 GW

2017
Began the mass production of poly PERC cell, with eff. > 20%

Began the production of dual-cell & HiDM cell modules

2018
Shipped over 33 GW modules cumulatively

Began the production of multi-bus bar, Bifacial cells & modules

Produced poly modules with > 400 W

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.

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. In recent years, we have increased our investment in the energy segment. Our energy segment primarily comprises of solar project development and sale, operating solar power projects and sales of electricity.

As of December of 2018, we had:

- 8.88 GW of annual solar module manufacturing capacity, approximately 1.35 GW of which is located in South East Asia, 50 MW in Brazil and the rest in China
- 6.3 GW of annual solar cell manufacturing capacity, approximately 1.3 GW of which is located in South East Asia and the rest in China;
- 5.0 GW of annual wafer manufacturing capacity located in China;
- 1.65 GW of annual ingot manufacturing capacity located in China.

We plan to expand our module and cell manufacturing capacities to 12.2 GW and 9.3 GW, respectively, by December 31, 2019.

(2018 Annual Report Page 40 and 2019 Q2 finance report)

COUNTRIES IN WHICH WE OPERATE

G4 – 6

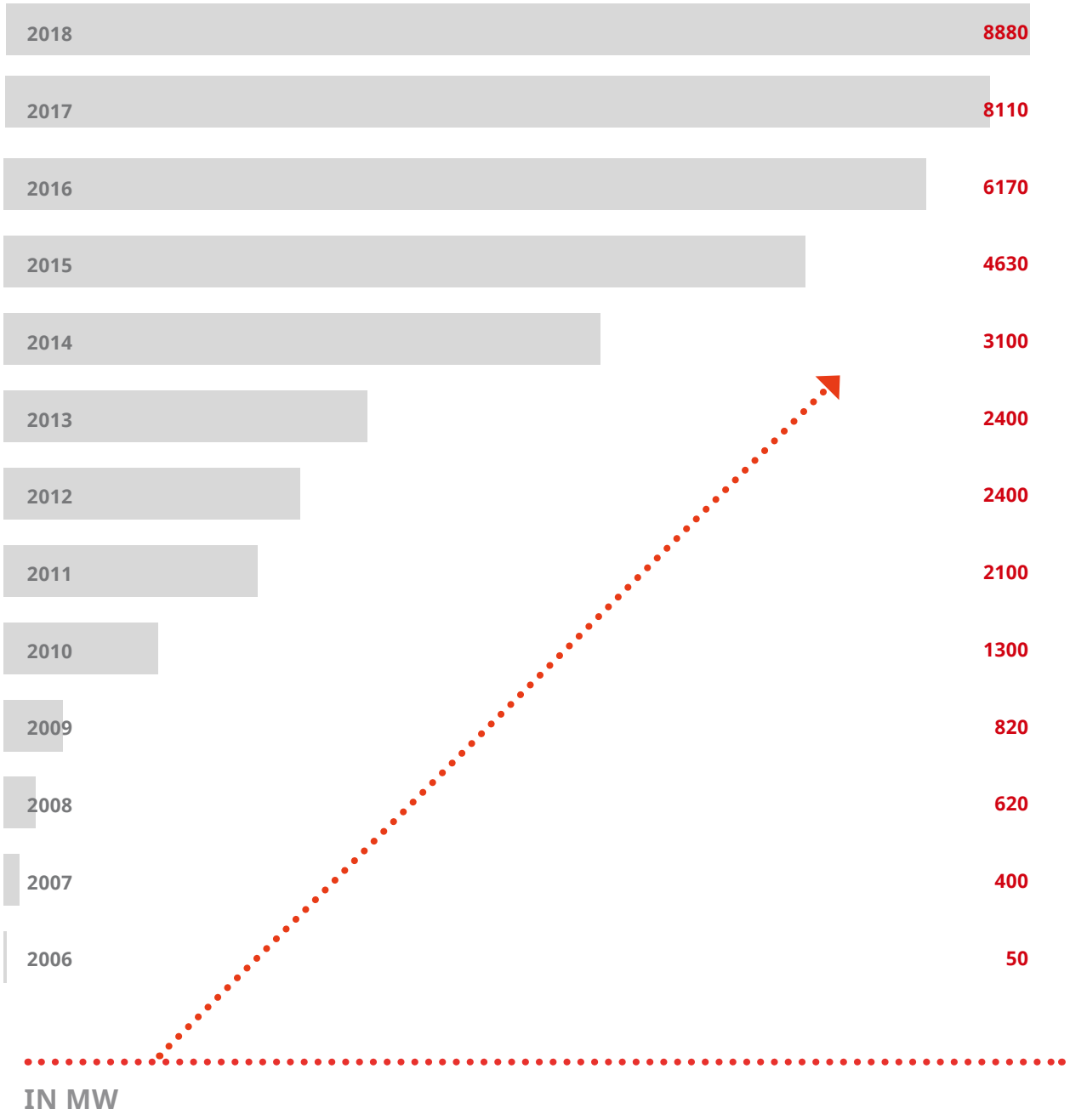
GLOBAL BRAND FOOTPRINT

Guelph, Canada	Global Headquarters
Walnut Creek US	Recurrent Energy HQ
Walnut Creek, US	USA Headquarters
Walnut Creek, US	Energy Group HQ
New York, US	Energy Group Subsidiary
Austin, US	Recurrent Energy Office
Panama	Sales & Global Energy Subsidiary
Sao Paulo, Brazil	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

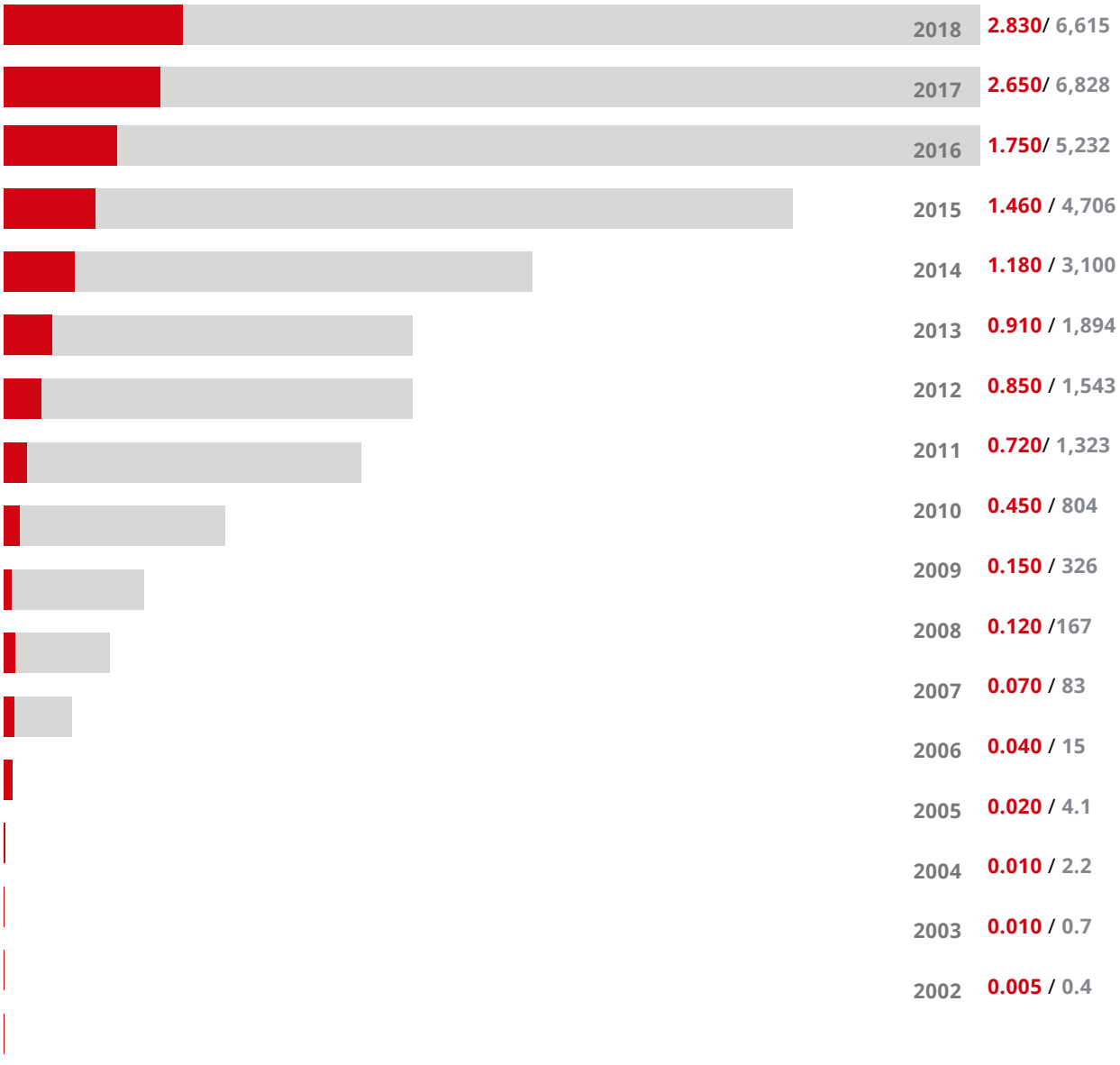
MANUFACTURING FOOTPRINT

Ontario, Canada	Module Factory
Suzhou, China	Cell Factory
Changshu, China	Module Factory
Luoyang, China	Ingot, Wafer & Module Factory
Funing, China	Cell 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

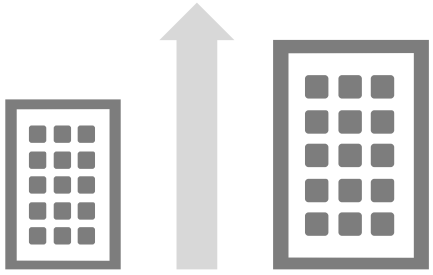


MODULE PRODUCTION

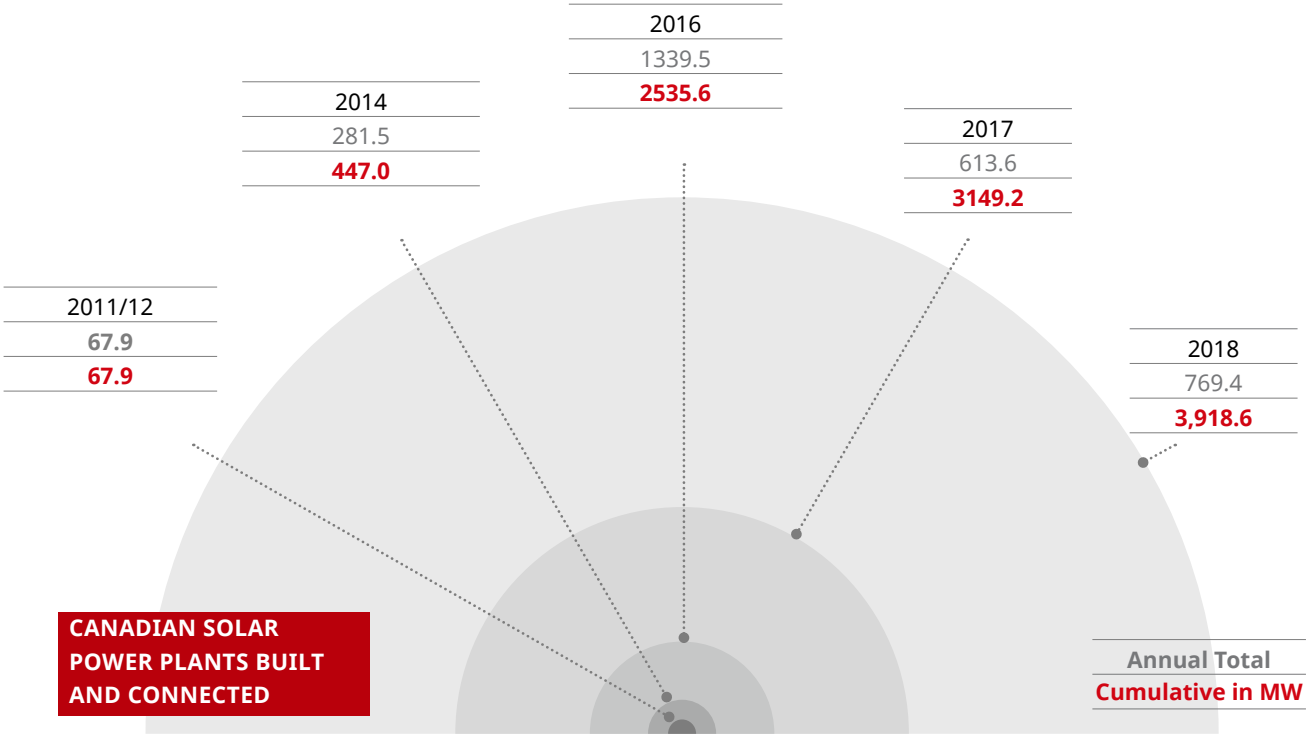


2. GROWTH PERSPECTIVE

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

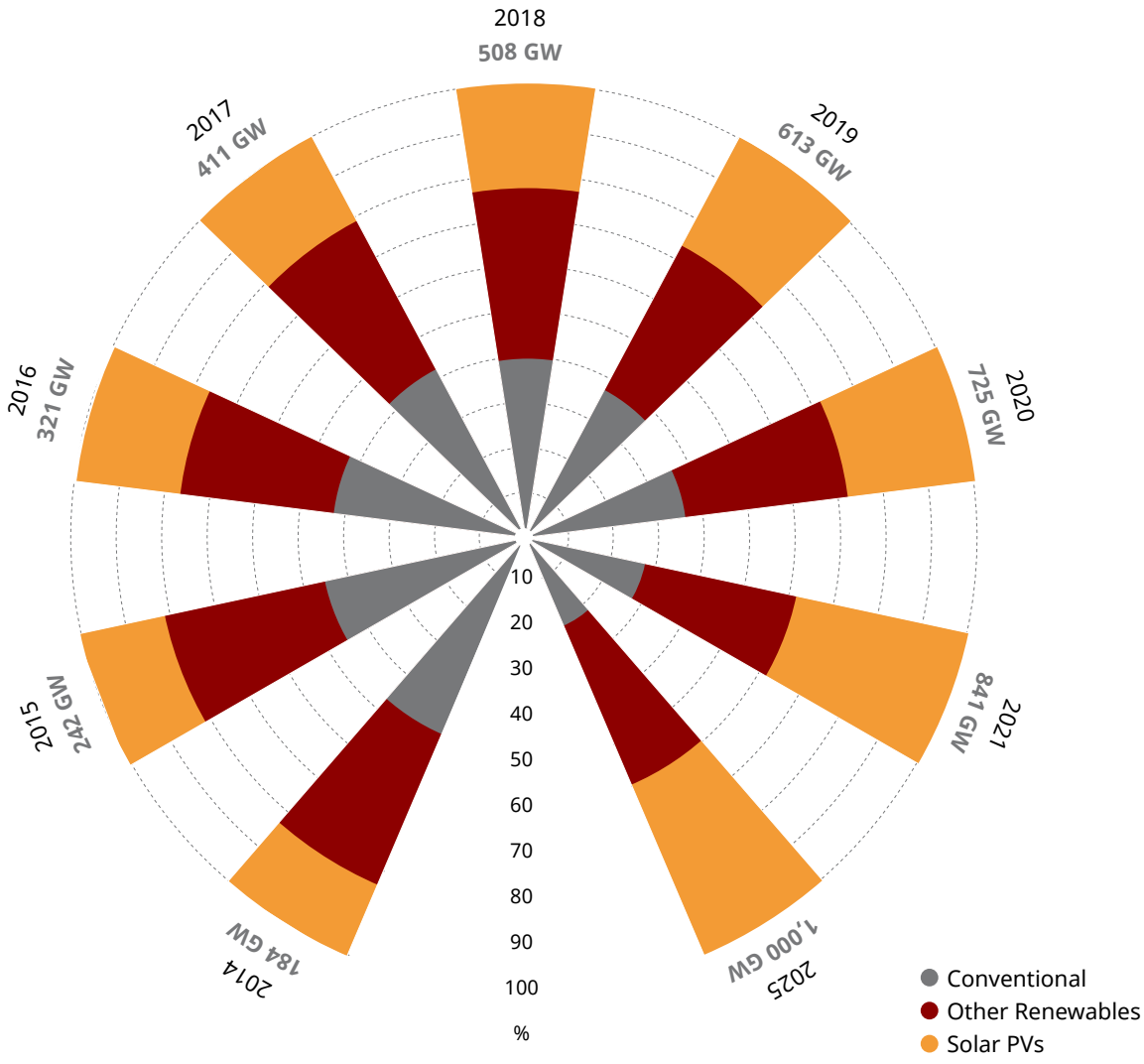


THE GLOBAL PV MARKET GREW BY 9.8% IN 2018 (ACCORDING TO RESEARCH FIRM IHS MARKIT)



*Includes projects of Canadian Solar Subsidiary Recurrent Energy

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 decomissioned 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

· In 2018, there was a record level of renewable power capacity added globally, with 518.96 GWdc of PV installations by the end of 2018 according to IHS Markit. According to the International Energy Agency (IEA), the global PV installation 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. and our principal executive office and principal place of business is located in 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.

Countries we operate in include: Australia, Brazil, Canada, China, Germany, India, Indonesia, Japan, Korea, Singapore, South Africa, Spain, Thailand, Turkey, Egypt, France, U.A.E., United Kingdom, Italy, Vietnam and the USA. All operations fall within the scope of this report, as detailed under Material Aspects G4 – 17.

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 2018 see "Item 4. Information on the Company – C. Organizational Structure" for additional information on our corporate structure, including a list of our major subsidiaries.)

EXPERIENCED BOARD AND SENIOR MANAGEMENT

DR. SHAWN QU
Chairman, President
& CEO (Director)

- 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
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

YAN ZHUANG
Senior Vice President
Chief Commercial Officer

- Head of Asia of Hands-on Mobile, Inc.
- Asia Pacific regional director of marketing planning and consumer insight at Motorola Inc.

GUANGCHUN ZHANG
Senior Vice President
Chief Operating Officer

- 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.

JIANYI ZHANG
Senior Vice President
General Counsel
Chief Compliance Officer

- Senior advisor to several Chinese law firms
- Senior assistant general counsel at Walmart Stores, Inc.
- Managing Partner at Troutman Sanders LLP

GUOQIANG XING
Senior Vice President
Chief Technology Officer

- Chief Technology Officer of Hareon Solar
- R&D Director of JA Solar
- R&D Advanced Process Director at HHNEC
- R&D Advanced Process Director at Semiconductor Manufacturing International

EXPERIENCED BOARD AND SENIOR MANAGEMENT

EXPERIENCED INDEPENDENT DIRECTORS

· Partner with McMillan LLP, a business law firm
· Director and senior officer of Boliden Ltd.

ROBERT MCDERMOTT
Independent Director

· CEO of Ivanhoe Nickel & Platinum Ltd.
Chairperson of the Audit Committee
· of Harry Winston Diamond

LARS-ERIC JOHANSSON
Independent Director

· 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 Shenzen Yantian Port (Group) Co. Ltd.

ANDREW WONG
Independent Director

·Independent Director and Chair of the Audit Committee of:
• Daqo New Energy Corp. (NYSE: DAQO)
• China Maple Leaf Educational Systems Limited (HKSE:1317)

ARTHUR (LAP TAT) WONG
Independent Director

PRODUCTS OFFERED IN MODULE AND SYSTEM SOLUTIONS (MSS) SEGMENT

Modules

Our primary customers are distributors, system integrators, project developers and installers/EPC companies. A number of our loyal customers have historically account for a significant portion of our net revenues. In 2016, 2017 and 2018, the top five customers of the MSS segment by net revenues collectively accound for approximately 16.7%, 18.0% and 9.1%, respectively, of our total net revenues. Sales to our largest customer in those years accounted for 5.0%, 7.2% and 2.6%, respectively, of our total net revenues.

We continue to develop new customer relationships in a wider range of geographic markets. In 2018, we increased our market share in the Middle East, Africa, Latin America and Australia, and maintained our leading market share in Japan and Europe. We intend to continue to expand our sales in these regions and develop more emerging markets in 2019. (From pages 46-47 of our 2018 Annual Report.)

Solar System Kits

A solar system kit is a ready-to-install package consisting of solar modules produced by us and components, such as inverters, racking system and other accessories, supplied by third parties. We began selling solar system kits in 2010 and in 2018 sold them primarily to customers in Japan, Europe and China.

EPC and O&M Services

Since 2012, we have started to provide O&M services for solar power projects in commercial operation. In 2018, we provided O&M services primarily in the North American, Europe, Australia and Japanese markets. Our MSS segment started to provide EPC services in 2018.

SERVICES OFFERED IN OUR OUR ENERGY SEGMENT

Solar Project Development and Sale

We develop, build and sell solar power projects 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.

Operating Solar Power Plants and Sales of Electricity

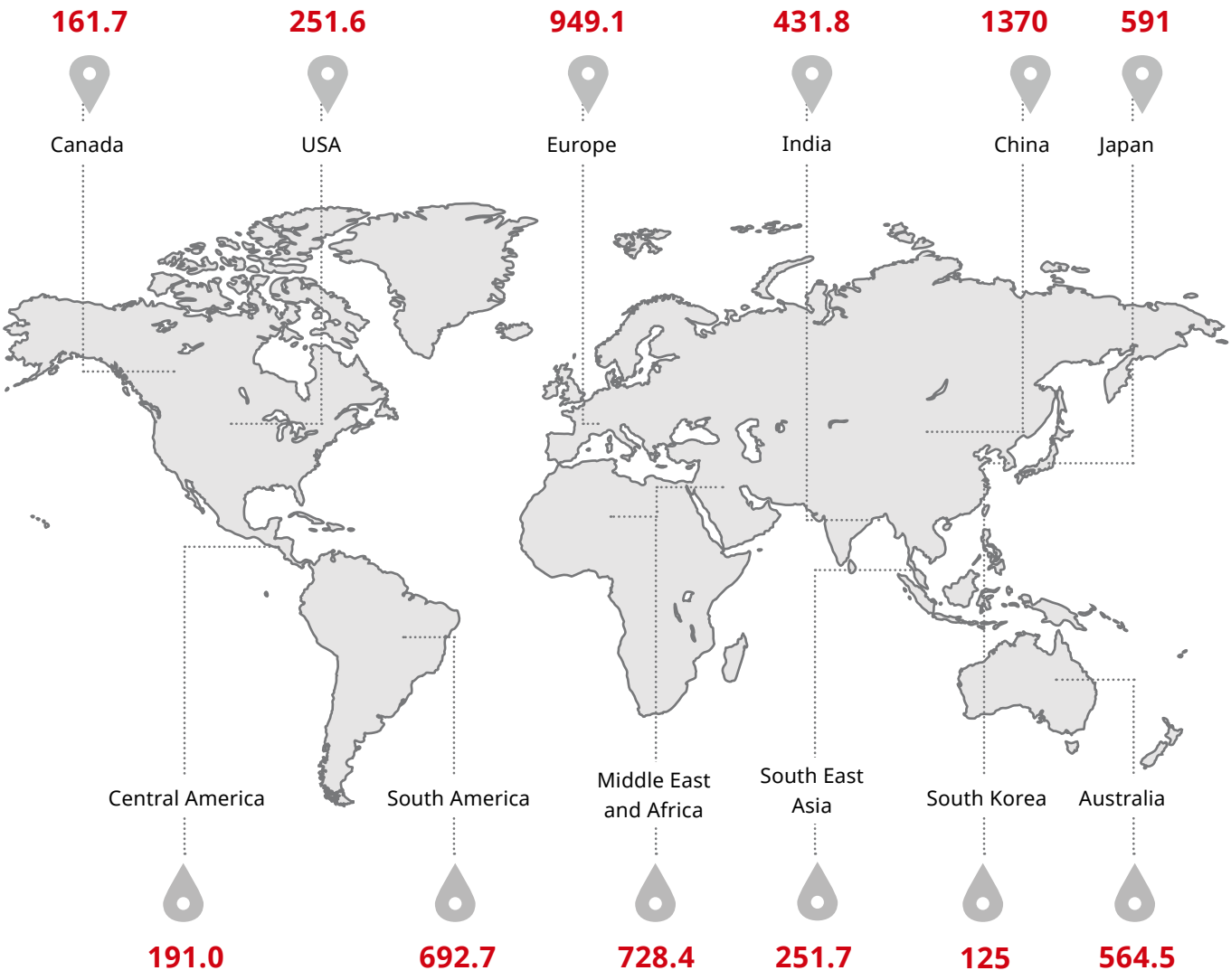
We directly operate some of our solar plants and generate income from the sale of electricity. As of February 28, 2019, we had a fleet of solar power plants in operation with an aggregate capacity of approximately 986.3 MWp. (From pages 41-43 of 2018 Financial Report)

The following table from page 46 of our audited 2018 Annual Report sets forth information on our total net revenues derived from customers categorized by their geographic locations:

Years ended December 31	2018		2017		2016	
Region	Total Net Revenues (in thousands of $)	%	Total Net Revenues (in thousands of $)	%	Total Net Revenues (in thousands of $)	%
Asia	1,571,287	42.0%	1,926,091	56.8%	1,338,404	46.9%
Americas	1,474,657	39.4%	1,108,162	32.7%	1,103,509	38.7%
Europe and others	698,568	18.6%	356,140	10.5%	411,165	14.4%

GEOGRAPHICAL SPREAD OF CANADIAN SOLAR PRODUCTS

MW SOLD IN 2018



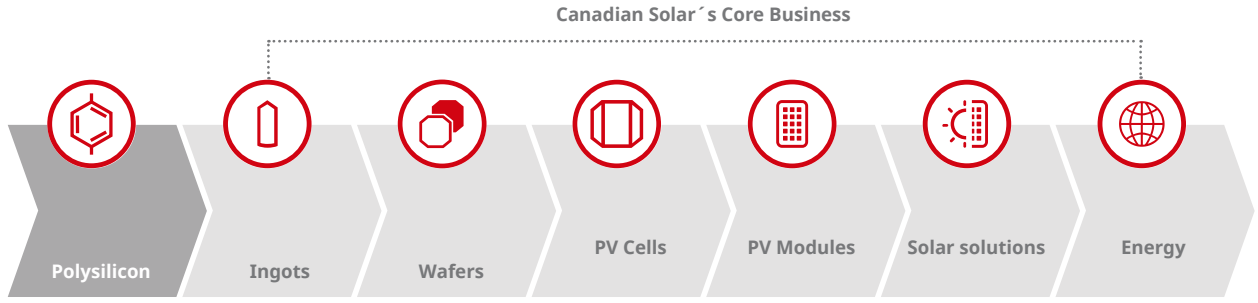
A BRAND THAT MAKES THE DIFFERENCE

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



Canadian Solar products	Mono- & Polycrystalline	Mono- & Polycrystalline	Mono- & Polycrystalline PERC Black silicon MBB	Mono- & Polycrystalline Half Cell module HiDM module Bifacial module	EPC O&M Off-grid / Micro-grid solutions Energy Storage	Solar plant development Sales of Electricity

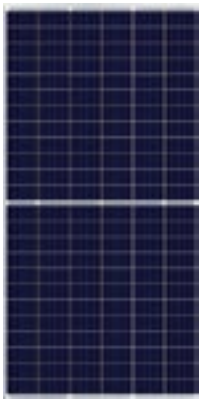
SOLAR MODULES

We produce a wide variety of standard solar modules, ranging from 3W to over 410W in power and using both multi-crystalline and mono-crystalline cells in several different design patterns, including shingled cells.

Our mainstream solar modules include standard CS6K (60 full cells), CS6U (72 full cells), CS3K (120 half-cells), CS3U (144 half-cells), Dymond CS6X-P-FG (72 full cells, double-glass), Dymond CS3U-P-FG (144 half-cells, double-glass), BiKu CS3U-B-FG (144 half-cells, bifacial), HiKu CS3W (144 half-cells), HiDM CS1H (60 format, shingled cells) modules, and HiKu which utilizes the industry's first 166mm x166mm sized multi-crystalline solar wafers and has a wattage of over 400W. The mainstream modules are designed for residential, commercial and utility applications. The small modules are for specialty applications.

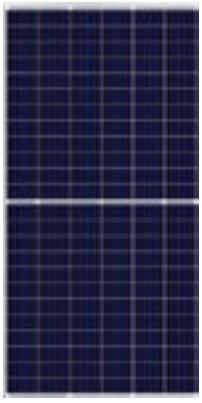
SOLAR MODULES

High Efficiency
Ku Module



Poly/Mono
120/144 cells

High Efficiency
KuDymond Module



Poly/Mono
120/144 cells

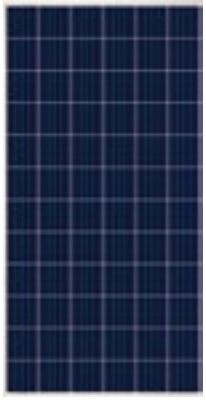
High Efficiency
HiDM Module

Mono
High density cells

Dymond
Double Glass Module

Poly/Mono
60/72cells

MaxPower
Module

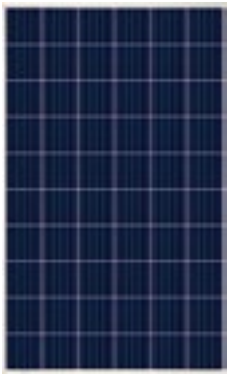


Poly/Mono
60/72 cells

Super Power
PERC Module

Mono PERC
60 cells

Standard
Module



Poly/Mono

In 2018, we launched the BiKu modules which are bifacial designed and can generate additional electricity from the backside of the module. These modules have more shading tolerance and a much lower hot spot risk thanks to the innovative design on the bifacial cell and double glass module.

At the end of 2018, we began the mass production of the HiKu module, the first commercially available multi-crystalline module exceeding 400 watts with significant levelized cost of energy, or LCOE, advantages. In 2018, we launched the HiDM module, which uses shingled cells to increase both module wattage and efficiency. We also launched P5 technology, which is based on casted mono technology developed in house, and will boost cell and module efficiencies to reach levels close to mono while retaining all the advantages of multi technology, such as LID, LeTID and lower cost.

ENERGY STORAGE SYSTEM & OFF-GRID SYSTEM

Canadian Solar's all in one solution of CAMEL ESS 2 is a state-of-the-art intelligent solution, comprising of PV modules, hybrid inverter, cable box and lithium batteries. It could be used in on-grid scenario to store excess energy generated by PV modules, feeding into the grid and discharging battery when it is needed. Meanwhile, it could work as UPS in the event of grid power outage, and work as a stand-alone system in any off-grid scenario.

Maple 3 solar energy system is a multi-functional device which can be used as a regular light at home or for camping, as a SOS signal in emergency, a mobile power bank for consumer electronics, such as mobile phones, PAD, MP3 etc.... Maple 3 can also power 5 V DC electronic devices.

Maple 3 is a very economical solution for people in areas with limited access to electricity. It is also a very convenient lighting/charging solution for people who love to spend time in nature, such as camping, hiking, etc.

SOLAR SYSTEM KITS

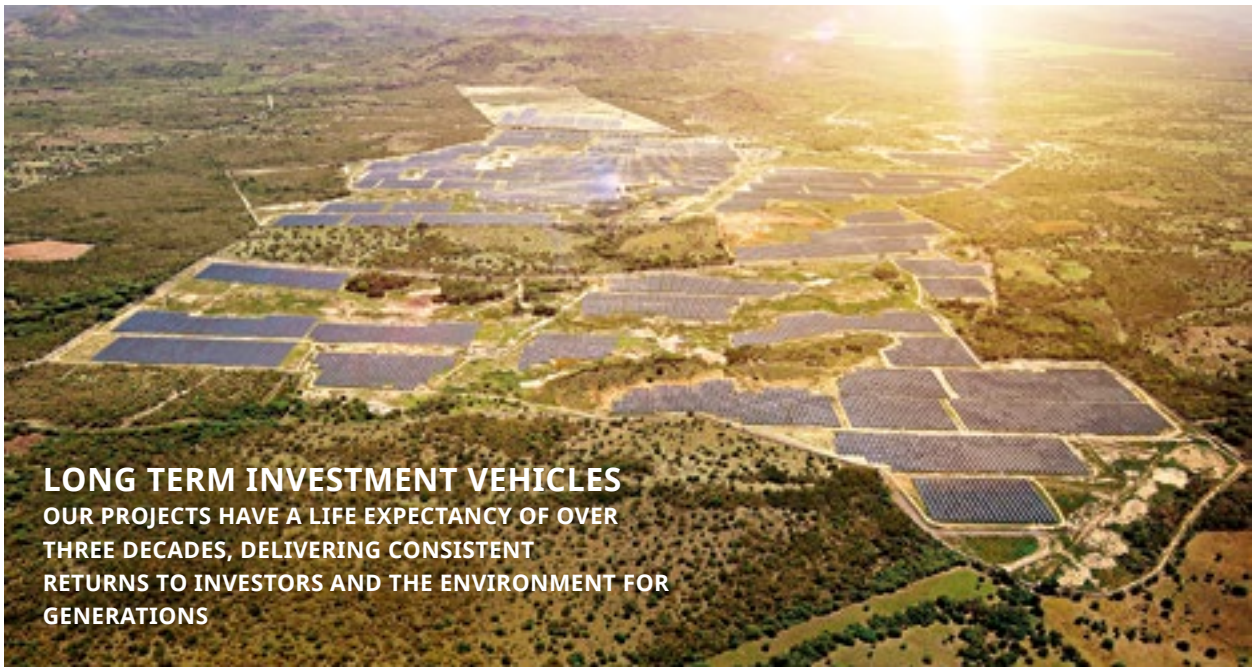
A solar system kit is a ready-to-install package consisting of solar modules produced by Canadian Solar and components, such as inverters, racking system and other accessories, supplied by third parties. We began selling solar systems in 2010, and in 2018 we sold them to customers in Japan, Canada, Australia, China, Brazil.

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 4.7 GWp PV capacity installed in Canada, USA, Mexico, Australia, Japan, UK, China and other emerging markets etc.
· 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 2019, we have over 2.9 GWp O&M portfolio in operation or contracted worldwide.



Nacaome Valle, Honduras, 79.2 MW

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, managment, coordination and financing. Our project sales team actively identifies and pursues suitable buyers for our solar power projects.

(From Page 43 of 2018 Annual Report)

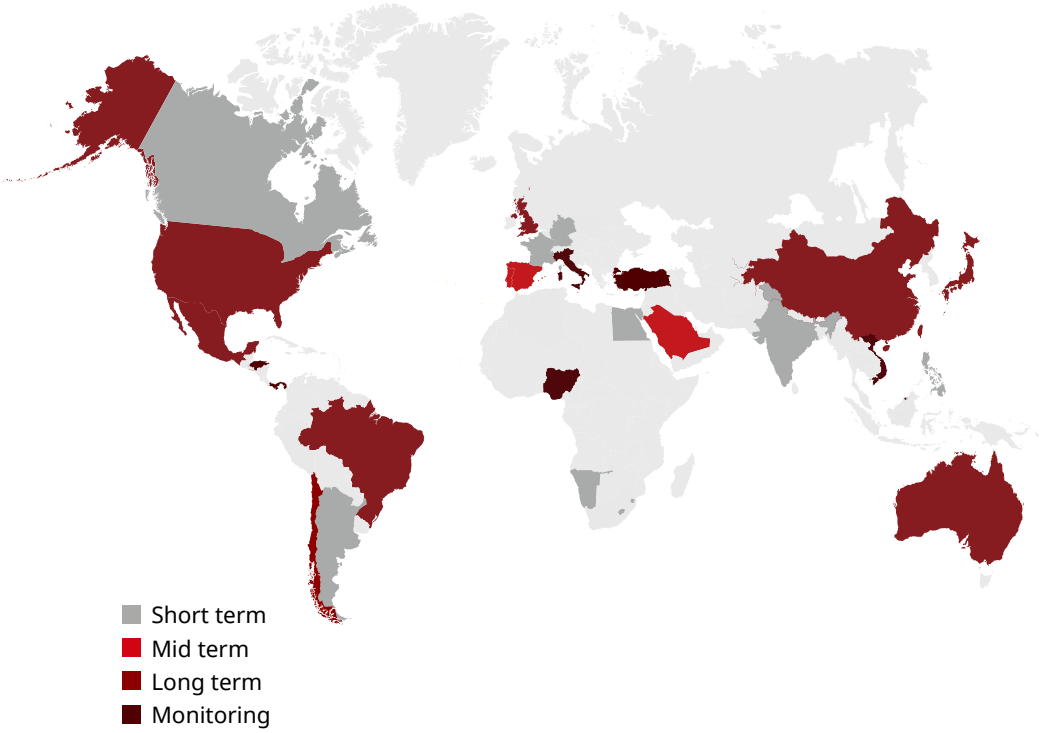
Traditional model.

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

As of July 31, 2019, the Company's late-stage, utility-scale solar project pipeline, including those in construction, totaled approximately 3.6 GWp, with 1,565 MWp in the U.S., 508.2 MWp in Brazil, 368 MWp in Mexico, 311.8 MWp in Japan, 385 MWp in China and additional 465.2 MWp in total in Australia, Canada, Israel, Taiwan, the Philippines, Malaysia, Italy and South Korea, etc.

In addition to our late-stage, utility-scale solar project pipeline, as of July 31, 2019, the Company had a portfolio of utility-scale, solar power plants in operation totaling 795.8 MWp.

(according to 2019 Q2 Financial Report)



13 GWP
Total pipeline

9.4 GWP
Early to mid-stage development pipeline

3.6 GWP
Late-stage project pipeline

798.5 MWP
SOLAR POWER PLANTS IN OPERATION

>4.7 GWP
SOLAR POWER PLANTS BUILT AND CONNECTED (INCL. RECURRENT)

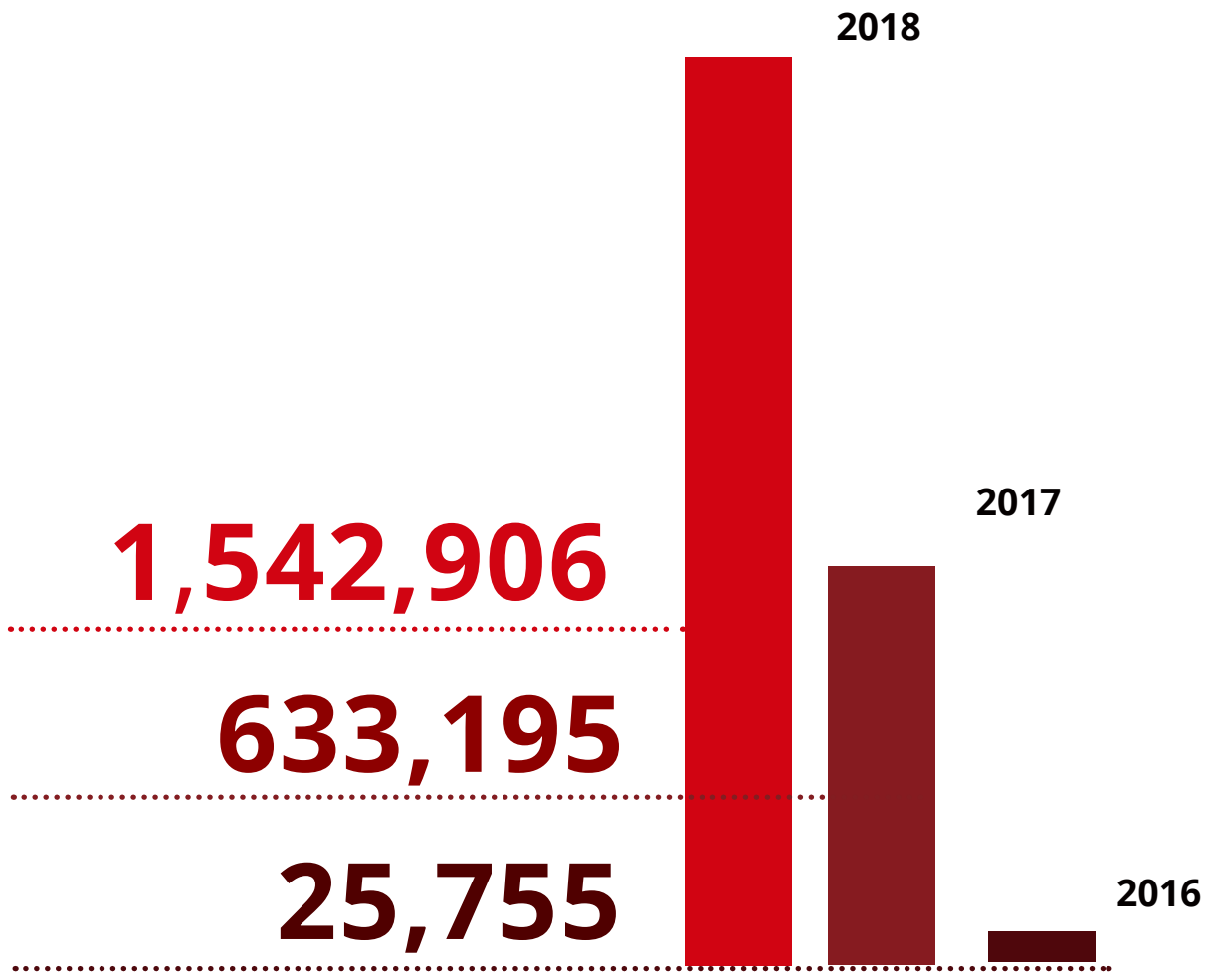
LATE-STAGE, UTILITY-SCALE SOLAR PROJECT PIPELINE (MWP) MAINLY LOCATED IN

1565	508.2	368	311.8	385
US	Brazil	Mexico	Japan	China

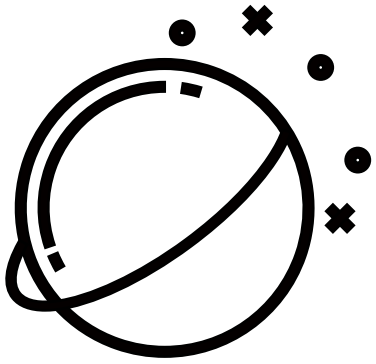
Source: Canadian Solar 2019 Q2 financial report

TOTAL REVENUE FROM
ENERGY BUSINESS

*IN THOUSANDS OF USD$



MAKING THE DIFFERENCE ON AN INTERNATIONAL SCALE



ONE DREAM:

CLEAN ELECTRICITY

· Canadian Solar employs over 13,000 people, with detailed work locations in G4-10a-c

· Over 30 subsidiary companies in 19 countries, with details of company locations and Canadian Solar ownership percentage disclosed on Pages 59-60 of 2018
Annual Report

65%

35%

OF OUR WORKFORCE ARE WOMEN AND WE ARE COMMITED TO MAKING THE DIFFERENCE

EMPLOYEES THAT MAKE THE DIFFERENCE

EMPLOYEE DEVELOPMENT

As of December 31, 2018 we had 13,034 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.

4.5% EMPLOYMENT INCREASE IN ONE YEAR

Our total workforce has expanded by 4.5% year over year to 13,034 employees in 2018. We are expecting to see a continuous increase of employment in the near future. See G4 – 13 below for more details.

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 2018. See Page 113 paragraph D of the 2018 Annual Report. We continue to focus on improving our relationships with employees.

PROCUREMENT MANAGEMENT STRATEGY

We use a vertically-integrated procurement strategy managed at a high level and supported by each division. Our goal is to establish an efficient and environmentally sustainable supply chain that meets both the interests of our stakeholders as well as our own development needs.

We are proud in our ability to obtain a cost-effective and stable supply of polysilicon, silicon wafers and solar cells. We continuously conduct due diligence to ensure we receive, at reasonable prices, the best quality products and services from our suppliers. We strive to increase productivity, achieve energy savings and reduce waste disposals and emissions.

In 2018, we purchased a significant portion of the silicon wafers used in our solar modules from third parties. Our largest silicon wafer supplier was GCL, and we have recently extended the silicon wafer purchase contract with GCL through 2019.

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 2018, our largest supplier of solar cells was Inventec. 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 and demand of solar cells.

For more details, see page 44 of our audited 2018 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 out perform 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@canadiansolar.com to request the full reports.

QUALITY INITIATIVES THAT MAKE A DIFFERENCE

Our certificates include:
Environmental Management ISO 14001:2016;
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, Underwritters 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.

The IEC certification is issued by Verband Deutscher Elektrotechniker, or VDE, and the UL certification by Canadian Standards Association, or CSA. All of our modules launched since the beginning of 2017 satisfy the latest standards, including IEC 61215, IEC61730 and UL 1703, 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, and the China General Certification Center of China.

CERTIFICATIONS

Quality, Environment Health & Safety Certifications	Product Testing Certifications	Product Highlights Certifications
· ISO9001:2015 · ISO14001:2016 · OHSAS18001:2007	· IIEC 61215 & IEC 61730:2005 · IEC 61215 & IEC 61730:2016 · UL 1703 & UL 790 & CEC · CE conformity, MCS (EN45011) · REACH Compliance	· Salt Mist Certificate · Ammonia Certificate · Blowing Sand Certificate · PID Certificate · Water Resistant IP67 · Fire C1D2

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	Membership
Australia	Smart Energy Council	Membership
Australia	Australian Industry Group	Membership
Africa	SAPVIA (South African Photovoltaic Association)	Membership
Brazil	ABINNE Brazil (Brazilian Electrical and Electronics Industry Association)	Membership
	ABSOLAR Brazil (Brazilian Association of Photovoltaic Solar Energy)	Membership
	ABGD Brazil (Brazilian Distributed Generation Association)	Membership
Canada	Canadian Solar Industries Associations (CanSIA)	Membership
Costa Rica	Acesolar Costa Rica	Membership
Columbia	SER Colombia (La Asociación de energías renovables Colombia	Membership
China	China PV Industry Association	Membership / Vice Director
	CCCMB (China Chamber of Commerce for import and Export of Machinery and Electronic Products	Membership
	SEMI – Industry association for the micro- and nanoelectronics industries, including PV	Membership
	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
	Japan builders network (JBN)	Membership
Mexico	Asolmex Mexico (Mexican Association of Photovoltaic Solar Energy)	Membership
Middle East	MESIA (Middle East Solar Association)	Membership
USA	Solar Energy Industries Association (SEIA)	Board
	Arizona SEIA (AriSEIA)	Membership
	Oregon SEIA (OSEIA) Tier 1	Tier 1
	California Solar and Storage Association	Membership

II. SCOPE OF THE REPORT

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

CS6X-P 50 MW India 2016

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 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.

GOVERNMENT & AUTHORITIES

Key concerns
· Policy delivery
· Compliance management
· Setting up standards for industries involved

Methods of engagement
· Meetings
· Regular statements and reporting
· Field work sampling or work instruction

Responsible party
· Investor relations
· EHS

PROF. ORGANIZATIONS

Key concerns
· Cooperation possibilities
· Agenda setting

Methods of engagement
· Direct contact
· Community contribution activities

Responsible party
· Legal
· Sales

CUSTOMERS

Key concerns
· Product and service quality
· After-sales support or warranty

Methods of engagement
· Sales process
· Service center
· Customer surveys
· Website
· Publicity
· Advertising
· Trade fairs

Responsible party
· Sales
· Marketing
· Service

SUPPLIERS

Key concerns
· Co-development
· Mutual growth
· Support for suppliers' CSR activities

Methods of engagement
· Supplier portal
· Supplier events
· Satisfaction surveys
· Proposal system
· Supplier code of conduct

Responsible party
· Sourcing
· Manufacturing

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

EMPLOYEES

Key concerns
· Staff involvement in corporate operations
· Solving staff disputes and ensuring employee'rights
· Staff career path development
· Working environment
· Responses to staff´s appeals

Methods of engagement
· Open communication
· Direct contact
· Training
· Intranet
· Newsletter

Responsible party
· HR

THE MEDIA

Key concerns
· Advertising campaigns
· PR topics
· Technical information

Methods of engagement
· Digital marketing
· Press releases

Responsible party
· PR
· Investor relations
· Marketing

INVESTORS

Key concerns
· Financial performance and significant information disclosure
· Company development

Methods of engagement
· Website and emails
· Presentations
· Direct contact
· Investor days

Responsible party
· Investor relations

COMMUNITIES

Key concerns
· 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

Methods of engagement
· 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

Responsible party
· Ehs in coordination with Manufacturing
· Local project pevelopment 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.canadiansolar.com/governance/highlights

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 briberies 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://investors.canadiansolar.com/static-files/417277b8-370e-4cd6-b8be-68254617d9f7

http://investors.canadiansolar.com/static-files/a9f5e39a-d849-47cd-99c5-35bbff07fc11

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 18 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 co-operation 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 uncompromising 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.

WE ARE HERE TO DO GOOD, WHILE DOING GOOD BUSINESS

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

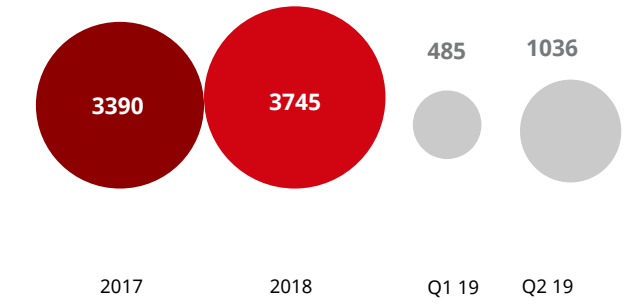
Our management views Environmental, Healthy and Safety (EHS) as central to our corporate strategy. We are committed to continuous improvement of our EHS policy and performance. The company has developed and implemented EHS management systems in the plants of Changshu Module, Suzhou Module, Suzhou Cell, 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, environmental and OHS management systems respectively.

All of our key products are ISO9001 quality management system certisified.

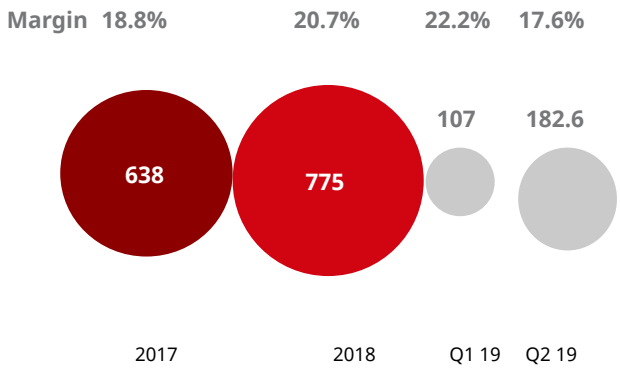
VI.A.
ECONOMIC ASPECTS

ECONOMIC PERFORMANCE

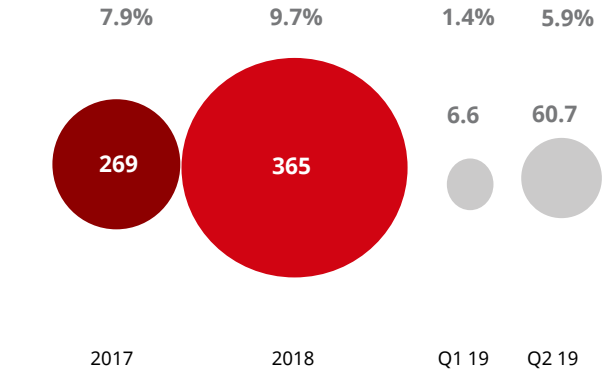
Revenue – USD$ million



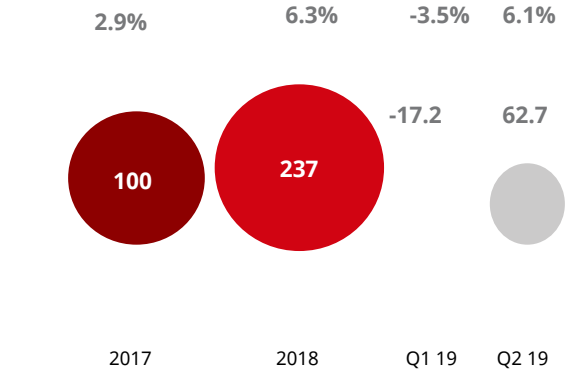
Gross Profit – USD$ million



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 2018. 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, 2014, 2015 ,2016, 2017 and 2018; balance sheet data as of December 31, 2014, 2015, 2016, 2017 and 2018 have been derived from our consolidated financial statements in our annual reportseach 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, 2018

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

Excerpt from page 4 of the Canadian Solar 2018 Annual Report.

	2014	2015	2016	2017	2018
Statement of operations data					
Net revenues	2,960,627	3,467,626	2,853,078	3,390,393	3,744,512
Income from operations	366,314	247,371	93,164	269,345	364,657
Net income	243,887	173,316	65,275	102,983	242,431
Net income attributeable to Canadian Solar Inc.	239,502	171,861	65,249	99,572	237,070
Earnings per share, basic	4.40	3.08	1.13	1.71	4.02
Shares used in computations, basic	54,408,037	5,728,903	57,524,349	58,167,004	58,914,540
Earnings per share, diluted	4.11	2.93	1.12	1.69	3.88
Shares used in computation, diluted	59,354,615	60,426,056	58,059,063	61,548,158	62,291,670
OTHER FINANCIAL DATA					
Gross margin	19.6%	16.6%	14.6%	18.8%	20.7%
Operating margin	12.4%	7.1%	3.3%	7.9%	9.7%
Net margin	8.2%	5.0%	2.3%	3.0%	6.5%

FOR THE YEARS ENDED, OR AS OF, DECEMBER 31, 2018

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

Excerpt from page 5 of the Canadian Solar 2018 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.

	2014	2015	2016	2017	2018
Selected operating data: Solar power products sold (in MW)					
MSS segment (1)	2,436.4	4,085.0	5,138.1	6,538.8	5,916.1
Energy segment (2)	376.2	298.8	65.7	354.3	901.1
Total	2,812.6	4,383.8	5,203.8	6,893.1	6,817.2
Average selling price (in $ per watt) Solar module business	0.67	0.58	0.51	0.4	0.34
BALANCE SHEET DATA					
Net current assets (liabilities)	366,621	-392,231	69,697	-22,709	125,964
Total assets	3,068,115	4,413,928	5,406,606	5,889,627	4,892,658
Net assets	729,574	832,510	899,390	1,059,775	1,272,845
Long-term borrowings	134,300	606,577	493,455	404,341	393,614
Convertible notes	145,691	146,674	125,569	126,476	127,428
Common shares	675,236	677,103	701,283	702,162	702,931
Number of shares outstanding	55,161,856	55,965,443	57,830,149	58,496,685	59,180,624

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 warrantied to last 25 years and beyond.

QUALITY OUR CUSTOMERS CAN BELIEVE IN

· 10-year limited product warranty
· 25- or 30-year limited power output warranty

For Ku Modules:

- During the first year, Canadian Solar warrants the actual power output of the module will be no less than 97.5% of the labeled power output
- From year 2 to year 25, the actual annual power decline will be no more than 0.6%
- By the end of year 25, the actual power output will be no less than 83.1% of the labeled power output

For Bifacial Modules:

Actual power output of the module when illuminated on the front side at Standard Testing Conditions:

- During the first year, Canadian Solar warrants the actual power output of the module will be no less than 97.5% of the labeled power output
- From year 2 to year 30, the actual annual power decline will be no more than 0.5%
- By the end of year 30, the actual power output will be no less than 83% of the labeled power output

Actual power output of the module when illuminated on the rear side at Standard Testing Conditions: Canadian Solar warrants the actual power output of the module at Standard Testing Conditions will be no less than the power bifaciality of the respective product, as specified in the applicable datasheet, multiplied by the warranted "actual power output of the module when illuminated on the front side at Standard Testing Condition" as defined in the paragraph above.

For Double glass modules

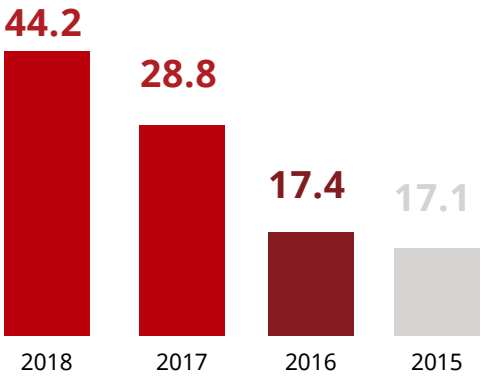
For Polycrystalline and Monocrystalline PERC Modules:

- During the first year, Canadian Solar warrants the actual power output of the module will be no less than 97.5% of the labeled power output.
- From year 2 to year 30, the actual annual power decline will be no more than 0.5%
- By the end of year 30, the actual power output will be no less than 83% of the labeled power output.

*Please refer to Canadian Solar's Module Limited Warranty Statements for more details.

RESEARCH & DEVELOPMENT INNOVATION

INVESTMENT IN RESEARCH & DEVELOPMENT IN MILLION $USD



The above table is taken from page 83 of the 2018 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 consistantly acchieved improvements in solar cell efficiency and cost, leading to affordable panels that can harness more of the sun's energy.

As of June, 2019, more than 2,248 global patents have been filed, of which 1,323 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, 2018, we had 572 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 22.80%,

BIFACIAL MODULE POWER UP TO 559 W SINGLE FACIAL MODULE POWER UP TO 430 W

1323 PATENTS AWARDED AS OF JUNE 2019

572 STAFF IN SOLAR TECHNOLOGY R&D

CS6U-P 500kW Pakistan University of Central Punjab 2018

Bifacial CS3U-PB-FG 100MW Wuhai China 2018

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 commited to implementing policies and government directives that help minimize negative environmental impacts, as disclosed in our 2018 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 withour 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.

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 TO 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 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 condensate water, and preliminarily-treated wastewater. This water is used for washing, heating, cooling, cleaning and gardening.

We conduct quarterly test 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 2018, we treated 4,303,301 m^3 of waste water 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. Luoyang Cell Factory:
In order to filter the concentrated water generated during cell production, Luoyang Cell Factory uses a series of measures to increase the concentrated water recovery rate, including GHP-D backwash water, ultrafiltration system backwash water and washing discharge water. 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. Then the filtered reclaimed water can be used for the degumming process and plant watering, saving 3,000 tons of water per day.

2. Baotou Cell Factory:
The factory also uses reclaimed water recycling facilities and concentrated water recovery facilities.
With the precision filter, the reclaimed water can be recycled and reused in production plant when it reach the related water quality standards. The factory can recycle 700 tons of waste water per day, and save 255,500 tons of water annually.

The factory filtered 100 tons of concentrated water per day. The filtered water were used for cell production and toilet flushing. Concentrated water recovery facilities can treat the concentrated water from cell production and recycle it again. It can save 336,500 tons of water annually.

3. Baotou Wafer Factory:
The factory uses the residual heat from the ingot furnace to provide the heating for plants and office buildings. During the local heating season which last for 6 months, it can increase the indoor temperature by 10 degrees Celsius, and save the usage of 21,310 m^2 natural gas per month. It can also reduce the electricity consumion by 4,320 kWh during the whole heating season, as one of the hot water circulating pumps can be replaced by the system.

The factory rebuilt the lighting systems in its switching room and power station by adding time switches and contactors to the original switches, so the lighting system can turn on and off automatically. It saved 1,728 kWh of electricity per month.

4. Suzhou Cell Factory：
In 2018, Suzhou Cell Factory used individual humidifiers to replace the steam to keep the humidity inside workshops. It reduced the steam consumion and reduced carbon emissions.

5. Funing Cell Factory：
In 2018, the factory upgraded the waste water treatment technology. The original triple effect evaporators were replaced by high-performance nitrogen removal equipment to reduce energy consumion.

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	2018	2017	2016
Total materials used (in metric tons)	571,008	464,075	349,486
... materials purchased from external suppliers	93,380	36,092	17,129
... materials obtained from internal sources	477,934	427,962	332,341
... non-renewable materials	499,228	401,680	301,900
... recycled input materials use	66,852	61,678	47,252
... recycled input materials as a % of total materials used	11.7%	13.3%	13.5%

2018	China	Canada	Brazil
Total materials used (in metric tons)	492,676	6,987	1,024
... materials purchased from external suppliers	43,776	108	1,024
... materials obtained from internal sources	448,900	7,186	-
... non-renewable materials	429,730	5,769	-
... recycled input materials use	62,946	1,406	-
... recycled input materials as a % of total materials used	12.8%	20.1%	-

2018	Thailand	Vietnam	Indonesia
Total materials used (in metric tons)	44,790	21,439	4,092
... materials purchased from external suppliers	44,476	-	3,997
... materials obtained from internal sources	314	21,439	96
... non-renewable materials	44,790	18,939	-
... recycled input materials use	-	2,500	-
... recycled input materials as a % of total materials used	-	11.7%	-

NOTE :

1. Internal sources is a reference to domestic procurement procedures.

ENERGY CONSUMPTION

Global	2018	2017	2016
Energy consumption – Total kWh consumed	43,225,038	49,308,589	32,113,078
... of which gas	3,690,639	48,747	0.00
... of which diesel	590,664	643,856	346,680
... of which gasoline	185,876	992,580	158,555
... of which steam	38,757,858	47,623,406	31,114,095
Total electricity consumed – kWh	686,593,504	499,704,557	318,838,285
Self-generated electricity in kWh	267,681,872	287,639,991	234,538,260
Proportion of renewable energy produced relative to total energy consumed in %	38.99%	57.56%	73.56%

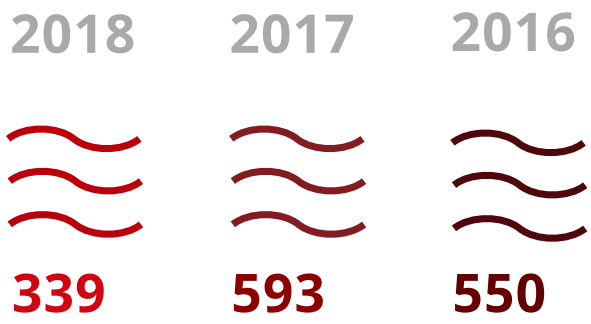
2018	China	Canada	Brazil
Energy consumption – Total kWh consumed	43,225,038	0.0	0.0
... of which gas	3,690,639	0.0	0.0
... of which diesel	590,664	0.0	0.0
... of which gasoline	185,876	0.0	0.0
... of which steam	38,757,858	0.0	0.0
Total electricity consumed – kWh	570,752,075	77,485	1,482,844
Self-generated electricity in kWh (from own PV systems) fed into the grid	267,681,872	0.0	0.0
Proportion of renewable energy produced relative to total energy consumed in %	46.90%	0%	0%

2018	Thailand	Vietnam	Indonesia
Energy consumption – Total kWh consumed	0.0	0.0	0.0
... of which gas	0.0	0.0	0.0
... of which diesel	0.0	0.0	0.0
... of which gasoline	0.0	0.0	0.0
... of which steam	0.0	0.0	0.0
Total electricity consumed – kWh	103,824,400	8,616,824	1,839,876
Self-generated electricity in kWh (from own PV systems) fed into the grid	0.0	0.0	0.0
Proportion of renewable energy produced relative to total energy consumed in %	0.0%	0.0%	0.0%

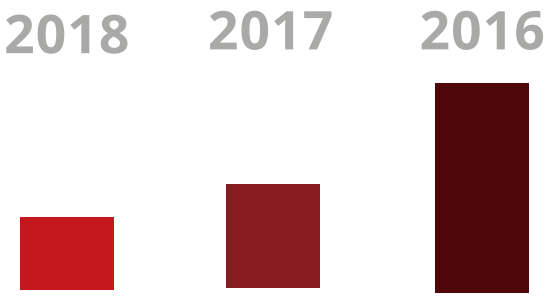
GLOBAL WATER CONSUMPTION

	2018	2017	2016
Total water withdrawal in m³	6,340,237	6,301,226	2,459,296
... municipal water supply	6,332,677	6,286,202	2,435,115
... surface water	0	0	0
... rainwater	0	0	0
... ground water	7,560	15,024	24,180
Total water use in m³/MW	339	593	550

GLOBAL WATER USE OF ALL PLANTS IN TONS PER MW REDUCED BY 38%% IN THREE YEARS



**GLOBAL WASTEWATER DISCHARGE VOLUME IN M³ PER MW PRODUCED.
A REDUCTION OF OVER 25.8% IN ONLY THREE YEARS.**



Total Discharge Volume in m³	4, 303, 301	2, 311, 652	1, 387, 238
Discharge Volume in m³/MW produced	**230**	**217**	**310**

WATER CONSUMPTION

2018 Water Consumed	China	Canada	Brazil
Total water withdrawal in m³	5,372,823	6,468	3,260
... of which water from municipal water supply	5,372,823	6,468	3,260
... of which surface water	0	0	0
... of which rainwater	0	0	0
of which ground water	0	0	0

2018 Water Consumed	Thailand	Vietnam	Indonesia
Total water withdrawal in m³	943,559	6,567	7,560
... of which water from municipal water supply	943,559	6,567	0
... of which surface water	0	0	0
... of which rainwater	0	0	0
... of which ground water	0	0	7,560

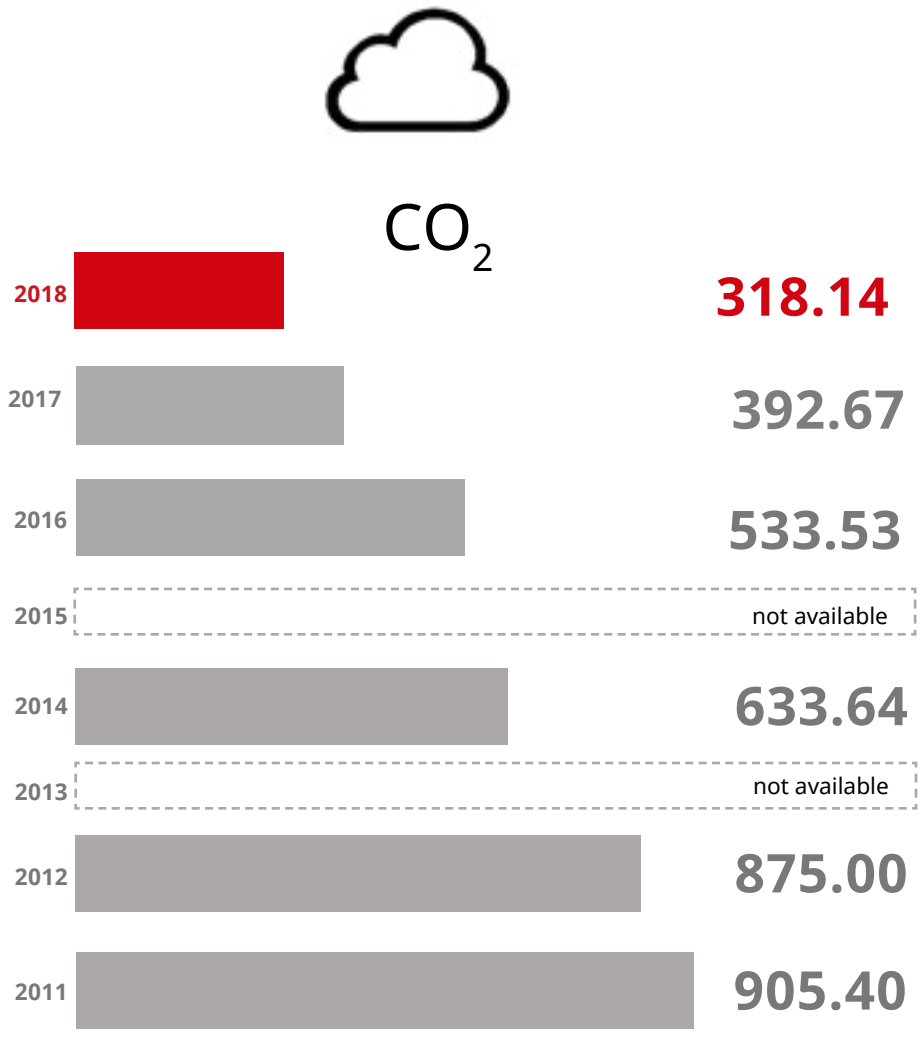
WATER RECYCLED AND REUSED

Global	2018	2017	2016
Water recycled/reused in m³	1,410,363	1,637,176	940,680
Total wastewater discharge in m³	4,303,301	2,323,394	1,392,798

2018 Water Recycled and Reused	China	Canada	Brazil
Water recycled/reused in m³	1,410,363	0	0
Water recycled/reused as % of total water withdrawal	26.2%	0	0
Total wastewater discharge in m³	3,950,931	0	1,883

2018 Water Recycled and Reused	Thailand	Vietnam	Indonesia
Water recycled/reused in m³	0	0	0
Water recycled/reused as % of total water withdrawal	0	0	0
Total wastewater discharge in m³	345,233	5254	0

CO_2 EMISSIONS IN KG PER KW PRODUCED



Our CO_2 emissions per kW of solar modules produced decreased by 65% over the past 7 years. 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 2016 and 2017, Canadian Solar continues to carry out the recommendations put forth by Solstyce, Smartgreenscans and Certisolis to improve product efficiency and lower carbon emissions. In 2018, we co-operated with Certisolis again to track and analyze the GHG emissions for per kW module produced.

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

Air emissions - Global	2018	2017	2016
Total Hazardous air pollutants – Tons Emitted	70.45	41.56	16.97
Total Hazardous air pollutants – Tons / MW	0.004	0.004	0.004
NOX – Tons Emitted	41.41	30.34	12.33
NOX – Tons / MW	0.002	0.003	0.003
Fine dust (PM10) – Tons Emitted	7.82	3.70	0.87
Fine dust (PM10) – Tons / MW	0.0004	0.0003	0.0002
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	0.19	0.08	0.06
SOX – Tons / MW	0.00001	0.00001	0.00001
Exhaust gas and fugitive emissions – Tons Emitted	0.23	0.16	0.01
Exhaust gas and fugitive emissions – Tons / MW	0.0000121	0.00002	0.00000
VOC – Tons Emitted	3.31	12.27	1.62
VOC – Tons / MW	0.00018	0.0012	0.0004
Other standard air emissions – Tons Emitted	17.64	2.65	3.94
Other standard air emissions – Tons / MW	0.000944	0.0002	0.001

OVERVIEW OF TOP SUPPLIERS FOR CANADIAN SOLAR 2018

Top 3 Suppliers	Wafer	Cell	EVA	Backsheet	Glass	Aluminum Frame	Junction Box
1	GCL	Inventec	First	Cybird	Xinyi	Mihuang	Tlian
2	RIETECH	Shunfeng	Tegu	First	Caihong	Yurun	Friends
3	Longi	Fortune	3M	Crown	Ancai	Hongxi	/
% of materials from the top 3 suppliers	**87%**	**65%**	**95%**	**85%**	**53%**	**82%**	**100%**

ENVIRONMENTAL DATA OF TOP-3 WAFER SUPPLIERS 2018

	GCL	Rietech	Longi
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	90,360	12,390	14,388
Products sold to Canadian Solar (tons)	5,422	804.64	143.88
% of products supplied to Canadian Solar	6%	6.49%	1%
ENERGY CONSUMPTION			
Total energy consumption (kWh)	802,966,065	273,762,253	N/A
Energy consumption per t	8,886	22,095	N/A
WATER CONSUMPTION			
Total water consumption (m^3)	2,506,821	1,480,390	N/A
Water consumption per t	27.74	119.48	N/A
WATER RECYCLED AND REUSED			
Total water recycling (m^3)	2,033,360	284,131	N/A
Water recycling per t	23	23	N/A
GREENHOUSE GAS EMISSIONS			
CO_2 emissions (tons)	109,335.60	193,846.54	N/A
CO_2 emissions per t	1.21	15.65	N/A
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO_x (t)	16.70	0.30	N/A
Fine dust PM10 (t)	7.12	1.15	N/A
SO_x (t)	0	0	NA
Exhaust gas and fugitive emissions (t)	0	NA	NA
VOC (t)	0	NA	NA
Other standard air emissions (t)	0	NA	NA

ENVIRONMENTAL DATA OF TOP-3 CELL SUPPLIERS 2018

	Inventec	Shunfeng	Fortune Energy
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	4,725	4,500	3,548
Products sold to Canadian Solar (tons)	1,134	900	534
% of products supplied to Canadian Solar	24%	20%	15%
ENERGY CONSUMPTION			
Steam (tons)	89,714,400	66,000,000	78,766,680
Diesel (tons)	18,987	14,667	22,203
WATER CONSUMPTION			
Total water consumption (m^3)	767,126	850,000	863,247
Water consumption per t	162	189	243
WATER RECYCLED AND REUSED			
Total water recycling (m^3)	117,672	200,000	19,053
Water recycling per t	25	44	5
GREENHOUSE GAS EMISSIONS			
CO_2 emissions (tons)	52,485	42,025.88	55,412
CO_2 emissions per t	11.1	9.3	15.6
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO_x (t)	NA	NA	N/A
Fine dust PM10 (t)	NA	NA	N/A
SO_x (t)	NA	NA	N/A
Exhaust gas and fugitive emissions (t)	NA	NA	N/A
VOC (t)	NA	NA	N/A
Other standard air emissions (t)	NA	NA	N/A

ENVIRONMENTAL DATA OF TOP-3 EVA SUPPLIERS 2018

	First	Tegu	3M*
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	65,000.0	8,571.0	27,000.0
Products sold to Canadian Solar (tons)	12,268.0	8,565.0	3,196.0
% of products supplied to Canadian Solar	19%	100%	12%
ENERGY CONSUMPTION			
Total energy consumption (kWh)	21,632,349	3,275,035	9,030,876
Energy consumption per t	332.8	382.1	334.5
WATER CONSUMPTION			
Total water consumption (m^3)	132,642	20,257	7,482
Water consumption per t	2.0	2.4	0.3
WATER RECYCLED AND REUSED			
Total water recycling (m^3)	112,648	0.0	7,128
Water recycling per t	1.7	0.0	0.3
GREENHOUSE GAS EMISSIONS			
CO_2 emissions (tons)	28,621	3,265	8,165
CO_2 emissions per t	0.4	0.4	0.3
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO_x (t)	8.1	0.0	3.3
Fine dust PM10 (t)	0.4	0.0	1.1
SO_x (t)	0.0	0.0	0.0
Exhaust gas and fugitive emissions (t)	0.0	0.0	0.0
VOC (t)	8.0	0.2	0.2
Other standard air emissions (t)	0.0	0.0	0.0

* Besides EVA, 3M also produces other products, so the energy, water and air emissions consumption for production one ton of EVA cannot be calculated exactly.

ENVIRONMENTAL DATA OF TOP-3 ALUMNINUM FRAME SUPPLIERS 2018

	Mihuang	Yurun	Haihong
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	65,500	22,800	35,000
Products sold to Canadian Solar (tons)	16,000	12,000	3,000
% of products supplied to Canadian Solar	23%	22%	8%
ENERGY CONSUMPTION			
Total energy consumption (kWh)	63,500,000	18,436,624	27,654,936
Energy consumption per t	969	809	790
WATER CONSUMPTION			
Total water consumption (m^3)	730,000	110,318	150,318
Water consumption per t	11.15	4.84	4.29
WATER RECYCLED AND REUSED			
Total water recycling (m^3)	563,000	77,222	110,033
Water recycling per t	8.60	3.39	3.14
GREENHOUSE GAS EMISSIONS			
CO_2 emissions (tons)	N/A	992	1,520
CO_2 emissions per t	N/A	0.04	0.04
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO_x (t)	0.00	1.90	1.77
Fine dust PM10 (t)	0.00	0.00	N/A
SO_x (t)	0	0.352	0.36
Exhaust gas and fugitive emissions (t)	0	0	N/A
VOC (t)	0	0	N/A
Other standard air emissions (t)	0	0.16	0.15

ENVIRONMENTAL DATA OF TOP-3 BACK SHEET SUPPLIERS 2018

	Cybird	First	Crown
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	47,774	22,500	29,000
Products sold to Canadian Solar (tons)	8,784	2,006	1,480
% of products supplied to Canadian Solar	0.22	0.09	0.05
ENERGY CONSUMPTION			
Total energy consumption (kWh)	13,714,947	6,075,000	7,565,880
Energy consumption per t	287.08	270.00	260.89
WATER CONSUMPTION			
Total water consumption (m^3)	77,306	36,826	135,300
Water consumption per t	1.62	1.64	4.67
WATER RECYCLED AND REUSED			
Total water recycling (m^3)	65,651	31,268	81,180
Water recycling per t	1.37	1.39	2.80
GREENHOUSE GAS EMISSIONS			
CO_2 emissions (tons)	20,528	10,264	14,500
CO_2 emissions per t	0.43	0.46	0.50
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO_x (t)	0.33	8.12	0.11
Fine dust PM10 (t)	0.16	0.41	0.04
SO_x (t)	0.00	0.00	0.01
Exhaust gas and fugitive emissions (t)	0.07	0.00	0.00
VOC (t)	0.43	0.35	0.00
Other standard air emissions (t)	0.00	0.00	0.00

ENVIRONMENTAL DATA OF TOP-3 GLASS SUPPLIERS 2018

	Ancai	Caihong	Xinyi
PRODUCTION			
TOTAL ANNUAL PRODUCTION (TONS)	334,283	384,000	1,184,300
Products sold to Canadian Solar (tons)	56,142	49,920	131,005
% of products supplied to Canadian Solar	17%	13%	11%
ENERGY CONSUMPTION			
Total energy consumption (kWh)	183,023,571	182,874,000	772,163,600
Energy consumption per t	548	476	652
WATER CONSUMPTION			
Total water consumption (m^3)	1,823,470	1,347,000	3,103,932
Water consumption per t	5.45	3.51	2.62
WATER RECYCLED AND REUSED			
Total water recycling (m^3)	1,458,776	N/A	50,900,688
Water recycling per t	4.36	N/A	42.98
GREENHOUSE GAS EMISSIONS			
CO_2 emissions (tons)	N/A	N/A	N/A
CO_2 emissions per t	N/A	N/A	N/A
NO_x, SO_x AND OTHER SIGNIFICANT AIR EMISSIONS			
NO_x (t)	145.00	204	1030.48
Fine dust PM10 (t)	14.00	12	79.15
SO_x (t)	60	47	202.88
Exhaust gas and fugitive emissions (t)	0	N/A	N/A
VOC (t)	0	N/A	N/A
Other standard air emissions (t)	0	N/A	N/A

ENVIRONMENTAL DATA OF TOP-2 JUNCTION BOX SUPPLIERS 2018

	Tlian	Friend
PRODUCTION		
TOTAL ANNUAL PRODUCTION (TONS)	4,255	2,358
Products sold to Canadian Solar (tons)	4,255	1,886
% of products supplied to Canadian Solar	100%	80%
ENERGY CONSUMPTION		
Total energy consumption (kWh)	4,619,181	2,610,000
Energy consumption per t	1,086	1106
WATER CONSUMPTION		
Total water consumption (m^3)	20,258	405
Water consumption per t	4.76	0.18
WATER RECYCLED AND REUSED		
Total water recycling (m^3)	2700	364.5
Water recycling per t	0.63	0.15
GREENHOUSE GAS EMISSIONS		
CO_2 emissions (tons)	3640	2906
CO_2 emissions per t	0.86	1.23
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	0
VOC (t)	0.03	0
Other standard air emissions (t)	0	0

WASTE AND RECYCLING

IN 2018, DUE TO THE INCREASE IN PRODUCTION, OUR WASTE GENERATED INCREASED. HOWEVER, THE AMOUNT OF WASTE PRODUCED PER WATT HAS DECREASED, AS DISCLOSED IN THE "ENVIRONMENTAL TARGETS" SECTION.

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 2018

Waste generation / Factory	Baotou Wafers	Baotou Modules	Luoyang Wafers	Luoyang Modules
Total solid waste generated – Metric tons	2817.90	106.20	18240.58	4699.81
Total solid waste recycled – Metric tons	2807.14	102.51	9023.58	4210.00
Percent solid waste recycled – %	1.00	0.97	0.49	0.90
Solid waste generated – Tons / MW	1.97	1.66	4.74	3.42
Total hazardous waste generated – Metric tons	10.76	3.69	3.04	5.72
Total hazardous waste recycled – Metric tons	10.76	0.00	2.52	4.88
Percent hazardous waste recycled – %	1.00	0.00	0.83	0.85
Total hazardous waste generated Tons / per MW	0.01	0.06	0.0008	0.0042

Waste generation / Factory	Funing Cells	Dafeng Modules	Suzhou Cells	Suzhou Modules	Changshu Modules	Yanchen Cells
Total solid waste generated – Metric tons	9908.25	192.68	13039.17	835.40	21898.96	188.143
Total solid waste recycled – Metric tons	7567.37	192.28	7402.64	615.68	21867.44	39.823
Percent solid waste recycled – %	0.76	1.00	0.57	0.70	1.00	21.17
Solid waste generated – Tons / MW	5.14	1.21	5.98	1.51	6.33	1.38
Total hazardous waste generated – Metric tons	2205.88	0.04	5636.53	6.00	35.11	0.00
Total hazardous waste recycled – Metric tons	1037.11	0.00	0.00	0.00	31.52	0.00
Percent hazardous waste recycled – %	47.02	0.00	0.00	0.00	0.90	0.00
Total hazardous waste generated Tons / per MW	1.15	0.00	2.59	0.01	0.01	0.00

Waste generation / Factory	Taiwan Modules	Thailand	Indonesia	Vietnam	Brazil	Canada
Total solid waste generated – Metric tons	65.57	9460.14	2.10	527.00	5493.62	87.10
Total solid waste recycled – Metric tons	23.67	4277.95	0.00	481.07	3331.55	43.50
Percent solid waste recycled – %	0.36	0.45	0.00	0.91	0.61	0.50
Solid waste generated – Tons / MW	3.31	0.06	0.06	1.62	0.19	1.13
Total hazardous waste generated – Metric tons	0.90	2909.89	NA	20.78	212.87	0.00
Total hazardous waste recycled – Metric tons	0.00	2874.20	0.00	4.90	59.32	0.00
Percent hazardous waste recycled – %	0.00	0.99	0.00	0.24	0.28	0.00
Total hazardous waste generated Tons / per MW	0.05	0.21	0.00	0.06	0.01	0.00

HAZARDOUS WASTE DISPOSAL
2018

Suzhou Cell, China	paste wiper (t)	waste oil (t)	empty oil drum (t)	waste activated carbon (t)	waste tube （peace）	(POCL3) waste activated carbon (t)"	sludge (contain F-) (t)	Waste salt (t)
Total	2.0800	2.70	0.35	16.70	0.24	2	1648.26	3966.2
Collection frequency	Monthly	Quarterly	Monthly	Quarterly	Annual	Quarterly	Daily	Daily
Contractor contractorcontractor	The Environmental Protection Service Center of SND				Suzhou Wei Xiang Electronic Waste Treatment Technology Ltd	Everbright Environmental Protection Solid Waste Disposal (Suzhou) Co., Ltd		
Treatment method	Incineration				Recycle	Landfill		
Disposal facility location	No. 47 Tongdun Street, Suzhou New District				No. 1468, Xiangjiang Road, SND	Qi Zi Village,Mudu Town , Wuzhong District, Suzhou		

Suzhou Modules, China	Waste cloth oil wiper (t)	Waste oil duster (t)	Waste waste organic solvent (t)	Waste activated carbon (t)	Empty oil barrel (t)
Total	3.81	0.242	0.973	0.1	0.874
Collection frequency	Irregularly				
Name of contractor	The Environmental Protection Service Center of SND				
Treatment method	Incineration				
Disposal facility location	No. 47 Tongdun Street, Suzhou New District				

HAZARDOUS WASTE DISPOSAL
2018

Changshu Modules, China	Waste mineral oil (t)	Waste oil duster (t)	Waste organic solvent (t)	Waste activated carbon (t)	Empty oil barrel (t)
Total	27.98	0	1.4	0	2.14
Collection frequency	Irregularly	Irregularly	Irregularly	Irregularly	Irregularly
Name of cont-ractor	Huaian Xingyu Recycle Co., Ltd	Jiangsu Kangbo Industrial Solid Waste Treatment Co., Ltd			
Treatment method	Recycle	Incineration			
Disposal facility location	No. 2 Shantou East Road, Huaian Economic Develop District	No. 102, Changchun Road , Economic Development District, Changshu			

Funing Cells, China	Waste silver size (t)	Waste alu-minium size (t)	Paste wiper (t)	Waste mi-neral oil (t)	Waste activated carbon (t)	Waste silver sludge (t)	Waste sil-ver salt (t)	Sludge (con-tain F-) (t)
Total	0.5509	5.134	0.526	33.898	2.61	997	1166.16	7135.35
Collection frequency	Irregularly							Monthly
Name of contractor	Kunshan Hongfutai	Huaian Wuyang	Kunshan Hongfutai	Jiangsu Senmao	Yancheng Qian	Huaian Wuyang	Yancheng Qian	Yancheng Huahong
Treatment method	Others	Others	Others	Recycle	Incineration	Others	Landfill	Recycle
Disposal faci-lity location	No. 89 Changyang Zhi Road, New District, Kunshan	No. 8 Kai-ming Road, Qingpu Industry Dis-trict, Huaian	No. 89 Ch-angyang Zhi Road, New District, Kunshan	Ziwei Road, Xuyu	Aoyang In-dustry Park, Funing	No. 8 Kaiming Road, Qingpu Industry District, Huaian	Aoyang Industry Park, Fun-ing	Tianshe Village, Shizhuang, Funing

HAZARDOUS WASTE DISPOSAL
2018

Luoyang Wafers & Modules, China	Waste Oil (t)	Waste organic solvent (t)
Total	7.395	3.14
Collection frequency	Annually	Annualy
Name of contractor	Luoyang Dexing	Henan Zhonghuanxin
Treatment method	Recycle	Incineration
Disposal facility location	Hazardous waste wharehouse	Hazardous waste wharehouse

Baotou Wafers & Modules, China	Waste oil (t)	Waste mortar (t)
Total	10.756	40
Collection frequency	Monthly	Monthly
Name of contractor	Inner Mongolia Jiurui	Jiangxi Shengeng
Treatment method	Recycle	Recycle
Disposal facility location	Hazardous waste wharehouse	Hazardous waste wharehouse

HAZARDOUS WASTE DISPOSAL
2018

Vietnam	Waste paste wiper (t)	Waste tube (t)	Waste oil (t)	Waste organic solvent (t)	Plastic barrel (t)	Iron barrel (t)
Total	1.26	0.02	3.00	0.20	0.20	5.00
Collection frequency	Monthly					
Name of contractor	Dai Thang Co,Ltd					
Treatment method	Incineration					
Disposal facility location	No 318 - To Hieu Street - Le Chan District - Hai Phong City					

Thailand	Waste mineral oil (t)	Iron barrel (kg)
Total	11,707.00	101.8
Collection frequency	Every 2 months	
Name of contractor	Professional Waste Technology (1999) Public Company Limited	
Treatment method	Fuel blending	Landfill
Disposal facility location	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"

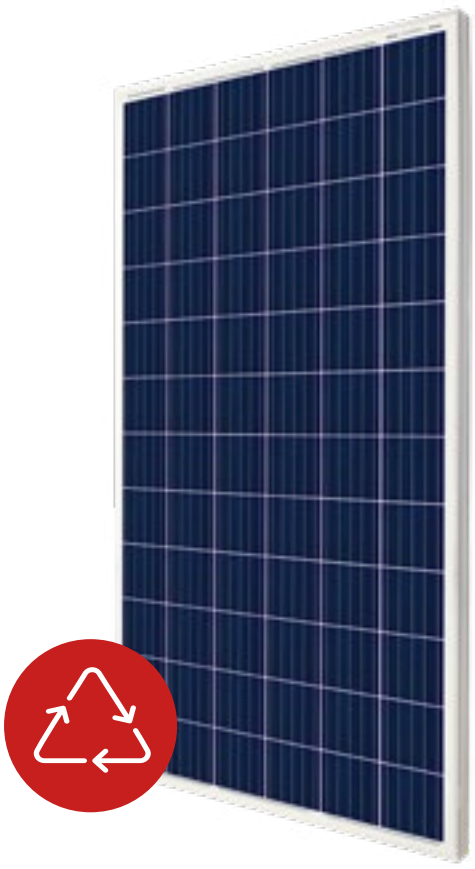
SOLAR PANEL RECYCLING

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 or cell phones.

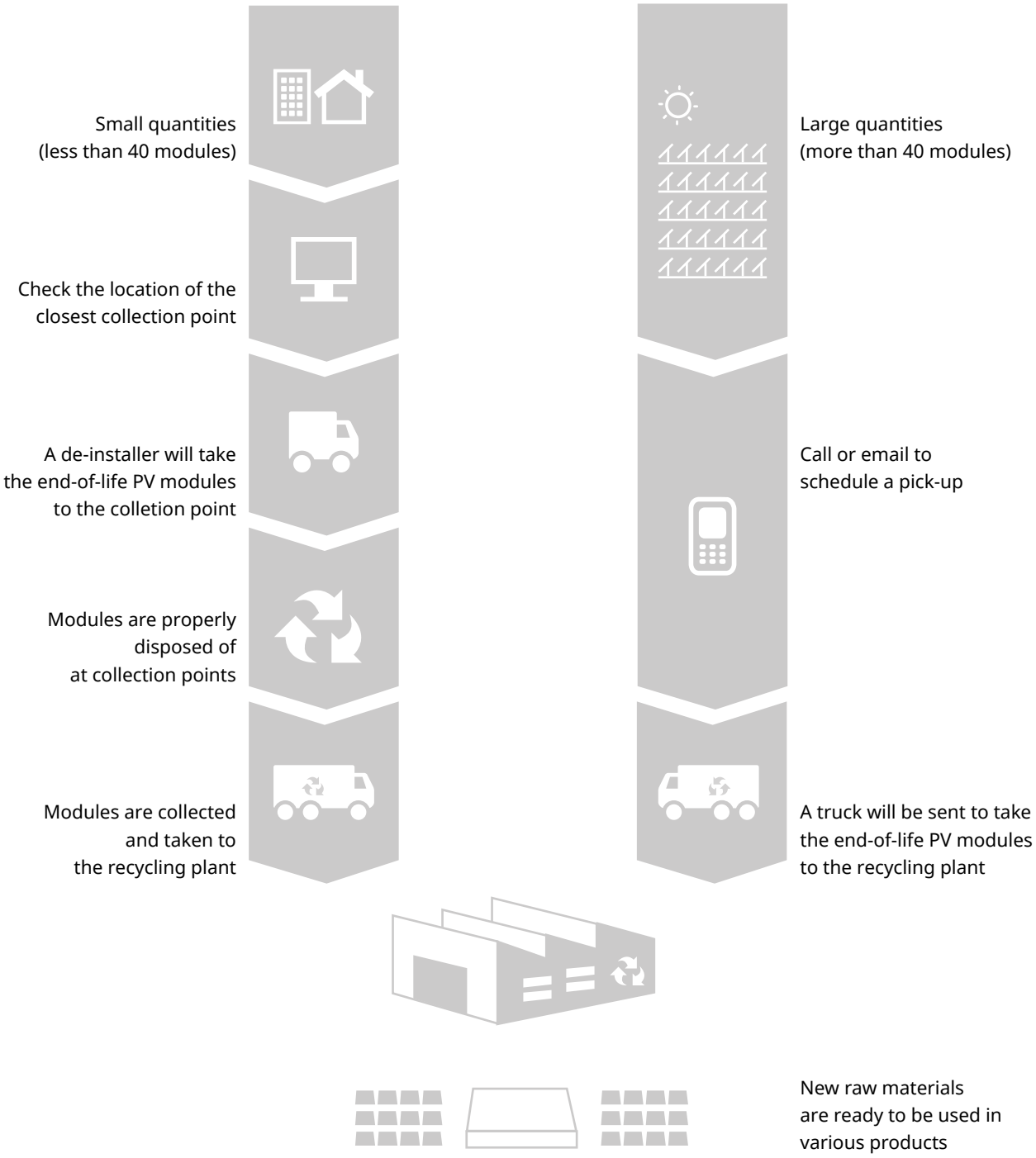
Canadian Solar is working closely with recycling service providers, such as Take-e-way and PV Cycle, to ensure that all legal WEEE obligations towards its customers are satisfied and appropriate market import actions are followed.

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

The crystalline panels are composed of: aluminum, glass and silicon. Over 90% of the panel materials can be recycled. 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. This program will also build sensible awareness for the development of solar industry in minimizing effects of waste materials produced.

SEIA PV RECYCLING PROGRAM IN US

Since 2016, Canadian Solar has been a member of the SEIA PV Recycling Program. From the program administrator: Many of SEIA's solar manufacturers and developers –including First Solar, Flex, JinkoSolar, Tesla, Canadian Solar, SFCE, SunPower and Trina – are working together to create a network of recyclers who can properly handle PV waste and ensure waste is not sent to landfills. By pooling our resources and proactively developing a PV waste management infrastructure, the solar industry will be able to offer the most cost-effective PV recycling solutions through recycling services priced at aggregated volumes versus smaller batched numbers.

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. Luoyang Cell Factory:
The Luoyang Cell 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.

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

2.Baotou Cell Factory:
The factory uses the reclaimed water recycling facilities and concentrated water recovery facilities.
With precision filters, the factory recycled and reused 700 tons of reclaimed water per day, saving 255,500 tons of water annually. The concentrated water recovery facilities can recycle 100 tons of concentrated water per day and save 336,500 tons water annually. The factory collected and reused 35,000 styrofoam boxes for packaging and reduced the environmental pollution made from waste packaging materials.

4.Baotou Wafer Factory:
The factory uses the residual heat from the ingot furnace to provide the heating for plants and office buildings. During the local heating season lasting for 6 months, it can save 21,310 m^3 natural gas per month and reduce the electricity consumion by 4,320 kWh. The factory added time switches and contactors its switching room and power station, so the lighting system can turn on and off automatically and can save 1,728 kWh of electricity per month. The factory recycled the pallets from the packages of primary silicon & crucibles, and reused them to contain ingots. It saved the consumption of 167 pallets per month.

5.Suzhou Cell Factory
In 2018, Suzhou Cell Factory used individual humidifiers to replace steam to keep the humidity inside workshops. It reduced the steam consumion 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 consumion. 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 & Ping-pong

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

Thecommunities where our facilities and projects are located are important to us. Every community is unique, so our team works closely with local stakeholders 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 pleasent 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 19 countries and created more than 13,000 jobs so far. Currently, over 36 GW of Canadian Solar photovoltaic products are used in industrial, commercial, residential, and other markets across more than 160 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 2018

65%

35%

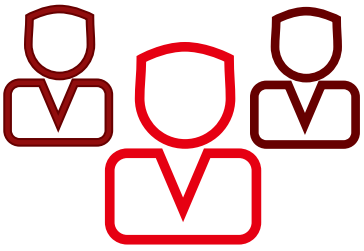
GLOBAL WORKFORCE COMPOSITION	2018	2017	2016	2015
Total employees	**13,034**	**12,473**	**9,724**	**8,969**
Women	4,563	4,384	3,446	3,082
percentage	35%	35%	35%	34%
Men	8,471	8,089	6,278	5,887
percentage	65%	65%	65%	65%
Below age 30	6,733	7,376	6,243	5,919
percentage	52%	59%	64%	66%
Age 30 and above	6,301	5,097	3,481	3,050
percentage	48%	41%	36%	33%
Length of service ≤3 years	10,074	9,565	7,196	6,522
percentage	77%	77%	59%	65%
Length of service > 3 years	2,960	2,908	2,528	2,447
percentage	23%	23%	26%	27%

WORKFORCE COMPOSITION IN 2018	China	Thailand	Vietnam	Indonesia
Total employees	**10,578**	**954**	**516**	**53**
Women	3,457	583	195	16
percentage	33%	61%	38%	30%
Men	7,121	371	321	37
percentage	67%	39%	62%	70%
Below age 30	5,608	634	322	39
percentage	53%	66%	62%	74%
Age 30 and above	4,970	320	194	14
percentage	47%	34%	38%	26%
Length of service ≤3 years	7,983	954	512	48
percentage	75%	100%	99%	91%
Length of service > 3 years	2,595	0	4	5
percentage	25%	0%	1%	9%

WORKFORCE COMPOSITION IN 2018	Americas	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Australia, Korea)
Total employees	**439**	**156**	**235**	**103**
Women	154	49	72	37
percentage	35%	31%	31%	36%
Men	285	107	163	66
percentage	65%	69%	69%	64%
Below age 30	85	17	8	20
percentage	19%	11%	3%	19%
Age 30 and above	354	139	227	83
percentage	81%	89%	97%	81%
Length of service ≤3 years	279	86	132	80
percentage	64%	55%	56%	78%
Length of service > 3 years	160	70	103	23
percentage	36%	45%	44%	22%

WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER

Total headcount



2018 **13,034**
2017 **12,473**
2016 **9,724**
2015 **8,969**
2014 **8,539**

GLOBAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER	2018	2017	2016	2015
Total headcount (excl. temporary workers or part time workers)	12,418	11,288	9,724	8,969
Employees excl. trainees	12,343	10,923	9,565	8,515
... women	4,293	3,897	3,390	2,981
... men	8,050	7,026	6,175	5,534
Trainees	75	365	159	454
... women	14	78	40	151
... men	61	287	119	303
Part-time workers	12	14	18	17
... women	6	7	2	6
... men	6	7	16	11
Temporary workers	604	1171,	551	579
... women	250	402	921	207
... men	354	769	1,868	372

GLOBAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER(2018)	China	Indonesia	Vietnam	Thailand
Total headcount (excl. temporary workers or part time workers)	10,048	53	516	932
Employees excl. trainees	9,988	53	516	932
... women	3,243	16	195	568
... men	6,745	37	321	364
Trainees	60	0	0	0
... women	10	0	0	0
... men	50	0	0	0
Part-time workers	1	0	0	0
... women	0	0	0	0
... men	1	0	0	0
Temporary workers	529	0	0	22
... women	204	0	0	15
... men	325	0	0	8

GLOBAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT AND GENDER(2018)	Americas	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Australia, Korea)
Total headcount (excl. temporary workers or part time workers)	388	146	235	100
Employees excl. trainees	380	140	235	99
... women	123	42	72	34
... men	257	98	163	65
Trainees	8	6	0	1
... women	1	2	0	1
... men	7	4	0	0
Part-time workers	2	9	0	0
... women	1	5	0	0
... men	1	4	0	0
Temporary workers	49	1	0	3
... women	29	0	0	2
... men	20	1	0	1

WE VIEW OUR EMPLOYEES AS FAMILY AND WE ARE EXCITED TO ANNOUNCE THAT 579 BABIES WERE BORN TO OUR STAFF IN 2018

PARENTAL LEAVE

Global	2018	2017	2016	2015
Women entitled to take parental leave	4,058	2,073	All	All
Men entitled to take parental leave	4,638	3,242	All	All
Women who took parental leave	211	182	147	142
Men who took parental leave	368	344	262	116
Percentage of employees who took parental leave	7%	10%	4%	3%
Return rate after parental leave (% of the total workforce)	86%	95%	92%	96%

Parental leave 2018	China	Indonesia	Vietnam	Thailand
Women entitled to take parental leave	3,040	2	24	807
Men entitled to take parental leave	4,248	19	25	0
Women who took parental leave	119	0	24	57
Men who took parental leave	334	0	25	0
Percentage of employees who took parental leave	6%	0%	4%	7%
Return rate after parental leave (% of the total workforce)	92%	0%	46%	72%

Parental leave 2018	Americas (total)	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Australia, Korea)
Women entitled to take parental leave	143	33	42	9
Men entitled to take parental leave	276	45	73	25
Women who took parental leave	4	5	1	1
Men who took parental leave	6	3	0	0
Percentage of employees who took parental leave	2%	10%	1%	4%
Return rate after parental leave (% of the total workforce)	100%	100%	0%	100%

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.

675,401 HOUR TRAININGS

43,266 PERSON-TIMES TRAININGS IN 2018

TRAINING PROGRAMS

Global	2018	2017	2016	2015
Number of hours spent on training (total)	675,401	184,434	174,818	111,059
Number of training programs	2,491	1,695	1,665	1,966
Number of employees having completed training programs	43,266	31,707	31,205	10,273
Percentage of employees undergoing training per year	236%	281%	321%	70%
Average number of hours spent for training	11.00	16.34	5.60	6.14

Employees Training 2018	China	Indonesia	Vietnam	Thailand
Number of hours spent on training (total)	655,186	17	9,517	734
Number of training programs	1,956	13	375	32
Number of employees having completed training programs	32,719	16	6,590	3,409
Percentage of employees undergoing training per year	132%	34%	1275%	201%
Average number of hours spent for training	26.4	0.4	18.4	1.5

Employees Training 2018	Americas (total)	EMEA (Europe, Middle East and Africa)	Japan	APAC (HK, India, Singapore, Australia, Korea)
Number of hours spent on training (total)	7,868	230	70	1,780
Number of training programs	47	50	15	3
Number of employees having completed training programs	419	33	32	48
Percentage of employees undergoing training per year	100%	35%	32%	76%
Average number of hours spent for training	18.8	2	2	23

DIVERSITY IN GLOBAL POWER AND UTILITIES SECTOR

Canadian Solar had 25% female representation in top tier management in 2018. 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 in 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	2018	2017	2016	2015
Number of employees in management position	**851**	**789**	**586**	**563**
... women	211	191	137	135
percentage	25%	24.2%	23%	24%
... men	640	598	449	428
percentage	75%	75.8%	77%	76%
Number of non-executive employees	**12,183**	**11684**	**9254**	**8,906**
... women	4,352	4193	3318	3,101
percentage	36%	36%	36%	35%
... men	7,831	7491	5936	5,805
percentage	64%	64%	64%	65%
Total workforce (incl. trainees)	**13,034**	**12473**	**9724**	**8,969**
... women	4,563	4384	3445	3,105
percentage	35%	35%	35%	35%
... men	8,471	8089	6279	5,864
percentage	65%	65%	65%	65%
Employees with disabilities	**44**	**28**	**49**	**53**
percentage	0.34%	0.22%	0.50%	0.60%

2018	China	Thailand	Vietnam	Indonesia
Number of employees in management position	**430**	**7**	**2**	**5**
of which women	104	1	2	-
percentage	24.2%	14.3%	100.0%	0.0%
of which men	326	6	-	5
percentage	75.8%	85.7%	0.0%	100.0%
Number of non-executive employees	**10,148**	**947**	**514**	**48**
of which women	3,353	582	193	16
percentage	33%	61%	38%	33%
of which men	6,795	365	321	32
percentage	67%	39%	62%	67%
Total workforce (incl. trainees)	**10,578**	**954**	**516**	**53**
of which women	3,457	583	195	16
percentage	33%	61%	38%	30%
of which men	7,121	371	321	37
percentage	67%	39%	62%	70%
Employees with disabilities	**44**	**0**	**0**	**0**
percentage	0.42%	0%	0%	0%

2018	Americas (total)	EMEA	Japan	APAC (HK, India, SGP, Au, Korea)
Number of management board	**201**	**90**	**50**	**66**
of which women	56	25	9	4
percentage	27.9%	27.8%	18.0%	21.2%
of which men	145	65	41	52
percentage	72.1%	72.2%	82.0%	78.8%
Number of non-executive employees	**238**	**66**	**185**	**37**
of which women	98	24	63	23
percentage	41%	36%	34%	62%
of which men	140	42	122	14
percentage	59%	64%	66%	38%
Total workforce (incl. trainees)	**439**	**156**	**235**	**103**
of which women	154	49	72	37
percentage	35%	31%	31%	36%
of which men	285	107	163	66
percentage	65%	69%	69%	64%
Employees with disabilities	0	0	0	0
percentage	0%	0%	0%	0%

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	2018	2017	2016	2015
Actual hours worked	32,855,815	28,001,534	23,364,714	21,092,810
Number of reportable occupational accidents	6	20	30	19
Number of fatalities	0	0	0	0
Absence due to accidents in hours	796	2,653	3,201	5,400
Accident rate (per 100 employees)	0.05	0.16	0.31	0.21
Absence rate due to accidents (per 100 employees)	0.002	0.01	0.014	0.026
Number of emergency drills performed	60	109	58	51

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

MISCELLANEOUS

Global	2018	2017	2016	2015
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 REDUCED THE NEGTIVE 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 18 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 60 emergency drills in 2018.

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 actively promotes corporate social responsibility, clean energy and other solar related topics.

DONATIONS, SPONSORSHIPS, EDUCATION SUPPORT, COMMUNITY SUPPORT

Canadian Solar actively takes care of local communities around the world. Company guidelines, policies and promoting activities to involve all our employees in the inter relations and communications with local communities to serve our Company goal of making the difference of the energy world as well as of benefiting our local communities.

CHINA

In August 2018, the China International Solar Decathlon Competition was held in Dezhou City, Shandong Province, China. Canadian Montreal Team won the champions for three individual items, including building design, market competition and promotion. It also won two third prizes for engineering design and innovat. The Montreal Team was made of McGill University and Concordia University. They used the multi-function solar system to build their project. Their achievements showed the determination to promote the development of zero-carbon technology from Canadian Solar.

On January 5th. 2019, Alxa League Taihu Lake Project Center is established with the support of 49 enterprise members, including Canadian Solar. Dr. Shawn Qu, the founder and Chairman of Canadian Solar was selected to be the Chairman of the executive team of the center. The center is the 24th environment protection centers, and will focuses on the environmental governance of Taihu Lake area, garbage classification and green supply chains for enterprises.

JAPAN

In November and December of 2018, Canadian Solar Japan donated two solar plants with total output of 27.3 MW to Hima Shrine Temple and Shinpuku-ji Temple, located near Tottori Daisen, and repaired them. With the cooperation of a large number of people from Daisen Town during the developing and constructing of CS Tottori Daisen solar power plant, finally we reached the completion of the site commercial operation date in around 50 days. These solar plants will generate clean and reliable energy to the temples and bring the convenience to the religious followers.

In 2019, Canadian Solar Japan constructed Daisen Canadian Garden and donated it to the local community. The garden was located near Maehata area, Daisen. Thanks for the cooperation and hard work of the local people of Daisen Town, the construction was finished in August. The Garden offers everyone the opportunities to get to know about mega-solar, or enjoy jogging and walking, or even bird-watching

as the plant is situated next to Tottori Prefectural Daisen Otaka (hawks) Forest.

THAILAND

In Feb., 2018 Canadian Solar Thailand donated and installed 12 kW solar modules to INEB's Bangkok-Based Office. INEB (International Network of Engaged Buddhists) is a Thailand based not-for profit-organization established in 1989. INEB operates as an autonomous organization under the Bangkok-based Sathirakoses-Nagapradeepa Foundation (SNF). Over the years the network has expanded to include members, both individuals and organizations, from more than 25 countries across Asia, Europe, North America and Australia. An understanding of socially engaged Buddhism has emerged from this diverse member base which integrates the practice of Buddhism with social action for a healthy, just, and peaceful world.
The modules have been fully operational for more than one year and have reduced costs by seventy percent (70%). Prior to having the solar modules the cost of electricity averaged 10,000 Thai Baht per month (approximately 313 USD). Now the average monthly cost is 3,000 Thai Baht per month (approximately 94 USD or less than 100 USD). It reduced operating costs through improved environmental and ecological means.

AUSTRALIA

Canadian Solar Australia sponsored Longreach Show in the Longreach Regional Council Areas and International Legends of League in Brisbane in May 2018.

Longreach Show Society was established in 1895 and the show encompasses the Longreach Regional Council Areas – which includes the townships of Longreach, Ilfracombe, Isisford and Yaraka. The Longreach Show Society provides a mix of exhibition, competition, festivities, arts and culture, entertainment and information to the Longreach Community and the broader Central West Region. It has been many families' annual traditional outing for generations and as an institution in the local community. The show has proven to be remarkably resilient. Over the year's other events have come and gone but the show still manages to stay strong with sponsors' help.

International Legends of League is a game of rugby league bringing together former State of Origin and former Australian rugby league players for a charity rugby league event against a local Allstars team.The event supported junior rugby league and also Police Legacy. The organiser and sponsors also did school visits throughout local region talking about life decisions Mental Health, Anti Bullying, education, the importance of staying at school and guiding them to make the right choices in life. The players worked with Indigenous health in local areas to promote wellbeing of the community including elders.

Canadian Solar (Australia) P/L signed a memorandum of understanding with Sunraysia Institute of TAFE in Victoria in March 2018 assisting SuniTAFE to shape their training programs and creating new economic development opportunities for Sunraysia. This included skill development opportunities for those wanting to be involved in the delivery and operation of solar farm projects in the region, which ultimately helped maximise the local benefits of building these projects.

AMERICAS

United States

Canadian Solar made a donation to support the work of the Climate Music Project, a project which seeks to communicate a sense of urgency about the climate crisis by combining climate science with the emotional power of music to drive meaningful action.

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

In Brazil, Canadian Solar donated solar modules to two different charitable sites in Bauru, São Paulo State. The charitable sites are Madre Maria Theodora de Voiron, a Kidergarten with around 170 children from 3 to 14 years old, and Lar dos Desamparados, a rest home for the elderly, with around 70 people.

EMEA

In 2019 Canadian Solar donated solar modules for a new solar power plant to 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 SolarMaxPower 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

RECURRENT ENERGY

Our subsidiary Recurrent Energy regards social investment as a core value.

In 2018, our subsidiary Recurrent Energy contributed to 72 organizations across the United States through a variety of its ongoing charitable giving programs:

Through the Social Investment program, Recurrent Energy partners with non-profit and civic organizations in communities nearby its solar project sites.

Through the RE Matching program, Recurrent Energy matches personal employee giving to registered 501(c)(3) non-profit organizations.

Through the 100 Club, any employee who volunteers 100 or more hours in a calendar year to a single charitable organization will receive a $1000 grant from Recurrent Energy to be directed to the 501(c)(3) organizations of that employee's choice.

GRID Alternatives Solar Install
In partnership with San Francisco Bay Area non-profit, GRID Alternatives, ten employees installed 2.2 KW of solar panels for a low-income family in Richmond, California.

The Watershed Project volunteer day
Eight volunteers helped revitalize a watershed in a public park in a low income community in the outskirts of the San Francisco Bay Area. The restoration effort encouraged plant growth while reducing the amount of soil erosion during heavy rains.

Glide Homeless Feeding Program
During the holiday seasons, multiple employees volunteered in a soup kitchen located in San Francisco's Tenderloin District that regularly works to feed to low-income and homeless individuals.

AWARDS &

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

According to the Solar Module & Inverter Bankability Report 2019 by Bloomberg New Energy Finance(BNEF), Canadian Solar was ranked the No.1 bankable module manufacturer, based on the stable financal preformance, reliable product quality and trustable corporate reputation. It was the fifth 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 48 module manufacturers and 17 inverter manufacturers about the bankability (can be used in solar projects with nonrecourse debt). All participants considered Canadian Solar bankable.

CHINA

According to the Chinese Photovoltaic Industry Association 2018-2019 Annual Report, by the end of March 2019, Canadian Solar patent applications reached 2248 in worldwide, including 2138 Chinese patents, 23 PCT (PatentCooperation Treaty) international patents, 1280 authorized Chinese patents, 43 authorized patents in overseas. Canadian Solar was the No. 1 company in China photovoltaic industry on patent applications and granted patents.

Canadian Solar's "A Method to Produce Anti-PID Solar Cell" won the 19th Excellent Patent of China, authorized by State Intellectual Property Office of P.R.China. Excellent Patent of China is the highest patent award in China.

Canadian Solar Inc. was awarded "2018 Top 500 New Energy Enterprises" and "2018 Top 10 Stable Development Enterprises in New Energy" by China Energy News.

The PERC high efficiency solar cell developed by Canadian Solar won the China Leading Technology by China Productivity Promotion Center

Canadian Solar subsidiary Changshu module factory was awarded the Third Batch of Green Factories by the Ministry of Industry and Information Technology.

Canadian Solar subsidiaries Suzhou module factory and Funing cell factory won the Demonstration Intelligent Workshop in Jiangsu Province by Jiangsu Provincial Department of Industry and Information Technology.

Canadian Solar Inc, was awarded the Social Responsibility Contribution prize, authorized by Huaxia Energy News.

AMERICA

Canada

In 2019, Canadian Solar Inc. was selected as one of The Best 50 Corporate Citizens by Corporate Knights Inc. Selected from a pool of 242 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

US

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

Argentina

Canadian Solar won two accolades in the 2018 Power Finance & Risk Deal of the Year Awards.
Canadian Solar was named the Latin America Project Finance Borrower of the Year, and was further recognized as Latin America Project Finance Deal of the Year for the financing of its 100 MWp solar project in Cafayate, Argentina.
Power Finance & Risk recognizes excellence and innovation in power project finance and M&A. Canadian Solar was selected as the winner in two of the twenty-five categories through an industry-wide poll that surveyed investors, sponsors, bankers and advisers throughout the Americas.
More information: http://investors.canadiansolar.com/news-releases/news-release-details/canadian-solar-wins-two-deal-year-awards-power-finance-risk

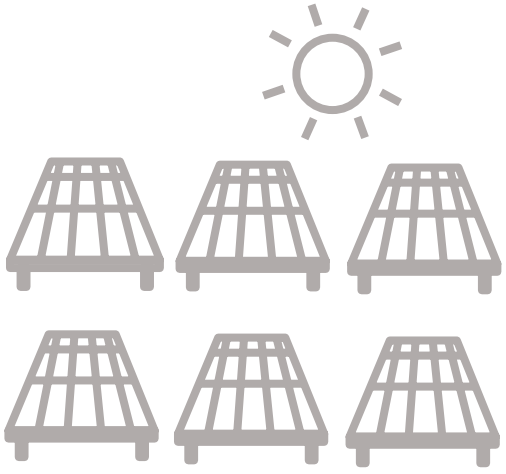
Brazil

In 2017, for the second year in a row, Canadian Solar has won the Best PV Module Manufacturer Award in Brazil by an overwhelming voting margin by RBS Magazine - Journal of Photovoltaic Solar Energy. Based on Brazil Solar Association's research in 2017, 78% of the customers in Brazil DG market preferred Canadian Solar.

Also in 2017, Canadian Solar was awarded the distinction of "Best PV Modules Manufacturer 2017" from the Brazilian Excellence 2017 awards.

2018, we and EDF Renewables jointly-owned 191.5 MWp Pirapora I solar power project was named by Infrastructure Journal Global (IJGlobal) as the Latin America Multisourced Deal of the Year at the IJGlobal Awards on March 15. Pirapora I is the first-ever solar power generation plant financed by Brazilian Development Bank (BNDES), with funding entirely from TJLP (Brazilian Long Term Interest Rate). This project was successfully commissioned in November 2017.

JAPAN
Canadian Solar issued the world's first dual-tenor bond served as the financing vehicle for a 19MW Gunma Aramaki Solar Power Plant. The bond has won Environmental Finance's Project Bond of the Year award for its innovative dual-tenor green project bond issuance in Japan. The bond also won J-Money's Best Structured Product Award during its Japan Deals of the Year 2017 awards program.



VII. APPENDIX

DISCLAIMER

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GRI CONTENT INDEX

The GRI Content Index below details all aspects of the report. References to external assurance reports for General and Specific Standard Disclosures have been supplied where these exist.

GRI G4	Core Content Index	Pages
G4 – 1	Chairman's introduction	5
G4 – 3	Name of the organization	15–16
G4 – 4	Primary brands, products and services	26
G4 – 5	Location of organization's headquarters	15–16
G4 – 6	Countries in which we operate	15–16
G4 – 7	Nature and legal form of ownership	21
G4 – 8	Our markets	15–16
G4 – 10	Workforce by type, contract, gender and region	96–99
G4 – 11	% of workforce covered by collective bargaining agreements	34
G4 – 12	Supply chain	73–81
G4 – 13	Significant changes since previous reporting period	7–9
G4 – 14	Approach to the precautionary principle	10
G4 – 16	Association memberships	39

General Standard Disclosures		Pages
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		
G4 – 18	Processes for defining the report content	40 – 41
G4 – 19	List of Material Aspects	40 – 41
G4 – 20	Internal aspect boundaries	40 – 41
G4 – 21	External aspect boundaries	40 – 41
G4 – 23	Changes in scope and aspect boundaries	40 – 41
STAKEHOLDER ENGAGEMENT		
G4 – 24	Stakeholder groups engaged by the organization	43 – 47
G4 – 25	Identification and selection of stakeholders	43 – 47
G4 – 26	Approach to stakeholder engagement	43 – 47
G4 – 27	Concerns raised through stakeholder engagement	43 – 47
REPORT PROFILE		
G4 – 29	Date of most recent previous report	10
G4 – 30	Reporting cycle	10
G4 – 31	Key contacts	127 – 128
G4 – 32	GRI content index – this index	123 – 124
GOVERNANCE		
G4 – 34	Governance	48
ETHICS AND INTEGRITY		
G4 – 56	Ethics and Integrity	49

A

AC Alternating current

C

CAFD Cash available for distribution
CanSIA Canadian Solar Industries Associations
CEC California Energy Commission
CED Cumulative Energy Demand
COD Commercial operation date
CO_2eq Carbon dioxide equivalent
CSA Canadian Standards Association
CSI Canadian Solar International
CS6P-M Canadian Solar Panel-Monocrystalline
CS6P-P Canadian Solar Panel-Polycrystalline
CSR Corporate Social Responsibility

D

DC Direct current
DLG DLG is a German testing institute (Deutsche Landwirtschafts-Gesellschaft)

E

E Estimation
EHS Environmental, Health and Safety
EIA U.S. Energy Information Administration
EL Electroluminescence
EPC Engineeering, Procurement, Construction
ESAP Environmental and social action plan
ESDD Environmental and safety due diligence
ESIA Environmental and safety impact assessment
ESMS Assessment and management of environmental and social risks and impacts
EVA Ethylvinylacetate (a plastic polymer)

F

FY Financial year

G

GHG Greenhouse Gas
GRI Global Reporting Initiative
GW Gigawatt

H

H_2SO_4 Sulphuric acid
HCl Hydrochloric acid
HF Hydrogen fluoride
HNO_3 Nitric acid
HR Human Resources

I

IEA International Energy Agency
IEC International Electrotechnical Commission
IPCC Intergovernmental Panel on Climate Change
ISO International Standards Organization

J

JET Japan Electrical Technologies Laboratory
JPEA Japan Photovoltaic Energy Association

K

KOH Potassium hydroxide
KPIs Key Performance Indicators
kWh Kilowatt hours
kWp Kilowatt peak

L

LCOE Levelized cost of energy

M

MJ	Megajoule
M&A	Mergers & Acquisitions
MJeq	Megajoule equivalent
MW	Megawatt
MWh	Megawatt hours

N

N_2O	Nitrous oxide
NaOH	Sodium hydroxide
NGOs	Non-Governmental Organizations
NH_3	Ammonia
NO_x	Nitrogen oxides

O

OSEA	Ontario Sustainable Energy Association
OEM	Original Equipment Manufacturer

P

PA	A polymide material
PAN	PAN files describe module performance under a wide range of environmental conditions
PET	Polyethylene terephthalate, a polymer
PCT	Patent Cooperation Treaty
PID	Potential Induced Degradation
$POCl_3$	Phosphorous oxychloride
PO_4-	Phosphate ion equivalent
PPA	Power purchase agreement
PR	Public Relations
PV	Photovoltaic/s
PVF	Polyvinyl fluoride is a polymer

Q

QHSE	Quality, Health, Safety and Environment

R

R&D	Research and Development
ROA	Return on assets

S

Sb	Antimony equivalent
SEIA	Solar Energy Industry Association
SEP	Stakeholder Engagement Plan
SO_2eq	Sulphur dioxide equivalent
SO_x	Sulphur oxides

T

TCO_2eq	Tons of carbon dioxide equivalent
TÜV	Technische Überwachungsverein (Technical Standards Monitoring Organization)

U

UL	Underwriters Laboratories Inc.

V

VDE	VDE is an electronic goods certification institute (Verband der Elektrotechnik, Elektronik und Informationstechnik e.V.)

W

W	Watt
WBG	World Bank Group
WP	Watt Peak
WTO	World Trade Organization

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