

Solar Energy for All

Achieve Our Dream
with Sunlight

2018

Corporate Social Responsibility Report



Trinasolar

About the Report

Range and Scope of the Report

As a global leading PV smart energy integrated solution provider, Trina Solar always pays attention to its social responsibility. Trina Solar compiled and issued the Corporate Social Responsibility (CSR) report since 2011, and the last report was published and issued in August, 2018.

The reporting period for this report is from January 1st, 2018 to December 31st, 2018. It elaborates on Trina Solar's ideas, strategies and concrete practices in relation to corporate social responsibility in 2018, covering all factories and operating business units which were under management control of Trina Solar. It includes all managed operations and consolidates our reporting on economy, environment, supply chain, people and community. In this report, we explain our vision and policy with respect to corporate social responsibility and report on our management approaches, activities, initiatives and our key performance indicators in this field during 2018.

The annual CSR report is dedicated to providing information to all stakeholders, including stockholders, potential investors, clients, staff, the communities we live and work in, business partners, public welfare organizations, media and government, to help them understand and evaluate Trina Solar's influence, risks and opportunities in relation to sustainable development.

In December 2018, Trina Solar 2017 Corporate Social Responsibility (CSR) Report was awarded with the "Golden Bee 2018 Excellent CSR Report – Growth Enterprise Award" during the 11th China CSR Report International Conference.

Reporting Framework

We prepared this report using the Global Reporting Initiative's (GRI's) Sustainability Reporting Guidelines. This report consists of 5 Chapters including Governance and Development, Care for Our Earth, Focus on Supply Chain, Care for Employees and Contribution to Society. We self-declare the report to be prepared in accordance with GRI Standards: Comprehensive Option.

Data Measurement

The data in this report mainly comes from the original records of practical operation. The information in the report will receive internal auditing by the company, and some special content will be subject to external auditing. We will periodically validate the effectiveness of the data collection process and data management system. We obtained ISO14001 Environmental Management System certification in 2008 and OHSAS18001 Occupational Health Management System certification in 2010. In 2011, we got ISO14064 certification for Greenhouse Gas Emission Data Verification. In 2012, we passed Product Carbon Footprint Verification PAS2050. In 2015, we were successfully certified with ISO50001/GBT 23331-Energy Management System. We validate the effectiveness of these systems through external auditing every year.

Report Info.

Publication date: August, 2019

Access method: The report is retrievable at Trina Solar's website (www.trinasolar.com).

Feedback: We appreciate your comments or feedbacks on this report via e-mailing to CSR@trinasolar.com.



Printed on
Recycle Paper

CONTENTS

 About the Report ----- 01	 Chapter 1 Governance and Development -- Trina Era 3.0	 Chapter 3 Focus on Supply Chain -- Share Sustainable Development	 Chapter 5 Contribution to Society -- Build a Beautiful Community
 Message From the Leadership ----- 05	Company Profile ----- 09 Corporate Governance ----- 13 Corporate Culture ----- 15 Communication with Stakeholders ----- 17 Materiality Analysis ----- 19 Support SDGs ----- 21 Challenges and Opportunities ----- 23 Awards ----- 26	Sustainable Supply Chain ----- 49 Conflict-free Minerals ----- 55 Cooperation for Win-win Situation ----- 55	Education Support ----- 73 Donations ----- 74 Volunteer Programs ----- 74
 Chapter 2 Care for Our Earth -- Make a Green Future	Green Sustainable Development ----- 29 Dealing with Climate Change ----- 33 Environment-friendly Operation ----- 43 Biological Diversity Management ----- 46	 Chapter 4 Care for Employees -- Promote Harmonious Development	 Appendix
		Talent Sustainable Management ----- 59 Employees' Rights ----- 61 Employees' Development ----- 61 Listen to Employees ----- 63 Employees' Health ----- 64 Employees' Occupational Health and Safety --- 65	Appendix I GRI Index ----- 75



Chairman & CEO of Trina Solar, Jifan Gao

We firmly believe that photovoltaic power will eventually be becoming the main energy by replacing conventional fossil energy. Trina Solar is both a communicator of green energy and a practitioner of green development. Our commitment to corporate social responsibility remains as strong as ever. On the road to being a global leader in Energy IoT (Internet of Things), Trina Solar is committed to fulfilling its mission of "Solar Energy for All".

Dear Distinguished Stakeholders,

In the context of the US's Section 201 investigation, India's trade protection and '531' photovoltaic new policy in China etc., the PV industry experienced dramatic volatility in 2018. Trina Solar has been striving to facilitate the stable development and transformation of our company.

Governance & Development: In 2018, Trina Solar continued to forge ahead. We established our own State Innovation Platform, aiming to cultivate and retain internal innovation sources for promotion of our business development. Trina Solar actively promoted intelligent manufacturing. We made use of IT and big data technology to improve automation and intelligence for our entire manufacturing chain. Productivity was enhanced significantly. Trina Solar had set a new record of 25.04% conversion efficiency for an N-type mono-crystalline IBC (Interdigitated Back Contact) solar cell. The IBC solar cell was developed independently by Trina Solar's State Key Laboratory (SKL). In 2018, Trina Solar continuously sought transformation and took our courage to innovate. We launched our third generation of new residential PV products – Superior-Core S, Smart PV Solution – TrinaPro, Trina Energy IoT (Internet of Things) and other innovative products and businesses. We were dedicated to providing our customer with superior products and services. With our perseverance and hard-working spirit, we had participated in and completed the construction of many PV plants and projects around the world, including grid-connection of 14 MW DC utility-scale project in Miyagi Prefecture in Japan; winning the bid for two 'Top Runner' projects - 250 MW project in Changzhi, Shanxi Province and another 250MW in Tongchuan, Shaanxi Province; launching of our first PV residential kit – Trinahome project in India; providing 167 MW PV modules for a farm in Murcia province in Spain; delivering a micro-grid project for 14 islands in Maldives etc. With the achievements in the areas of innovation, intelligent manufacturing and Energy IoT, etc., Trina Solar won the "China Industrial Awards - Enterprise Category" in the 5th China Industrial Awards, being the first PV company receiving the honour in China.

Environmental Protection and Green Development: Trina Solar always pays attention to green development. As of the end of 2018, the cumulative grid-connected capacity of Trina Solar's solar power plants in China exceeded 1.6 GW. In 2018, after the sales of solar plants, the solar plants owned by Trina Solar generated 775 million kWh of clean solar power, which exceeded the total power consumptions (722 million kWh) for Trina Solar's manufacturing operations and R&D activities in China. This means that Trina Solar has once again achieved "zero" carbon emissions, enabling the goal of producing our clean energy products with clean energy.

Trina Solar strived to continuously improve energy efficiency, reduce emissions and conserve resources throughout our operations. Establishment of Energy Management System – ISO50001 at our manufacturing sites demonstrates our energy-efficiency improvements and commitments. Trina Solar established and implemented an internal carbon-trading system. We set up an integrated energy consumption target for each department and assessed its performance monthly to encourage energy-saving initiative. In 2018, Trina Solar's electricity and water consumption per MW module production were 133.6 MWH/MW and 1360.1 m³/MW respectively, representing 38.8% and 31.6% of reduction compared to that of 2014. We disclosed greenhouse gas emission annually based on the international standard – ISO14064 requirements. The greenhouse gas emission per MW module production in 2018 is 119 tonne/MW, being 34.9% reduction compared to that in 2014. As a global leader in solar industry, Trina Solar is committed to promoting green manufacturing in all aspects, including plant construction, raw material selection, manufacturing, waste recycle

and energy consumption etc.. In 2018, Trina Solar passed the audit by China Quality Certification Center (CQC) with a high score of 97. Trina Solar was awarded with the honour of "Green Factory Model" by the Ministry of Industry and Information Technology, P. R. China.

Employees' Health and Development: Employees are essential force for pushing forward Trina Solar's sustainable development. Trina Solar is committed to providing employees with a safe, healthy and respectful work environment. We established a professional training system, matured performance appraisal, various communication channels and career paths for employees, aiming to inspire employees' enthusiasm and innovation. In 2018, Trina Solar's total investment in occupational health and safety management is RMB 8.25 million (about US\$ 1.23 million). The total training time of employees is more than 131,372 hours. Trina Solar cares for employees' physical and mental health. While introducing talents from around the world, we provide them with good opportunities for career development. In December 2018, Trina Solar was awarded with "China's Most Healthy Employee Award" in the "2018 Asia's Best Workplace" competition organized by AIA China, Beijing University and HRoot. In October 2018, Trina Solar participated in the 2018 CSR performance assessment by EcoVadis, a global supplier sustainability rating agency. Trina Solar was awarded a gold medal for the second consecutive year as a recognition of its CSR performance.

Contribution to Society: Early in 2003, Trina Solar joined in the "Bright Project" in Tibet. We built 40 solar off-grid power stations, allowing those vulnerable groups in electricity - deficient regions enjoy modern conveniences with clean solar energy. In September 2018, Trina Solar once again donated its off-grid PV power generation system to herder families in Tading Township, Shigatse city in Tibet. Trina Solar participated in the charity projects of former US President Bill Clinton, donating solar modules to Haiti and Africa. Trina Solar donated millions of RMB to social welfare projects, such as Wenchuan earthquake, Xinjiang highway construction, environmental protection project for Nanjing University, and 'Eco – Changzhou, Carbon Footprint' project etc.. Trina Solar set up a sunshine fund and donated RMB 10 million to China Siyuan Foundation for Poverty Alleviation, helping the college students in poverty areas cultivate entrepreneurship and achieve success in photovoltaic industry.

Looking ahead: Photovoltaic industry will usher in an unprecedented development stage. With the advent of the PV grid-parity around the world, the demand for global PV products and solutions tends to be diversified and stabilized. Photovoltaic power will gradually become the cheapest clean energy in the world. We firmly believe that photovoltaic power will eventually be becoming the main energy by replacing conventional fossil energy. Trina Solar is both a communicator of green energy and a practitioner of green development. Our commitment to corporate social responsibility remains as strong as ever. On the road to being a global leader in Energy IoT (Internet of Things), Trina Solar is committed to fulfilling its mission of "Solar Energy for All".

Jifan Gao
Chairman & CEO of Trina Solar

In Trina Era 3.0, we will devote ourselves to becoming a global leader of smart energy. We are committed to maintaining a high standard corporate governance by incorporating social sustainability into corporate strategy, management and long-term development. Trina Solar always operates in good faith. We promise to comply with laws and regulations, international conventions and business ethics. Trina Solar sticks to tackling the relationship with suppliers, clients, governments, partners, competitors and other stakeholders with principles of fairness and honesty, aiming to achieve the sustainable development together.

01

Governance & Development

- Company Profile
- Corporate Governance
- Corporate Culture
- Communication with Stakeholders
- Materiality Analysis
- Support SDGs
- Challenges and Opportunities
- Awards



Company Profile

Trina Solar was founded in 1997, headquartered in Changzhou, China. The main business includes photovoltaic products, photovoltaic systems, and smart energy, which cover the R&D, production and sales of photovoltaic modules, power station and system products, photovoltaic power generation and maintenance services, development and sales of intelligent micro-networks and multi-energy systems and energy cloud platform operations, etc..

Trina Solar has established regional headquarters in Zurich, Switzerland, San Jose, CA, USA, Tokyo, Japan and Singapore. We also have offices and

subsidiaries in Madrid, Mexico, Milan, Sydney, Chile, Dubai, etc. We have established manufacturing bases in Thailand and Vietnam. Our business covers more than 100 countries and regions worldwide. Trina Solar devotes itself to building a sustainable solar industry together with its installers, distributors, utility and project developers worldwide. Trina Solar is committed to leading solar industry in terms of technology innovation, product quality, environmental protection and social responsibility and providing its clients with clean & reliable energy. In 2018, as a global leading PV smart

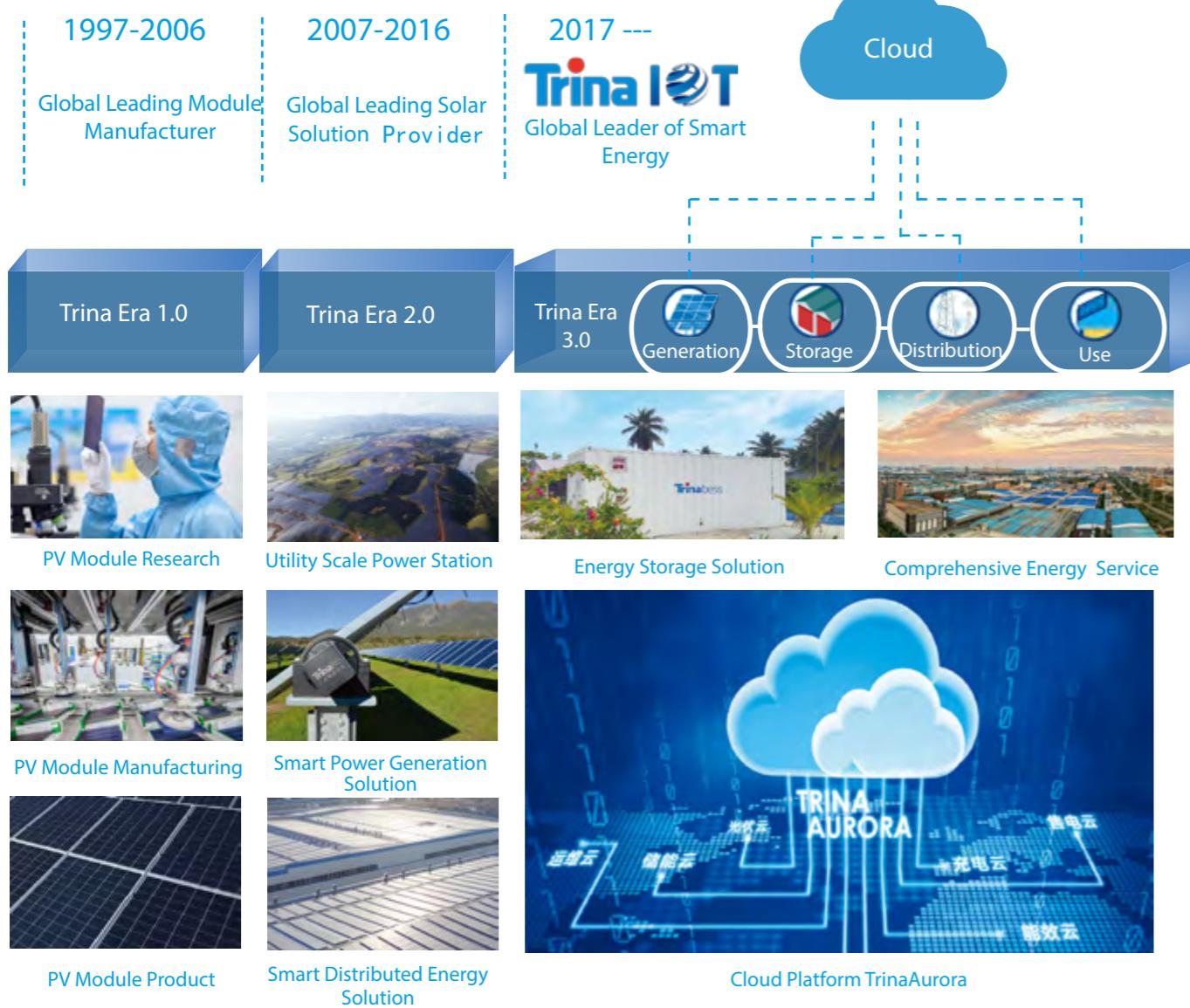
energy integrated solution provider, Trina Solar took the lead in building the brand of Energy Internet of Things (IoT). Together with domestic and international dominant enterprises and research institutions, Trina Solar established Trina Energy IoT Industrial Development Alliance and IoT innovation center, providing our partners with an innovation platform to establish an energy IoT ecosystem. Trina Solar will keep moving towards being a global leader of photovoltaic smart energy integrated solution provider.

Globalization

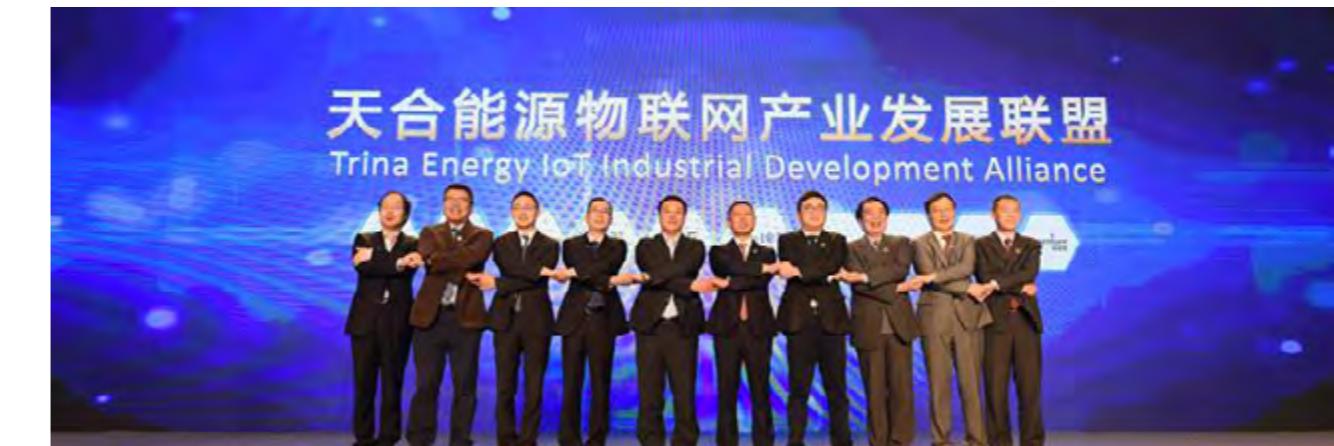




Diversified Business



Trina Solar Launched a New Brand "Trina IoT" and Started Trina Energy IoT Industrial Development Alliance



In March, 2018, Trina Solar released the brand of energy Internet of Things - Trina IoT, and started Trina Energy IoT industrial development alliance, which shows that Trina Solar has made a huge step forward to its target in new era -- being a global leader of Energy Internet of Things (IoT).

Trina IoT is a new service that Trina Solar will provide integrated solutions to energy generation, storage, distribution, use and cloud service. It includes a series of solutions that represents the top photovoltaic technology and development direction, such as TrinaPro - smart solar power generation solution, solutions to PV Commercial use, TrinaBess - smart storage solution, Trina MOTA - Trina energy management platform and Trina Aurora - smart

energy cloud service.

Trina IoT is connecting billions of solar panels, energy generation devices, energy storage devices, energy distribution nets and electricity use terminals with the advanced technologies, such as big data, artificial intelligence and block chain. By making use of energy IoT technology, we allow various energy consumptions for every family, community, and even every city in a coordinated way. Energy IoT helps realization of the energy load being monitored and managed accurately. Our aim is to promote global energy transformation and try to make clean energy become the mainstream energy, so as to achieve our mission of "Solar Energy for All".

Trina Solar completed the acquisition of Nclave, a Spanish solar tracking mounting producer

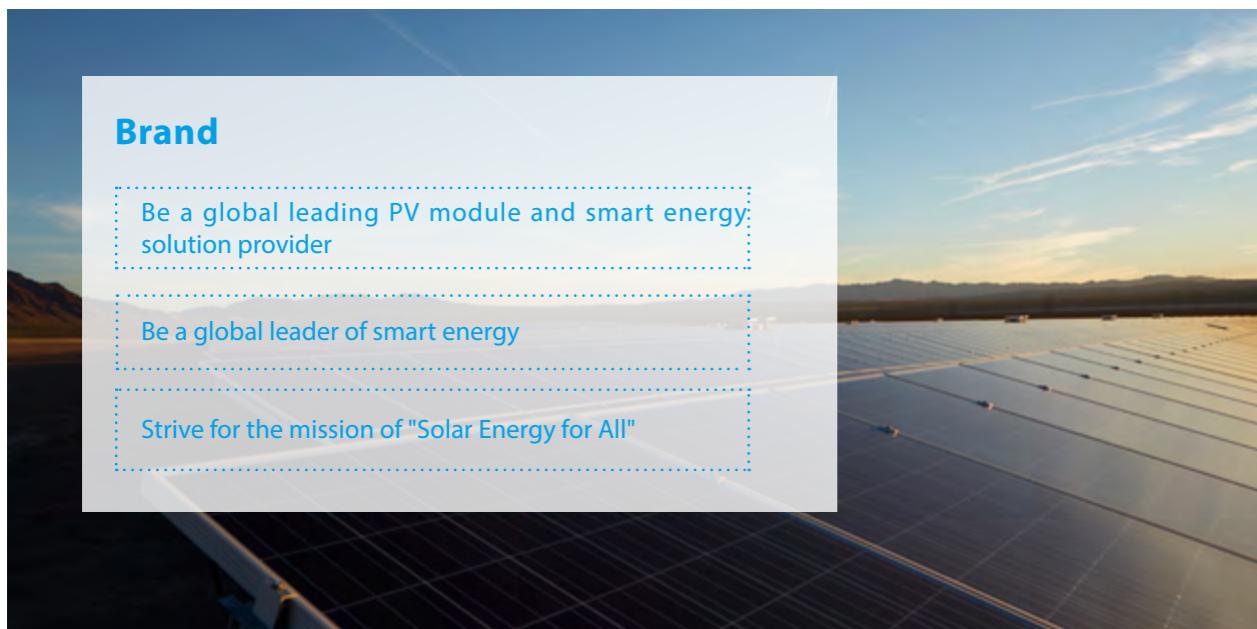


In May, 2018, Trina Solar completed the acquisition of Nclave Renewable S.L. ("Nclave" for short), a global solar tracking mounting manufacturer from Spain. It speeds up the transition of Trina Solar from photovoltaic product supplier to global PV smart energy integrated solution provider, showing that Trina Solar has made a big step forward in his strategic transition to the new era of energy Internet of Things (IoT).

The new-released smart photovoltaic solution "TrinaPro" will include and integrate Nclave tracking mounting product and engineering design, vise versa, the advanced technology of Nclave will be deeply integrated into the smart development of Trina Solar. In smart PV solution service area, Trina Solar will provide our customers with more exquisite service.

Corporate Governance

Legal compliance is not only the guarantee for the survival of an enterprise, but also the foundation for the long-term healthy development. Trina Solar always adheres to legal compliance and business ethics. We strive to protect intellectual property rights and cultivate an ethical mechanism, so as to build a responsible, honest and compliant corporate governance mechanism.



Organizational Structure

In order to adapt to the ever-changing of solar industry, Trina Solar continuously makes organizational structure transformation, aiming to enhance core competitiveness and vitality. In 2017, Trina Solar adopted a "Platform + Value Creation Unit (VCU)" business model to achieve a flatten organizational structure transformation, which motivated internal employees, and attracted external resources. In 2018, we completed the transformation of Value Creation Unit

Intellectual Property Rights

Trina Solar respects all intellectual property rights. We are committed to complying with international conventions on intellectual property, as well as local laws and regulations. We established Intellectual Property Management Committee and formulated Intellectual Property Management General Principles, Patent Management System, and Business Secret Management Procedure, to protect Trina Solar's intellectual property rights.

By the end of 2018, Trina Solar has applied for 1,593 patents, among which 727 are invention patents (including 32 PCT patents, 14 international patents). We own 765 valid patents, among which

Trina Solar sticks to the philosophy of upholding integrity first. We consciously abide by laws and regulations, international conventions and business ethics, and build our integrity throughout the whole process of production and business activities. Trina Solar promises to continue to create value for our stakeholders, and strives to build a brand image of both 'model management' and 'integrity first'. We continue to carry out the establishment of compliance culture to strengthen the legal awareness and compliance awareness of employees through training, publicity, examination, accountability and so on. In 2018, Trina Solar was awarded the award of Provincial Credible Enterprise by Jiangsu Administration Bureau for Industry and Commerce.

Risk Management & Internal Audit

Risk management and control is a necessary condition for the stable development of the company and the security of its employees. We have established and maintained a sound corporate governance structure, rules, and decision-making procedures in accordance with the Company Law, Charter of Trina Solar, and relevant laws and regulations. We have setup management structure including shareholder general meeting, board of directors, board of supervision, and the management team. The powers and responsibilities are clearly defined and balanced. The operations, such as voting, decision-making, supervision, and execution, are standardized.

Trina Solar sets up a Board of Directors (BOD), and formulates a series of corporate-level rules and regulations, such as General Manager Discussion Procedure, Internal Audit Procedure. The BOD is sub-grouped into three special committees. The important issues submitted to the BOD must be discussed by the special committees to form a formal proposal, so that it is ensured that the decision is made in a scientific, standardized and efficient way. Trina Solar's BOD has an Audit Committee and an Internal Audit Department. To ensure business compliance and risk control, IA Department strictly follows "China Internal Auditing Standards" and "Trina Solar Internal Audit Charter".

Legal Compliance and Ethics

Trina Solar always supports UN Global Compact Initiatives and adheres to legal compliance management. We have integrated ethics and compliance requirements into the company's daily operations. We formulated a series of rules and regulations to guide behaviors of employees and suppliers, e.g., Trina Solar's Code of Business Conduct and Ethics, Incentives for Reporting Ethical Issues, Anti-corruption Policy, Antitrust Compliance Policy, Regulation for Employee Behaviour Reward and Punishment etc.. We also set up an Ethic and Compliance Department, being responsible for handling ethics education

Internal audit plan, approved by the Audit Committee and management, is independent of the audit plan of BU and functional department. The scope of audit includes R&D, procurement, manufacturing, sales, customer service, human resource, finance, and other aspects and functions. The audit scope and plan are adjusted annually in order to continuously meet the company's business development needs.

Besides, Trina Solar has established a Risk Control and Compliance Department in order to identify and respond to both external and internal risks. We also have founded a Risk Control Working Committee. We regularly identify the various company risks including strategic risks, operational risks, financial risks, compliance risks, the company's platform transformation risks and others. We established a Trina's Risk Control and Tracking System (RCTS) in 2017 to ensure that all audit findings were properly and effectively closed. In 2018, we implemented an innovative audit plan to strengthen the coordination among the company's internal departments and improve closure effectiveness for audit findings. We formulated a joint audit team, consisting of the members from finance, quality, procurement, HR, EHS etc., to comprehensively identify the risks faced by all aspects of the company.

and ethics issues. We continue to strengthen the anti-corruption and anti-bribery management system and formulate relevant requirements and operational guidelines for corporate governance.

We ensure employees to abide by business ethics in a clear, simple and direct way. We operate our company to ensure that our operation and management are always in line with applicable business ethics.



- Establish complaint channels for the public through email, telephone and "Trina Solar Reward, Complaint and Reporting Platform", to protect employees' legitimate interest and give appropriate rewards.
- Require new employees to learn and sign on the Code of Business Conduct and Ethics.
- Conduct annual self-disclosure of conflicts of interests for key management staff.
- Provide codes of conduct and anti-corruption training for all employees to enhance employees' compliance awareness. The ethics compliance is regarded as a required course for new employees on the UMU learning platform. It is a compulsory course for new employees and the training rate for new employees is 100%.

Complaint Channels:

Ethics Compliance Hotline:

+86-519-85176933

Anti-fraud Reporting Email:

IA@trinasolar.com



Corporate Culture

Corporate culture is the soul of an enterprise and an inexhaustible source of sustainable development. Trina Solar always advances with the times, and updates our corporate culture in different development stages so that we can improve company's cohesiveness, ensure sound development, help employees realize self-values, and finally realize our mission and vision.



C | Customer-Centric

Serve our customers with full heart.

- Understand customer needs
- Quickly respond to customer requests
- Provide superior products and services
- Create excellent customer experience
- Value honesty, integrity & candor, accept different view
- Focus on teamwork & synergy, create and share team successes
- Practice self-reflection and self-criticism
- Face the future and embrace change



O | Open-Mindedness

Embrace change openly.

- Understand customer needs
- Quickly respond to customer requests
- Provide superior products and services
- Create excellent customer experience
- Value honesty, integrity & candor, accept different view
- Focus on teamwork & synergy, create and share team successes
- Practice self-reflection and self-criticism
- Face the future and embrace change



D | Dedication

Dedicated to creating values for customers, and our company.

- Understand customer needs
- Quickly respond to customer requests
- Provide superior products and services
- Create excellent customer experience
- Value honesty, integrity & candor, accept different view
- Focus on teamwork & synergy, create and share team successes
- Practice self-reflection and self-criticism
- Face the future and embrace change
- Be proactive and take quick actions
- Dedicate to work and strive hard to achieve goals
- Be fearless in the face of challenges and difficulties
- Persevere and committed to achieve the mission



E | Excellence

Pursue higher goals.

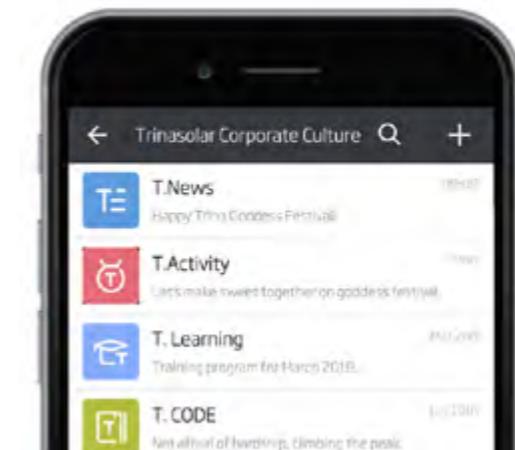
- Understand customer needs
- Quickly respond to customer requests
- Provide superior products and services
- Create excellent customer experience
- Value honesty, integrity & candor, accept different view
- Focus on teamwork & synergy, create and share team successes
- Practice self-reflection and self-criticism
- Face the future and embrace change
- Be proactive and take quick actions
- Dedicate to work and strive hard to achieve goals
- Be fearless in the face of challenges and difficulties
- Persevere and committed to achieve the mission
- Seek transformational change and continuous improvement
- Courage to innovate and adopt rapid iteration
- Learn fast and surpass ourselves
- Strive to be the best with determination

Corporate Culture Communication

In order to integrate the core values into the daily behaviors of each Trina employee and put words into actions, we continue to take a variety of programs to ensure that the core values are rooted in every

employee's mind and every aspect of our business. We ensure that we maintain our unified thoughts and actions in our day-to-day operations and provide customers with effective services.

Trina Enterprise Communication



Trina Enterprise Communication sends company news and push activities to all employees in real time, including office guidelines, on-line activities, mobile learning, employee recognition, and other internal communication.

Trina Culture Star-seeking Program



We encourage everyone to seek for those employees who are fully dedicated and responsible. We push for integrating the core values of Trina Era 3.0 into employees' minds and actions.

Trina Family Day: Dynamic Future in 2018



Creative intelligence area



Various artistic skills area



Delicious food area



Trina energy town



Dynamic exercise area



Infinite energy area

The purpose of the activities held on the family day was to increase exchanges among the company, the employees and employees' families, which enabled employees to enhance cohesion and inspire pride of employees' families.

On December 1st, 2018, the fourth family day event was opened in Changzhou Olympic Sports Center. More than 1,000 Trina families, near 3,000 people, participated in the event.

Communication with Stakeholders

Stakeholder communication and participation has always been considered as one focus for Trina Solar's sustainable development. We believe that bilateral, transparent and regular communication will bring about closer ties between us and stakeholders, and enhance mutual trust and respect.

Trina Solar is always striving to provide sustainable solutions for climate change and energy crisis. Under the severe situation of global climate change, Trina Solar has continuously promoted the sustainable development of

Calling for Promoting Sustainable Development - Jifan Gao Attended Asian and Pacific Energy



In April 2018, Gao Jifan, Chairman and CEO of Trina Solar, was invited to attend the second UN Asia-Pacific Energy Conference and delivered a speech. He discussed with the energy ministers of various countries on sustainable development goals during the conference. As a Chairman of China PV Industry Association and the founding member of UNSD - Sustainability Advisory Committee, he deeply understands that enterprises are important actors in coordinating the government's transformation of sustainable development goals into results. Trina Solar successfully built many solar power projects, which demonstrated the positive impact of the government's integration of sustainable development into national policies. As examples, Trina Solar participated in China government project - "Western Bright

Intelligent Robot Show at 2018 China Shanghai International AI Exhibition

From August 30th to September 1st, 2018, 2018 China Shanghai International Artificial Intelligence (AI) Exhibition was held at the Shanghai International Exhibition Center. The intelligent robot, developed independently by Trina Solar, was exhibited for the first time. The event marked a new step of Trina Solar on the road to transforming a smart energy integrated solution provider.

The self-developed intelligent sanitation robot exhibited by Trina Solar is designed in a simple and novel way, featured with exact positioning, autonomous wake-up, ultrasonic obstacle avoidance, self-charging, real-time monitoring and many other functions. The intelligent sanitation robot can work continuously for 8-12 hours and can clean 48,000 square meters' area in one day, which is equivalent to the workload of 6-8 sanitation workers. It can be applied to squares, parks, sidewalks, scenic spots, etc. It is a smart terminal product combined with advantages of intelligent control, multi-sensor fusion and digitization.

Through systematic identification and classification of stakeholders, we have established stable, multi-aspect communication channels, such as various activities, product launches, face-to-face communication meeting, questionnaires, e-mails, and official website etc. We constantly collect stakeholders' expectations, needs, and suggestions. While actively and effectively responding, we also prioritize the feedbacks from stakeholders as important inputs for our continuous improvement.

economy, society and ecological environment through joint efforts and global cooperation with government agencies, photovoltaic associations and other stakeholders.

Project", solving the electricity shortage in 39 townships in 11 counties in the Changdu, Tibet. Trina Solar delivered a "photovoltaic + energy storage" smart micro-grid project for 14 islands in the Maldives. The project can meet the electricity demand of more than 1,500 households in the local area.

Mr. Gao also called on governments to formulate policies to encourage the development of clean energy. He hoped that enterprises, public institutions, and financial institutions worked together to promote a new era of sustainable development and ecological civilization. Dr. Akhtar, UN Vice Secretary General, highly praised Mr. Gao's speech and Trina Solar's contribution to sustainable development.



Stakeholders	Communication Methods	Communication Activities
Customers	<ul style="list-style-type: none"> Product launch Customer satisfaction survey Customer audit Meeting Exhibition Website 	<ul style="list-style-type: none"> In June 2018, Trina Solar participated in German International Solar Exhibition to showcase Trina Solar's high-efficiency module technology and intelligent solution. 1) TrinaPro - Smart PV solution: TrinaPro is the first time to enter European market. It enhances the electricity generation up to 30%; 2) Trinahome is also the first to participate in overseas exhibition. It consists of Trina Solar's high-efficiency module and energy storage solution, being the best choice for household PV system; 3) Half-cut Splitmax mono-/multicrystalline modules have also been received much attentions. The modules can effectively reduce cell-connection energy loss, while reducing module temperature and increasing the power generation in high temperature installation areas.
Employees	<ul style="list-style-type: none"> Communication meeting Roundtable meeting/ lunch meeting HR hotline Staff suggestion scheme Wechat platform Training 	<ul style="list-style-type: none"> Trina Solar held 20th anniversary celebrations & 2017 annual meeting, with the theme of 'Grateful to You, Create Greater Glories'. Trina Solar's executives, manufacturing employees, overseas employees, employees' families and other representatives were gathered together to participate in the activities of the 20th anniversary celebration. In 2018, HR Employee-Relationship organized a total of 43 diverse cultural and sport events, including hobbies, traditional culture, reading, and traditional festivals.
Shareholders	<ul style="list-style-type: none"> Communication meeting Roundtable meeting / lunch 	<ul style="list-style-type: none"> Convene shareholders meetings regularly.
Government	<ul style="list-style-type: none"> Sign cooperation memorandum Participate in policy research Participate in government's project 	<ul style="list-style-type: none"> In September 2018, Trina Solar signed the "The Project Cooperation Framework Agreement of Smart Park of Trina Sun City" with the Changzhou High-tech Zone Photovoltaic Industrial Park. It is estimated that the total investment is approximately RMB 1 billion to jointly build the Changzhou Smart Park of Trina Sun City.
Business Partners	<ul style="list-style-type: none"> Sign strategic partnership agreement Supplier meeting Supplier research / audit Supplier / contractor training 	<ul style="list-style-type: none"> In January 2018, Trina Solar signed a strategic cooperation memorandum with Siemens AG. The cooperation between the two parties was further deepened on the basis of the signed cooperation agreement in November 2017. The two parties will use their own resources and technological advantages to explore the development of energy IoT, intelligent micro-grid, distributed energy projects and other related software and hardware products in countries and regions along the "Belt & Road Initiative".
Non-governmental organizations and Communities	<ul style="list-style-type: none"> Participate in community activities Employee volunteer activities Participate in charity activities Collect feedback from community Hire local employees to improve profits, and pay tax in accordance with law 	<ul style="list-style-type: none"> In March 2018, Trina Solar participated in corporate environmental charity - "Zero-Carbon" event, initiated by CEO Council, Sino-US Sustainable Urbanization of Paulson Foundation. The event aimed to call on global companies to take further actions to reduce carbon emissions and waste. In June 2018, EHS Department conducted a EHS Satisfaction Survey for community residents surrounding the company.
Public Media	<ul style="list-style-type: none"> Disclose information on social responsibilities on a regular basis 	<ul style="list-style-type: none"> Trina Solar released Corporate Social Responsibility Report annually.
Research Institutions/ Standards Associations	<ul style="list-style-type: none"> Industry association Seminars Technical Cooperation 	<ul style="list-style-type: none"> Led by Trina Solar, the new standard "Specification for Terrestrial Dual-Glass Module with Crystalline Silicon Solar Cell, SEMI PV82-0318", was officially released in March 2018. The standard will be implemented globally as a unified technical specification. Trina Solar was leading and participating in the development of national standards, industrial standards, SEMI international standards, IEC standards and association standard. Trina Solar firstly proposed and published PV industrial standard to the Solar PV Energy System Technical Committee of International Electrotechnical Commission(IEC/TC82)

Materiality Analysis

Materiality analysis can help us have a thorough knowledge of the topics that are of greatest interest to our stakeholders, so that we can reveal more comprehensive and relevant information to address the concerns of stakeholders.



1. Identification of Materiality Issues

Factors Considered

In defining the material issues, we take into account the factors including:

- reasonably estimable economic, environmental and social impacts
- interests and expectations of stakeholders
- main topics and future challenges of solar industry
- key applicable laws and regulations
- corporate's vision, mission, core values, strategies and goals

Identification Sources

We identify material issues from a wide range of sources including:

- customer and supplier survey
- company website, email, quarterly communication meeting
- employee blogs, forums and feedbacks
- company news release, social media channels
- meetings with customers, suppliers and government officials
- third-party audit on management system

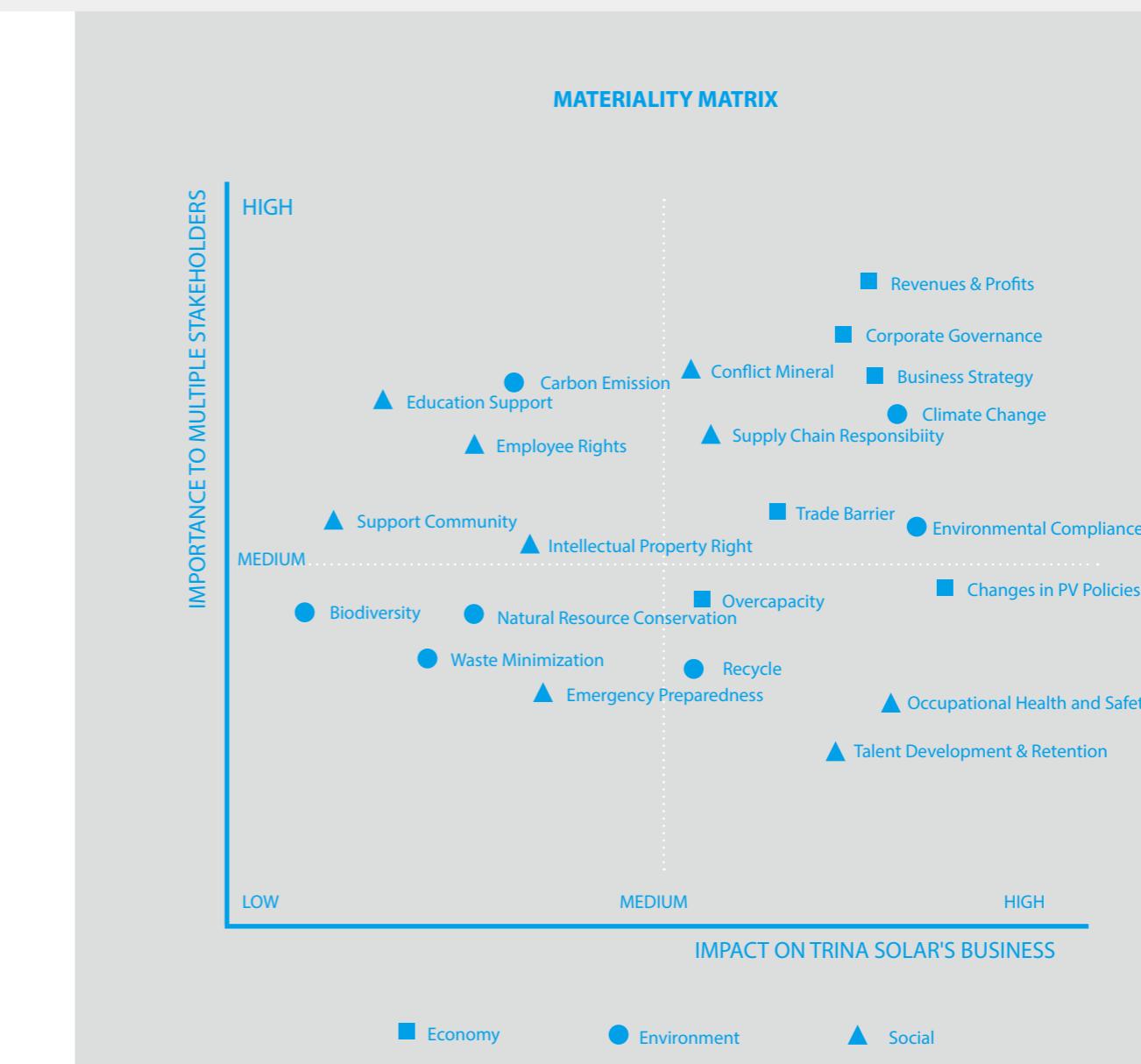
2. Determination of Materiality Issues

With a combination of internal and external sources, the material issues we identified include:

- **Business and Economy** : business strategy, overcapacity, financial performance, revenues, profits, tax and incentives, political condition, corporate governance, talent development, talent retention, trade barrier, changes in China PV policies
- **Environment** : climate change, carbon emission, natural resource conservation, wastewater treatment, air emission, recycle, waste minimization, environmental compliance, water consumption, chemical consumption, energy efficiency, green building, biodiversity
- **Social Impact** : corporate culture, occupational health and safety, emergency preparedness, supply chain responsibility, conflict minerals, community support, employee relationship, labor union, human rights, intellectual property right, security, gender equalization.

3. Priority of Materiality Issues

We review issues and consider both the potential impact on stakeholder decisions and impact on Trina Solar's business development. We prioritize the significance of each issue based on the criteria including business continuity, finance performance, business strategy, product brand, company reputation, competitive advantage, excellent management and community impact. We develop a materiality matrix according to the importance to multiple stakeholders and the impact on Trina Solar's business. The materiality matrix demonstrates the topics being of the greatest interests to our stakeholders. We engage in stakeholders to periodically review the materiality matrix to ensure that it remains updated and continues to meet stakeholders' expectation.



Support SDGs

In September 2015, the 2030 Agenda for Sustainable Development was adopted by 193 member states on the United Nations Sustainable Development Summit. The agenda, including 17 sustainable development goals, aims to create a more fair and environmental friendly world, eradicate extreme poverty, overcome inequality and unjust, and prevent climate change.

UN's Sustainable Goals	Our Actions
	<p>Energy could help people get rid of poverty and develop local economy. We helped the poor areas to improve their economic and living standards by establishing entrepreneurial funds and PV poverty alleviation, and promote the sustainable development of agriculture and fishery by installing PV modules high above fish pond and farming land.</p> <ul style="list-style-type: none"> In 2015, Siyuan Sunshine Fund for Entrepreneurship was founded by Trina Solar. The fund donated 10 million to China Siyuan Foundation for Poverty Alleviation. The Fund desires to help 10,000 poor college students cultivate entrepreneurship and achieve success in PV industry through training. PV power station generates green energy and stable income. The station is simple to operate and maintain. PV power station has a guarantee operation period of 25 years. A PV poverty alleviation pilot project, located in Qingzhu village, Guidong county, Chenzhou in Hunan Province, was officially connected to power grid in September, 2016. This was the first village-level PV power station constructed by Trina Solar. In 2017, 20 MW PV poverty alleviation project, Trina Solar's second phase of Wuwei project, was successfully connected to the grid. In 2018, Trina Solar built a 600KW PV plus fishery poverty alleviation project in Xiaoshiqiao Village, Changzhou City. The earnings of the power station would be used for poverty alleviation, which could provide reliable, stable and long-term poverty alleviation funds for local poor residents, so as to help them get rid of poverty as soon as possible. In June 2018, Trina Solar donated RMB 900,000 to the "Siyuan Public Welfare Fund" for social welfare projects, such as targeted poverty alleviation, subsidization for the needy students, assistance to the disabled, the care for the elderly and the young, disaster relief and medical assistance for serious diseases etc. Trina Solar has established the Employee Assistance Program(EAP) and invited experts periodically to give guidance in terms of stress management, occupational mental health, and healthy lifestyles to help employees relieve the work pressure, which helps to eliminate psychological distress and improve work efficiency. Trina Solar has established an internal clinic to provide the employees with medical and health counseling services. Trina Solar provides annual health examination for employees. In 2015, it launched the flexible benefit program to provide physical health insurance choices. Employees can choose insurance items for themselves and their families according to their own demands. In December 2018, Trina Solar won the "China's Most Healthy Employee Award" in the "2018 Asia's Best Workplace" competition launched jointly by AIA China, Public Health College of Peking University and China's leading human resources media HRoot.
	<p>Goal 1: End poverty in all its forms everywhere</p> <p>Goal 2: End hunger, achieve food security and improve nutrition and promote sustainable agriculture</p>
	<p>Goal 3: Ensure healthy lives and promote well-being for all at all ages</p>
	<p>Goal 4: Ensure inclusive and quality education for all and promote lifelong learning</p>

UN's Sustainable Goals	Our Actions
 	<p>Goal 5: Achieve gender equality and empower all women and girls</p> <p>Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all</p> <ul style="list-style-type: none"> Trina Solar strictly adheres to relevant international conventions, local laws and regulations, to ensure gender equality and prohibit employment discrimination. While promoting employees diversity, we strive to provide employees with a good working environment and welfare, actively promote the employees localization, and improve local employment rate. By the end of 2018, Trina Solar had a total of 13,679 staff coming from 40 countries and regions around the world. In 2018, Trina Solar had 4,964 female employees, accounting for 36.3% of the total. In addition, Trina Solar hired a total of 2,227 overseas employees to work locally.
	<p>Goal 6: Ensure access to water and sanitation for all</p>
 	<p>Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation</p> <ul style="list-style-type: none"> Trina Solar has implemented various water-saving projects, such as reuse of RO rejected water, treatment and reuse of wastewater, collection of condensed water from air conditioning system etc. In 2018, water consumption per MW module production has decreased by 31.6% compared with that of 2014. The water-saving projects implemented during the period of 2014 to 2018 saved a total of 3.52 million tons of water. In 2018, Trina Solar Energy established the Industry Development Alliance of Trina Energy Internet of Things (IoT), devoted to becoming the world's leading company of new Energy Internet of Things (IoT). Trina Solar actively responds to "Belt & Road Initiative". It invested US\$ 100 million to build the largest 1 GW solar photovoltaic cell manufacturing facilities then in the Yun-Zhong Industrial Zone, Beijiang Province in Vietnam. We bring more than 1,000 jobs and widely disseminate clean energy application in the region. Trina Solar are always adhering to the concept of innovation and development. We strive to implement "PV+" strategy, integrating photovoltaic application with commercial, agriculture, construction, transportation, communications and other industries.
 	<p>Goal 12: Ensure sustainable consumption and production patterns</p> <p>Goal 13: Take urgent action to combat climate change and its impacts</p> <ul style="list-style-type: none"> Trina Solar has established ISO50001 Energy Management System, received ISO14064 certification for Greenhouse Gas Emission Verification, and passed PAS2050/ISO14067 Product Carbon Footprint Verification. We are continuously dedicated to improving energy efficiency, reducing GHG emission and saving resources. Trina Solar continued to focus on energy efficiency improvement by identifying and implementing energy-saving projects and optimizing energy use. The electricity consumption per MW production in 2018 decreased by 38.8% compared with that of 2014. The energy-saving project has saved electricity 19,480 MWh, and reduced carbon dioxide emission by 16,316 tons from the year 2014 to 2018. In 2018, Trina Solar has once again achieved "zero" carbon emissions for its manufacturing operations and R&D activities in China, enabling the goal of producing our clean energy products with clean energy.

Challenges & Opportunities

Trina Solar will always continue to improve operational efficiency and competitiveness in a responsible and innovative way, and work with stakeholders to face and grasp the challenges and opportunities of sustainable development, so as to promote sustainable improvement of society, economy and environment. When formulating sustainable development strategies and goals, we fully take into account the risks and opportunities, and consider them as important factors in product design, procurement, manufacturing, and product delivery.

While enjoying the tremendous achievements brought by economic growth, scientific and technological progress, and social development, mankind has also gradually and clearly recognized the energy shortage, climate change, and ecological and environmental challenges brought by the excessive use of fossil fuels. As a world leading photovoltaic company, Trina Solar will take this opportunity to address climate change and use solar energy for the benefit of all mankind. We will always pay attention to opportunities and risks facing the world and where we operate, take the initiative to cope with risks and embrace opportunities. We will continue to promote technological innovation and sustainable development in the photovoltaic industry. We push photovoltaic power generation for thousands of households, aiming to benefit all mankind by coping with climate change and improving ecological environment.

Energy Transformation

Risks and Opportunities	Counter-measures
<ul style="list-style-type: none"> Energy is a matter of common concern all over the world and the core of almost all major challenges and opportunities. To build more sustainable and inclusive communities, enhancing the ability to combat environmental issues, such as climate change, and building of a clean and low-carbon global energy system will be the basic trend of energy development. Low-carbon and intelligence has become the mainstream direction of global energy transformation. 	<ul style="list-style-type: none"> We successfully open up a new Trina Era 3.0 : Being a Global Leader of Smart Energy. We make full use of various resources to vigorously develop smart energy and energy Internet of Things (IoT). Trina Solar strives to create an integrated solution for 'Energy Generation, Storage, Distribution, Energy Use and Cloud' and promote the transformation of solar energy into digital and intelligent energy. Energy IoT technology will help us provide clean energy to humans and the earth in a more sustainable way. It provides "zero" emission solution to our global customers. We are building a smart energy platform that combines PV power generation and storage technology with the Trina Solar Energy IoT, enabling the connection of millions of home end-users and 100,000 commercial end-users. In the future, Trina Solar aims to connect hundreds of millions of home end-users and millions of commercial end-users, and build a digital energy system in a cycle of power generation, smart distribution and energy use. Trina Solar Energy IoT significantly improves energy efficiency and clean energy use ratios, so as to better serve end-users and address energy transformation challenges.

Establishment of New Energy IoT Industrial Innovation Center



In August 2018, New Energy Internet of Things (IoT) Industrial Innovation Centre was established in Trina Solar. The Centre will cooperate with domestic and foreign leading enterprises and institutes to carry out core technological innovations, including the four areas of PV power generation, energy storage, IoT control and cloud platform technology. Partnered with 16 leading companies and academic institutions,

the Centre will invest RMB 1 billion in construction a R&D centre in three years in the fields of power generation, energy storage, distribution, energy use and control, and cloud computing, aiming to become a key core technology innovation base of the national energy IoT, helping China seize opportunities in global energy revolution and supporting national energy transformation strategy.

Trade Barrier

Risks and Opportunities	Counter-measures
<ul style="list-style-type: none"> Trade protectionism being raised by some countries in PV industry, mainly in U.S. and European Union, poses a challenge for healthy development of PV industry. For example, in January 2018, the United States announced a 201-clause resolution on solar cells and modules. The safeguard tariff on imported products will be implemented for four years, with a first-year tariff rate of 30%, followed by a 5% annual reduction and a 15% reduction by 2021. 	<ul style="list-style-type: none"> As a key member of the global photovoltaic industry, Trina Solar will continuously play an active role in advocating fair competition and free trade, promoting the healthy development of the photovoltaic industry, providing high-quality photovoltaic products and system solutions for global customers, and promoting global green and sustainable development. Closely keeping pace with the 'Belt & Road Initiative' and market-oriented strategy, Trina Solar accelerated the overseas expansion. It built production bases in Thailand and Vietnam. The countries along the 'Belt & Road Initiative' not only have the initiative to build clean energy system, but also have the needs to develop distributed smart energy and promote energy IoT applications. Trina Solar's business has currently expanded to 39 markets in the 65 countries along the 'Belt & Road Initiative' route, accounting for 60% in the region. Trina Solar has 16% to 20% of market share in the countries along Turkey, India etc., playing an indispensable role in its local PV industry development. Entering a new stage, Trina Solar is committed to becoming a global energy IoT leader, and looks forward to providing integrated solutions for clean energy development in the countries along the route.

Micro-grid Group delivered by Trina Solar in Maldives



As a global leading PV smart energy integrated solution provider, Trina Solar is committed to providing customer with the customized and high reliable micro-grid energy system. In September 2018, Trina Solar completed the world's largest micro-grid project in 14 islands in Maldives. The project was developed by the Ministry of Environment and Energy of the Maldives. Trina Solar is responsible for design and engineering installation. The project has a capacity of 4 million kWh per year, which can meet the electricity needs for more than 1,500 local households.

Maldives, located in the Indian Ocean, consists of more than a thousand islands. The islands are separated from each other. It is impossible to build a large power station for unified power supply. Power generation in habitable

islands mainly relies on conventional diesel power, which results in pollution and greenhouse gas emission. In view of the energy situation, Trina Solar proposed a customized "PV Power + Energy Storage + Diesel Power" micro-grid solution, which is effectively integrated based on the different electricity demands and existing energy structures in the 14 islands. The hybrid off-grid power generation system adapted to the local conditions. The system helps Maldives transition from conventional energy supply to integrated energy supply mode. The project has currently become a typical example for island micro-grid. It has significant value for energy transition for those island countries along "Belt & Road Initiative" in the Indian Ocean and the Pacific.

National Policy

Risks and Opportunities	Counter-measures
<p>Solar power is clean and pollution-free. With support of favorite PV policies and technological innovation, PV industry has experienced rapid development in past decade. In order to guide healthy and sustainable development for PV industry in China, National Development and Reform Commission, Ministry of Finance, and National Energy Administration jointly issued the "Notice on Matters Related to PV Power Generation in 2018" on May 31st, 2018. The notice focused on promoting technological progress, reducing power generation costs, reducing subsidy dependence, optimizing development scale.</p>	<p>Trina Solar actively embraces challenge and strives for cost and quality leadership. While expanding production capacity, we are committed to continuously improving conversion efficiency and module output power through technological innovation. We have introduced a variety of products and system solutions, such as ALLMAX PERC Mono Half-cut module, TALLMAX Half-cut MBB module, DUOMAX Dual Glass 60, module and DUOMAX Dual Glass 72 module etc. to meet the different PV project needs and improve our competitiveness.</p>

Trina Solar's "Black King" Modules Installed in Qingdao Olympic Sailing International Conference Center



In June 2018, the 18th meeting of the Council of Heads of State of the Shanghai Cooperation Organization (SCO) was successfully held at Qingdao Olympic Sailing Center. Trina Solar was honored to participate in the construction of the conference center and witnessed the historical moment of SCO's future development. Trina Solar constructed a PV project with designed capacity of 692 KW, for Qingdao Olympic Sailing International Conference Center, hereinafter referred to as "Aofan Project". The project has a designed capacity of 692 KW. The total power generation for the project is estimated to be 24.6 million kWh. The clean solar

power is fully consumed for the Center's daily operations. The design of Aofan Project meets the high requirements of both practicality and aesthetics. To keep the harmonious integration of the PV power station and the building shape, Trina Solar has purposely developed PV "Black King" modules. Except for ultra-high efficiency of 19.2%, the "Black King" modules, installed on the roof of the Conference Center, have a natural black visual texture and look like two black wings. The whole building is perfectly integrated with the blue sea and sky.

Climate Change

Risks and Opportunities	Counter-measures
<p>Sea level rising, glaciers melting and frequent extreme weather conclude that the world has been affected by climate change. Climate change has become a common focus for both governments and private sectors, and one of the most serious challenges facing the world today.</p>	<p>Sustainable development is one of important ways to deal with climate change. Dealing with climate change is both challenges and opportunities for the PV industry. Solar products and solutions help energy consumers reduce and neutralize carbon emissions, so as to promote the global energy transformation from fossil fuels to other alternative energy sources. By the end of 2018, Trina Solar cumulative module shipments is approximately 40 GW. Under normal operation, those modules will be able to generate the clean energy which amounts a reduction of carbon emissions by 40 million tons per year.</p>

Air Source Heat Pump (ASHP) Production and Research Base Put into Operation

Under the global initiative of dealing with climate change, all countries are accelerating the clean and low-carbon energy transformation. They are paying more attention to energy efficiency. As a representative of clean energy source, Air Source Heat Pump (ASHP) technology can realize heat energy transformation from low-level heat source to high-level heat source in the air, thereby achieving the purpose of energy saving, environmental protection and comfortable

heating. Responding to the winter clean-heating strategy in China, Trina Solar built a ASHP production base in 2018. ASHP will be connected to various intelligent terminals. It is widely used in civil heating & hot water supply, commercial heating and cooling, agricultural production, drying, and other industrial applications etc. Trina Solar's ASHP provides energy consumers with an overall energy efficiency solution by using of the technology of "PV Energy + ASHP Products".

Awards

No.	Date	Awards
1	January 2018	• Trina Solar was awarded with "China Best Learning Enterprise in 2017" by Learning Community, China's largest talent development community.
2	January 2018	• Trina Solar ranked third in the Top 100 Innovative Enterprises in Jiangsu Province.
3	January 2018	• Trina Solar won the list of China's Top Fifty Enterprises in Electronic Information R&D and Innovation in 2018.
4	February 2018	• Trina Solar was on the list of the second batch of "Green Factory" by the Ministry of Industry and Information Technology, China.
5	February 2018	• Yancheng factory was awarded with "Advanced Units of Park Safety Management" by Photoelectric Industrial Park of Yancheng city.
6	March 2018	• Yancheng factory was awarded with "Advanced Unit of Fire Management" by the Fire Brigade of Yancheng Economic Development Zone.
7	April 2018	• Trina Solar was awarded with "Credit Demonstration Enterprise of Jiangsu Province" by Economic and Credit Commission and Credit Leadership Office of Jiangsu Province.
8	April 2018	• Trina Solar won the "China Talent Development Elite Award in 2017".
9	June 2018	• Trina Solar has been selected as the "Global Best Performance Module Manufacturer" for the fourth time by DNV GL, an international authoritative certification institute
10	July 2018	• Trina Solar won the "2018 China Learning and Development Value Award" sponsored by HREC.
11	July 2018	• Trina Solar passed the quantification system certification of ISO14064 greenhouse gas emission conducted by BSI.
12	July 2018	• Vietnam factory was awarded with the "Beijiang Provincial Excellent Contribution Enterprise Award" by the Vietnamese Beijiang Provincial Government.
13	July 2018	• Trina Solar won the "Best Employer Brand - Communication Award" awarded by China's leading human resources media HRoot.
14	July 2018	• Hefei factory was awarded the title of "Demonstration Enterprise of City-level Safety Culture Construction" by Hefei Safety Production Committee.
15	August 2018	• Trina Solar obtained the honor of "The First Low Carbon Demonstration Units in Changzhou City" awarded by Changzhou Development and Reform Commission.
16	August 2018	• Trina Solar was awarded the title of "National Intellectual Property Advantage Enterprise" by the State Intellectual Property Office.
17	September 2018	• Trina Solar took the top ranking in Bloomberg's list of "The World's Most Valuable Financing Module Brands" for the third consecutive time.
18	October 2018	• Trina Solar was awarded a gold medal for the second consecutive year as a recognition of its Corporate Social Responsibility (CSR) performance by EcoVadis, an independent third-party assessment organization.
19	December 2018	• Trina Solar won the "2018 Golden Bee Excellent CSR Report - Growing Enterprise Award".
20	December 2018	• Trina Solar won the "China Industrial Awards - Enterprise Award" established and approved by the State Council, being the first PV company receiving the honor in China.
21	December 2018	• Trina Solar was awarded with "China's Most Healthy Employee Award" in the "2018 Asia's Best Workplace" competition by AIA China, Peking University and China's leading human resources media HRoot.
22	December 2018	• Hubei factory was awarded with "Advanced Safety Organization" by Shazui Street Committee of Xiantao City.



Our environment is the foundation for human beings' survival and development. As an advocate of green energy and a practitioner of green development, Trina Solar is committed to promoting sustainable development through continuous innovation. We have established ISO14001 Environment Management System and ISO50001 Energy Management System to minimize the negative impact of our business operations on the environment and the earth that all human beings share. We have set up our 2020 Environmental Sustainable Development Goals to ensure that our business is developed in an environmental-friendly, responsible and sustainable way. And we are devoted to building a green and low-carbon planet with all partners.

02

Care for Our Earth

- **Green Sustainable Development**
- **Dealing with Climate Change**
- **Environment-friendly Operation**
- **Biological Diversity Management**



Green Sustainable Development

Energy and environmental issues have become the major threat to world economy and sustainable development. While enjoying the benefits of economic growth, technological progress and social development, human beings also realized the challenges brought by over-consumption of fossil energy. Nowadays, human being is facing a series of problems, such as energy shortage, climate change and ecological environment challenge.

As a leading PV enterprise, Trina Solar is dedicated to developing clean solar energy worldwide. While providing affordable and clean solar energy, we pay much attention to environmental protection and sustainable development.

Trina Solar has established ISO14001 Environment Management System and formulated the Trina Solar's 2020 Sustainable Development Goal. We also actively cooperate with global partners, academic institutions, governments and NGOs to facilitate the realization of PV power parity by technological innovation. Trina Solar is committed to improving energy efficiency and increasing the share of renewable energy for sustainable development, including dealing with climate change. Focusing on the mission of 'Solar Energy for All', Trina Solar always supports UN Global Compact Initiatives and upholds the concept of sustainable development. We'll work unremittingly to make our contribution towards UN's 2030 Global Sustainable Goal.

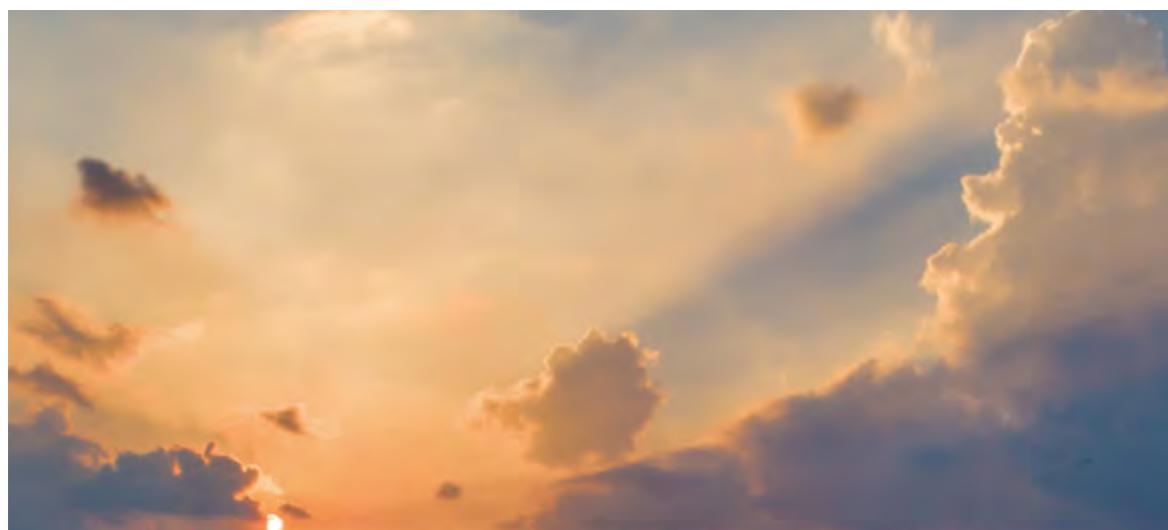
2020 Sustainable Development Goals

No.	2020 Trina Solar Sustainable Development Goals	2015	2016	2017	2018	Decreased Percentage
1	<ul style="list-style-type: none">15% reduction of CO₂ emission per MW module compared to that of 2015 (TCO₂e/MW)	182.6	168.0	132.3	119	34.8%
2	<ul style="list-style-type: none">10% reduction of consolidated energy consumption per MW module compared to that of 2015 (TSC/MW)	13.15	13.12	11.00	10.81	17.8%
3	<ul style="list-style-type: none">15% reduction of electricity consumption per MW module compared to that of 2015 (Mwh/MW)	2,210	1,870	1,630	1,340	39.4%
4	<ul style="list-style-type: none">10% reduction of water consumption per MW module compared to that of 2015 (T/MW)	1,885	1,744	1,592	1,360	27.9%

EHS and Energy Management Policy

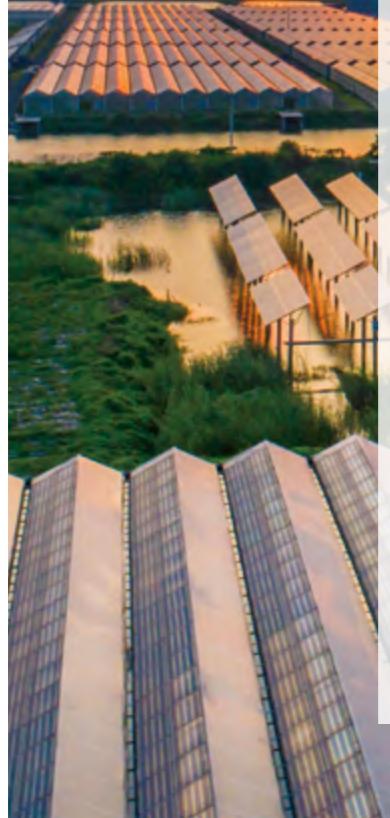
We have established and maintained a comprehensive environment management system and occupational health management system in line with international standards.

We have set up Environment, Occupational Health & Safety and Energy Management Policy. We advocate each employee of Trina Solar to observe and publicize the policy.



Trina Solar is committed to being the global leader of smart energy. We pay attention to employees' health & safety and sustainable development. We are dedicated to creating a safe, healthy and environmentally-friendly workplace for employees and a harmonious green planet for mankind. We promise to use energy and natural resources responsibly and efficiently. Herewith we pledge the following:

- Comply with all applicable EHS & energy management laws & regulations and meet interested parties' requirements.
- Be committed to prevention of pollution and minimizing negative impact on environment. Promote sustainable development and build a green and low-carbon planet.
- Be committed to prevention of occupational injury and illness. Provide a safe, healthy and environmentally-friendly workplace for employees.
- Make efficient use of energy and resources. Consistently reduce energy consumption and carbon emission from production and commercial operations.
- Enhance employees' EHS & energy conservation awareness and encourage employees to participate in EHS & energy conservation programs.
- Provide necessary resources for implementing EHS & energy management system. Continually improve performance via perfecting EHS & energy management system.
- Provide transparent EHS report to stakeholders and other relevant interested parties.
- Pledge our support and commitment to help our suppliers improve their EHS & energy management performance and take social responsibility.



Environment Management System

In our continuing efforts to enhance and ensure protection of the environment, Trina Solar has always adhered to the highest standards of environmental protection in our daily operations. Most of our manufacturing plants have established ISO14001 Environment Management System. We integrate environmental protection and sustainable development into our every work process, including site selection, designing, construction and plant operation. We effectively manage the environmental aspects of products, activities and related services through our established environmental management system.

Trina Solar commits to work together to promote sustained and inclusive economic growth, social development and environmental protection. Trina Solar's Environment Management System is designed to help us improve our environmental performance. It gives us a systematic, organized approach to address the issues of environment protection and sustainable development. The system is part of our overall management system that includes organizational structure, planning activities, responsibilities, procedures, processes and resources for achieving and maintaining environmental performance.

No.	Plants	Established ISO14001 Environment Management System	No.	Plants	Established ISO14001 Environment Management System
1	Plants at Changzhou Headquarters	Yes	5	Hefei Plant	Yes
2	Changzhou Yabang Plant	Yes	6	Energy Storage Solution Plant	Yes
3	Yancheng Plant	Yes	7	Thailand Plant	Yes
4	Hubei Plant	Yes	8	Vietnam Plant	Yes

Chains	Measures
 Site Selection, Designing and Construction of Plants/PV Power Stations	<ul style="list-style-type: none"> • Environment Impact Assessment, evaluate the positive and negative impacts of the proposed projects on the community's environment; • Ensure the environmental protection facilities to be designed, constructed and put into use simultaneously with the main part of construction project; • Protect the community's ecological environment and biological diversity.
 Research & Development	<ul style="list-style-type: none"> • Incorporate the concept of environmental protection into R&D and improve the product conversion efficiency.
 Manufacturing	<ul style="list-style-type: none"> • Ensure sustainable use of resources; • Continuously promote the energy efficiency; • Ensure that treated effluent and emission of waste gas meet national and local limits; • Promote recycling of resources; • Promote green office.
 Packaging	<ul style="list-style-type: none"> • Reduce packaging materials without affecting package safety; • Utilize recycled and degradable package materials.
 Logistics	<ul style="list-style-type: none"> • Develop a resourceful transportation route; • Choose the best mode of transportation; • Improve the utilization rate of containers.
 Product Recycling	<ul style="list-style-type: none"> • Be a member of PV CYCLE and dispose the waste PV products in an environmental friendly way; • Be a member of the Glass Recycling Committee of Japan (GRCJ).

Dealing with Climate Change

We profoundly realized that climate change has posed serious challenges to the environment, economy and society. The development of world economy is powered by energy. Fossil fuels are the major energy source that is being used in the world today. However, consumption of fossil fuels release greenhouse gases (GHGs), such as carbon dioxide, nitrogen dioxide, sulphur dioxide, carbon monoxide etc. The emission of GHGs can lead to serious environmental issues such as air pollution and global warming. Besides, fossil fuels are not renewable. Therefore, it is irreversible that the renewable energy, such as solar energy, will take the place of the conventional energy. The renewable energy is playing an increasingly important role and becoming one of the mainstream sources of energy around the world.

Global climate change is a serious environmental, economic and social challenge that warrants an equally serious response by governments and the private sectors. Governments and the private sectors need to actively adopt energy saving measures to reduce greenhouse gas emissions and effectively support the realization of the UN's 2030 Sustainable Development Goals. As a global leader in energy IoT, Trina Solar is committed to providing clean solar energy for the world. We promise to promote sustainable manufacturing and build an environmentally-secure planet by using energy and natural resources efficiently. We consistently reduce energy consumption and carbon emission from production and commercial operations by enhancing energy efficiency, and work tirelessly to promote green development and build an ecological civilization.

Aspects	Countermeasures
Set up 2020 Green Sustainable Development Goals	<ul style="list-style-type: none"> In response to China's commitment to carbon reduction for the 'Thirteenth Five-year Plan (2016 to 2020)' for coping with climate change, Trina Solar formulated the 2020 Sustainable Development Goal, reducing 15% of CO₂e emission per MW module compared to that of 2015 (TCO₂e/MW).
Establishment of EHS Management System	<ul style="list-style-type: none"> We have established our mature greenhouse gas inventory and energy management system (ISO14064, ISO14067 and ISO50001) to systematically manage carbon emission and energy consumption. We actively explore and implement energy saving projects, and try our best to reduce carbon emission from our operations. In 2018, Trina Solar's electricity consumption and water consumption per MW module decreased by 38.8% and 31.6%, respectively, compared to that in 2014.
Clean Solar Power	<ul style="list-style-type: none"> In 2016, Trina Solar consumed 780 million kWh of power for all factories and R&D centers' operations in China. The solar power plants owned by Trina Solar in China generated 1.18 billion kWh of clean solar power. In 2017, the power consumption for all operations in China was 850 million kWh, and the clean solar power generation reached 1.55 billion kWh. In 2018, Trina Solar consumed 722 million kWh of power for all factories and R&D centers' operations in China. The solar power plants owned by Trina Solar in China generated 775 million kWh of clean solar power. This means that Trina Solar has achieved 'zero' carbon emission for operations in China since 2016.
Pollution Control Facilities	<ul style="list-style-type: none"> In recent years, Trina Solar has established sophisticated wastewater and waste gas treatment facilities to ensure that discharge of wastewater and emission of waste gas stably meets environmental standard limits. In 2018, Trina Solar's total environmental protection inputs reached RMB 93.45 million (about US\$ 13.8 million). In the five years from 2014 to 2018, Trina Solar collected a total of 15.11 million tons of industrial wastewater, and produced and reused 9.2 million tons of new-water (or recycled water), which could meet the annual water consumption for 50,000 households in China.
Internal Carbon Trade Scheme	<ul style="list-style-type: none"> Trina Solar actively participates in global GHG emission reduction activities and programs to increase employees' awareness of emission reduction. We establish an internal carbon trade scheme. We setup an annual integrated energy consumption target for each department and carry out assessments monthly. We award carbon emission bonuses for those departments who have achieved their targets, and impose carbon emission penalties for those who have not fulfilled their carbon emission targets.
Supply Chain Sustainability	<ul style="list-style-type: none"> Trina Solar has always been both a clean energy advocate and a low/zero carbon practitioner. We actively participate in global emission reduction initiatives. In 2017, Trina Solar took part in the CEO Council, Sino-US Sustainable Urbanization of Paulson Foundation. This provides advantage for us to promote the development of clean energy technologies and make our contributions to worldwide emission reduction campaign. We pay attention to the social responsibility of our global suppliers and partners. We continuously reduce carbon emission in supply chain by promoting the optimization of the packaging methods, transportation modes, and increasing local supply of products and raw materials, so as to jointly promote the sustainable development of photovoltaic industry.

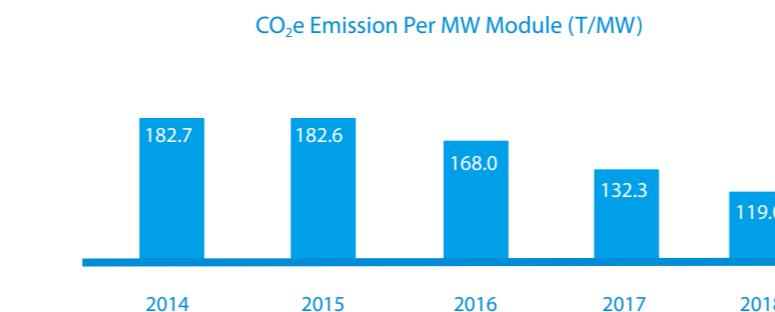
Reduction of GHG Emission

Trina Solar has been paying attention to sustainable development. We conduct ISO14064 GHG emission verification and disclose our carbon emission annually. We always look for opportunities to reduce GHG emission in product design, production, and packaging processes. We continuously identify potential energy-saving projects, aiming for fulfillment of our commitment to sustainable development.

Trina Solar conducts GHG verification annually in accordance

with international standard ISO14064 requirements. The scope of verification includes scope 1- direct GHG emission and scope 2 - indirect GHG emission. We continuously monitor and improve our GHG management performance. Total greenhouse gas emissions for Trina Solar's China operations in 2018 were 609.5 thousand tons of CO₂e, which was approximately 13.7% lower than that of 2017.

Based on the requirements of 'The Vienna Convention for the Protection of the Ozone Layer' and 'The Montreal Protocol on Substances that Deplete the Ozone Layer', all the refrigerants and fire extinguishing agents used in Trina Solar plants do not contain ozone depleting substances (ODS).



2018 GHG Emission Per Unit Production decreased Compared to that of 2014

34.9%

GHG Emission CO ₂ e (1,000 tons)	2014	2015	2016	2017	2018
Scope 1	14.9	11.6	15.1	13.0	9.1
Scope 2	475.8	513.2	636.1	692.9	600.4
Total	490.7	524.8	651.2	705.9	609.5

Types of GHG	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆
GHG Emission CO ₂ e in 2016 (1,000 tons)	645.0	0.04	0.004	5.1	0	1.03
GHG Emission CO ₂ e in 2017 (1,000 tons)	699.5	0.04	0.03	5.1	0	1.30
GHG Emission CO ₂ e in 2018 (1,000 tons)	604.1	0.04	0.002	5.4	0	0

Green Sustainable Development

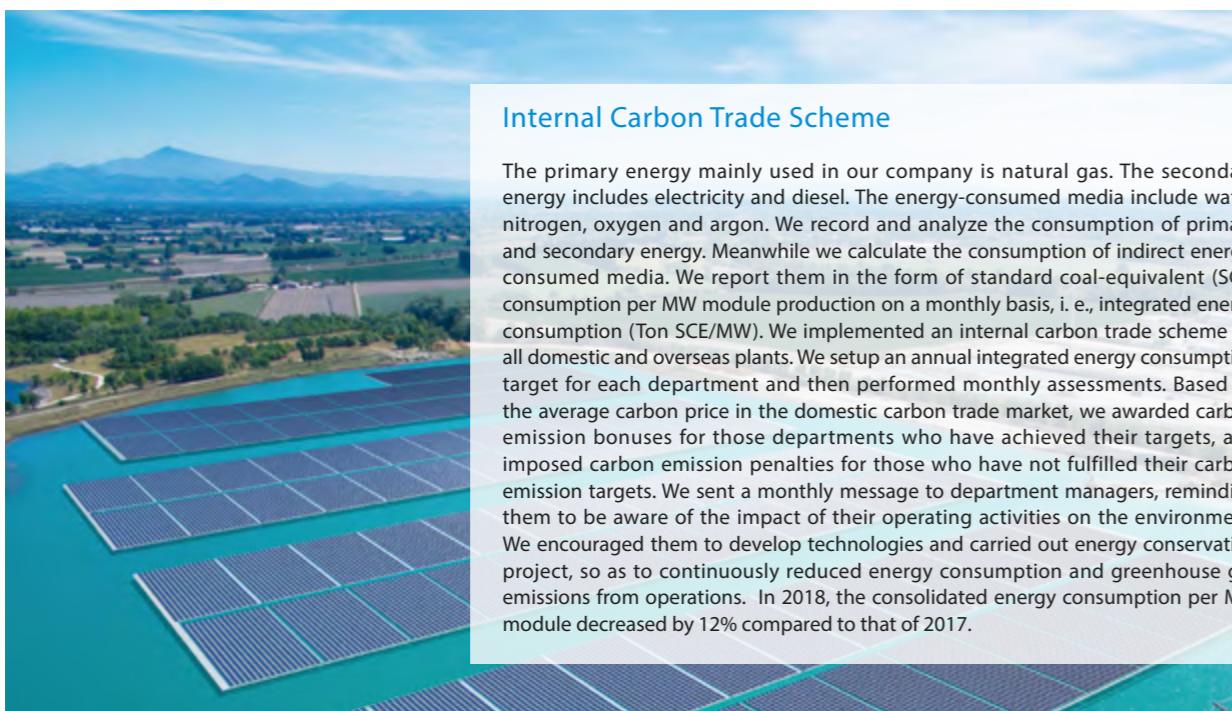
Dealing With Climate Change

Environment-friendly Operation

Biological Diversity Management

Enhancement of Energy Efficiency

Sustainable development requires not only clean energy, but also higher energy efficiency. Trina Solar focuses on reducing environmental impact from its operations. We strive to enhance our energy use efficiency while using our energy in a responsible manner. Trina Solar continuously reduces CO₂ emission and makes our best efforts to produce more cost-competitive products and contribute to climate change mitigation.



Internal Carbon Trade Scheme

The primary energy mainly used in our company is natural gas. The secondary energy includes electricity and diesel. The energy-consumed media include water, nitrogen, oxygen and argon. We record and analyze the consumption of primary and secondary energy. Meanwhile we calculate the consumption of indirect energy-consumed media. We report them in the form of standard coal-equivalent (SCE) consumption per MW module production on a monthly basis, i. e., integrated energy consumption (Ton SCE/MW). We implemented an internal carbon trade scheme for all domestic and overseas plants. We setup an annual integrated energy consumption target for each department and then performed monthly assessments. Based on the average carbon price in the domestic carbon trade market, we awarded carbon emission bonuses for those departments who have achieved their targets, and imposed carbon emission penalties for those who have not fulfilled their carbon emission targets. We sent a monthly message to department managers, reminding them to be aware of the impact of their operating activities on the environment. We encouraged them to develop technologies and carried out energy conservation project, so as to continuously reduced energy consumption and greenhouse gas emissions from operations. In 2018, the consolidated energy consumption per MW module decreased by 12% compared to that of 2017.

Trina Solar was awarded as "Green Factory Model" by the Ministry of Industry and Information Technology (MIIT)

In February 2018, the Ministry of Industry and Information Technology announced the second batch of green manufacturing list, including 208 green factories, 53 green design products, 22 green parks, and 4 green supply chain management demonstration enterprises. Among them, Trina Solar passed the third-party evaluation from China Quality Certification (CQC) with a high score of 97 and was awarded with the honour of "Green Factory Model".

As a leader in the global solar industry, Trina Solar is committed to green manufacturing in terms of plant construction, raw material selection, production processes, waste utilization, and energy consumption, and strives to build a green factory with intensified plants, harmless raw materials, clean production, waste recycling and low carbon emission. In the future, Trina Solar will actively play a demonstration role in green manufacturing, actively implement green strategies, green standards, green management and green production, and strive to build a green manufacturing system that is efficient, clean, low-carbon, and ecological. Trina Solar will lead the green culture.



Focus on Supply Chain

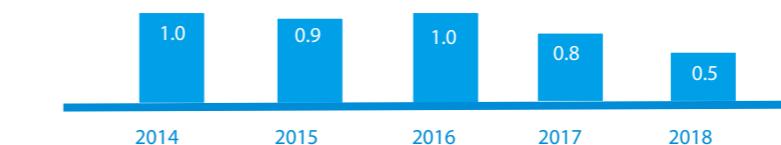
Care for Employees

Contribution to Society

Appendix

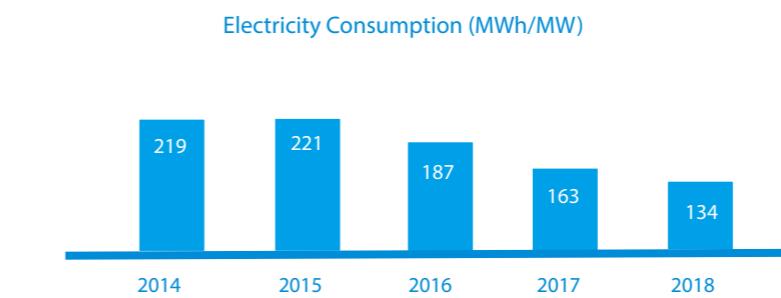
Types of Energy	2014	2015	2016	2017	2018
Natural Gas (1,000 m ³)	2,720	2,710	4,550	3,270	1,970
Electricity Purchased (1,000 kWh)	589,501	634,931	861,112	998,869	876,252
Integrated Energy Consumption (TSC/MW)	86,000	92,104	106,940	150,513	132,331

Natural Gas Consumption (1,000 m³/MW)



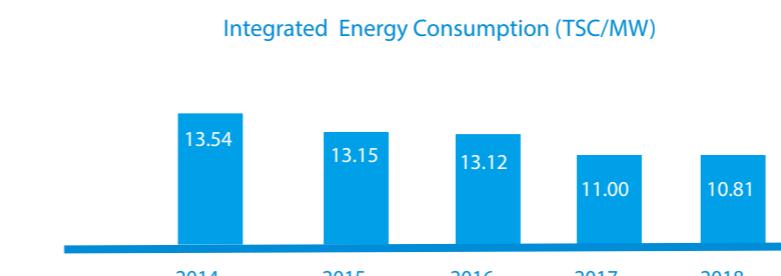
Natural gas consumption in 2018 decreased compared to that of 2014

50%



Electricity consumption in 2018 decreased compared to that of 2014

38.8%



Integrated energy consumption in 2018 decreased compared to that of 2014

20.2%

Renovation Project for 35 KV Electrical Substation

The 35KV substation, located in southwestern campus in Changzhou, was put into operations in 2005. There were two main transformers, model of S9-5000 and S9-10000 respectively, in the substation. The transformers were old models with low energy efficiency and low load ratio. After evaluation, it was decided that the load for 35KV substation could be directly connected to a upstream 110KV substation and the transformers could be switched off, thus reducing both power consumption and 35KV variable power. Besides, the safety and reliability of electricity supply were improved. The renovation project was completed in December 2018. After the renovation, we saved 200,000 kWh/year of electricity consumption, which was equivalent to a reduction of 160 tons/year of carbon emission.

Annual Energy Saved

200,000 kWh

Trina Solar Energy Conservation Project Statistics

Year	Location	Description	Energy Saved	CO ₂ Reduction (tons/year)
2018	Changzhou, China	• 35 KV substation renovation in Southwest Campus	200 MWh/year electricity	160
2018	Thailand Plant, Thailand	• Operating blowers intermittently to reduce the cost of wastewater treatment by utilizing the climatic advantages of high temperature in Thailand.	300 MWh/year electricity	240
2018	Hubei, China	• Replacing 1500 T5 fluorescent lamps in the production workshop with energy-efficient LED lamps. • After the dryer system in air compressor operated for long-time, the absorption ability of desiccant alumina was getting weaker, and the resistance became larger when the compressed air passed through the dryer system. After replacing with the new alumina, the resistance was reduced, so the power consumption was reduced.	100 MWh/year electricity	80
2018	Hefei, China	• The lighting control in the warehouse was modified and equipped with the sub-area control switches, which allowed to switch on the lighting based on area needs, so as to help save electricity.	70 MWh/year electricity	56
2017	Changzhou, China	• Replacement of oven with drying machine to reduce electricity consumption in cleaning process in Silicon Workshop.	500 MWh/year electricity	400
2017	Changzhou, China	• Collection and reuse of residue heat from chillers and air compressors.	5,000 MWh/year electricity	4,000
2017	Yangcheng, China	• Replacement of axial flow compressors with centrifugal compressors, which have higher COP and capacity, to enhance energy efficiency.	1,400 MWh/year electricity	1,120
2017	Hefei, China	• Fine-tuning and optimization of operation parameters of air compressors, chillers, cooling water pumps and air-conditioning system, so as to reduce electricity consumption while giving guarantee operation conditions in workshop.	70 MWh/year electricity	56
2017	Vietnam Plant, Vietnam	• Modification of cooling water process to Multi-crystall furnaces was done. Additional two sets of cooling water heat exchangers, which made heat exchange with cooling towers directly, were installed. The electricity consumption was reduced resulted from reduction of chilled water consumption during the period from May to September each year.	1,690 MWh/year electricity	1,352
2016	Changzhou, China	• Implementation of PCW (process cooling water) free-cooling process to reduce electricity consumption.	1,220 MWh/year electricity	976
2016	Yangcheng, China	• Installation of lighting auto-control sensors in the public areas, including warehouse, packaging material shelter and rain shelter, where the lighting was always on before installation.	500 MWh/year electricity	400
2016	Hubei, China	• Installation of VFD (Variable Frequency Drive) for air compressors so as to achieve electricity saving purpose.	600 MWh/year electricity	480
2016	Thailand Plant, Thailand	• Instead of pumping water, the water tank was designed in such a way, so that water replenishment is fulfilled by gravity and electricity consumed by water pumps was saved. • Residue heat from process cooling water (PCW) was collected to heat the process water, so as to reduce electricity consumption.	1,500 MWh/year electricity	1,200
2015	Changzhou, China	• The low power-rated air compressors were replaced with high power-rated air compressors, so that the compressed dry air (CDA) was supplied in centralized way. The energy efficiency was raised and electricity was saved.	333 MWh/year electricity	266
2015	Changzhou, China	• Upgraded multi-crystalline furnace from model G5 to G6 in Wafering workshops. G6 multi-crystalline furnace has a big charging capacity, so that energy efficiency was raised significantly.	6,000 MWh/year electricity	4,800
2014	Changzhou, China	• Collection and reuse of residue heat from refrigerators (chillers) to raise the water temperature for UPW (Ultra-pure Water) plant, leading to a saving of natural gas consumption.	300,000 Nm ³ /year natural gas	650
			Total	16,236

Environment-friendly Operation

Creating a sustainable future requires cleaner energy. As the world's population continues to increase, the dealing of the world population's demand for energy has become an unprecedented challenge.

Clean Solar Energy

Global energy system is accelerating the transition to low carbon. The large-scale utilization of renewable energy and the cleanliness & low carbonization of conventional energy will be the basic trend of energy development. Accelerating the development of renewable energy has become the mainstream of global energy transformation. Compared with traditional coal-fired power generation, solar energy can significantly reduce CO₂ emission. How we can produce more clean energy, which can significantly reduce CO₂ emission, is regarded as one of the biggest challenges we face. Trina Solar is committed to continuously exploring and applying technologies that increase PV product efficiency and help reduce CO₂ emission. We strive to use the clean solar energy to promote energy transformation. We are committed to systematically addressing the issues of economic development, environmental protection and energy security and providing the clean solar energy to the public.

We not only conduct our operation in a responsible manner, but also contribute to meet the rising demand for clean energy by establishing Product Stewardship Policy, technological innovations, efficiency improvement, and adequate disposal of end-of-life PV products, so as to actively respond to global climate change.

As of end of 2018, the cumulative shipments of Trina Solar's PV modules exceeded 40 GW. The PV modules converted sunlight into electricity, which can reduce carbon dioxide emissions by 40 million tons per year compared to thermal power generation, assuming each panel is operating normally. Trina Solar strives to explore innovative solar energy application model and implement 'PV +' strategy. We make our contributions to the construction of ecological civilization and the response to global climate change. As of the end of 2018, the cumulative grid connection of Trina Solar's solar power plants in China exceeded 1.6 GW. In 2018, after the sales of solar plants, the solar plants owned by Trina Solar generated 775 million kWh of clean solar power, which exceeded the total power consumptions (722 million kWh) for Trina Solar's manufacturing operations and R&D activities in China. This means that Trina Solar has once again achieved "zero" carbon emissions, enabling the goal of producing our clean energy products with clean energy.

Energy storage project successfully connected to grid in Alice Springs, Northern Territory, Australia

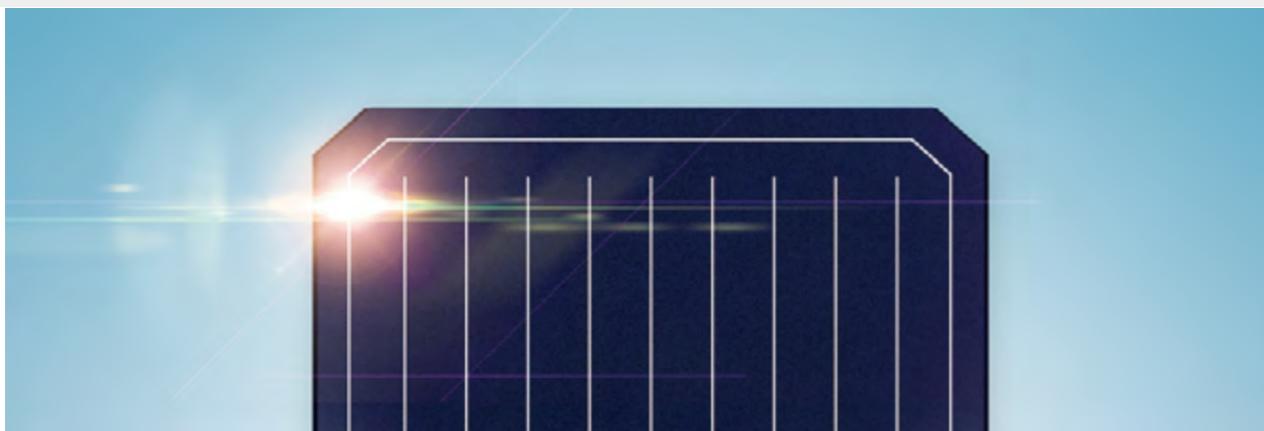


In September 2018, Trina Solar's commercial energy storage project, Bunnings Warehouse, was successfully connected to grid in Alice Springs, Northern Territory of Australia. As one of the largest commercial energy storage projects in Alice Springs, Trina Solar provided customers with 560 kWh containerized energy storage system and 375 kW PV modules, which not only enhanced the energy efficiency and power stability through energy storage technology, but also reduced electricity cost and maximized economic benefits by making use of peak-to-valley price difference and optimizing energy management.

Alice Springs is famous for its surrounding desert scenery and historical heritage. The maximum temperature during daytime can reach 45 °C. The long-term air-conditioner running results in the demand of large power load and high power stability on local grid. As the largest DIY (Do it yourself), horticultural

and hardware chain store in Australia, it was decided to install an energy storage system for Bunnings Warehouse in Alice Springs to cope with the high load, high electricity price and grid instability issue resulted from high ambient temperature. It helps to reduce the dependence on local power grid and improve power stability.

Trina Solar has developed customized solutions from design, spare parts procurement, system integration, installation, commissioning, etc., which effectively solve the problems of high temperature operating environment and grid instability. The project has become a model application case for the energy storage industry. After the project is connected to the grid, it is estimated that the annual power generation reaches 560 MWh, which saves about AU\$ 180,000 (about RMB 900,000).

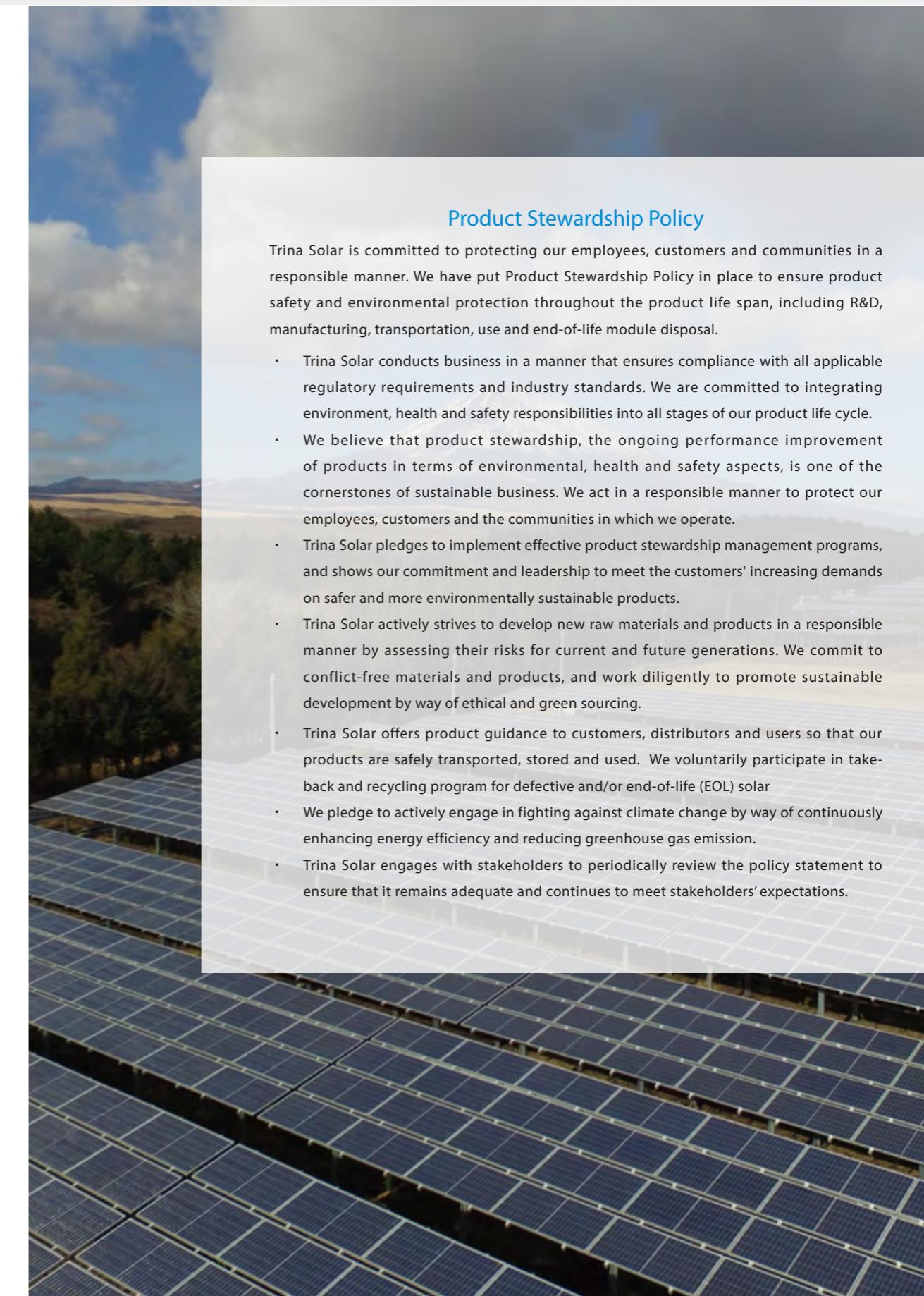


Innovation & Sustainable Development

Innovation promotes sustainable development. Trina Solar has partnered with Solar Energy Research Institute of Singapore (SERIS), Australian National University (ANU) and other world's leading PV research institutes and universities, to advance solar technology and create cutting-edge solutions for our customers. Trina Solar's State Key Laboratory (SKL) of Photovoltaic Science and Technology (PVST) has successively created 18 world records in the conversion efficiency and output power of photovoltaic cells and modules.

In an innovation-driven PV industry, Trina Solar always focuses

on developing leading-edge PV technologies and products with improved cell efficiency and reduced system cost. Trina Solar insists on technological innovation, and strives to transform the laboratory technology to commercial application as quickly as possible. In February 2018, certified by JET Japan, the 6 inch (area 243.18 cm²) IBC (Interdigitated Back Contact) solar cell, developed independently by Trina Solar's State Key Laboratory (SKL), had set a new record of 25.04% conversion efficiency. Innovation helps expand our business scope, enhance our resource use efficiency, as well as protect environment and promote the sustainable development of the global economy.



Product Stewardship Policy

Trina Solar is committed to protecting our employees, customers and communities in a responsible manner. We have put Product Stewardship Policy in place to ensure product safety and environmental protection throughout the product life span, including R&D, manufacturing, transportation, use and end-of-life module disposal.

- Trina Solar conducts business in a manner that ensures compliance with all applicable regulatory requirements and industry standards. We are committed to integrating environment, health and safety responsibilities into all stages of our product life cycle.
- We believe that product stewardship, the ongoing performance improvement of products in terms of environmental, health and safety aspects, is one of the cornerstones of sustainable business. We act in a responsible manner to protect our employees, customers and the communities in which we operate.
- Trina Solar pledges to implement effective product stewardship management programs, and shows our commitment and leadership to meet the customers' increasing demands on safer and more environmentally sustainable products.
- Trina Solar actively strives to develop new raw materials and products in a responsible manner by assessing their risks for current and future generations. We commit to conflict-free materials and products, and work diligently to promote sustainable development by way of ethical and green sourcing.
- Trina Solar offers product guidance to customers, distributors and users so that our products are safely transported, stored and used. We voluntarily participate in take-back and recycling program for defective and/or end-of-life (EOL) solar
- We pledge to actively engage in fighting against climate change by way of continuously enhancing energy efficiency and reducing greenhouse gas emission.
- Trina Solar engages with stakeholders to periodically review the policy statement to ensure that it remains adequate and continues to meet stakeholders' expectations.

Trina Solar won the "China Grand Award for Industry"



In December 2018, the 5th Conference of China Grand Awards for Industry was held in the Great Hall of the People in Beijing. Due to its outstanding performance and strength, Trina Solar was conferred with the award of the China Grand Award for Industry. The award honors industrial enterprises and projects acting as role models in entrepreneurship, self-dependent innovation and globalization in China's reform and opening-up. Trina Solar was the first PV company to receive this honor in China.

Innovation-driven has always been one of core strategies for development. In 2018, together with domestic and international leading enterprises and research institutions, Trina Solar established Trina Energy IoT Industrial Development Alliance and IoT innovation center, providing our partners with an innovation platform to establish an energy IoT ecosystem.

China Grand Award for Industry, approved by the State Council, is the highest award in China's industrial sector and is known as the "Oscar" in Chinese industry. Led by the China Federation of Industrial Economics, the award was established in 2007, and was held once every two years, aiming to recognize enterprises that have achieved outstanding results in innovation-driven development and adhering to the new era industrialization path with Chinese characteristics, leading the high quality development for China's industrial enterprises.



Compliant Disposal of Scrapped PV Modules

The average lifespan of PV modules is approximately 25 years. The solar modules installed in the 1990s have reached their useful lifespan and will then be scrapped. The compliant disposal of scrapped PV modules and the recycling of valuable resources of scrapped modules will be a significant research subject. The investigation of relevant research institution demonstrates that the number of scrapped PV modules will increase tremendously from 2020 and reach 800,000 ton/year by 2030.

Many companies have not considered the problem of compliant disposal of scrapped PV modules which end product life cycle. As a responsible company, Trina Solar actively undertakes the responsibility to ensure compliant disposal of waste PV products. Trina Solar strictly abides by the e-waste management laws and regulations of the countries in which it operates, and proactively pushes for the recycling and reuse of waste electronic products.

Waste Electrical and Electronic Equipment Directive (WEEE, 2012/19/EU) specifies that manufacturers of electrical and electronic equipment must guarantee that waste products created in any EU member states must be recycled and reused, in order to ensure that electrical and electronic equipment, including PV modules, is properly managed by means of recycling, reusing, reclamation and regeneration. In 2012, for the first time, the Directive took PV modules and equipment into account. From February 1st, 2014 onwards, all photovoltaic manufacturers, distributors and installation contractors in Europe must fully abide by EU's rules on waste management, including providing necessary funds and administration. All PV products must be labeled with the same "wheelie bin" LOGO designed by WEEE.

- Phase I (As of August 14th, 2015): Scrapped PV modules recycling rate reaches 75%, reuse rate reaches 65%;
- Phase II (As of August 15th, 2018) : Scrapped PV modules recycling rate reaches 80%, reuse rate reaches 75%;
- Phase III (from August 15th, 2018 onwards): Scrapped PV modules recycling rate reaches 85%, reuse rate reaches 80%.

Trina Solar always focuses on extended producer and has become a part of the non-profit organization PV CYCLE (European Photovoltaic Module Take-back and Recycling Organization)

founded in 2007. PV CYCLE is committed to centralizing and customizing services for the recycling of global waste photovoltaic products.

- EU member countries: PV CYCLE establishes a network consisting of hundreds of certified and recycling points, waste transport firms and dedicated recycling facilities across the Europe. It provides solutions for sustainable PV module take-back and recycling, and uses recycled materials for the making of various new products.
- Other areas: PV CYCLE provides customized services, for example, whoever needs international parcel service can inquire on the PV CYCLE's website (www.pvcycle.com) or can send an email to info@pvcycle.com.

Cooperated with Veolia and French Renewable Energy Union, PV Cycle built a PV module recycling plant in Roosset, south of France. The recycling plant was put into operation in 2018. The PV Recycling Plant uses robots to disassemble and sort PV modules. 95% of the materials can be disassembled, sorted, processed and recycled. Typical PV modules are made of 65-75% glass, 10-15% aluminum frame, 10% plastic and 3-5% silicon. The sorted materials are processed, packaged and sent to different industries. Among them, two-thirds of the glass is processed to become shattered glass, which is sent to the glass manufacturing industry. The aluminum frame is sent to the aluminum refinery. The waste plastic can be used as a fuel in cement plant. The recovered silicon can be used in the precious metal industry. Finally, the remaining cables and connectors are crushed and sold as copper beads.

Trina Solar (Japan) Limited joined in the Glass Recycling Committee of Japan (GRCJ). The core members of GRCJ consist of associations and companies who promote the reuse of waste glass. The GRCJ was established for the promotion of recycling PV modules, especially the recycling of waste glass. The recycling process includes collection, transportation, disassembly, sorting, separation and glass production of waste modules. Glass and cell scraps are mainly separated and collected by smashing and gravity separation. Glass scraps can be used as raw materials for building materials and ceramics industry. The metal component of cell scraps will be recycled and reused by specialized metal recycling companies.

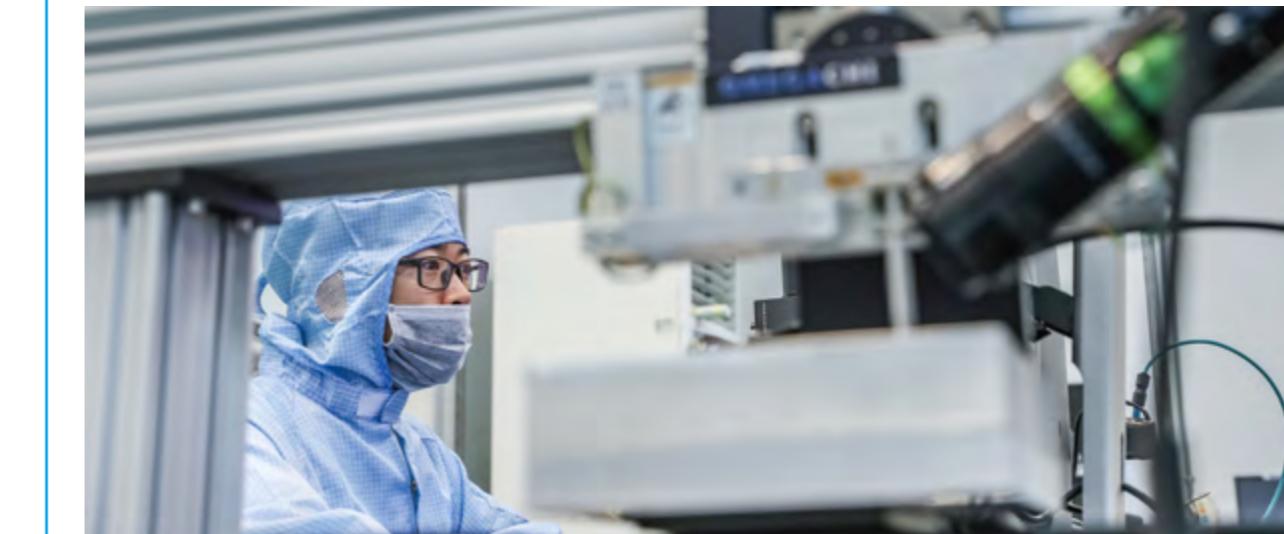
Reliability Test



Longer life-span product can reduce the exploitation of the earth's resources. Laboratory reliability test uses rigorous testing methods to simulate module performance under real environmental conditions to assess whether it meets the expected quality and reliability:

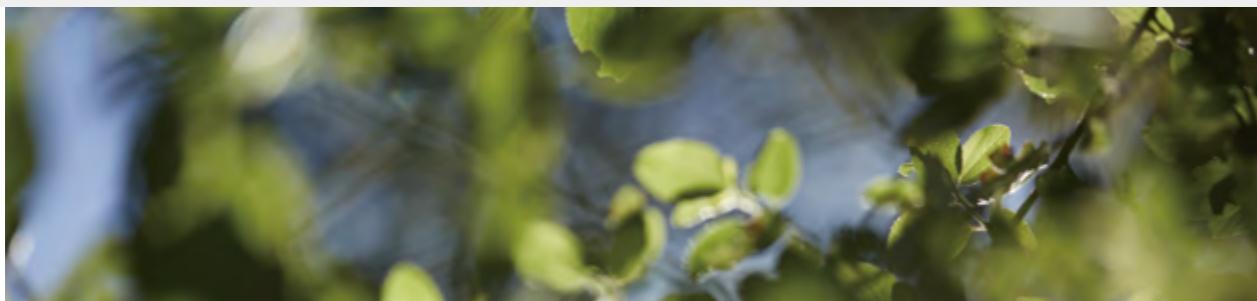
- Electrical performance test: module performance test under standard illumination and low illumination conditions;
- Safety test: test on grounding, insulation, voltage withstand;
- Mechanical performance test: hail and impact performance test;
- Exposure and hot spot test;
- Environmental aging test: UV test, moist & heat test, moist & freezing test;
- Ammonia, salt spray test.

Extended Producer Responsibility - Proactive Research on Recycling of Scrapped PV Module



Most of valuable materials in PV module, such as silicon, silver, copper and aluminum, can be recycled. The recycling of the materials saves resources and reduces energy consumption. As a leader in PV industry, Trina Solar firmly believes that the recycling of scrapped PV module has significant economic and environmental value. The progress made so far in the field is as follows:

- Development of module disassembly device is currently undergoing prototype debugging.
- Development of backboard plastic material recycling is in "separation + centrifugal system integration" phase.
- Experiment of recycling of solar cell (silicon) has been completed. The silicon powder purification experiment is in the processing.



Environment-friendly Operation

As an advocate and practitioner of environmental protection, Trina Solar has always been committed to sustainable development throughout the whole product life cycle, from product development, raw material procurement and manufacturing, to resource & energy utilization and waste management.

We believe that the most precious resource is the natural

environment on which human beings depend. Trina Solar will spare no efforts to fulfill our commitment to all stakeholders, and will always concern for human beings and the sustainable development of the earth. Green manufacturing and environmental protection has always been the lifeline of our company. We implement green operations through rational use of natural resources, adequate treatment of wastewater and air emission, waste recycling, and other environmental promotion activities.

Beautifying China - Trina Solar is a Practitioner



The day on 5th June each year is the World Environment Day. People all over the world express their longing for and pursuit of a beautiful environment on the day.

The Ministry of Ecology and Environment released the theme for 2018 World Environment Day: "Beautifying China, I am a practitioner", aiming to promote the public participation in nurturing of ecological civilization, and work together to build China with blue sky, green earth and clean water. As an advocate and a practitioner of green development, Trina Solar is committed to providing clean energy products and using energy and natural resources efficiently and responsibly. We advocate green sustainable production and do our utmost to contribute to the beautiful vision of "Clean Water & Green Mountains".

On June 2nd, 2018, Eco-Environmental Protection Seminar, organized by Changzhou Eco-Environment Bureau – High-tech Division, was held in the Dinosaur City Theater (Phase 5). Zhenxiang Zhao, Environmental Protection Director of Trina Solar, was invited to attend the seminar. Mr. Zhao shared environment management experience with thousands of participants, including Trina Solar's EHS management system, clean energy generation, pollution control facilities and sustainable supply chain etc.

Trina Solar always adheres to the sustainable development concept, respects nature, and protects nature. We protect eco-environment like protecting our eyes. We treat the eco-environment like our life. To build a beautiful China together with community to have a blue sky, green earth and clean water, Trina Solar is a practitioner!

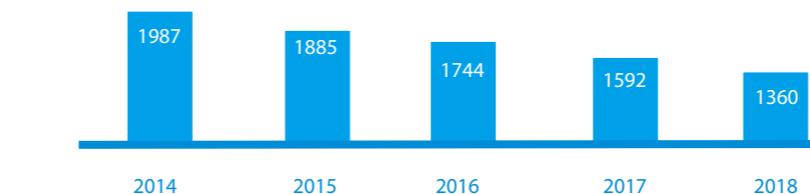
Sustainable Use of Water Resource

Trina Solar regards protecting water resource as one of its important tasks, and strives to reduce the consumption of water resource per MW module production through sustainable use of water resource. Solar module production consumes a lot of water. To carry out water conservation management, we setup water saving goals for each workshops and implemented various of water saving projects, such as reuse of RO (Reverse Osmosis)

rejected water, treat and reuse of wastewater, collection of condensed water from air conditioning system etc. We setup a strict maintenance scheme to clean RO membrane to increase DI (De-ionized) water yield. With business expanding, total amount of water consumption is in increasing trend. But as we continue to develop and implement water conservation projects, our water use efficiency continues to increase.

Water Consumption	2014	2015	2016	2017	2018
Water Consumption (million m ³)	5.338	5.418	8.043	9.703	8.919

Water Consumption per MW Module Production (T/MW)



Water consumption decreased in 2018 compared to that of 2014

31.6%

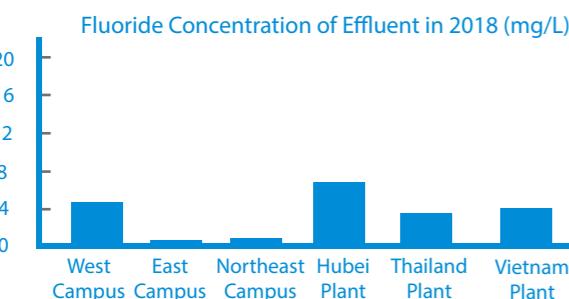
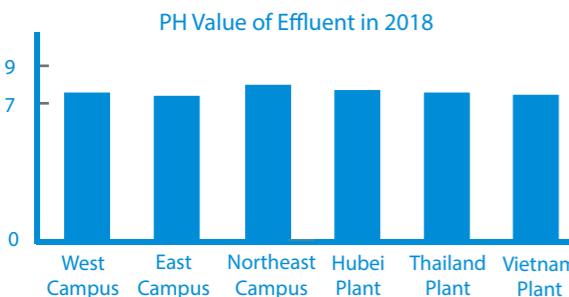
Type	Measures Taken to Save Water from 2014 to 2018	Water Saved (million tones/year)
Reuse of RO Rejected Water	<ul style="list-style-type: none"> A lot of ultra-pure water is needed in the wafering and solar cell manufacturing processes. A lot of RO (Reverse Osmosis) rejected water is discharged from UPW (ultrapure water) plants. We collect those RO rejected water, and use it in those processes where high water quality is not required, such as pre-cleaning, alkaline cleaning, surface grinding, angle grinding in wafering workshops. The Hubei plant uses 300 tons RO rejected water every day for wastewater station dispensing, scrubber replenishment, landscaping, flushing and other things. 	1.57
Wastewater Reuse	<ul style="list-style-type: none"> Trina Solar worked together with Wuxi Depelle Water Investment to build a new water recycling plant. The plant was built using advanced dual-membrane (ultrafiltration and reverse osmosis) technology to treat industrial wastewater generated from the manufacturing process. The treated water was directed back to Trina Solar as supplementary raw water supply. In the five years from 2014 to 2018, Trina Solar collected a total of 1.511 million tons of industrial wastewater, and produced and reused 9.2 million tons of new-water (or recycled water). The water can meet the annual water consumption for 50,000 households in China. 	1.80
Others	<ul style="list-style-type: none"> Implementation of internal water recycle for wafer cleaning baths – water used in the post-cleaning bath was diverted and reused in the pre-cleaning bath. Collection of condensate water from the air conditioners and use it as supplementary water supply for cooling tower and emission scrubber. Circulating water of vacuum pump as supplement water for cooling tower in cell workshop. Collection and reuse of humidifying water for air conditioners in module workshop. Regularly clean RO (Reverse Osmosis) membrane so as to raise DI water yield and reduce RO rejected water. 	0.15



Wastewater Discharge

The wastewater from the manufacturing process which can't be reused or recycled will be adequately treated by our internal wastewater treatment plants prior to being discharged into the municipal sewer for further treatment. There was no occurrence of chemical leakage or wastewater limit-exceeding event since our operations started.

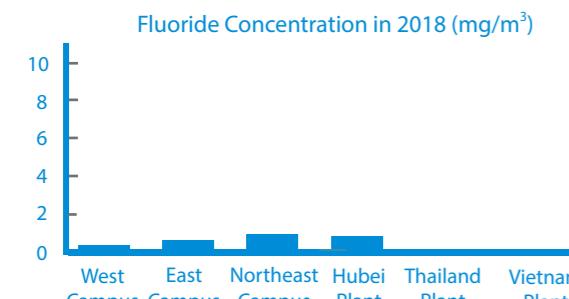
As a company with a strong orientation towards social responsibility, Trina Solar has been striving to lead the solar energy sector in proactively discovering wastewater denitrification and de-phosphorization technologies. After a few years of experimental exploration, Trina Solar has finally decided upon using the conventional technique-biochemical nitrification and de-nitrification technique to remove nitrogen and



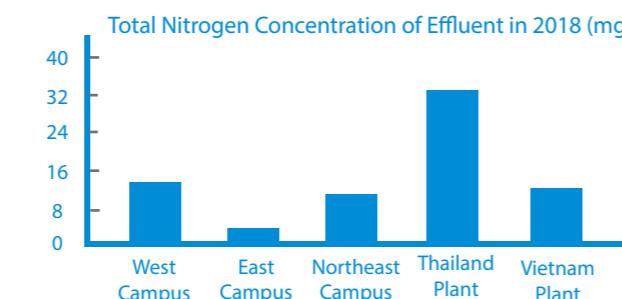
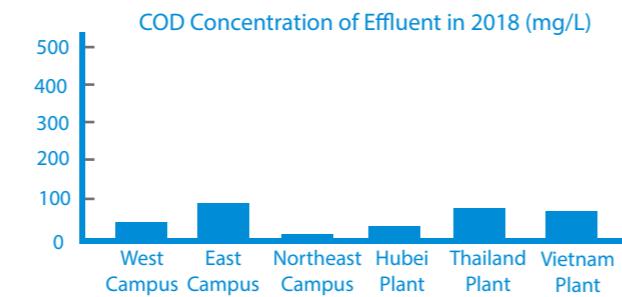
Air Emission

Trina Solar has built a range of scrubbers, such as acidic/caustic scrubbers, organic scrubbers etc. to remove pollutants from air emission according to relevant laws and regulations, to lower down the concentration of emission and to avoid or lessen the hazards that arise from air pollution.

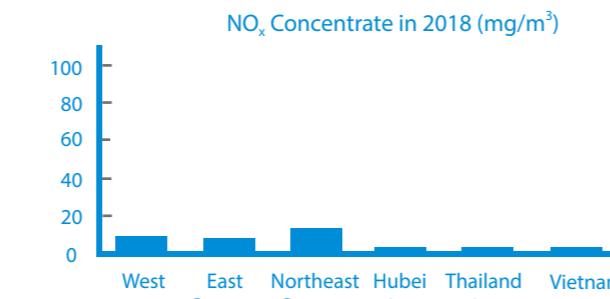
In order to meet the on-going stringent emission requirement,



phosphorus from wastewater. The manufacturing base of Trina Solar is located in Changzhou, Jiangsu Province, belonging to the Lake Tai basin - one of the most developed areas in China. To meet the stringent requirement of "zero" emission of nitrogen and phosphorus for projects within Taihu reserve regulated in Jiangsu Provincial Ordinance of Lake Taihu Water Pollution Prevention and Treatment, we have completed the wastewater de-nitrification update project in West Campus, East Campus and Northeast Campus. We successfully used the organic matter from wastewater generated in the wafer workshop as the necessary carbon source. We also used the small amount of phosphoric acid generated in the diffusion process as the phosphate source for biochemical nitrification. Thereby, we achieved the goal of "treating waste with waste", and lower down the environment impact.



the plants in headquarters, Changzhou invested RMB 7.4 million to upgrade the acidic scrubbers. Trina Solar engaged accredited third parties to carry out annual monitoring of air emission from our exhausts and scrubbers. Results show that air emission from exhaust and scrubbers are well below the limits of local standard and solar industrial standard.



Waste Management

Inadequate waste management may not only cause soil pollution and damage eco-balance, but also lead to water pollution and air pollution. Trina Solar treats wastes as resources. We segregate different wastes, and manage them based on

Stage	Measures
Designning	<ul style="list-style-type: none"> Take waste minimization into consideration at product design stage. Substitute or minimize those toxic materials with less toxic or non-toxic materials.
Manufacturing	<ul style="list-style-type: none"> Establish and implement Waste Management Procedure. Categorize different wastes into general waste, resource waste and toxic waste, and manage them in different ways. Setup and implement a recycle scheme for resource wastes, such as carton boxes, paper, plastics, metal scraps and woods. Setup and implement an annual toxic waste disposal plan, and maintain a disposal inventory according to regulatory requirements. Conduct environment awareness training for employees on waste minimization and segregation.
Packaging	<ul style="list-style-type: none"> Use the recyclable materials for packaging. Under the condition of not being jeopardizing product safety, try to use light-weighted materials.

Green Office

A quarter of our time each week is spent in the office. We believe that green office not only means minimizing the environmental impact of office activities, but also means creating an environment beneficial to the physical and mental health of employees so that they feel physically comfortable and are spiritually uplifted.

We work to gradually incorporate the "green office" theme

into fine detail of our work, to greatly reduce the impact of office activities on the environment. We are gradually reducing the use of hard copies of documents, and promoting the use of electronic documents. We established a video conference system, thus reducing the carbon emission generated during travels. We install a lamp switch for each cubicle to remind employees to turn off desk lamp when they leave their cubicle.

Biological Diversity Management

How to balance between the economic development and ecological protection has been one of key issues many enterprises face. Trina Solar always conducts environmental impact assessment (EIA) according to local requirements. EIA is to evaluate the positive and negative environmental impact when developing a new project or constructing a new solar power plant. We are committed to protecting the ecological environment and biodiversity of local communities.

To protect ecological environment, we build PV projects without changing the original use of the land, such as PV plus agriculture, PV plus fishery etc. while providing clean energy to local communities:

- Trina Solar built a solar farm in Dorset, London. We set up bird houses and bat nests near the farm and planted local wildflowers while keeping the solar panels high without affecting the farm's continued grazing.

Trina Solar built a 120MW 'PV plus fishery' project in Xiangshui, Jiangsu Province. The lower layer remains as aquaculture while the upper layer is PV panels, thus achieving sustainable economic, ecological and social benefits.

Trina Solar successfully built a 5MW 'PV plus agriculture' project in Menghe, Changzhou. A shed is constructed for ecological agriculture, where the roof is made of double-glass PV modules for clean power generation. The double-glass PV modules have strong permeability, thus keep the required illumination for the growth of crops.

Trina Solar built a 51MW 'PV plus agriculture' project in the tea garden in Xishuangbanna, Yunnan. The transparent double-glass PV modules were used above the tea tree for efficient use of the space. The project generates about 80 million kWh/year clean solar energy, which reduces carbon emissions by 60,000 tons.

Our plants always keep a section of the land so that it can be a home for native plants and animals. Moreover, we always try to improve their living environment, and promote the evolution of biodiversity at the project location by conducting environmental awareness-raising activities.

Trina Solar believes that every step of progress depends on the cooperation with, and support of the entire supply chain. A healthy and stable supply chain is the key to sustainable development of Trina Solar. We integrate sustainable development into procurement business and process, and take it as the basic line of choosing supplier. We not only actively fulfill our social responsibilities, but also urge our global suppliers and partners to shoulder their social responsibilities as well, so as to lead the whole PV industry to a sustainable future.

03

Focus on Supply Chain

- Sustainable Supply Chain
- Conflict-free Minerals
- Cooperation for Win-win Situation



Sustainable Supply Chain

The effective supply-chain management can help us reduce risks, improve products quality, achieve strategic objectives, enhance the overall performance of suppliers, and create commercial values for ourselves and customers. We constantly focus on our suppliers' performance on corporate social responsibility, and take it as the base line of choosing suppliers. We drive suppliers for continuous improvement through supplier assessment, audit and capability-building. We strive to continuously raise the overall performance of our suppliers and enhance their sustainability, so as to promote the sustainable development of the entire PV industry chain.

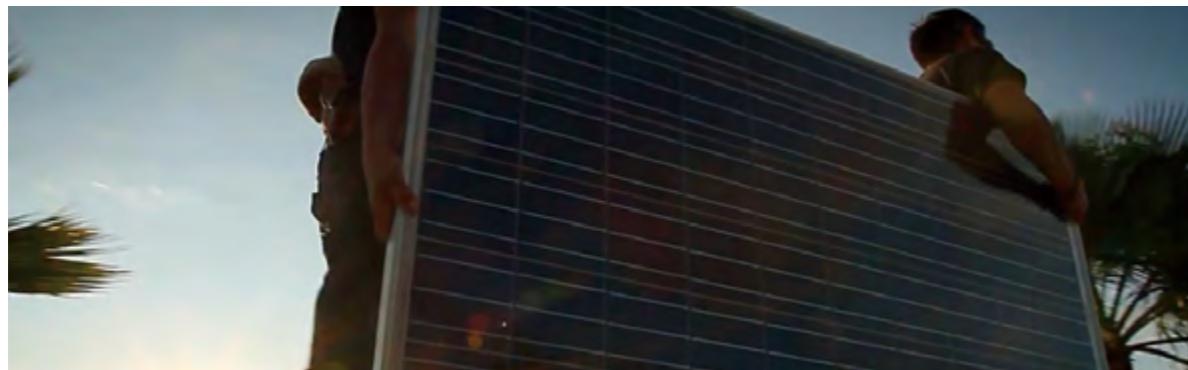
Our supply chain covers more than 80 procurement items, including raw materials, auxiliary materials, infrastructure, equipment, spare parts, packaging, logistics services, personal protective equipment, office suppliers, certification services, etc. The purchase team in headquarters in Changzhou is responsible for purchasing raw materials, auxiliary materials, infrastructure, equipment, installation and logistics services. The purchase team in local plants purchases those low-priced consumables, such as spare parts, personal protective equipment, office suppliers, etc..

Supplier Development

Trina Solar focuses on suppliers' sustainable development capabilities. We continuously improve the overall competitiveness of the supply chain through a comprehensive supplier review and evaluation process, as well as the full range of supplier communications and interactions. We focus on building a sustainable and win-win supply chain system. At present, the main suppliers are divided into: potential suppliers, potential qualified suppliers, and qualified suppliers.

Potential Supplier: a supplier who is able to produce or deliver materials for Trina Solar but temporarily hasn't obtained Trina

Supplier Development Procedure



We have established a standardized supplier development process, which includes supplier survey, supplier assessment, new parts/materials approval, qualified supplier approval etc.. The several related departments jointly discuss and decide on supplier selection, evaluation and elimination to ensure fairness and transparency.

Supplier Survey: The procurement department issues a 'Vendor Assessment Form' to the potential suppliers to evaluate their qualifications. The department completes the form by telephone call and on-site audit to assess whether the potential suppliers satisfy Trina Solar's requirements based on the marks: 1) <60 marks, not meeting the development requirements; 2) 60-70 marks, conditionally suppliers for development; 3) 71-80 marks, suppliers for development; 4)> 80 marks, preferred supplier for development.

Supplier Assessment: Trina Solar has established detailed assessment guidelines to evaluate suppliers. For those potential suppliers that need on-site assessment, our procurement department will review and assess their integrated abilities in many aspects, such as quality management system, supply

Solar's recognition for its qualification and ability. The supplier will be recorded into our potential supplier database. Trina Solar will choose qualified supplier from that database and assess it through questionnaire and formal on-site evaluation.

Potentially Qualified Supplier: a supplier who has obtained Trina Solar's recognition for its qualification/ability and is added to Trina Solar's procurement system.

Qualified Supplier: once a potentially qualified supplier passes the assessment, it will be upgraded to qualified supplier.

Supplier Management

We implement 'status' management on suppliers. The status of suppliers is divided into five states in the procurement system: approval, R&D, abnormal quality, freezing, and elimination. We can only issue bulk POs (purchase orders) to the suppliers with 'approval' status, and POs in small quantities to the suppliers with 'R&D' status. We cannot issue POs to the suppliers with 'abnormal quality', 'freezing', and 'elimination' status. We developed DQMS digital quality management system, which helped us manage all suppliers' information, status and performance appraisal effectively. We interacted online with suppliers to promote our suppliers make continuous improvements.

- Approved Supplier: being approved as a qualified supplier

to place a batch purchasing order.

- Developing Supplier: in the process of development and only small order for trial.
- Abnormal Supplier: being disqualified more than three times, the supplier will be classified as 'abnormal'.
- Frozen Supplier: with no deal for one year, the supplier will be frozen and limited for any new orders.
- Eliminated Supplier: with no deal for over two years or classified as 'disqualified'; the supplier will be eliminated from the supplier list.

High Standards of Business Ethics

Trina Solar considers business ethics as a key criterion for the selection of suppliers. The integrity agreement is an essential part of the contracts signed with our suppliers, which aims to promote and maintain high standards of business ethics among our suppliers. The clause in business ethics requires that the supplier promise not to bribe any person of Trina Solar in any way. Once any violation of the business ethics or laws and regulations is found, Trina Solar will immediately terminate all cooperation with the supplier. The clause in business ethics also provides suppliers with open complaint channels. Once suppliers discover that Trina Solar employees have violated business ethics, including bribery, extortion etc., they can report to Trina Solar's Ethics and Compliance Department.

Ethics Compliance Hotline:

+86-519-85176933

Anti-fraud Reporting Email:

IA@trinasolar.com

Reporting Platform:

<http://wb.trinasolar.com:8090/RCPFM/Trinasolar/report>

Management of Key Suppliers

Exerting an influence on key suppliers is an effective way to improve their corporate social responsibility (CSR) performance. Trina Solar formulated 'Supplier CSR Management Procedures' to continuously strengthen communication with suppliers by conducting CSR survey and on-site audit. The procedure requires key suppliers to sign CSR commitments, so as to strengthen communication and cooperation with them and strive to establish a stable, honest and reliable supply chain.

Trina Solar evaluates suppliers risk and identifies risk levels annually. Trina Solar categories the suppliers whose products

and services are closely related to Trina Solar Sustainable Development Goals as key suppliers, including:

- Providing products and services related to our goal of sustainable development, significant environment aspects or major risks;
- Providing products containing substances being restricted in use or liable to cause occupational diseases;
- Providing products, equipment and services with a great effect on our energy performance.

Chains	Content
CSR Survey on Key Suppliers	Good corporate social responsibility (CSR) performance is an important criterion for our selection of suppliers. Trina Solar conducts a comprehensive CSR survey on all newly-introduced key suppliers, which includes assessment of their performance in safeguarding workers' rights and interests, environmental impact, workers' safety, health and welfare, business integrity, and legal compliance etc.. The suppliers who fail to meet entry standards in CSR will not be qualified as our qualified suppliers.
Key Suppliers' CSR Commitment	We expect our suppliers to incorporate labor standards, environmental protection, occupational health and safety and business ethics etc. into their management systems. In order to ensure that our suppliers adhere to Trina Solar's principles and values, we request each of the key newly-introduced suppliers to sign a Supplier CSR Commitment, which stipulates that suppliers must pursue integrity management, create safe and healthy working conditions for workers, adopt fair employment and give due dignity and respect to workers.
CSR Audits for Key Suppliers	<p>We believe that periodic audit is an effective approach to promote suppliers' self-management. We carry out on-site audit on our key suppliers on a regular basis via document review, site inspection and employee interviews. In case of any problem encountered, we request the supplier to rectify it within a reasonable time frame. In case of a major non-conformity during audit, Trina Solar will request the supplier to take corrective actions within a time frame. The supplier is also required to establish its management system and procedure to prevent the similar non-conformity from happening again. In case that the supplier fails to fulfil our requirements, we may reduce the purchasing volume gradually or even disqualify the supplier permanently.</p> <p>Supplier audit covers the followings:</p> <ul style="list-style-type: none"> Business ethics: following ethical standards of fairness and honesty. Health and safety: having valid health and safety licenses, providing employees with a healthy and safe workplace, reducing accidents and injury as well as occupational health hazards. Environmental protection: having valid environmental protection licenses, complying with all relevant environmental protection requirements, and adopting environmentally responsible manufacturing processes; Elimination of discrimination: maintaining a workplace without discrimination, physical or verbal harassment. Prohibition of child labor, forced labor and labor abuse: prohibiting corporal punishment and forced labor, including use of prisoner labor, indentured labor, bonded labor, military labor or slave labor. Free association and collective negotiation: respecting employees' rights for joining, organizing or not joining labor unions.

Suppliers' Performance Evaluation

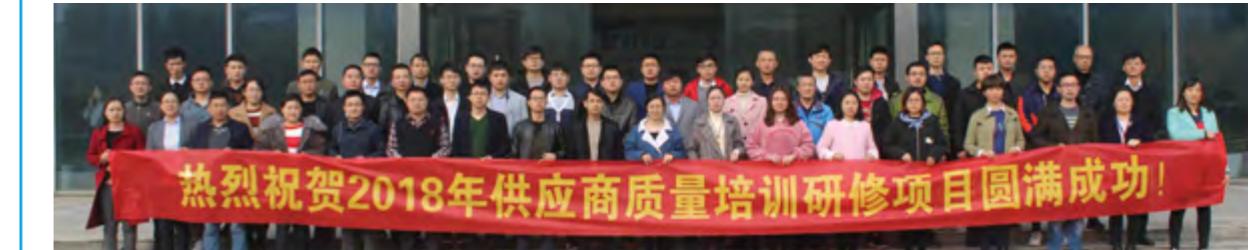
Trina Solar established a 'Management Regulation for Supply Chain Business Performance Evaluation', which evaluated the suppliers' performance in terms of quality, cost, delivery, service, innovation etc.. The suppliers were periodically evaluated based on their risk levels, including monthly evaluation, quarterly evaluation or random evaluation. Based on the results of the evaluation, we divided the suppliers into categories of five-star, four-star, three-star, two-star and one-star, which represented excellent, good, general, pending improvement and disqualified suppliers respectively. We awarded suppliers the Annual Excellent Supplier Award, Quality Excellence Award, Technology Innovation Award etc. based on their annual performance evaluation, so that we turned one-way guidance into the active two-way collaboration and communication. Thus we

gradually enhanced the suppliers' performance in all aspects. We regularly conducted supplier training, counseling and improvement programs to improve the suppliers' capabilities. For suppliers with lower stars, we focused on communication and counseling to encourage improvement. For the suppliers having no improvement for a long time, we gradually reduced the purchase volume, froze the procurement, or up to disqualify them.

In 2018, we added intellectual property (IP) clauses in the company's standard contract template to enhance the supplier's IP protection awareness and improve their IP protection management skill.



Supplier Quality Training



Trina Solar has been organizing quality training for suppliers every year since 2013, including the topics of QC Seven Tools, 8D, Measurement System Analysis, Lean Six Sigma etc.. From 2013 to 2018, about 360 people from Trina Solar's suppliers participated in the training and obtained the certificate issued by Trina Solar. In addition, we organized Trina Solar Cup - Supplier Improvement Project Competition annually to push suppliers for continuous quality improvement, cost

reduction, result sharing, and excellent quality products creating. During the period from 2016 to 2018, we had 54 improvement projects from 50 suppliers participating in the competition. Among them, 14 improvement projects submitted by 14 suppliers were received in 2018, and the project of "Reducing the Poor Appearance of PV Module Back-sheet" submitted by Zhongtian PV Materials Co., Ltd. won the first prize for its significant improvement.

Matured Supplier Management System



We developed DQMS digital quality management system in 2017, which helped us manage all suppliers' information, status and performance appraisal effectively. We interacted online with suppliers to improve communication. We developed SRM Supplier Management System in 2018, which covered management modules such as supplier development, purchase requisition, contract signing, reconciliation, payment, supplier status, etc.. The overall efficiency was improved significantly.

• Improve procurement strategy: access to supplier

- performance data, improve supply quality, and reduce procurement risk;
- Reduce cycle time: automate Request for Proposal (RFP) and Request for Quotation (RFQ) processes to accelerate procurement execution through online approval;
- Reduce procurement cost: consolidate the needs of multiple BU (Business Units), obtain preferential prices through competitive quotations, and reduce overall procurement cost.



Conflict-free Minerals

"Conflict minerals" refer to metallic minerals, such as tin, tantalum, tungsten, gold and cobalt exploited from Democratic Republic of Congo and surrounding nations, which may produce serious problems regarding human rights and environment during exploit and sales. Trina Solar has put its policy, systems and processes in place to ensure that its supply chains are conflict-free. We are committed to sourcing only materials from environmentally and socially responsible suppliers. We highly focus on conflict minerals and work diligently with suppliers to promote sustainable development by way of ethical sourcing. The copper strips, coated with tin, are used in the production process of PV modules. We

have proactively taken actions since we realized that there is a possibility of conflict:

- Formulate formal conflict mineral management policy;
- Establish management system and conduct conflict mineral survey for supply chain;
- Organize conflict mineral training for key suppliers;
- Inquire all suppliers to sign formal agreement to promise no conflict mineral in their products, and deliver the requirement to downstream suppliers.

Cooperation for Win-win Situation

Trina Solar not only pays attention to its own green development, but also takes initiative to convey its vision and goal of sustainable development to its global partners. Trina

Solar is committed to working with global partners to gather ideas and contribute inspiration and innovative solutions for the sustainable development of the photovoltaic industry.

Joint Development of Energy Micro-grid with CM-IoT and Haibin Group

In June 2018, together with CM-IoT, Haibin Group in Jiangsu, Trina Solar signed a tripartite strategic cooperation agreement in Trina Solar headquarters in Changzhou. Jifan Gao, Chairman of Trina Solar, Xingxiang Xu, Chairman of Jiangsu Haibin, Xiaoyu Qi, President of CM-IoT, and Yongjun Xu, Dean of Jiangsu Low-carbon Research Institute, attended the signing ceremony. Through the strategic cooperation, we achieved synergy in the five areas including incremental

distribution network project, energy service, energy storage, thermo-electricity generation and energy IoT. Combined with the local resource endowments, we built energy IoT demonstration projects. We are committed to being a leader in the aspects of energy IoT planning, science and technology park construction, energy cloud platform and energy IoT solutions.

Clean Solar Energy Development in Africa



The 2018 Beijing Summit of the Forum on China-Africa Cooperation was held in September 2019. Rongfang Yin, Executive Vice-President of Trina Solar and Boca, Senior Representative of Beijing Office, African Trade Center signed "Trina Solar - African Trade Center Strategic Alliance Agreement". The two parties were committed to establishing a long-term relationship to jointly develop and utilize the clean solar energy in Africa. By taking advantage of Trina Solar's brand, technology and globalization, Trina Solar will provide African customers with competitive products, solutions and high-quality services to meet the needs of customers in African market. African Trade Center will use Trina Solar as its primary partner in PV-related project development and provide local resources support. The two parties will also explore potential investment opportunities in the fields of PV + solutions, energy storage, smart energy and energy IoT etc., aiming to jointly promote the application and development of low-carbon, green and clean solar energy in Africa.

2018 Trina Solar Supplier Conference



The 2018 Trina Solar Supplier Conference was held in Changzhou with the theme of "Connecting, Sharing, Wisdom - Building a New Dream Chapter". More than 320 representatives from all over the world attended the conference. Jifan Gan, Chairman & CEO of Trina Solar, attended the conference and made a keynote speech. Mr. Gao shared participants with PV industry trend, Trina Solar development history and its concept of "Co-creation, Sharing, Partnership, and Win-win together". He emphasized that Trina Solar always adhered to the principle of "Technology Co-creation, Information Sharing, Supply and Demand Matching, and Quality Leading", and stuck to transparency, visualization, digitization, standardization, and multi-dimensional collaboration with all suppliers. Mr. Gao called for working together to create a sharing platform, so as to become a market leader and achieve a win-win goal. The Conference established two awards, Joint Innovation Award and Long-Term Strategic Cooperation Excellence Award, which recognized those suppliers who had achieved joint-innovation with Trina Solar in 2018 and had a long-term strategic cooperation.

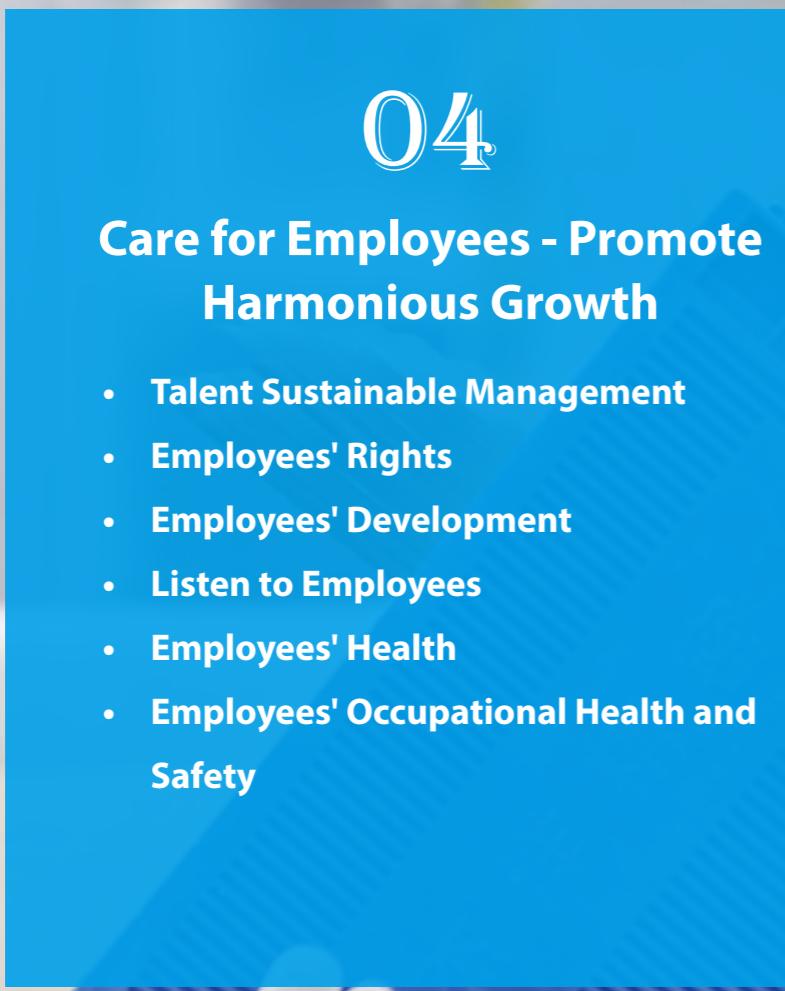
With the advent of the PV grid-parity around the world, Trina Solar strives to build energy innovation platform to be in line with national innovation needs and green development trends. Trina Solar is committed to becoming the world's leading energy IoT company. Looking ahead, Trina Solar is looking forward to cooperating with all suppliers and friends to develop a win-win situation!

Employees are essential force for pushing forward Trina Solar's sustainable development. We believe that it depends on every employee's support and dedication to achieve our mission and vision. Therefore, we are committed to providing our employees with safe and healthy working conditions. We also provide highly professional training, a competitive salary and benefit package, and open communication channels for our employees, hoping to stimulate their enthusiasm and to create a win-win future between the company and the employees.

04

Care for Employees - Promote Harmonious Growth

- **Talent Sustainable Management**
- **Employees' Rights**
- **Employees' Development**
- **Listen to Employees**
- **Employees' Health**
- **Employees' Occupational Health and Safety**





Talent Sustainable Management

Trina Solar treats talents as the driving force for sustainable innovation. We focus on employees' personal development and has formulated a sustainable talent cultivating strategy. We attract and retain outstanding talents through reasonable performance evaluation, systematic training, competitive salaries and incentive mechanisms. Trina Solar makes every effort to offer an international platform for our employees to become comprehensive management talents.

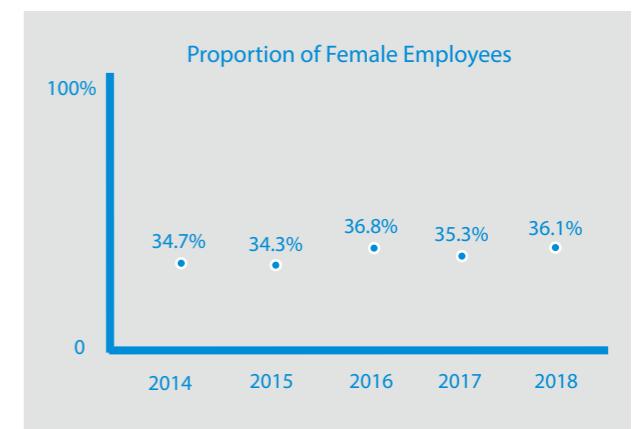
In order to meet the increasing demand for talents, we recruit employees

through Internet and campus-oriented channels. Moreover, we cooperate with domestic and overseas colleges, establish professional training courses, and organize Trina Solar exclusive job fairs. Our employees can really be regarded as a mini-UN.

As of the end of 2018, Trina Solar had a total of 13,679 staff from 40 countries and regions around the world. We strictly adhere to relevant international conventions, local laws and regulations, to ensure gender equality and prohibit employment discrimination. The

proportion of female employees in Trina Solar remains quite stable during the past several years. In 2018, we have 4,964 female employees, occupying 36.3% of the total. While facilitating the diversification of our staff, we are also actively promoting the localization of employment, which widens our knowledge of local culture, and provides more working chances for local people as well. As of end of 2018, Trina Solar hired a total of 2,227 overseas employees work locally.

Area	Male	Female
America	26	17
Europe	85	22
Asia Pacific, Middle East & Africa	864	1,213
China	7,740	3,712
Total	8,715	4,964





Employees' Rights

Trina Solar supports the UN Global Compact, and strictly adheres to international conventions on human rights and labor standards, as well as local labor laws and regulations. We protect the legitimate rights and interests of employees according to law.

- With the globalization of business, we learn local requirements about work time, holidays and social security systems to ensure compliance with international conventions on human rights and labor standards and to be an attractive and legitimate employer. We respect employees' rights to exercise freedom of association and collective bargaining and establish labor union organizations in every plant at home and abroad.
- Comply with local laws in the region where our factories or offices are located. Child labor is strictly forbidden. Men and women enjoy equality in the workplace. Resolutely eliminate forced labor in the production or service provision process. There has been no occurrence of forced labor event in Trina Solar's operation process.
- We formulate the regulation of 'Management of Paid Leave' to allow employees take paid vacation. We provide all employees with pensions, insurance for work-related injuries, unemployment, medical care, maternity and housing provident funds. Company benefits also include birthday cake vouchers, health days, cash gifts for weddings, accident insurance and medical hospitalization subsidies. We have formulated sound compensation policy to ensure that our employees' compensation is higher than the lowest level of the regions our plants/offices located in.
- Adhere to the fair and equal recruitment policy to promote good relations between employer and employee. Trina Solar will never interfere with employees' freedom of belief or discriminate any employee in terms of nationality, ethnicity, religion, gender, age, disability or marital status. Till now, no discrimination incidents related to gender and health status happened in Trina Solar.

Employees' Development

Employees' passion and contribution is an inexhaustible source for the success of Trina Solar. We focus on our employees' personal growth and development and treasure the efforts

made by them. We provide training courses and setup awards to encourage employees to make improvements and obtain common developments with the company.

Training and Education

Training and education can help employees grow and realize their own value. Hence, Trina Solar continuously increases investment in training, education and culture cultivation to provide a strong career support system for our employees. We hope that they can make further progress in their daily work.

We have established a mature training system, including training regulations, courses, lecturers, etc.. In 2015, the Leadership Institute was established, which aims to develop and implement learning programs for senior and middle managers in the company, as well as build a management team with international operation capability. In 2018, we established Trina University to provide industry or occupation-related knowledge

and skills training for internal employees, distributors, suppliers, etc., and fully support the capacity improvement and organizational culture of employees and partners. In April 2018, Trina Solar won the "2017 China Talent Development Elite Award - Best Learning Project Award" at the 14th China Enterprise Training and Development Annual Conference, which is a full recognition of Trina Solar's learning development and training empowerment work. In July 2018, Trina Solar was awarded with the "2018 China Learning and Development Value Award - Value Case Award" by the Human Resources Intelligence Society (HREC) for its practice case of "Construction of Strategic Talent Cultivation System in Era 3.0".

Establishment of Trina University



In April 2018, Trina University was officially established. The unveiling ceremony was held at the headquarters of Trina Solar in Changzhou. Shaoyang, the chief human resources officer of Trina Solar, presided over the opening ceremony and introduced the background and planning of Trina University to all attendees. Headquartered in Changzhou, China, Trina University has 10 different types of professional classrooms and open spaces in order to meet different learning and communication needs. Trina University has six colleges: Leadership Institute, Business School, Photovoltaic Institute, Future College, Energy IoT Academy, and International College. Based on the orientation of "strategic landing, performance improvement, capacity development and cultural construction", and taken "active in learning, brave in practice, good at summarizing and willing to share" as the learning culture, Trina University is committed to becoming a first-class enterprise university, and providing talent cultivation and empowerment services for Trina Solar, its partners and customers.

Methods	Descriptions
Library	<ul style="list-style-type: none"> To build a better learning platform to support employees' development, Trina Solar has cooperated with Changzhou Library to jointly open a library with a collection of over 20,000 books. The library shares the same management system as the one used in Changzhou Library. The readers can borrow books from and return books to either one. The library regularly organizes reading and sharing activities to foster employees' interest in reading and learning.
Trina University	<p>There are six sub-colleges:</p> <ul style="list-style-type: none"> Leadership Institute: being oriented to the leadership development for internal employees; Photovoltaic Institute: serving the popularization of photovoltaic system knowledge and technology; Energy IoT Academy: aiming to help Trina 3.0 target; Business School: offering a curriculum for general management courses; Future College: focusing on cutting-edge science and technology applications; International College: being a learning and communication platforms for overseas employees.
New Employee Training	<p>To help new employees adapt the company's corporate culture and start their career quickly, we provide them with a two-day's intensified training, which covers company and product introduction, environment, health and safety, corporate culture, and ethical compliance.</p>
Face-to-face Training	<p>In 2018, the total training hours is 131,372 hours, covering the following training contents:</p> <ul style="list-style-type: none"> Echelon Talents and Starlight Cradle Training Program Course; Training in stress and mood management, EQ management, effective communication, and software applications etc.; Cutting-edge technology learning courses related to Energy IoT; Empowering team leadership and new manager growth courses.
UMU Interactive Learning Platform	<p>In 2016, the UMU Interactive Learning Platform of Trina Solar was launched to meet the learning needs of employees in a simpler, more convenient and more efficient way through various micro-courses. The key online learning projects in 2018 are as follows:</p> <ul style="list-style-type: none"> Cutting-edge technology courses such as artificial intelligence and big data Learning programs of various specialized technical courses in units of value groups Online learning and sharing activities in units of value groups and leadership projects As of end of 2018, there were more than 1000 UMU online courses and 36,439 people participated in the training.

Development and Motivation

To attract, retain and motivate employees, Trina Solar has established an effective performance management mechanism. Employees are required to set personal development plan (PDP) every half year, and their leaders will evaluate and rate their performances. PDP is composed of three aspects of appraisal, including business objectives and key tasks, employee management objectives, and personal development goals to achieve balance among individual growth, team development and organizational goals.

Rewards	Description
Excellent Employee	Employees who have a strong sense of responsibility and outstanding performance will be awarded. In 2018, 535 employees were awarded as department-level excellent employees. 90 employees were awarded as company-level excellent employees, including 10 employees as Excellent Contribution Award, 12 employees as Best Business Development Award, 28 employees as Unique Originality Award, 34 employees as Best Synergy Award and 6 employees as Best Growth Newcomer Award.
Excellent Team Award	Teams with excellent performances will be awarded. In 2018, 15 teams were awarded with Excellent Team Award.
Model Worker Award	Set up awards for employees who have outstanding performances in work, reasonable proposals, cost reduction, resources conservation, environmental protection and safe production. In 2018, 21 employees were awarded with the title of 'Model Worker'.
Outstanding Female Employee Award	Set up awards for dedicated female employees who work in production, scientific research and have good professional ethics. In 2018, 21 female employees were awarded with Outstanding Female Employee Award.

Listen to Employees

We value the communication and participation of employees, and encourage them to join the Labor Union. We have established a variety of efficient and transparent communication channels within the company to build multi-channel and multi-level employee communication, so as to promote culture construction and allow employees to fully exercise their democratic rights as a

We set objectives for management staff and leaders through performance management. Employees who enter the company can make their choices to take a technical or a managerial position for career development. Trina Solar will award and encourage excellent employees and teams every year. Employees with outstanding performance will be promoted according to the company's regulations. Trina Solar helps its employees to achieve individual values and keep same pace of development with the company.

Channels	Contents
Enterprise Wechat	<ul style="list-style-type: none"> Enterprise Wechat can effectively support internal communication, communication, collaboration and file sharing among employees, improve work efficiency and promote communication and collaboration. Enterprise Wechat can timely release company news, events, training, work processes, excellent deeds of outstanding employees, etc. to all employees of Trina Solar.
Staff Communication Meeting	Organizing internal communication activities between new employees and old employees, new employees and excellent employees, and communication between team leader and other staff, so as to establish exchange platform, understand employee voices and promote corporate culture.
Vulnerable Group Meeting	Caring for the company's vulnerable employees, such as organizing communication activities for deaf employees and minority employees. Bringing the warmth and care for the vulnerable group.
HR Hotline	Through the HR hotline, employees can consult issues like company activities, policies, salaries and benefits, workplace environment, safety and health, etc.
'Lync' Communication Platform	Employees worldwide can use 'Lync' internal communication platform to identify issues in their daily work, so as to enhance work efficiency.

Employees' Health

Employees with sound physical and mental health will have a higher work enthusiasm and work efficiency. Trina Solar continuously pays attention to employees' mental and physical health. We strive to create an efficient, relaxed and caring work environment for our employees, and help them make a good balance between work and life, so as to improve their work performance and quality of life.

We have established an internal clinic to provide the employees with medical and health counseling services. We regularly organize health examination for employees and annual health checkup for female employees to show our caring for them. We also provide free traditional acupuncture therapy for employees. In brief, we do our utmost to create a healthy, safe and comfortable workplace for all employees and help them improve their work performance and quality of life.

Relaxing and Efficient Work Atmosphere

We believe that creating a good work atmosphere can help employees balance their work and life. Employees can relieve their stress by participating in various kinds of cultural activities, and promote their professionalism, dedication and work enjoyment.

Trina Solar has many sports clubs such as football, basketball, badminton, table tennis, swimming, fishing, etc. We organize sports competitions every year according to employees' interests. For example, we held basketball league games for consecutive 10 years, badminton games for consecutive 9 years, tug-of-war

In 2017, Trina Solar launched a wonderful welfare platform based on its existing flexible welfare program. Employees can choose their own welfare items for themselves and their families according to their own needs, such as telephone-doctor, physical examination, critical illness insurance, accident insurance and other self-paying programs, to meet their different health-care needs. Employees are given their own decision-making rights to guarantee their welfare so that they can fully be engaged in enjoyment of work and life.

In order to facilitate relationships between parents and children, Trina Solar persists in conducting parents-children activities to benefit children's physical and mental health, such as Trina children summer camp, art training class, painting and calligraphy show, parent-child reading club, mother's day activities, etc. The activities are both fun and entertaining. The activities not only help promote emotional communication between parents and children, but also allow employees pay more attention to their children's healthy growth.

events for 8 years, Ping-Pong matches for 7 years, and snooker competitions and marathon for 5 years.

In order to popularize local cultures and enrich employees' cultural life outside of work, we prepare various activities to celebrate local traditional festivals. Moreover, we also have reading clubs, Tai-chi classes, and Yoga classes and flower arrangement classes for female employees. The relaxing, soft movements can help people calm down amidst the hustle and bustle of life, cultivating their minds and making them more confident in their work and life.

Awarded with "China's Most Healthy Employee Award" in the "2018 Asia's Best Workplace" competition



In December 2018, Asia's Best Workplace (China Mainland) Awards Ceremony was held in Shanghai, and Trina Solar was awarded with "China's Most Healthy Employee Award" in the "2018 Asia's Best Workplace" competition by AIA China, Peking University and China's leading human resources media HRoot. This professional selection campaign is dedicated to promoting the work philosophy of "Healthy and Long-Term Life", helping enterprises monitor the health status of employees, building healthy organizations and improving the sustainable development of enterprises.

Trina Solar always pays attention to employees' health and regards employees' health as one of the most important assets of the company. Shaoyang, the CHO of Trina Solar, said that Trina Solar always pays close attention to the physical and mental health of employees while introducing excellent talents from all over the world, strives to create a good cultural atmosphere, and creates a vibrant and future-oriented organization that leads the industry through organizational strategy and talent strategy.



Employees' Occupational Health & Safety (OH&S)

The employees' safety and health is the foundation of our business. We integrate occupational health and safety (OH&S) management requirements into every aspect of the company's operation management. We are committed to creating a safe, healthy and OH&S Management System

We believe that a sound OH&S management system can continuously help us improve OH&S performance. Most of our manufacturing plants, both domestic and overseas plants, have established OH&S Management System – OHSAS 18001. We implement OH&S improvement programs in every stage, including plant design, construction, research and development, manufacturing and packaging. We do our utmost to protect the health and safety of our employees, contractors, customers and other stakeholders.

No.	Plant	OH&S Management System	No.	Plant	OH&S Management System
1	Plants in Changzhou Headquarters	Yes	5	Heifei Plant	Yes
2	Changzhou Trina Yabang Plant	Yes	6	Energy Storage Solution Plant	Yes
3	Yancheng Plant	Yes	7	Thailand Plant	Yes
4	Hubei Plant	Yes	8	Vietnam Plant	Yes

environmentally-friendly workplace for our employees, helping them enjoy a better quality of life, and allowing them grow and develop together with Trina Solar.

While providing clean energy products to the world, Trina Solar is committed to creating a safe, healthy and environmentally-friendly workplace for its employees. Employees are our greatest asset. We have put a EHS management procedure in place to ensure that all incidents/accidents occurring in the factories or BUs are invested and communicated promptly. The effective and practical remedial measures are taken to prevent recurrence. The responsible managers are liable for any serious accidents occurred, so as to promote their self-management and self-improvement.

We have set established a medium-term OH&S goal of a 15% reduction in the Total Recordable Incident Rate (TRR) in 2020 compared to that in 2015. Continuous improvement in OH&S performance is an integral part of our operations. TRR in 2017 decreased by 5.6% compared to that in 2015. The company's TRR slightly increased in 2018 due to equipment automation transformation.

Note: Total Recordable Rate (TRR) is calculated by multiplying the sum of dangerous occurrence, lost time injuries (LTIs), fatalities (Fs), restricted work injuries (RWs) for employees for the reporting period by 10^6 and dividing by the total working hours in that period (H).

Chains	Measures
	<ul style="list-style-type: none"> Carry out OH&S assessment, assess the potential impact on employees' OH&S and the communities, and ensure establishment of adequate OH&S protection facilities; Safety and occupational health facilities are designed, constructed and put into use simultaneously with the main part of a construction project.
	<ul style="list-style-type: none"> Only safe process and materials with no or low occupational hazards are used.
	<ul style="list-style-type: none"> Identify hazards of every work process, and take protective measures according to the risk levels; Compile work instructions for each post, improve and implement the responsibility system of safety and occupational health, and promote safety performance continuously; Ensure sufficient investment in safe production and occupational health to protect employees' occupational health; Provide occupational health and safety training for employees; Conduct emergency evacuation drills; Promote employees' safety awareness and cultivate safety culture.
	<ul style="list-style-type: none"> Utilize recycled and non-toxic package materials to ensure customers' safety.

Granted Global Corporate Social Responsibility (CSR) Gold Award for Two Consecutive Years



Headquartered in Paris, EcoVadis is a world-renowned independent third-party assessment agency. EcoVadis has been operating a platform to provide sustainability ratings for global supply chains since 2007. The platform delivers simple and reliable scorecards to monitor supplier practices, covering 150 purchasing categories, 110 countries, and 21 CSR indicators in four themes: environment protection, labour practices, fair business practices and sustainable procurement.

Due to its outstanding performance in environmental protection, labor practices, fair business practices, and sustainable procurement, Trina Solar was granted with Global Corporate Social Responsibility (CSR) Gold Award in EcoVadis CSR assessment in two consecutive years of 2017 and 2018. The achievement of being granted with Global Gold Award for two consecutive years from EcoVadis fully affirms Trina Solar's contributions and long-term commitments to promoting sustainable development as a responsible corporate citizen.

Workplace Safety

Trina Solar is dedicated to providing a safe and healthy workplace for all employees and contractors. Our goal is to continuously reduce work-related injuries in the workplace through hazard identification and risk control, and make efforts to improve OH&S performance.

Trina Solar proactively conducts risk assessments in relation to the health and safety risks posed to any person who may be

affected by his undertaking in our workplace. A procedure has been established and implemented to systematically identify the hazards and assess the risks related to manufacturing activities, products and services. Risk control strategies have been implemented, focusing on elimination/replacement, engineering measures, administrative measures and personal protective equipment controls. Trina Solar maintains an active emergency response plan. The plan is to ensure, to the best of our abilities, that the site facilities are maintained and operated in a safe way.

2018 Trina Solar Safety Promotion Month

We have been organizing Safety Promotion Month for 10 consecutive years to raise all employees' EHS awareness. In June 2018, we organized a series of promotion activities with the theme of "Life First, Safe Production":

Activity	Content
EHS Knowledge Quiz	<ul style="list-style-type: none"> Each employee visited EHS exhibits placed in the canteen, and then answered the quiz either in hard-copy or electronic form. The content of quiz covered chemical safety, electricity safety, occupational health, fire safety, traffic safety and so on. There were a total of 1,858 employees participated in the program.
Emergency Drill – Fire Evacuation & Confined Space Operation	<ul style="list-style-type: none"> Together with Changzhou Xinbei Safety Supervision Bureau, Changzhou Xinbei Fire Brigade, Trina Solar conducted fire emergency and evacuation drill and confined space operation drill. The drills familiarized employees with the response procedure in event of an emergency, and assessed the preparedness of ERT (Emergency Response Team) members and employees.
First-aid Lecture	<ul style="list-style-type: none"> Professional first-aid doctors were invited to give lectures on first-aid methods like CPR (cardiopulmonary resuscitation) to improve our ERT members' emergency response abilities. 40 ERT members received the Primary First-aid Certificate issued by the Changzhou Red Cross in 2018.
Public Environmental Satisfaction Survey	<ul style="list-style-type: none"> EHS Department conducted an environmental survey to the surrounding residents of the factory. The purpose of the survey is to seek for the opinions and views from the surrounding residents on Trina Solar's operations. In 2018, there were 150 residents surveyed. 85% of the residents were in favor of this kind of the environmental survey. 87% of the residents had a positive feedback towards the development of Trina Solar.

Emergency Drills at Changzhou Headquarters



Together with Changzhou Xinbei Safety Supervision Bureau, Changzhou Xinbei Fire Brigade, Trina Solar conducted fire emergency & evacuation drill and confined space operation drill in June 2018.

- Fire Emergency and Evacuation Drill:** The drill simulated a fire emergency occurred at workshop corridor, which led to a plant-wide evacuation. The drill assessed the effectiveness of fire emergency response plan. Together with external professional team, the drill improved the cooperation and emergency response capabilities of ERT members, employees and external fire brigade.
- Confined Space Operation Drill:** One of two technicians was suffocated due to insufficient ventilation while repairing scraper in wastewater treatment pond. An emergency case was activated to assess ERT members on their roles, responsibilities and abilities as defined in emergency response plan. The drill also assessed the preparedness of the team for prompt and effective response to the confined space rescue capabilities.

Chains	Occupational Health and Safety (OH&S) Management
Risk Identification	<ul style="list-style-type: none"> Hazard Identification and Risk Assessment: We have put Hazard Identification and Risk Assessment Procedure in place to identify the hazards and assess the risks related to manufacturing activities, products and services. Based on risk level determined, risks are categorized as major risks, medium risks and minor risks. Adequate control measures are taken to ensure workplace safety. Safety Inspection: Trina Solar has established the EHS Inspection and Management Procedure to assess the strengths and weaknesses in the plant's safety management system by the identification of unsafe acts and unsafe conditions. The procedure gives the notification of line management for appropriate, effective and prompt corrective actions to ensure that the potential safety hazards are eliminated and risk level are reduced. Near-miss Reporting: Trina Solar adopts an open and effective reporting mechanism to encourage correct behaviors, practices and processes in order to avoid the occurrence of accidents and personal injury. We encourage all employees to report near misses they observe around them via different channels, such as EHS reporting card, near miss reporting database in E-flow system, email and telephone notification etc. Industrial Hygiene Monitoring: We carry out industrial hygiene monitoring each year based on legal requirements. Engineering and administrative measures will be taken to ensure that employees are provided with a healthy work environment.
Risk Control	<ul style="list-style-type: none"> Safe Production Responsibility Rule: According to the principle of 'Responsibility-oriented Management' and 'One Post, Double Responsibilities', EHS Responsibility Agreement was signed to ensure Safe Production Responsibility Scheme to be implemented in every location and every department. EHS Training: We make EHS Trainings for employees, contractors and suppliers, such as New Employee Training, On-the-job Training, Professional Safety Training (e.g. chemical safety, electricity safety, fire safety). The trainings help employees and contractors understand the safety hazards, precautions and their safety responsibilities during the course of their work. Hazardous Work Management: We set up a permit-to-work system to ensure the safety of contractors and employees. This system requires employees and contractors to apply for an Area Work Permit prior to the commencement of any work within Trina Solar premises. We strictly control activities that may cause major injuries or losses, such as working at a height, hot work and confined-space work. The responsible person for a project needs to complete a permit for such works, which shall be approved by relevant parties prior to commencement of the work. Chemical Management: We strictly adhere to all the applicable rules of not to use the prohibited or restricted chemicals in the places where we operate. We formulated 'Chemical Management Procedure' to ensure the introduction, purchase, storage, usage and discard of chemical are adequately supervised and the related risks are well controlled. EHS Management of Change (MOC): EHS Management of Change (MOC) is an essential building block to maintain operation integrity and prevent serious EHS accident. Trina Solar set up a MOC procedure. An evaluation should be conducted if the changes have a strong relation with those that may be harmful to people, the environment, safety or quality of products. Occupational Hazard Notification: We set up occupational hazard notice cards in workplace to allow employees to know the possible occupational health hazards and the related protective measures, so as to improve employees' self-protection awareness. Occupational Health Examination: We arrange employees who are exposed to occupational hazards to have occupational health examinations every year. In case of occupational contraindication symptom, we promptly take corrective measures, such as swap of positions.
Emergency Management	<ul style="list-style-type: none"> Emergency Management Plan: In case of an emergency, the way how to response makes the difference between a positive and a negative outcome. We believe that effective contingency plans and periodic drills will play a crucial role in stabilizing the situation upon emergency. Therefore, we have developed a comprehensive emergency response plan, including fire emergency, chemical spill and burn, power outage, etc., to ensure that we are able to promptly and effectively respond to a variety of safety and environmental incidents. We also conduct emergency drills regularly in each responsible area to ensure our emergency response plan can work well while improving our emergency response preparedness. We regularly conduct fire evacuation drills together with local fire brigade to ensure that our emergency plan are effective. Medicare Green Channel: Trina Solar sets up Medicare Green-card Scheme with local hospitals in Changzhou for our employees. Employees can receive immediate medical attention after showing their 'Medicare Green Card'. Trina Solar will pay for medical expenses afterwards to make sure that employees receive timely treatment.

Trina Solar fully takes our operation impact on the community into consideration and takes effective measures to reduce the impact, so as to establish mutual trust with the community and win their support and respect. Trina Solar is devoted to promoting economic and social development of local communities while expanding our business. We consistently promote and implement public welfare programs and try to achieve the goal of common prosperity with local communities. We work together with our partners to bring long-term benefits to local communities through investing in education, promoting public welfare and implementing volunteer programs.

05

Contribution to Society - Build a Beautiful Community

- Education Support
- Donations
- Volunteer Programs





Education Support

Trina Solar constantly pays attention to education of local communities. We make investment in education and promote the cultivation of innovative talents, so as to facilitate the sustainable development of the society.

As the global leading PV smart energy integrated solution provider, Trina Solar will continue to actively promote education, environmental protection, popularization and application of clean energy. Upholding the tradition of repaying the society, Trina Solar always support the development of social welfare and the graduate entrepreneurial projects, aiming to be a responsible and outstanding corporate citizen.

Year	Education Support Projects during 2014-2018
2014	Trina Solar united with the Solar Energy Industries Association (SEIA) and the Brian D Robertson Memorial Solar Energy School Foundation (BDR Foundation) to donate a total of 11.2 kilowatt solar modules to Coral Academy of Sciences. It provided 9% of the total energy of the school, and saved the school about 1,400 dollars in electricity every year. Coral Academy of Sciences in Las Vegas is a school mainly focusing on education in the STEM fields.
2015	Siyuan Sunshine Fund for Entrepreneurship was founded by Trina Solar. The Fund donated RMB 10 million to China Siyuan Foundation for Poverty Alleviation. By providing public training and entrepreneurship and employment assistance courses, the Fund aims to help poor college students get a skill and start their businesses in emerging industries, so as to help their families in poverty-stricken areas in western China to achieve poverty alleviation.
2016	Siyuan Sunshine Fund for Entrepreneurship launched the first public PV training program for teachers, and rolled out two public PV training sessions in Xining, Qinhai Province and Wuwei, Gansu Province. We provide education support for poor areas and help college students in western China to start their own business.
2017	Siyuan Sunshine Fund for Entrepreneurship held 2017 Innovation & Entrepreneurship Final Competition in Lanzhou. 12 teams from new energy major of six colleges in western China entered the final. The themes of submitted programs covered new energy buildings, residential distributed solar power project, recycling and reuse of PV modules, and solar energy applications.
2018	The Jiangsu Provincial Committee of the China Democratic National Construction Association and the Aide Foundation jointly launched the "Siyuan Aimin Public Welfare Fund", and Trina Solar donated RMB 900,000 to help carry out social service work. "Siyuan Aimin Public Welfare Fund" was established by Trina Solar, Jiangsu Construction Engineering Group Co., Ltd., Jiangsu Jinbai Construction Group, Hong Kong Ping An Group Co., Ltd., Youcheng Investment Group and other enterprises with a total investment of more than RMB 4 million, which will be used for targeted poverty alleviation, student assistance, disability support service, disaster relief, and medical assistance for serious illness, and other social welfare projects.
2018	Donated teaching and living materials worth of RMB 500,000, such as computer, school uniform, to the primary and secondary School in Luojue Town, Jinyang County, Liangshan Prefecture, Sichuan Province.

Donations

As a corporate citizen, Trina Solar actively engages in public charity. Together with local communities, we organize public welfare activities to build a safe, harmonious and green community.

Year	Donation Projects during 2014-2018
2014	Trina Solar donated 4 kilowatts photovoltaic modules to the hybrid power system Sun Star located at the mountaintop of Signal Hill, Cape Town, South Africa, providing energies for local educational activities, movie projection, sports events, exhibitions etc.
2015	Trina Solar donated RMB 2.5 million to Changzhou Honored Enterprise Promotion Association to set up the Trina Tongxin Million Public Welfare Fund to support the filming of documentary of Mr. Liu Guojun, an outstanding Chinese entrepreneur and a famous patriotic businessman.
2015	Trina Solar donated 213 pieces of PV modules to Japanese Asahi Welfare Association located in Hokuto, Yamanashiken, Japan. The 54 kilowatts PV power station will not only bring earnings by selling electricity power but also improve the agricultural facilities and reduce the association's welfare budget.
2016	Trina Solar donated about 7 kilowatts solar modules to International Disaster Emergency Response Team (Team Rubicon) to build an off-grid solar power system in the village of Lapubesi in the Gorkha area which was affected by a 7.8-magnitude earthquake occurred in Nepal in 2015. The power system was established for the villagers' lighting and daily electricity. And the British Prince Harry participated in the installation of modules personally.
2016	Trina Solar donated 10 ambulances, worth of RMB 700,000, to Fengning County, Hebei Province. The donation aims to improve local emergency rescue ability in primary health care institutions.
2017	Trina Solar donated RMB 1 million to Poverty Alleviation and Development Office of Dongxiang Autonomous County in Gansu Province for poverty alleviation.
2017	Trina Solar donated 30 kilowatts (KW) solar modules to Nagarjuna Institute in India to help carry out the construction of solar-powered parking shed.
2018	Trina Solar donated RMB 375,000 to the People's Government of Linxian County, Linfen City, Shanxi Province for the construction of a village-level PV power station.
2018	Trina Solar built a 600KW PV plus fishery poverty alleviation project in Xiaoshiqiao Village, Bieqiao Town, Liyang, Changzhou City. The earnings of the power station would be used for poverty alleviation, which could provide reliable, stable and long-term poverty alleviation funds for local poor residents, so as to help them get rid of poverty as soon as possible.
2018	Trina Solar donated 5 sets of off-grid photovoltaic power generation systems to Pu Village, Tading Township, Xietongmen County, Shigatse City. The average elevation of Pu Village is 4,400 meters, and some villagers live without electricity for a long time. Off-grid photovoltaic power generation system will help herders to use home appliances, which could significantly improve their living quality.

Volunteer Programs

Trina Solar focuses on mutual development with its local communities. We encourage our employees to voluntarily participate in public welfare activities, i.e., 'left-behind' and impoverished children caring, vulnerable group helping, etc. Trina Solar vigorously strengthens its volunteer fostering. We actively involved in various community services and sustainable development projects, so as to inherit the volunteer spirit of contribution, friendship, mutual help and progress.

Trina Solar established Tian'ai Volunteer Team in 2014. The team consists of more than 40 volunteer members from various

In 2018, Trina Solar donated RMB 375,000 to the People's Government of Linxian County, Shanxi Province for the construction of a village-level PV poverty alleviation power station, and built a 600KW "PV plus fishery" poverty alleviation project in Xiaoshiqiao Village, Changzhou City. The power station project will help local residents get rid of poverty as soon as possible.

GRI Index

To enable stakeholders fully understand Trina Solar's social responsibility, 2018 Trina Solar Social Responsibility Report

discloses relevant information as the comprehensive disclosure plan based on GRI (Global Reporting Initiative).

Indicator Number	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
Organizational Profile					
102-1—102-7	Name of the organization; Activities, brands, products, and services; Location of headquarters; Location of operations; Ownership and legal form; Markets served; Scale of the organization	●	• Company Profile	09	
102-8	Information on employees and other workers	●	• Care for Employees	59	
102-9—102-10	Supply chain; Significant changes to the organization and its supply chain	●	• Sustainable Supply Chain	49	
102-11	Precautionary Principle or approach	●	• Corporate Governance • Challenges & Opportunities	13 23	
102-12	External initiatives	●	• Support SDGs	21	
102-13	Membership of associations	●	• Communication with Stakeholders	17	
Strategy					
102-14—102-15	Statement from senior decision-maker; Key impacts, risks, and opportunities	●	• Message from Leadership • Corporate Governance • Challenges & Opportunities	05 13 23	
Ethics and Integrity					
102-16—102-17	Values, principles, standards, and norms of behavior; Mechanisms for advice and concerns about ethics	●	• Corporate Governance • Corporate Culture	13 15	
Governance					
102-18	Governance structure	●	• Corporate Governance • Employees' Occupational Health and Safety	13 65	
102-19	Delegating authority	●	• Corporate Governance • Green Sustainable Development	13 29	
102-20	Executive-level responsibility for economic, environmental, and social topics	●	• Corporate Governance • Materiality Analysis	13 19	
102-21	Consulting stakeholders on economic, environmental, and social topics	●	• Corporate Governance • Materiality Analysis	13 19	
102-22—102-24	Composition of the highest governance body and its committees; Chair of the highest governance body; Nominating and selecting the highest governance body	●	• Corporate Governance	13	
102-25	Conflicts of interest	●	• Corporate Governance	13	
102-26—102-28	Role of highest governance body in setting purpose, values, and strategy; Collective knowledge of highest governance body; Evaluating the highest governance body's performance	●	• Corporate Governance	13	
102-29—102-31	Identifying and managing economic, environmental, and social impacts; Effectiveness of risk management processes; Review of economic, environmental, and social topics	●	• Corporate Governance • Materiality Analysis	13 19	
102-32	Highest governance body's role in sustainability reporting	●	• About the Report	01	
102-33—102-34	Communicating critical concerns; Nature and total number of critical concerns	●	• Communication with Stakeholders • Challenges & Opportunities	17 23	

● Covered in the Report

● Partially Covered in the Report

○ Not Covered in the Report

Indicator Number	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
102-35—102-39	Remuneration policies; Process for determining remuneration; Stakeholders' involvement in remuneration; Annual total compensation ratio; Percentage increase in annual total compensation ratio	●	• Corporate Governance • Communication with Stakeholders	13 17	
Stakeholder Engagement					
102-40—102-44	List of stakeholder groups; Collective bargaining agreements; Identifying and selecting stakeholders; Approach to stakeholder engagement; Key topics and concerns raised	●	• Communication with Stakeholders	17	
Reporting Practice					
102-45	Entities included in the consolidated financial statements	●	• About the Report	01	
102-46	Defining report content and topic Boundaries	●	• About the Report	01	
102-47	List of material topics	●	• Materiality Analysis	19	
102-48	Restatements of information	●	• About the Report	01	No restatements of information
102-49—102-56	Changes in reporting; Reporting period; Date of most recent report; Reporting cycle; Contact point for questions regarding the report; Claims of reporting in accordance with the GRI Standards; GRI content index; External assurance	●	• About the Report	01	No significant change in previous reports
ECONOMIC					
Management Approach					
103-1	Explanation of the material topic and its Boundary	●	• Materiality Analysis	19	
103-2	The management approach and its components	●	• Message from Leadership • Challenges & Opportunities	05 23	
103-3	Evaluation of the management approach	●	• About the Report • Communication with Stakeholders	01 17	
Economic Performance					
201-1	Direct economic value generated and distributed	●	• Message from Leadership	05	
201-2	Financial implications and other risks and opportunities due to climate change	●	• Message from Leadership • Dealing with Climate Change	05 33	
201-3	Defined benefit plan obligations and other retirement plans	○			
201-4	Financial assistance received from government	○			
Market Presence					
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	●	• Employees' Rights	61	
202-2	Proportion of senior management hired from the local community	●	• Employees' Rights • Employees' Development	61 61	
Indirect Economic Impacts					
203-1	Infrastructure investments and services supported	●	• Contribution to Society	71	

● Covered in the Report

● Partially Covered in the Report

○ Not Covered in the Report

Indicator Number	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
203-2	Significant indirect economic impacts	●	• Challenges & Opportunities	23	
Procurement Practices					
204-1	Proportion of spending on local suppliers	●	• Sustainable Supply Chain	49	
Anti-corruption					
205-1—205-3	Operations assessed for risks related to corruption; Communication and training about anti-corruption policies and procedures; Confirmed incidents of corruption and actions taken	●	• Corporate Governance	13	
Anti-competitive Behavior					
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	○			
ENVIRONMENTAL					
Management Approach					
103-1	Explanation of the material topic and its Boundary	●	• Materiality Analysis	19	
103-2	The management approach and its components	●	• Care for Our Earth • Sustainable Supply Chain	27-46 49	
103-3	Evaluation of the management approach	●	• Care for Our Earth • Sustainable Supply Chain	27-46 49	
Materials					
301-1—301-3	Materials used by weight or volume; Recycled input materials used; Reclaimed products and their packaging materials	●	• Environment-friendly Operation	43	
Energy					
302-1—302-5	Energy consumption within the organization; Energy consumption outside of the organization; Energy intensity; Reduction of energy consumption; Reductions in energy requirements of products and services	●	• Dealing with Climate Change	33	
Water					
303-1—303-3	Water withdrawal by source; Water sources significantly affected by withdrawal of water; Water recycled and reused	●	• Environment-friendly Operation	43	
Biodiversity					
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	●	• Biological Diversity Management	46	
304-2	Significant impacts of activities, products, and services on biodiversity	●	• Biological Diversity Management	46	
304-3	Habitats protected or restored	●	• Biological Diversity Management	46	

● Covered in the Report

○ Partially Covered in the Report

○ Not Covered in the Report

Indicator Number	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	●	• Biological Diversity Management	46	
Emissions					
305-1—305-5	Direct (Scope 1) GHG emissions; Energy indirect (Scope 2) GHG emissions; Other indirect (Scope 3) GHG emissions; GHG emissions intensity; Reduction of GHG emissions	●	• Dealing with Climate Change	33	
305-6	Emissions of ozone-depleting substances (ODS)	●	• Dealing with Climate Change	33	
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	●	• Dealing with Climate Change	43	
Effluents and Waste					
306-1	Water discharge by quality and destination	●	• Environment-friendly Operation	43	
306-2	Waste by type and disposal method	●	• Environment-friendly Operation	43	
306-3	Significant spills	●			No such incident
306-4	Transport of hazardous waste	●	• Environment-friendly Operation	43	
306-5	Water bodies affected by water discharges and/or runoff	●	• Environment-friendly Operation • Biological Diversity Management	43 46	
Environmental Compliance					
307-1	Non-compliance with environmental laws and regulations	●			No such incident
Supplier Environmental Assessment					
308-1	New suppliers that were screened using environmental criteria	●	• Sustainable Supply Chain	49	
308-2	Negative environmental impacts in the supply chain and actions taken	●	• Sustainable Supply Chain	49	
SOCIAL					
Management Approach					
103-1	Explanation of the material topic and its Boundary	●	• Materiality Analysis	19	
103-2	The management approach and its components	●	• Product Stewardship Policy • Sustainable Supply Chain • Care for Employees • Contribution to Society	40 49 57-70 71-74	
103-3	Evaluation of the management approach	●	• Product Stewardship Policy • Sustainable Supply Chain • Care for Employees • Contribution to Society	40 49 59-70 71-74	

● Covered in the Report

○ Partially Covered in the Report

○ Not Covered in the Report

Indicator Number	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
Employment					
401-1	New employee hires and employee turnover	●	• Care for Employees	59	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	●	• Employees' Rights	61	
401-3	Parental leave	○			
Labor/Management Relations					
402-1	Minimum notice periods regarding operational changes	○			
Occupational Health and Safety					
403-1	Workers representation in formal joint management-worker health and safety committees	●	• Employees' Occupational Health and Safety	65	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	●	• Employees' Occupational Health and Safety	65	No work-related fatalities
403-3	Workers with high incidence or high risk of diseases related to their occupation	●	• Employees' Occupational Health and Safety	65	
403-4	Health and safety topics covered in formal agreements with trade unions	●	• Employees' Health • Employees' Occupational Health and Safety	64 65	
Training and Education					
404-1	Average hours of training per year per employee	●	• Employees' Development	61	
404-2	Programs for upgrading employee skills and transition assistance programs	●	• Employees' Development	61	
404-3	Percentage of employees receiving regular performance and career development reviews	●	• Employees' Development	61	
Diversity and Equal Opportunity					
405-1	Diversity of governance bodies and employees	●	• Care for Employees	59	
405-2	Ratio of basic salary and remuneration of women to men	●	• Employees' Rights	61	
Non-discrimination					
406-1	Incidents of discrimination and corrective actions taken	●	• Employees' Rights	61	
Freedom of Association and Collective Bargaining					
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	●	• Sustainable Supply Chain • Employees' Rights	49 61	
Child Labor					
408-1	Operations and suppliers at significant risk for incidents of child labor	●	• Sustainable Supply Chain • Employees' Rights	49 61	
Forced or Compulsory Labor					
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	●	• Sustainable Supply Chain • Employees' Rights	49 61	
Security Practices					
410-1	Security personnel trained in human rights policies or procedures	○			

Indicator Number	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
Rights of Indigenous Peoples					
411-1	Incidents of violations involving rights of indigenous peoples	●			No such incident
Human Rights Assessment					
412-1	Operations that have been subject to human rights reviews or impact assessments	●	• Employees' Rights	61	
412-2	Employee training on human rights policies or procedures	●	• Employees' Development	61	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	●	• Employees' Rights	61	
Local Communities					
413-1	Operations with local community engagement, impact assessments, and development programs	●	• Education Support • Volunteer Programs	73 74	
413-2	Operations with significant actual and potential negative impacts on local communities	●	• Environment-friendly Operation • Volunteer Programs	43 74	
Supplier Social Assessment					
414-1	New suppliers that were screened using social criteria	●	• Sustainable Supply Chain	49	
414-2	Negative social impacts in the supply chain and actions taken	●	• Sustainable Supply Chain	49	
Public Policy					
415-1	Political contributions	○			
Customer Health and Safety					
416-1	Assessment of the health and safety impacts of product and service categories	●	• Product Stewardship Policy	40	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	●			No such incident
Marketing and Labeling					
417-1	Requirements for product and service information and labeling	●	• Product Stewardship Policy	40	
417-2	Incidents of non-compliance concerning product and service information and labeling	●			No such incident
417-3	Incidents of non-compliance concerning marketing communications	●			No such incident
Customer Privacy					
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	●			No such incident
Socioeconomic Compliance					
419-1	Non-compliance with laws and regulations in the social and economic area	●			No such incident

● Covered in the Report

● Partially Covered in the Report

○ Not Covered in the Report

● Covered in the Report

● Partially Covered in the Report

○ Not Covered in the Report