

Trina Solar

2012 Corporate Social Responsibility Report

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RECYCLED PAPER

About the Report

Scope

Trina Solar has produced the Corporate Social Responsibility (CSR) Report for the last three years. It covers Trina Solar's corporate social responsibility performance for the 2012 calendar year. It includes all managed operations and consolidates our reporting on economy, environment, 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 2012.

The focus of our annual corporate social responsibility (CSR) report is on providing our key stakeholders, including shareholders and potential investors, customers, current and potential employees and retirees, the communities where we live and operate and suppliers—as well as financial and social responsibility analysts, NGOs, media and governments, with the information that helps them understand and assess our sustainability impacts, risks and opportunities. In this CSR report, we have continued to broaden our disclosures in an attempt to provide the information of most significance to these stakeholder audiences.

Framework and Guidelines

This report is prepared using the Global Reporting Initiative (GRI) G3.1 Sustainability Reporting Guidelines. Our 2012 publication officially follows GRI G3 guidelines, and self-declares the report to the GRI Application Level A. A GRI Content Index is provided in the appendix in the report.

Data Measurement

The data in this CSR report is based on our own measurements and calculations which are based on definitions, methods and procedures developed at corporate level. The information in our report is subject to internal reviews and, for selected content, external reviews. On a regular basis, we validate the management systems and processes used to collect the data. We obtained ISO14001 environmental management system certification in 2008 and OHSAS18001 occupational health management system certification in 2010. In 2011, we got the ISO14064-1 certification for Greenhouse Gas Emission Data Verification. In 2012, we passed the Product Carbon Footprint Verification PAS2050. Each year, we invited independent third-party audits to our sites.

We produce our CSR report in Portable Document Format (PDF), and an electronic version is available on our company web site. Questions, inputs and suggestions regarding this report can be directed to: EHS_Department@trinasolar.com.

Report Compilation Process



Message from the Chairman and CEO

Dear Stakeholders,

Welcome to Trina Solar's 2012 corporate social responsibility (CSR) report.

In 2012, affected by the financial crisis, overcapacity, disorderly competition and trade protectionism, the global photovoltaic (PV) industry faced huge challenges. There were also challenges with innovation and sustainable development. In the face of these challenges, the fate of individuals, businesses and the whole PV industry were closely linked together. As one of the world's leading PV companies, Trina Solar actively took responsibility to resolve international trade disputes, responded to the trade protectionism, and promoted the sustainable and healthy development of the PV industry.

We know that sustainable development cannot be achieved overnight. Nevertheless, we believe that the enterprise will play an increasingly important role in the process of sustainable development. Trina Solar refines our corporate core values as "Customer Focus, Open-mindedness, Respect and Collaborate for Win-Win and Pursuit of Excellence". Trina Solar is committed to creating a win-win situation with both nature and the community. Creativity and leadership in the field of sustainable development are bestowed on Trina Solar for its vision, mission, core values and corporate capability. PRTM, a subsidiary of PwC (PricewaterhouseCoopers), published the global PV Sustainability Index in 2012. Trina Solar was ranked No. 2 globally and No. 1 among all Chinese PV manufacturers.

Trina Solar continuously pays attention to sustainable development. We actively take a responsible attitude to climate change. In October 2012, Trina Solar successfully passed the product carbon footprint verification, PAS2050, by BSI (British Standards Institution). In November 2012, Trina Solar was recognized as a "Green Integrity Enterprise" by Jiangsu Environmental Science Association. In 2012, the consumption of electricity and water per MW module was reduced by 65% and 64% respectively compared to that of 2008. All of our achievements resulted from our relentless pursuit of sustainable development. We will always commit to the green and low-carbon development path through technical innovation and efficiency enhancement, so as to reduce carbon emissions from production and commercial operations. We strive to do our best to achieve the strategic goal of sustainable development.

Creating a safe, supportive and mutual-respectful work environment for every employee is not only Trina Solar's social responsibility, but is also a powerful factor in establishing a dynamic and everlasting enterprise. We were conferred the "Happiest Enterprise" award in Jiangsu Province for the years of 2011 ~ 2012 by Jiangsu Business School, which is sponsored by 14 universities, including Nanjing University and Southeast University. In April 2012, Trina Solar was ranked No. 1 globally for environmental and social performance in the 2012 Solar Scorecard, an award system established by the SVTC (Silicon Valley Toxics Coalition), covering the assessment areas of extended producer responsibility, occupational health and safety, chemical use, supply chain responsibility and life cycle analysis. We are proud to be a producer of clean energy and have great faith in the power of solar energy to better people's lives. Trina Solar's vision is to make solar energy a stable clean energy that is affordable to everyone. To fulfill the goal, we're dedicated to the development of sustainable solutions and commit to creating smart energy together.

The world economic situation will remain uncertain in 2013. The extraordinary experience Trina Solar has accumulated is well suited for overcoming the obstacles. We are well positioned to continuously deal with the challenges ahead. We are confident about our capability to build a world-class enterprise, and lead the PV industry through the crisis.

We pledge to be a good citizen of our planet. Trina Solar values social responsibility as an integral part of the business operations. We strive to pursue technological innovation and the wise use of energy and resources. We'll do our best to reduce the impact on the environment and meanwhile, actively explore the new PV technology applications. With Trina Solar employees' energy and wisdom, we are confident that we'll be able to fulfill the goal of the widespread use of solar energy worldwide and achieve sustainable development. Our mission is to let solar energy benefit mankind! Thank you!

高纪凡

Jifan Gao

Trina Solar Chairman of the Board and CEO

We pledge to be a good citizen of our planet. Trina Solar values the social responsibility as an integral part of business operations. We'll do our best to reduce the impact on the environment, and meanwhile, actively explore the new PV technological applications. With Trina Solar employees' energy and wisdom, we are fully confident that we'll be able to fulfill the goal of popular use of solar energy worldwide, and achieve sustainable development. Our mission is to let solar energy benefit mankind!



Jifan Gao
Trina Solar Chairman and CEO



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Trina Solar
Changzhou
Corporate Headquarters

Encouraged by the rapid growth of the global PV industry and inspired by the "Million Solar Roofs" project in America, Jifan Gao, the Chairman and Chief Executive Officer founded Trina Solar—pioneer of the Chinese solar PV industry—in December 1997 with a team of scientists. Since founded in 1997, Trina Solar has maintained an unwavering commitment to producing dependable, high performing solar modules. As the company takes the lead in the solar industry, it has remained focused in its dedication to delivering the best value to customers.

Today, our high-quality modules provide clean, reliable solar electric power in on-grid and off-grid residential, commercial, industrial and utility-scale systems. With local sales offices and partners all over the world, we are committed to improving the competitiveness of solar energy and to developing a sustainable solar industry.

Explore Trina Solar

Solar Module Shipments

1,590 MW

Employees

12,000

Geographic Scope

25 countries

1.

Corporate Culture

2012 was the most challenging year for Trina Solar since it was established. In 2012, we refined our corporate core values as "Customer Focus, Open-mindedness, Respect and Collaborate for Win-Win, and Pursuit of Excellence". The corporate core values will become Trina Solar's guide for sustainable development and will be a key foundation for maintaining core competitiveness and fulfilling the company's mission and vision.

The core values are our core beliefs, which we should consis-

tently insist on and align with. In 2012, we established the Company Culture Promotion Committee. The committee was led by the CEO and CHO, and consisted of representatives of various departments. We set up an electronic platform, Core Values BBS (Bulletin Board System), through which employees discussed their understanding of the core values, shared the experiences and stories associated with the core values, so as to circulate and spread the essence of Trina's culture.



Stephanie Shao, Chief Human Resources Officer

Trina's core values shouldn't be a slogan. What we need is concrete action. The core values should serve as guidance for our thoughts and deeds, especially during the period when the PV industry is faced with the multiple challenges.

We'll conduct a 360-degree survey on Trina's core values and competency assessment twice a year. The survey will help employees have a better understanding on Trina's core values. By doing so, employees will be able to recognize their merits and areas for improvement.



Corporate Culture Promotion Committee

- 01 Help Trina employees worldwide understand the company culture;
- 02 Integrate the culture into our daily operation rules and regulations, so as to make them truly reflect the company's values and philosophy;
- 03 Conduct training sessions, improve Trina employees' cultural awareness;
- 04 Let the corporate culture truly become the guide of employee's thoughts and deeds, through various management measures and communication programs.

Customer Focus

Creating long-term customer partnership and delivering superior value:

- Customer Oriented
- Service Excellence
- Leading Needs
- Partnership

Open Mindedness

Highly open and inclusive, accept others and embrace change:

- Honesty & Integrity
- Inclusiveness
- Reflection & Improvement
- Study for Innovation

Respect & Collaborate for Win-Win

Foster an environment of respect, trust, mutual support and collaboration:

- Respect Others
- Mutual Trust
- Altruism
- Team Collaboration

Pursuit of Excellence

Guided by the Company mission, constantly push the current boundaries to achieve outstanding results:

- Positive & Optimistic
- Result Oriented
- Self-challenge
- Mission Achievement

Organization

Americas

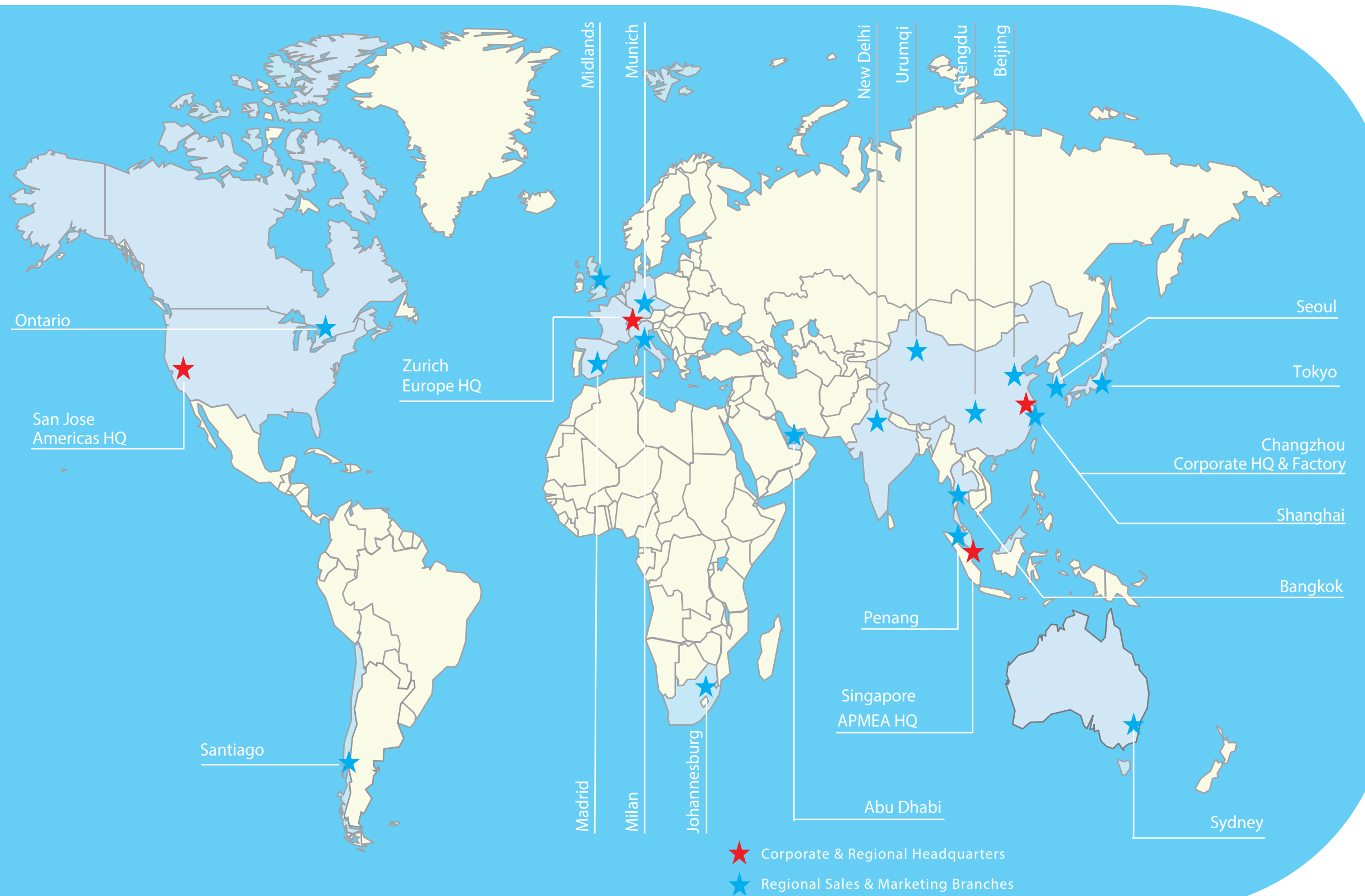
Europe

APMEA

China

The PV industry entered a consolidation phase in 2012. In order to overcome the challenges of an increasingly competitive PV industry and achieve sustainable development, we adjusted our development strategy, and took initiatives to streamline our organization. We optimized our global organization structure by setting up four BUs (Business Units), 4 sales regions and our corporate headquarters.

We designated the Module BU as our business foundation, and identified PV system as our new growth point. Meanwhile, we actively developed the smart energy development plan.

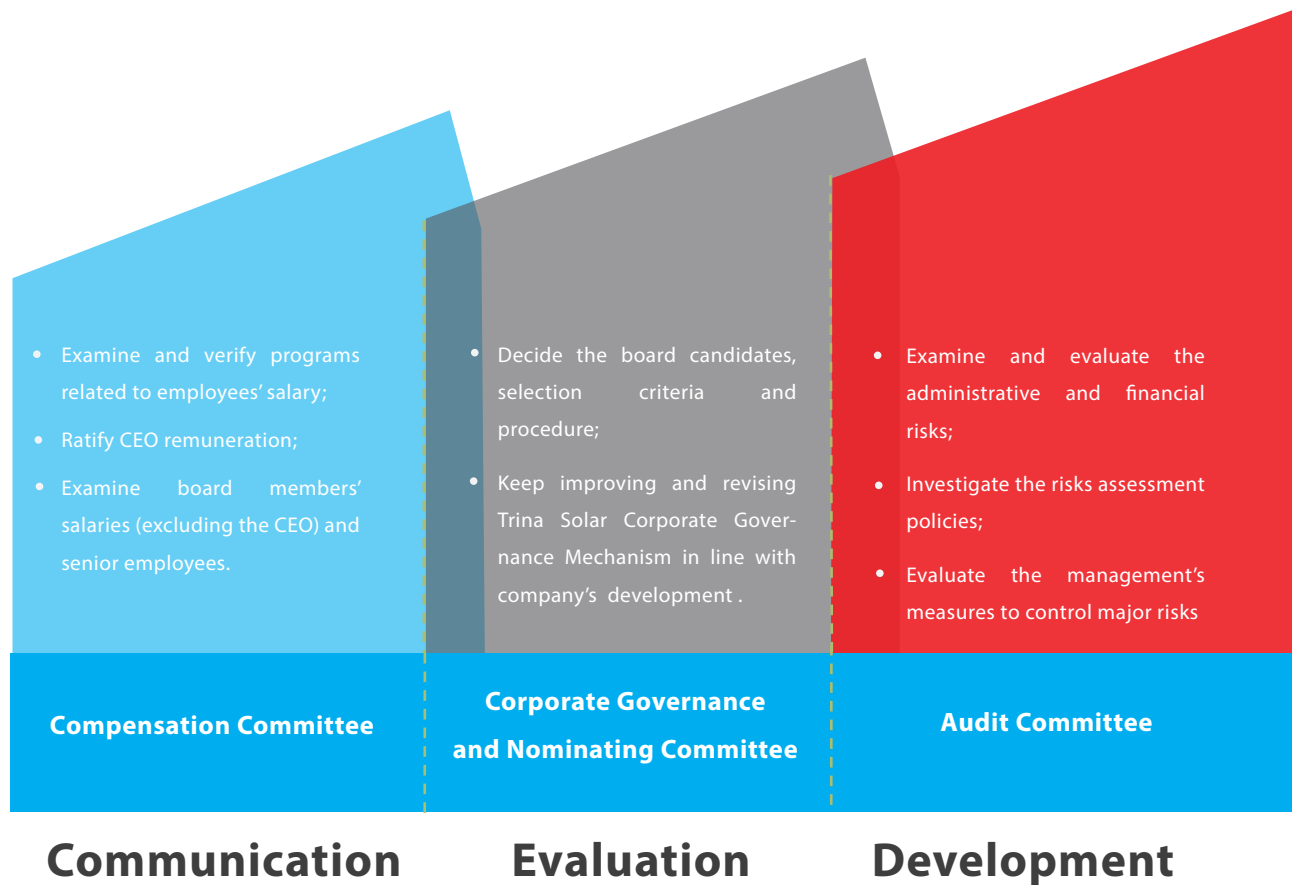


Corporate Governance

Having sound corporate governance is the key to safeguarding the interests of stakeholders and achieving sustainable development. Trina Solar has always focused on customers, and never wavered in its efforts to improve the transparency and openness of corporate management systems. The company is continuously on the move to build up a responsible, reliable and legally compliant corporate governance structure.

Board of Directors

Trina Solar has established Board of Directors and laid down the requirements of "Trina Solar's Corporate Governance Regime". The Board includes three different committees, which evaluate and discuss all important matters proposed to the Board. The Board comes up with a final proposal based on the board discussion. Its responsibility is to ensure the company's decisions being made in a consistent, rational and efficient way.



Risk Management

Risk management is crucial to the company's stable development and to employee safety. In order to identify and deal with various risks, including financial and non-financial risks, Trina Solar has set up a Risk Management department. The department is responsible for real-time monitoring of daily operations and for laying down improvement plans to mitigate the risks. The goal is to avoid or minimize the losses resulting from any possible serious incidents.

Reliability and Bankability

Trina Solar 's solid track record stems from sustainable growth as an operational and financial foundation of our business.

The importance we give to financial transparency and quality standards has consistently placed us among the preferred partner of leading financial institutions, project developers and EPC firms around the world.

Despite the rapid pace of change in the industry, Trina Solar has provided its customers with the reliable local technical support to ensure that products meet and exceed customer and investor expectations delivering long-term return on investment.

Business Ethics

Trina Solar has established the Code of Business Conduct and Ethics (the "Code"), which contains general guidelines for operating Trina Solar's businesses consistent with the highest standards of business ethics. The Code is designed to deter wrongdoing and to promote:

- Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- Full, fair, accurate and timely disclosure of reports and documents that the Company will file with;
- Comply with applicable laws, rules and regulations;
- Prompt internal reporting of violations of the Code;
- Account for adherence to the Code.

Trina Solar has established a Business Ethics Committee. The responsibility of the committee is to lead our company's business ethics development and promotion. We have set up a dedicated department responsible for any complaints or advisory work. The committee establishes channels, such as an ethics hotline, an anti-fraud email hotline etc., to identify and curtail any potential risk. The code of business conduct and operation guidance is published on Trina Solar's website: www.trinasolar.com.

We focus on legitimate businesses, and adhere to the highest standards of business ethics. Trina Solar has put "The Code of Business Conduct and Ethics", "Management Policy for Gifts and Hospitality Offerings", "Anti-Fraud Reporting Policy" etc in place. These codes and policies reflect the moral values and operational guidelines of Trina Solar. We require our employees to observe the ethical standards advocated by the company when conducting our business.



Anti-Corruption

Trina Solar is committed to building a corruption-free system and running the company with the highest standards. We have a Gifts and Benefits Acceptance Guideline, Gifts and Hospitality Offering Management Policy and Trina Solar Offence Reporting System, which reflects the ethical values and working principles of Trina Solar. Meanwhile we require all the employees to carry out their work under these principles.

In 2012, we proceeded with the effort of improving our internal audit system and conducted our business in accordance with the highest ethical principles. We organized training sessions for senior executives and key staff to learn the value of integrity and emphasized the importance of ethics in order to prevent the occurrence of corruption.

Reporting Mechanism

Trina Solar has established reporting mechanisms to allow employees to report any issues in business ethics and inappropriate behavior, including bribery, fraud, corruption, conflict of interests and abusing of company assets etc., through e-mail, hotline, correspondence or a face-to-face discussion.

Continuous training and internal communication are critical in ensuring sound business ethics. We have set up a variety of channels to foster employees' awareness on business ethics, such as an e-learning training courses, case-sharing seminars, relevant email messages to all employees etc. Trina Solar is committed to ensuring our ethical business being always integrated into business activity.

Integrity & Compliance

We firmly believe that integrity and legal compliance are the two cornerstones for sustainable development. Trina Solar seeks to exceed its rivals with transcendent business performance by fair and honest competition, rather than illegal or unethical business practices. The company strictly prohibits infringement of the third parties' intellectual properties. We adhere to the principles of fairness, integrity and legal compliance. Every employee is required to treat customers, suppliers and competitors equally and respect their rights.

Promote High Business Ethical Standards with Suppliers and Partners

Trina Solar treats business ethics as an important criteria for supplier selection and ongoing cooperation. We have signed a "Business Ethical Commitment" with existing suppliers and partners, and set up a database to track their performance indicators, such as records of fraud, violation of labor law, legal complaints, etc. The aim is to lead and promote high standard of business ethics when dealing with suppliers and business partners.



Policies

Environmental Health and Safety (EHS) Policy

Trina Solar is committed to designing and manufacturing of solar photovoltaic modules and related system-enhancing solutions to lower the overall cost of installed solar system. While supplying clean energy products, we pay attention to employee's health, safety and well-being, as well as environmental protection and sustainable development between our operating economies and environments. Our vision is to create a safe, healthy and environmentally-friendly workplace for employees and a harmonious green planet for mankind. Herewith we pledge the following:

- Comply with all applicable EHS laws & regulations and meet interested parties' requirements.
- Promote sustainable manufacturing and build an environmentally-secure planet by making efficient use of energy and resources and maximizing raw material recycling.
- Proactively reduce occupational injury and illness risks and promote employee health and well-being.
- Commit to the prevention of pollution, occupational injury and illness to minimize its negative impact on environment, while ensuring employee health and safety.
- Enhance employee EHS awareness and encourage employees to participate in EHS programs.
- Continually improve EHS performance via perfecting the EHS management system.
- Provide transparent EHS reports to stakeholders and other relevant interested parties.
- Pledge our support and commitment to help our suppliers to improve their EHS performance and take social responsibility.

Product Stewardship Policy

Trina Solar developed its product stewardship policy to ensure safety and environmental protection of the photovoltaic modules throughout its entire life cycle.

01

Trina Solar conducts business in a manner that ensures compliance with all applicable regulatory requirements and industry standards. We commit to integrating environmental, health and safety responsibilities into all stages of our product life cycle.

02

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.

03

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.

04

Trina Solar actively strives to use and develop new raw materials and products in a responsible manner by assessing their risks for current and future generations.

05

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 modules.

06

Trina Solar engages with stakeholders to periodically review the policy statement to ensure that it remains adequate and continues to meet stakeholders' expectations.

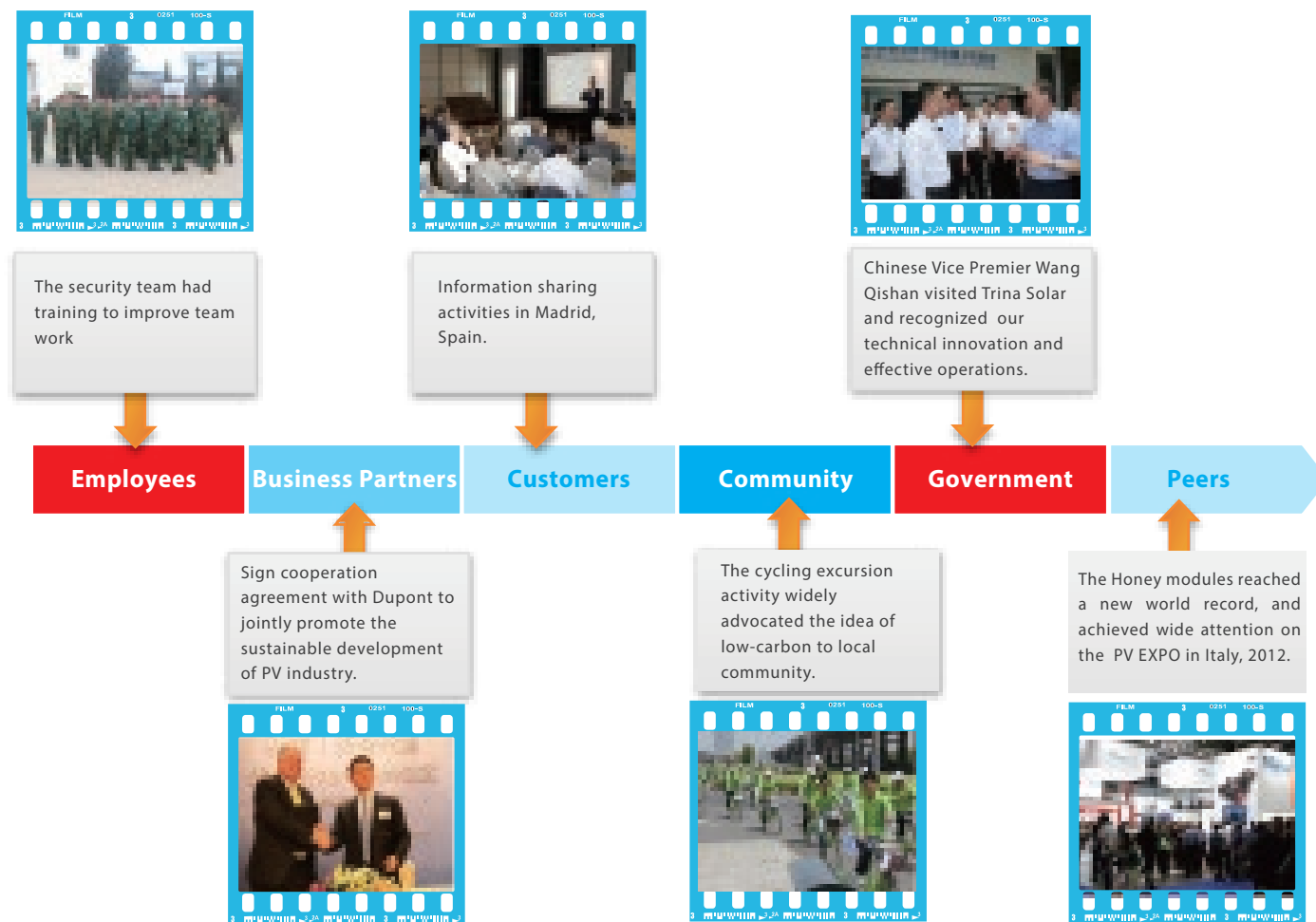


Communication with Stakeholders

We need to work together with all stakeholders to develop their potential in order to diversify cooperation to promote the process of sustainable development of society.

Trina Solar pledges to respect, consider and respond to the interests of its stakeholders. Through systematic identification and classification of stakeholders, Trina Solar has established stakeholder communication channels. For many years, we have been listening to stakeholders, responding to their needs in a comprehensive and timely manner and providing high quality service to our customers and the community, so as to meet the expectations of stakeholders.

Together with our partners worldwide, Trina Solar is committed to the mission of changing conventional modes of power supply, and accelerating the world's transition to clean and reliable renewable energy.



No.	Stakeholders	Communication	Our Responsibility and Commitment
A	Customers	<ul style="list-style-type: none"> Customer satisfaction investigation Meeting and seminar Exhibition 	<ul style="list-style-type: none"> Business ethics Product quality Product safety
B	Shareholders	<ul style="list-style-type: none"> General meeting of shareholders Quarterly conference call 	<ul style="list-style-type: none"> Operation performance Perfect the corporate governance structure Timely and accurate disclosure of business operations Important news and development
C	Employees	<ul style="list-style-type: none"> Employee survey Training Performance appraisal BBS (Bulletin Board System) forum HR hotline Staff suggestion scheme 	<ul style="list-style-type: none"> Workplace safety Welfare
D	Environment	<ul style="list-style-type: none"> Energy conservation and pollution prevention Waste disposal ISO14064 GHG verification 	<ul style="list-style-type: none"> Energy conservation Water resource protection EHS management improvement
E	Business Partners	<ul style="list-style-type: none"> Regular meeting EHS policy notification Supplier audit Contractor training 	<ul style="list-style-type: none"> Fair competition Joint development Cooperation on mutual trust
F	Peers / Standard	<ul style="list-style-type: none"> Business forum Release research result 	<ul style="list-style-type: none"> Promotion of technological innovation Building a sustainable solar industry
G	Community	<ul style="list-style-type: none"> Operation of public welfare/charity project Employee volunteer activities 	<ul style="list-style-type: none"> Contribution to the harmonious development of the community
H	Media	<ul style="list-style-type: none"> Media Communication Information disclosure 	<ul style="list-style-type: none"> Attention to media opinion Active disclosure of CSR information
I	Government	<ul style="list-style-type: none"> Discussion and reporting Policy research Planning and formulation 	<ul style="list-style-type: none"> Tax payment Legal compliance

Challenges and Opportunities

In 2012, Trina Solar experienced serious challenges, including overcapacity, aggressive competition, the global financial crisis and the continuous decline of module prices. Nevertheless, our mission, "Let Solar Energy Benefit Mankind", remains as the core guide for all Trina Solar employees. We helped each other, tackled difficulties together, actively responded to each challenge and made efforts to achieve sustainable development.

Challenges in 2012	Ways of dealing with the challenges & commitment to Sustainable development
Slowing market growth and overcapacity led to fierce competition and continuous decline of sales price	<ul style="list-style-type: none"> To overcome the crisis through continuous innovation, cost reduction, high quality and brand leadership. Constantly renovate and develop new products. Proactively develop both on-grid and distributed solar energy projects. Be aligned with global energy growth patterns and propose the new tagline "Smart Energy Together".
Global trade protectionism	<ul style="list-style-type: none"> Comply with US and EU "anti-dumping" and "anti-subsidy" investigations and prove that Trina Solar is not dumping or receiving illegal subsidies. We appeal for global cooperation and for free trade principles by supporting initiatives such as the Sustainable Energy Trade Initiative (SETI), the International Center for Trade and Sustainable Development (ICTSD) and the Green Growth Action Alliance (G2A2).



Trina Solar CEO and the Chancellor of Germany, Angela Merkel

On 31st August, 2012, at the Sino-German Entrepreneur Forum, Trina Solar's Chairman and CEO Jifan Gao spoke on behalf of the Chinese PV companies. He called on Sino-German enterprises of the two countries to carry on the principle of free trade and fair competition, so as to achieve mutually beneficial cooperation and green development. The Forum was co-chaired by Chinese Prime Minister Wen Jiabao and German Chancellor Angela Merkel.

Performance Summary

The following table provides a performance summary of our key economic, environmental, and social indicators.

Key CSR Performance Indicators						
		2008	2009	2010	2011	2012
Economic	Solar module shipments (MW)	201.01	399	1057	1512	1590
	Net revenues (US\$ 1000)	831,901	845,136	1,857,689	2,047,902	1,296,655
	Gross profit (US\$ 1000)	164,442	237,154	584,361	332,642	57,243
	Gross margin (%)	19.80%	28.10%	31.50%	16.20%	4.40%
	Income from continuing operations (US\$ 1000)	99,987	135,369	417,348	30,966	(264,872)
	Net income (loss) from continuing operations (US\$ 1000)	60,739	96,226	311,453	(37,820)	(266,555)
Environment	Carbon emission per MW Module Production (T/MW)	---	---	320	242	239
	Electricity consumption per MW Module Production (MWH/MW)	801	569	360	282	277
	Water Consumption per MW Module Production (m ³ /MW)	8,018	4,543	3,529	2,982	2,870
	Amount of wastewater per MW Module Production (m ³ //MW)	---	2,698	2,074	2,031	1,760
	Amount of Waste recycled per MW Module Production (T/MW)	---	---	---	2.48	2.72
	Environmental input (US\$ 1000)	---	---	12142.2	12924.8	8104.4
Supply chain	Suppliers CSR audit (Times)	---	---	7	9	18
Employee	Employee amount	4,600	7,900	10,000	15,000	12,000
	Rate of employees joint in the labor union (%)	---	17.1%	55.0%	65.8%	67.3%
	Female employee ratio (%)	---	---	---	37.4%	36.5%
	Percentage of employees whose salary is higher than the stipulated minimum (%)	100%	100%	100%	100%	100%
	Total Recordable Rate (TRR)	---	---	1.56	0.79	0.56
	Work-related fatalities	0	0	0	0	0
	Average training hours (hrs /yr Cap)	---	---	---	30	33
	Safety & Occupational Health Input (US\$ 1000)	---	---	2097.3	3939.2	4568.6

Awards

Date	Awards
January 2012	Listed in "2011 China Core Enterprise Rank List" by China City Competitiveness Institute.
February 2012	Awarded "Enterprise Technology Innovation Award" at the Jiangsu Science and Technology Awards Conference held in Nanjing.
March 2012	Named as "Top PV Brand" by EUPD, a German research institution for new energy industry.
April 2012	Ranked No. 1 globally for environmental and social performance in the 2012 Solar Scorecard, an award system established by the SVTC (Silicon Valley Toxics Coalition), in the US.
April 2012	Awarded "Excellence in Sustainable Development-Low Carbon Award" by British Standards Institution (BSI).
June 2012	Awarded "Advanced Enterprises in Jiangsu Province" by Jiangsu provincial government.
June 2012	Re-elected as the "Chinese Energy Group Top 500 Enterprises" in the Second China Energy Economic Forum, co-hosted by China Energy Newspaper and China Energy Economy Research Institute.
July 2012	Conferred the honorable award of "Happiest Enterprise" in Jiangsu Province for the years of 2011 - 2012 by Jiangsu Business School, sponsored by 14 universities, including Nanjing University and Southeast University.
July 2012	Passed the verification of ISO14064 (Quantification and Reporting of Greenhouse Gas Emission) by British Standards Institution (BSI).
September 2012	Nominated in the "China's Top 50 Global Challengers List" by Boston Consulting Group (BCG).
October 2012	Passed the product carbon footprint verification, PAS 2050 by British Standards Institution (BSI).
November 2012	Passed the ISO14001 environmental management system and OHSAS18001 Occupational Health Management System verification by TUV.
November 2012	Won the "2012 PV Industry Top 10 Supplier Brands" award during the "2012 Top 50 PV Industry Brand Competition", co-hosted by the Modern PV Magazine and Global Solar PV Network.
November 2012	Recognized as "Green Integrity Enterprise" by Jiangsu Environmental Science Association.
December 2012	Recognized as "Health Promotion Demonstration Enterprise" by the Patriotic Health Campaign Committee of Jiangsu Province.





**Electricity Consumption
per MW Module Production**

277 MWH/MW

**Water Consumption
per MW Module Production**

2,870 m³/MW

Environmental Investment

US\$ 8.1 million

We strive to maintain our high product quality while using energy and natural resources responsibly and efficiently. In 2012, the amount of electricity consumption and water consumption per MW (megawatt) module decreased by 65% and 64% respectively in comparison with that of 2008. Although proud of the results achieved thus far, we are fully aware that this is a long-term, arduous task. We will unwaveringly advocate and implement low-carbon development strategy, and integrate green-manufacturing concepts through all stages of our company's operations, sparing no efforts to create an environmentally-friendly and resource-conserving company.

Environmental Protection 2.

Corporate Sustainable Development

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Corporate sustainable development is a business approach that creates long-term shareholder value by embracing opportunities and managing risks derived from economic, environmental and social developments.

As a worldwide enterprise committed to the development of green solar energy, Trina Solar has long implemented the concept of sustainable development and committed to conserving energy and protecting the environment in order to

fulfill its mission of achieving mutual and sustainable development of the company itself, the community and the ecosystem.

Not only are we a clean solar energy manufacturer, but also an advocate for providing sustainable solutions to address the global climate change and energy crisis. With the entire PV industry confronted with the multiple challenges in 2012, Trina Solar constantly called for both domestic and international cooperation through various channels, in the hope of pushing forward the continuous development of the PV industry worldwide and establishing a global collaboration.



April 2012, America, ranked No. 1 by Silicon Valley Toxics Coalition

Trina Solar was ranked No. 1 globally for environmental and social performance in the 2012 Solar Scorecard, an award system established by the SVTC (Silicon Valley Toxics Coalition), covering the assessment areas of extended producer responsibility, occupational health and safety, chemical use, supply chain responsibility, and life cycle analysis.

June 2012, Rio de Janeiro, Brazil United Nations Conference on Sustainable Development

Chairman and CEO Jifan Gao was invited to attend the United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil (or Rio+20 Summit). At the occasion of Rio+20 Summit, leaders from business, scientific and civil societies worldwide initiated the theme of green development. A message from the Summit was that we must overcome urgent and interlinked economic, social and environmental challenges in the coming decades to create a sustainable path. The Summit called for a wider cooperation in seeking for solutions to the common challenges of mankind, such as shortage of energy, water, food and other major challenges and jointly promoting the sustainable development of mankind.

January 2012, Davos, Switzerland, 2012 World Economic Forum

Trina Solar Chairman and CEO, Jifan Gao attended the 2012 World Economic Forum in Davos, Switzerland. At the Forum, Jifan Gao called on governments, industries, media and consumers worldwide to balance the short-term interests and long-term interests and reach a wider cooperation and consensus through frank and extensive dialogue, so as to jointly expedite the world's transition to clean, efficient and renewable energy.

November 2012, Jiangsu Province, China, Green Integrity Enterprise

Initiated by Jiangsu Environmental Science Association, Trina Solar participated in the competition of the Green Integrity Enterprise qualification. Three criteria, covering environmental behavior, environmental responsibility, and social image, were set up for the competition. Experts from Jiangsu Environment Protection Authority carried out systematic examination to the environmental performance indicators of each participating enterprise, including pollutant emissions, environmental management organization, environmental rules and regulations, energy-saving, pollution reduction, environmental supervision, corporate environmental culture, and environmental awareness promotion programs etc. In November 2012, Trina Solar was recognized as "Green Integrity Enterprise" by Jiangsu Environmental Science Association.

Addressing Climate Change

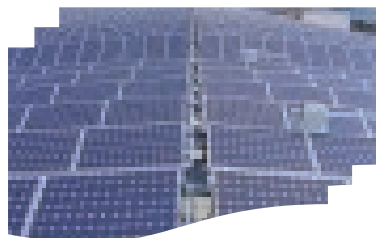
Energy is the driving force of world economic development and the material basis of mankind's survival. While enjoying the benefits of economic growth and technological progress, humans are also facing a series of challenges resulting from over-consumption, such as energy shortage, environment pollution and climate change.



Clean Energy

Dealing with global climate change has become an extremely urgent task for the world, nations and companies. While improving energy efficiency is certainly effective for the control of climate change, it is a challenge to increase clean energy production sufficiently to substantially reduce carbon dioxide (CO₂) emissions. Compared with the conventional fossil-fuel energy, solar energy can significantly reduce carbon dioxide (CO₂) emissions and reduce pollution. To address the issues of climate change and energy shortage, Trina Solar is committed to continuously exploring and adopting innovative technology and advocating low-carbon green energy patterns for mankind. We pledge to systematically resolve the multiple problems of economic growth, environmental protection and energy security and to provide the world with reliable, clean solar energy.

Case Study: Golden Sun Project – 2MW PV System Installed on the Rooftops in Changzhou HQ



In December 2010, Trina Solar invested US\$ 3.5 million on installing a 2 MW PV system. The PV panels were installed on the rooftops of 14 buildings, 2 vehicle carports, and 2 areas of lawn. It has generated 1.68 million KWH (kilowatt hour) electricity since it was put into operation in February 2012, which is equivalent to 1,380 tons of carbon emission reduction.

Greenhouse Gas Offset Plan

Trina Solar has partnered with the Plant-for-the-Planet Children's Initiative, which seeks to offset global greenhouse gas emission by planting trees. The initiative was inspired by the United Nations Environmental Program (UNEP) Billion Tree Campaign. The initiative aims to plant a billion trees by 2020 to absorb carbon emissions and to empower more than one million children to prevent the impending climate crisis.

Some 100,000 children in 193 countries are the leading lights of this campaign for sustainability and Trina Solar's participation will see 27,000 trees planted over three years in Costa Rica, Ecuador, Congo, Namibia, Malaysia, Brazil and China.

The overall reduction in CO₂ from this activity is estimated to be more than 220,000 kg a year, which is sufficient to offset Lotus F1 Team Grand Prix emissions over the course of five seasons. With the partnership, Trina Solar is taking a step to transform Formula 1 into a greener enterprise. More than 500 million people watch Formula 1 every year and we can educate the large audience on the importance of solar energy and sustainability.

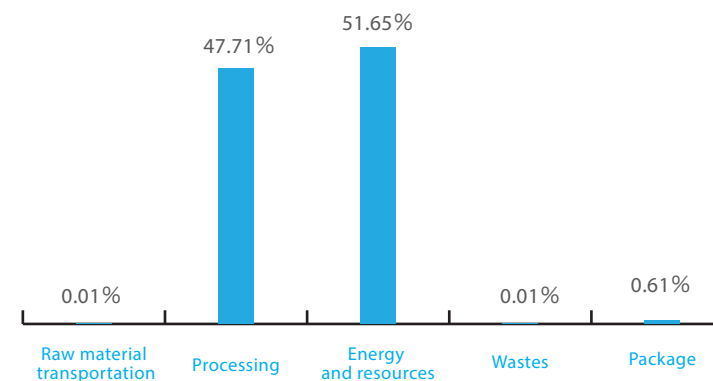


Product Carbon Footprint PAS2050 Verification

Finding a way to sustain industrial development and maintain the eco-balance simultaneously has been a challenge that many enterprises are pondering over. Trina Solar has consistently paid attention to harmonious development among economic, environmental and social development. In 2012, we successfully obtained the Carbon Footprint Verification (the verification) for the company's solar PV modules from British Standards Institution (BSI) based on requirements of PAS 2050:2011 standard. BSI verified the greenhouse gas emissions during the whole life cycle, including acquisition of raw materials, processing activities phase and packaging phase etc.

- The verification directly reflects our commitment to corporate social responsibility.
- The verification allows us to seek for opportunities to reduce greenhouse gas emissions in the processes of product design, manufacturing and module supply, and to explore the potential projects of energy-saving and pollution reduction.
- The verification encourages us to integrate the concept of environmental protection into the whole life cycle of the module.

Carbon footprint of TSM-PC05 series PV

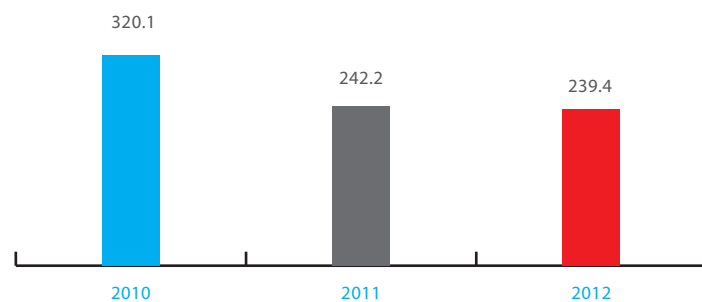


Greenhouse Gas (GHG) Measurement Projects

The on-going commitment to conducting Greenhouse Gas (GHG) measurement projects is not only to fulfill the social responsibility for the new energy manufacturing industry, but also a prerequisite for building a global green energy industry system which is safe, stable and clean.

As a company in the environmental technologies industry, we not only focus on the design, development, and manufacturing of green products to achieve sustainable development, but also strive to establish a credible, transparent and consistent GHG inventory to demonstrate the corporate social responsibility to the public and customers. Trina Solar has put substantial efforts in establishing a systematic methodology to quantify and report GHG emissions which lays down a solid foundation and framework for Trina Solar to continue the quantification, monitoring and reporting of GHG emission reductions in our forward operations. Electricity, diesel and natural gas are consumed during manufacturing of PV products. Except for the needs of our day-to-day energy conservation programs, Trina Solar also needs to proactively benchmark our industrial standards. ISO14064 Verification helps the company achieve pollution reduction target and also foster employees' awareness to use natural resources in more efficient ways. Through our efforts, the CO₂ emission per MW module production in 2012 reduced by 25.2% compared with that in 2010.

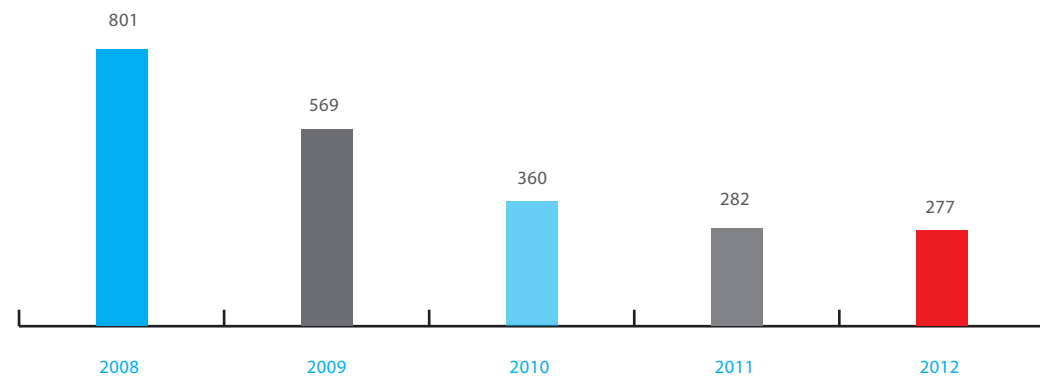
Trina Solar carbon emission per MW module production(T/MW)



Enhancement of Energy Efficiency

Reducing the electricity consumption per product unit not only helps reduce carbon dioxide (CO₂) emission, but also brings down the product cost. We are committed to enhancing energy efficiency in order to reduce carbon dioxide (CO₂) emission, and produce more cost-competitive products. In 2012, we continued to promote energy efficiency improvements, identify and implement energy-saving projects, and optimize energy use. The electricity consumption per MW module production declined by 65.4% compared with that of 2008.

Electricity consumption per MW module production(MWH/MW)



Case Study 1: Replacement of Centrifuge with Filter



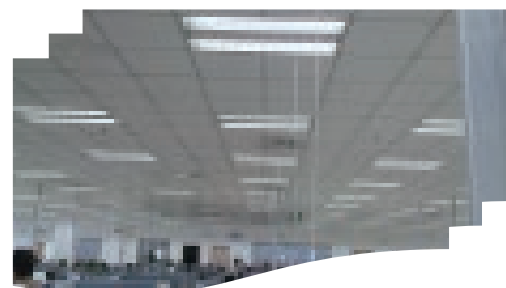
The sludge dewatering process in wastewater treatment used to use centrifuge technology. Its disadvantages are high-energy consumption and high noise level. In March 2012, the Facility Department replaced the centrifuge machine with filter press in the sludge dewatering process. The project leads to electricity saving of 562,000 KWH/year, saves US\$ 63,000 in annual electricity cost, which is equivalent to 462 tons/year of carbon reduction.

Case Study 2: Renovation Project for Silane Combustion Towers



Each silane combustion tower in CM-E1 workshop is equipped with two circulating water pumps with a power rate of 5.5KW each. Each water pump sprinkles only the partial area of the tower. In May, 2012, the Facility Department installed a connecting valve between the exits of two water pumps. Only one water pump keeps running after installation. The renovation project conserves 337,000 KWH of electricity every year, saves US\$ 38,000 in annual electricity cost, and reduces 277 tons of carbon emission.

Case Study 3: Installation of Light Switches for each Employee in the Main Office



Electricity is precious. Employees often forget to switch off the lights when they leave. To ensure each employee can turn off the lights above them, the Facility Department installed a position switch for each employee in the centralized office area. The project not only saves electricity, but also raises the employees' energy saving awareness.



Environmentally Friendly Operation

As an advocate and practitioner of environmental protection, Trina Solar has always been committed to sustainable development.

Green manufacturing and environmental protection have always been the lifeline of our company. We implement green operations through rational use of natural resources, adequate treatment of wastewater and air emissions, waste recycling, and other environmental promotion activities.



Sustainable Use of Water Resource

Water, as the source of life, the blood of industry and the necessary resource for the maintenance of human development, is the foundation for human survival. In 2012, we implemented various effective water-saving projects, and strived to reduce water consumption per MW module production through sustainable use of water resource. Our water consumption per MW module declines annually. In 2012, water consumption per MW module decreased by 64.2% and 3.8% compared to that of 2008 and 2011, while the volume of wastewater discharge reduced 34.8% and 13.3% respectively compared to that of 2009 and 2011. The encouraging result is inseparable from our sustainable use of water resource.

Reuse and Recycle of Water

We have always been committed to water reuse and recycle programs. We successfully implemented the projects for collection and reuse of RO (reverse osmosis) rejected water, HVAC condensate water, and even preliminary treated wastewater. The water is used for washing, heating, cooling, cleaning and gardening. Guided by the zero waste principle, we try our best to make the best use of water, aiming to prevent pollution and reduce fresh water consumption, so as to achieve the win-win situation between economic development and environmental protection.

Case Study 1: Water Recycle Project in WCM Workshop



Our manufacturing process uses a lot of ultrapure water in the WCM workshop. About 30% of tap water is rejected by the Reverse Osmosis membrane, called ROR water in ultrapure water producing process. The Facility department set up a water-recycling project to collect, treat and reuse of ROR Water using mature technology. The project saves 175,000 m³ of water, equivalent to US\$ 10,000 water bill saving every year.

Case Study 2: Wastewater Reuse Project

Trina Solar worked together with Wuxi Depple Water Investment to build a new water recycling plant. The plant was built using advanced dual-membrane (ultra-filtration and reverse osmosis) technology to treat industrial wastewater created during the manufacturing process. The treated water was sent back to Trina Solar as supplementary raw water supply. Previously, about 2000 m³ wastewater was sent to Wuxi Depple. About 1400 m³ wastewater get recycled.

This project not only helps to reduce water consumption, but also helps explore a new way for sustainability and environmental protection.



Ultrafiltration and reverse osmosis equipment



Sedimentation pond

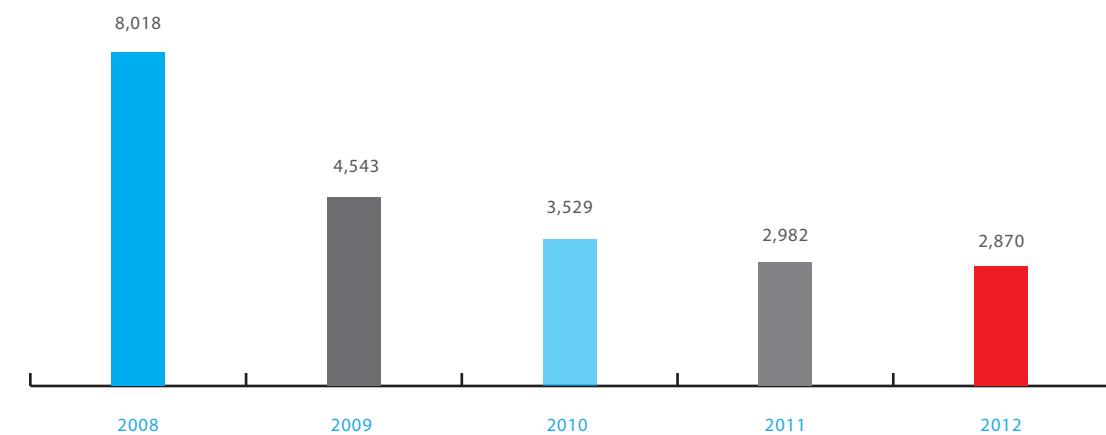


Effluent pond

Enhancing Utilization Rate of Water Resources

Although our total water consumption grows with production volume, the utilization rate of water resource has continued to improve through implementation of water recycling and reduction projects.

Water consumption per MW module production(m³/MW)



Wastewater Discharge

The wastewater from the manufacturing process which can't be reused or recycled will be adequately treated by de-fluorination and neutralization processes prior to being discharged into the municipal sewer. Local environmental authorities monitored the water quality of the treated effluent, which shows that the water quality meets the national stipulated limits.



Fish swimming in the wastewater effluent pool

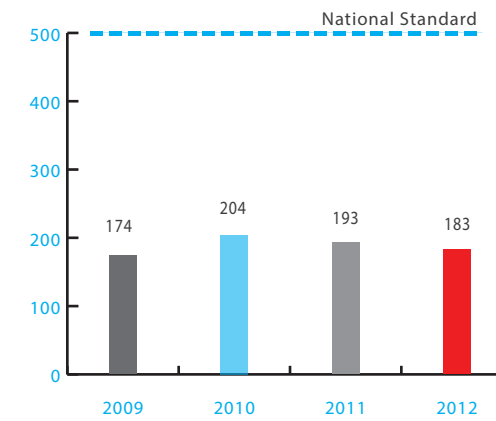


Acidic/caustic scrubbers

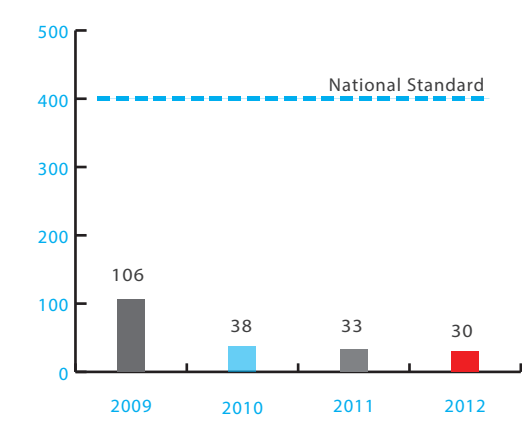
Air Emissions

Trina Solar has also built a range of scrubbers, such as acidic/caustic scrubbers and organic scrubbers to remove pollutants from air emissions. Trina Solar engaged an accredited third party to carry out annual monitoring of air emissions from our exhausts and scrubbers. Results show that air emissions from exhausts and scrubbers are well below legal requirement of the Integrated Emission Standard of Air Pollutants GB 16297-1996.

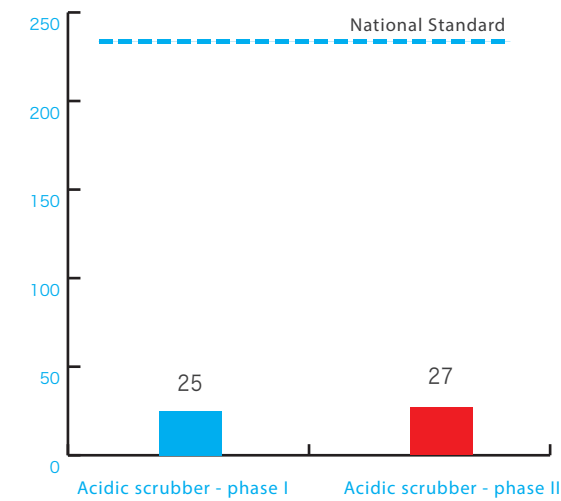
Concentration of COD monitored by the third-party (mg/L)



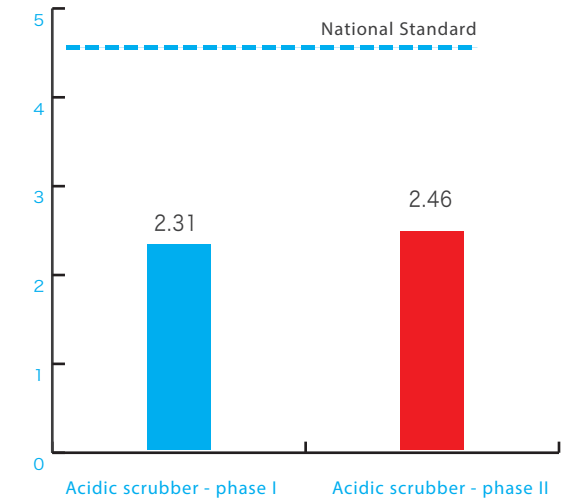
Concentration of total suspended solids monitored by the third-party (mg/L)



Nitric Oxide (NOx) emission concentration in 2012 (mg/m³)



Nitric Oxide (NOx) emission rate in 2012 (kg/h)



Waste Management

The wastes from Trina Solar's manufacturing processes mainly consist of wooden pallet, plastic foam, paper waste, used oil and sludge from wastewater treatment. Trina Solar treats waste as a resource. We segregate different wastes, and manage them based on the principle of "3Rs" – Reduction, Reuse and Recycle. We adopt the following measures to reduce the amount of waste from manufacturing processes:

01

To consider the ways of reducing waste generation during the product design phase.

02

To maximize the use of recyclable materials for packaging, reduce the landfill disposal and increase the recycling rate of wastes. In 2012, the waste recycled increased from 2.48 T/MW in 2011 to 2.72 T/MW.

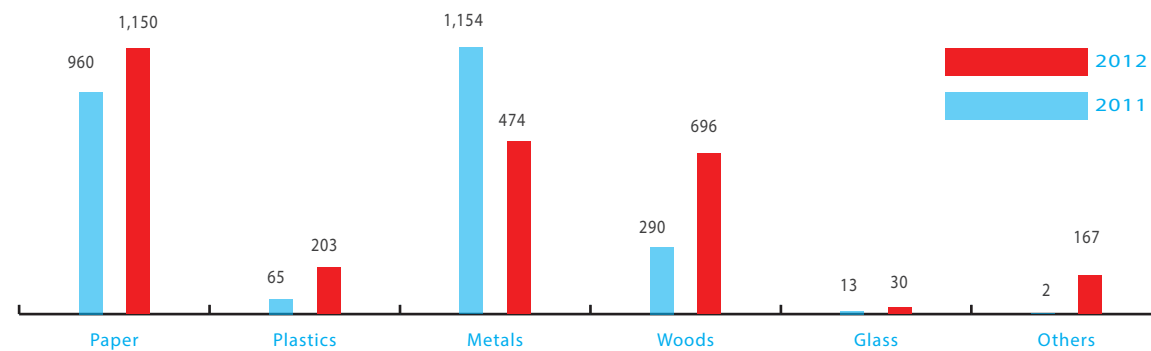
03

To raise the employees' awareness of waste segregation and minimization through training.

04

To establish a waste management procedure, to engage accredited industrial waste collector to dispose of the industrial wastes and to strictly follow the national requirements.

Resource wastes recycled per MW module production (kg/MW)



Win-Win Cooperation

“Respect and Collaborate for Win-Win” is a core company value. Trina Solar’s success is dependent on the success of suppliers and other stakeholders. For example we help suppliers to improve their EHS performance and become more socially responsible. Trina Solar is continuously pushing forward the sustainable development of the photovoltaic industry with our stakeholders worldwide.



Supplier Audit Support

EHS/CSR audits for 18 key suppliers

Promotion of Clean Energy

Organization of PV industry supply chain symposium

Technical Cooperation

Cooperation in new technologies research with Dow Chemical

Supplier Management

One way to improve the performance of suppliers' social responsibility is to exert influence on them. Trina Solar carries out risk assessments on suppliers annually, identifies their risk levels and lists those suppliers whose products and services are closely related to Trina's sustainable development as key suppliers.

Trina Solar has put Supplier CSR Management Procedure in place. We regularly conduct on-site CSR audits/surveys to the key suppliers. The audit/survey covers the areas of EHS legal requirements, environmental protection, occupational health and safety, fire safety and social responsibility. We request key suppliers to sign CSR commitment letter in order to strengthen the communication and cooperation and commit to building a stable, efficient and reliable supply chain.

CSR Survey for Suppliers

Good social performance is an important criterion for selecting suppliers. Trina Solar carries out a comprehensive CSR survey when selecting suppliers. The survey covers the areas of workers' human rights, environmental protection, occupational health/safety and welfare, integrity, EHS legal compliance etc. Suppliers who fail to meet the minimum standards will not be selected as our qualified suppliers.

Suppliers CSR Commitment Letter

We expect our suppliers to integrate labor standards, environmental protection, occupational health & safety and business ethics by signing CSR Commitment letter. To ensure that our suppliers can observe our principles and values, we require our suppliers to sign a CSR Commitment Letter and promise to manage sincerely and treat employees equally and considerately.



CSR Audit for Suppliers

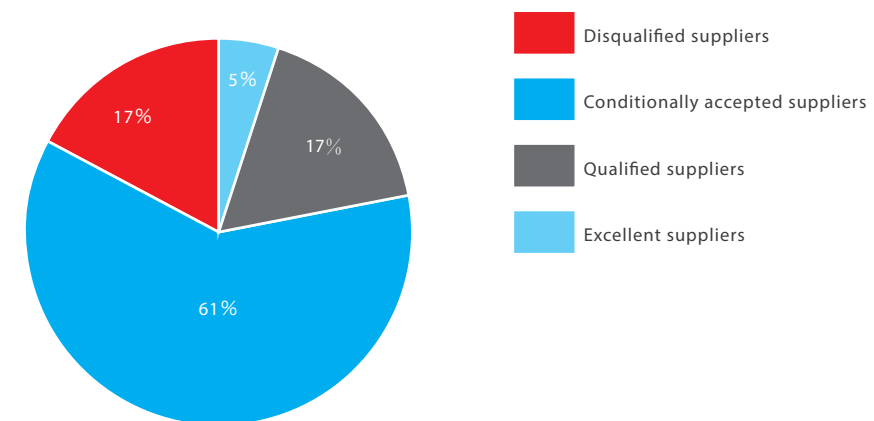
We believe that regular audit is an effective way to promote the self-management of suppliers. We conduct the audit by means of document audits, field inspections and employee interviews. Suppliers are required to respond to the audit findings within two weeks' time.

Principles:

- 01 Follow the business ethics of fairness and honesty
- 02 Protect employee's lawful rights and actively audit to prevent child labor, forced labor and physical abuse in the supply chain
- 03 Provide Employees with a healthy and safe work place
- 04 Adopt environmentally-friendly manufacturing processes

In 2012, Trina Solar conducted EHS/CSR audits for 18 key suppliers to encourage them to fulfill their social responsibilities. Among the 18 suppliers, one supplier is listed as an excellent supplier, three as qualified suppliers, eleven as conditionally accepted suppliers and three as disqualified suppliers. The three disqualified suppliers are required to rectify non-compliant practices within two weeks' time. We would stop doing business if the suppliers couldn't complete corrective actions.

Results of 2012 suppliers CSR audit



Strategic Partnerships

Trina Solar focuses on green development and aims to achieve this vision and objective of sustainable development with all the global partners. Trina Solar works jointly with them to seek for innovative solutions for the PV industry.

Case Study 1: Establish Technical Cooperation with Dow Chemical



In July, 2012, Trina Solar signed a Memorandum of Understanding with Dow Chemical for a long-term and comprehensive strategic technical partnership.

Trina Solar and Dow Chemical will conduct a comprehensive cooperation in new technologies research and product development. Both sides pledge to expand the business cooperation scope, transfer the scientific research achievement into productivity and promote collaboration and win-win partnership.

Case Study 2: Establish Technical Cooperation with Dupont

In March, 2012, Trina Solar signed the strategic cooperation agreement with Dupont. Both parties were committed to developing extensive and intensive cooperation in R&D, strategic purchasing and joint promotion for the sustainable development of the PV industry.



Soccer competition with Dupont

Case Study 3: Changzhou PV Industry Supply Chain Joint Symposium



On 4th August, 2012, Trina Solar, together with Changzhou PV Industry Association, organized a Changzhou PV industry supply chain joint symposium. The participants explored current industry challenges and the common development of PV industry.





Care for Employees

Employees are essential for the success of Trina Solar. Our values are founded on realizing each employee's potential. Achieving our mission and vision depends on each employee's contributions and achievements. Therefore, we are committed to providing our employees with a safe and healthy workplace, a competitive salary and benefit package, highly professional trainings and development opportunities.

2012 Average Training Hours

33 hours per employee per year

Safety & Occupational Health Investment

US\$ 4.57 million

Total Recordable Rate (TRR)

0.56 per million working-hour

4.

Employee Rights

We protect our employees' lawful rights and follow the laws and regulations. No forced labor or child labor is allowed and men and women enjoy equal pay for equal work.

Trina Solar strictly adheres to the Chinese Labor Law and Labor Contract Law and Trina Solar protects every employee's rights. We adhere to the open, 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 against any employee in terms of nationality, ethnicity, religion, gender, age, disability or marital status. During 2012, no discrimination incidents happened within our company.

In 2012 we also set up an Employees Paid Leave Policy that defines employee vacation policies. We greatly emphasize the participation of employees and encourage employees to join the labor union. Employees can participate in organizational management through the communication meetings, Bulletin Board System (BBS) forum, HR hotlines, suggestion box for example.



Employee Benefits

Employee benefits differ by country based on local norms and needs. In 2012, some of the benefits included paying various insurances and funds for employees, endowment insurance, accident insurance, unemployment insurance, medical insurance, maternity insurance and housing provision fund. Extra benefits are also provided such as traditional holiday allowance, accident injuries insurance, hospitalization subsidy, life/invalidity insurance, supplementary risk plans, pension plans and even lunch vouchers.

Employee Advancement

We are concentrating on attracting and keeping outstanding talent through trainings, competitive salaries and talent development system. Trina Solar will make the best use of the talents by all means.



01

Formulate the Performance Management System and carry out key performance indicator (KPI) evaluations for each employee every six months. The bonus, salary increases and promotion will be directly linked to the KPIs results.

02

Formulate the Employee Reward Management System to choose the excellent employee and teams to inspire individuals and teams with superior performance.

03

Apply for the talent fund, a creative fund for the employees who have obtained a Master and/or Doctorate.

04

Put new positions on the company intranet and allow employees to have the chance to apply for a new position. The scheme will help promote employees' professional development.

05

Recognize each employee's contribution. Hold a farewell ceremony for each retiree and issue retirement certificate and souvenir.

Training and Development

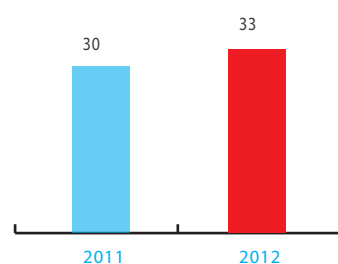
Trina Solar considers employee training and development critical since employees are fundamental to the success of the company. Training and development is an important element of the managerial system. We provide a training support system and tailor individual development plans to employees to enable them to keep developing and to retain high-quality talent within the company.

Training Center

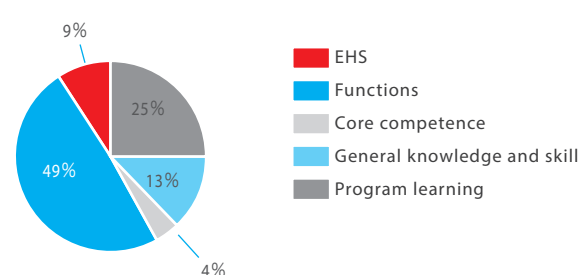
Trina Solar has set up a Training and Development Center in China. We have established a complete training system, which includes training coordination, training curriculum, trainers and other resources. The Training Center designs training programs on both technical and managerial aspects for each individual employee.

In 2012, the total training time exceeded 370,000 hours, which was equivalent to about 33 hours per person. The training topics included functional training, EHS/CSR, core competence, general knowledge, etc.

Average Training Hours per Person (H)



Categories of Training Courses



Case Study: English Salon



As an international company with Chinese manufacturing, the English language skills are crucial for career advancement. Trina Solar organizes the English Salon for non-native speakers in China and invites native English teachers to teach English in our factory.

E-learning

In 2012, we deployed an E-learning system to provide a platform for employee's independent learning. Currently, there are about 80 courses on our E-learning platform, 20 of which were developed by employees. An incentive policy encourages employees to develop e-courses using their expertise. This not only reduces our courseware development cost, but also documents employee knowledge.

Library

To provide a better platform for employee overall development, Trina Solar in China established a library equipped with 20,000 books. Our library used the same management system as that of Changzhou Municipal Library. Employees can borrow and return the books at any one of the libraries. Employees can also enjoy e-magazines and e-books in the electronic-reading room.

Case Study: Mobile Library Service



Trina Solar's factory has three campuses. For the convenience of employee, the Training Department set up a mobile library. A service car, equipped with laptops and wireless network, carries 3,000 books to provide employees with services, such as library card applications, borrowing & returning books, reading, book reservation and answering readers' enquiry.

Customized Training

Every employee at Trina Solar Europe has 5 days of paid leave per year that can be used for external training programs. Internally Trina Solar offers trainings depending on the employee's needs. In 2012 for example, team leaders in Europe have benefitted from Media and Political Communications Training supporting media and policy communication and addressing customer needs and concerns.



Employee Well-being

Employee physical and mental health constitutes one guarantee of productivity improvement and thus we support the occupational health and mental health for both employees and retirees. In factories we have company clinics and rest areas for pregnant women. We also have an Employee Assistance Program, regularly carry out industrial hygiene monitoring in the workplace and offering occupational medical check-up for employees. Our efforts in China were recognized with the "Health Promotion Demonstration Enterprise" award, the only enterprise in Changzhou winning the award in 2012.

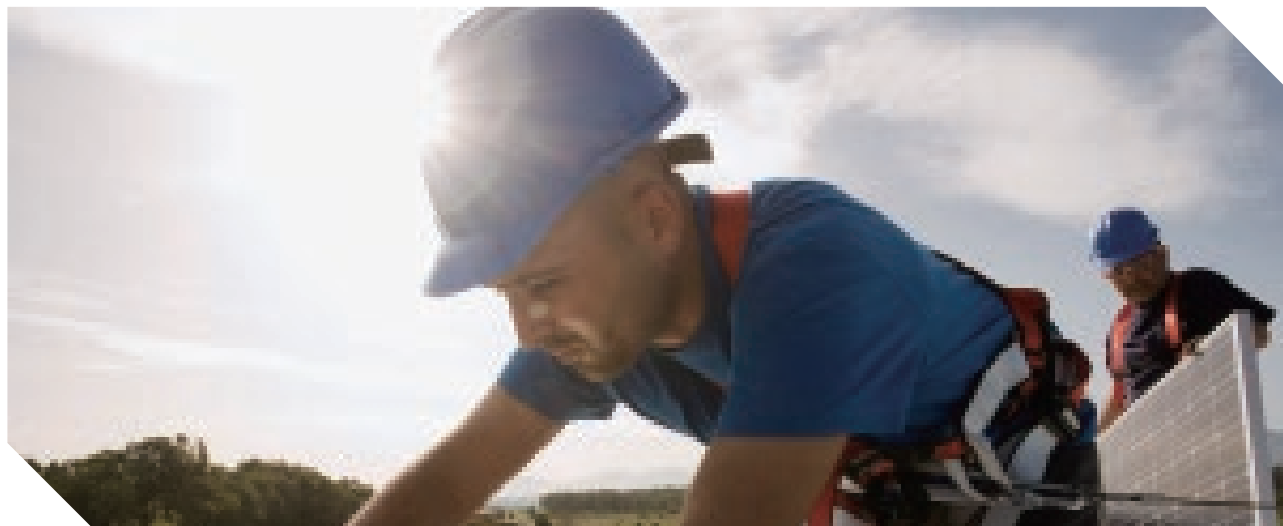
In factories and other relevant locations, we have set up company clinics. These not only provide first aid treatment, but also offer counseling services to employees' physical and mental health. Furthermore, since 40% of our factory employees are female, special rest areas for pregnant women have been set up where they can also be attended to by our doctors and nurses if necessary.

Mental Health Care

The newly established Employee Assistance Program (EAP) helps to solve both mental and behavior problems for employees, and their family members. It improves an employee's personal performance and their team's overall efficiency. Experience has shown that EAP is one of the best solutions to support employees' mental health needs.

Occupational Health

Trina Solar conducts health examinations for employees who could be exposed to occupational health hazards, such as noise, dust and hazardous chemicals. For employees exhibiting occupational illness symptoms, we adjust their roles to prevent occupational diseases. Based on the local occupational health protection laws and regulations, Trina Solar regularly carries out industrial hygiene monitoring at workplaces and notifies employees on how to minimize the risks.



Case Study: Medicare Green Card Scheme

Trina Solar pays the industrial injury insurance of all factory workers. To ensure employees get timely medical treatment, Trina Solar sets up Medicare Green-card Scheme with two hospitals in Changzhou for our employees. Employees will be able to receive immediate medical attention after showing Trina Solar Medicare Green Card in the two hospitals. Trina Solar will pay medical expenses afterwards to make sure the employees receive timely treatment.

Work-life Balance

Having work-life balance helps employees enjoy their job and their social/home life. Trina Solar encourages non-work activities to help them reduce stress, be positive and be a good team member. In China, Trina Solar supports this through sports clubs (football, baseball, badminton, ping pong, swimming, fishing clubs), including competitions with other companies. It also organizes events for parents and children from multiple cultures to interact, activities around important national days and entertainment events.

Cafeteria Plan

Every employee at Trina Solar Europe can benefit from a discretionary fringe benefit scheme. The company encourages the employees to take language courses, join sports clubs, use public transportation or benefit from health care. A good work-life balance fosters the employee's creativity and guarantees a healthy balance.

Parent-Children Interaction

Teenage time is the most important period in one's life. Considering that our employees put all their time and energy on work and self-improvement, Trina Solar organizes various parent-children activities to promote the communication between children and their parents. These activities not only help to build a bridge to connect parents and children, but also help to cultivate children's exploring spirit and encourage children to make more new friends.



Case Study 1: English Competition

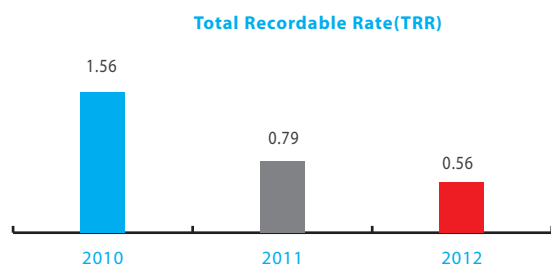
To improve the interests in English of our employees' children, Trina Solar organized a Fun English competition with Changzhou Shane English, which enhanced children's love for English and promoted the relations between children and their parents as well.

Case Study 2: Opening Doors for Employee's Children

The Trina Solar office in Switzerland actively supports the National Children's day. On this particular day, every employee is encouraged to bring their child/children to work so they can understand their parents' responsibilities and get an idea of their potential future career path. Trina Solar offers the children an insight into the different departments of the company by organizing a guided tour, explaining the different work procedures.

Employee Safety

As stated in EHS policy, Trina Solar is committed to protecting employees' health and safety and treats safety as one of our top priorities when conducting business. We believe that the establishment and implementation of a good occupational health and safety management system is an important way to care for our employees and their family members. This is also an important social contribution.



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 10⁶ and dividing by the total hours worked in that period (H).

Our accident rate has declined for three consecutive years. In 2012, the accident rate reduced by 29% compared with that in 2011. This achievement results from our on-going improvement of EHS management system and pursuit of an accident-free workplace.

Employees Workplace Safety

We are committed to workplace safety. Our safety objectives are to continuously improve safety and health for all employees with fewer hazards, reduced exposures and fewer injuries and illnesses. We make efforts to change workplace culture to increase employee awareness of, commitment to and involvement in safety and health.

Trina Solar proactively conducts risk assessments in relation to the safety and health 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.

Hazard Identification and Risk Assessment

We set up the Hazard Identification and Risk Assessment Procedure to identify the hazard and assess the risks related to manufacturing activities, products and services. Hazard identification is the recognition process of sources or situations that can cause harm to people (accident or illness). Risk assessment is the process of estimating the risk levels for the hazards and their acceptability. Based on risk level determined, risks are categorized as major risk, medium risk and minor risk. The risk acceptability and recommended actions are also suggested as depicted in the Table.

Risk Category	Acceptability of Risk	Recommended Actions
Minor Risk	Acceptable	<ul style="list-style-type: none"> No action required. Recommend further actions to reinforce the controls on case-by-case basis.
Medium Risk	Moderately acceptable	<ul style="list-style-type: none"> To verify adequate procedures and controls are in place to prevent and control the hazardous event. To determine if further recommendation is necessary due to the catastrophic consequences of the event.
Major Risk	Not acceptable	<ul style="list-style-type: none"> Hazardous event must be mitigated with engineering and/ or administrative controls. Interim controls are required to ensure safe operation pending completion of recommendations. Activity must be stopped.

Safety Inspections

Trina Solar has established the EHS Inspection and Management Procedure to assess the strengths and weaknesses in the plant's safety 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. The establishment and implementation of the procedure minimize employee and company loss by early detection of potential safety and health hazards.

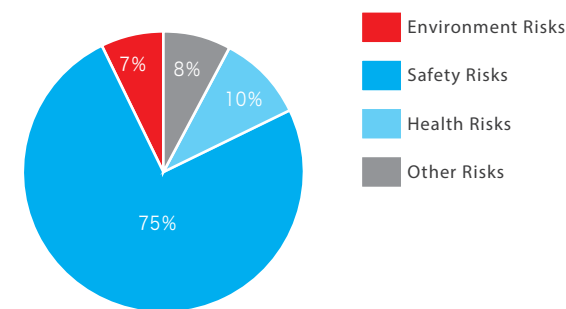
Near Miss Reporting

A "near miss" or "near" accident is defined as unsafe acts and/or unsafe conditions that may have the potential to result in an injury, health impairment, environment pollution or property damages if it is not resolved or addressed systematically. The "Safety Pyramid" theory suggests that reporting and resolving near miss can prevent and reduce accidents and injuries.

Trina Solar launched a plant-wide campaign, Near Miss reporting program, in June 2010 to encourage all employees to report near misses. To ensure the successful implementation of the program, employee can report a near miss through different channels, such as EHS reporting card, near miss reporting database in e-flow system, email and telephone notification.

We received a great response from our employees. There were total 1,928 near misses reported in 2012, and 90% of them were resolved.

Potential risk types in 2012



Case Study: Near Miss Reported on EL Test Post



A near miss was reported at the EL (Electroluminescence) test location where employees were required to lean into the machine when scanning the bar code on modules. This process had risk of workers being clamped by the machine and employees could easily have been injured. After receiving the report, an equipment engineer installed an interlock sensor and fixed the scanner inside the machine according to the operational requirements and equipment characteristics, which fundamentally removed the safety hazard. The successful removal of the risk was recognized by the audit committee.

Hazardous Work Management

To ensure the safety of contractor and employees, we set up a permit-to-work system, which requires employees and contractors to get an Area Work Permit prior to the commencement of any work within Trina Solar premises. We strictly control those dangerous works, such as working at height, hot work and working in confined space. Additional Dangerous Work Permits shall be applied and get approved by relevant parties prior to commencement of the work.

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 has 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. Examples of the change required MOC evaluation include:

- 01 Introduction of new technology and equipment;
- 02 Selection and introduction of new process (chemical, physical, methods, etc.);
- 03 Variance of operation procedure;
- 04 Introduction of new supplier or new substances;
- 05 Establishing manning & organization.

Emergency Management Plan

During an emergency, our response makes the difference between a positive and a negative outcome. Trina Solar has put an Emergency Response Plan (ERP) in place to enable employees to respond to an emergency in a timely and efficient manner. The plan provides a framework for effective communications with employees, the public, customers, government and other stakeholders during an emergency. The ERP covers emergencies such as fire, chemical spill/chemical burn and power outages. It is regularly reviewed and emergency drills were conducted to ensure suitability and adequacy of the plan.



Chemical spill response drill



Evacuation drill



Fire drill

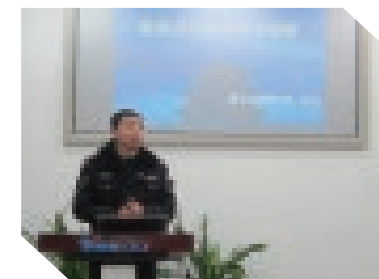
Road Safety Campaign

Trina solar cares not only about employee's work safety, but also about their safety on the road in their daily commute. To minimize the chance of a traffic accident on employees' way between home and the company, our company has implemented a variety of road safety improvement programs in China around the factories, which have directly contributed to zero traffic deaths or serious injuries in 2012:

- 01 Building of the traffic accident joint-liability check mechanism.
- 02 Defining vehicle deceleration zones on the roads near entrances and exits of the factories.
- 03 Regular inspection of motorcycles and electric car licenses.
- 04 Providing reflective strips for motorcycles, electric bicycles and push bikes to increase visibility at night.
- 05 Inviting traffic patrolmen to explain about the traffic situation, common traffic violations, correct driving habits, how to inform police of accidents and how to handle a hit-and-run accident aided by traffic accident videos.
- 06 Distribution of road safety pamphlet to our employees and posting promotional poster on EHS notice board.



Adding of reflective strips



Road safety training

Developing a Safety Culture

Caring for employee's life and work safety is one of the key performance indicators of corporate culture progress. We strictly follow security policies, hold EHS committee meeting monthly, organize safety-month every year, launch various training activities to strengthen employee's recognition about safety culture, give guidance to employee's safe behavior and promote the corporate culture of "safety first".

EHS Promotion Month

Trina Solar has organized EHS Promotion Month for four consecutive years with a different theme each year:



In 2012's promotion month, a series of interesting activities attracted all the employees' active participation, including CEO, CHO, General Managers, Engineers and other front-line employees.

Activity 1: Opening Ceremony of EHS Promotion Month in 2012



President & CEO gave a speech at the opening ceremony, and emphasized that safety is the foundation of sustainable development and explained the importance of "scientific and safe development".



President and CEO signed the agreement of safe production responsibility with Department Heads.

Activity 2: ERT Competition



ERT competition tested and improved their emergency response capability.

Activity 3: Forklift Safety Competition



The forklift safety competition greatly helped the forklift drivers improve their safe driving skills and safety awareness.

Activity 4: CSR Lecture



During the CSR lecture, the product manager from BSI, gave a full explanation about the definition of CSR, the core values of a corporate and the CSR market trend, which greatly improved each representative's understanding about CSR.

Activity 5: First-aid Knowledge Lecture



The first-aid knowledge lecture gave lots of practical skills to improve the professional first-aid skills for ERT members.

EHS Committee Meeting

The Trina Solar EHS Committee aims to implement the company's EHS policies. The committee supervises the implementation status of safety measures, pushes for various EHS programs and strives to achieve EHS excellence in the company.

The EHS committee meeting is convened monthly. Representatives of both the employees and the management from departments of manufacturing, technology, facility, supply chain and administration participate in the meeting. All EHS issues are discussed and communicated during the committee meeting, and examples of the meeting agenda include,

- 01 Conflict resolution
- 02 Existing unsafe acts and unsafe conditions
- 03 Proper work procedures and safe working methods
- 04 EHS suggestions, proposals and activities from and by workers
- 05 Review of EHS accident cases and EHS performance



As a responsible enterprise, we adhere to the philosophy of giving back to society and boosting the local economy, environment and society with our own technical advantages and resources. We promote the development of society through educational investment, charity activities and employees volunteer services.

Contribution to Society

5.

Supporting Education

Trina Solar International School

Donations

Humanitarian Relief in Haiti

Volunteer Activities

Care for Stay-at-home Children

Supporting Education

Supporting education is our long-term responsibility. In China, in 2012, we invested in the construction of the Changzhou Trina Solar International School. The school helps to promote the internationalization of the local economy and develop international talent. We also built a carbon-free Solar Showroom and donated it to Nanjing University. Another donation of solar modules was done to Dr. Evie Garrett Dennis University in Colorado USA to improve its education facilities. Both donations were supported by an active communication campaign on solar energy development.

Case Study 1: Trina Solar International School

Trina Solar International School has adopted an international curriculum and hires experienced native teachers. The school has a 15 year international curriculum from kindergarten to the end of secondary school education. The school provides good educational facilities to children and teenagers with different backgrounds in Changzhou city.



Teachers and Students



Christmas concert

Case Study 3: Donation of Solar Showroom to Nanjing University

On 20th May, 2012, Nanjing University held its 110th anniversary ceremony in Xianlin Campus. Two solar showrooms besides the No.1 Teaching Building became the highlights of the ceremony. The showrooms were carbon-free as they used PV modules donated by Trina Solar to power the lighting and audio equipment. The room was also built with recyclable and pollution-free materials, such as wood, in order to demonstrate the low-carbon concept to teachers, students, visitors and guests. The solar off-grid system impressed students and helped them understand solar energy's potential to replace fossil fuels and achieve energy independence.

Trina Solar emphasizes the harmonious development with the community. We regularly organize promotion programs to promote scientific knowledge and hold a Fitness and Culture Festival. The programs inspire residents' passion for community building and help foster a harmonious development of enterprise and community.

Supporting Education



Donations

The prosperity and stability of society is the foundation of a successful enterprise and the success of an enterprise depends on the development and progress of society. To support this, Trina Solar makes contributions to disaster relief, medical services, traffic safety etc.

Africa: Health Care in Malawi

Currently more than 1.3 billion people live without electricity of whom almost half are in Africa. In November, 2012, Trina Solar worked jointly with Innovation: Africa to provide clean energy to two remote clinics and one community services station in Malawi that service over 85,000 people. These provide HIV services, vocational training, adult education and orphan adoption. The PV modules donated by Trina Solar work in combination with a storage system, which allows all three facilities to offer care and services to their communities at night and other conditions of low visibility.

"We are pleased to support local communities in need with our technology," said Ben Hill, President of Trina Solar Europe. "Looking forward, our aim is to continue to bring solar power to improve the quality of life of people who live without access to electricity."

The originator and CEO of Innovation: Africa, Sivan Yaari said: "Trina Solar has been an ideal partner in our work to uplift African communities. With their solar panel donations, we are able to spend our resources where they are needed most: identifying communities without energy and working with them to build sustainable solar projects. We have ambitious goals, and with Trina's support, we hope to double our impact in the next year".



Service station in Malawi



Left 1: Eveline Widmer-Schlumpf, Federal President Switzerland; Left 2: Jodie Roussel, Head of Public Affairs Trina Solar Europe; Left 3: Chief Officer Environment & Energy Province of Bern ; Left 4: Ben Hill, President of Trina Solar Europe; Left 5: Peter Schürch, Architect for Sustainable and Energy Efficient Buildings.

Switzerland: Energy Independence

Every year since 1991, the Swiss Solar Prize aims to reduce Switzerland's international energy dependency through highlighting solar leadership and innovation. The ceremony is organized by the Swiss Solar Agency, an NGO founded in 1990 with the goal of having one solar plant of 1kW in every single Swiss community.

At the 22nd Swiss Solar Prize ceremony in the Environment Arena near Zürich, the Solar Prize for the best PlusEnergyBuildings (PEB) and a Norman Foster Solar Award for those PEB with best-integrated installations were announced and awarded.

For the first time, the PEB's Solar Prize for province was handed over to the province of Bern by Ben Hill, President of Trina Solar Europe and Jodie Roussel, Head of Public Affairs Trina Solar Europe. The prize involves the donation of solar modules of about 40 kW to a government building in the province of Bern and encourages provincial governments to create new incentives for smart energy buildings that produce more power and electricity than they use.

America: Social Responsibility Project

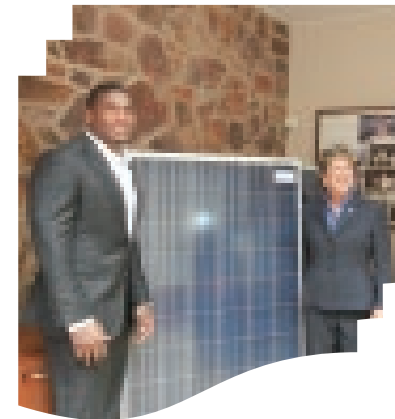
In March 2012 in partnership with actor, racecar driver, and advocate Patrick Dempsey (part of Dempsey Racing) Trina Solar launched an initiative to bring affordable clean energy to communities around the U.S. This involved donating solar modules to local schools, health clinics, and non-governmental organizations and building the infrastructure to sustain the investment, including a network of supportive local partners, local installers and system component providers.

"Solar power can be a practical solution to the critical issues facing the nation's population and environment," said Mr. Dempsey. "Solar is ready today to help local communities, as well as to create jobs and new businesses." Driven by a mission to actively promote the benefits of solar power, Trina Solar is working with Mr. Dempsey to create lasting benefits for the local communities.



Left 1: Delette Olberg, Public Affairs ; Left 2: Tom Martinez ; Left 3: Jake Brown; Left 4: Patrick Dempsey; Left 5: Colin Yang, Vice President, Public Affairs

Case Study: Air Pollution Reduction in San Diego



The American Lung Association, established in 1904, is the earliest volunteer health organization that focuses on lung disease prevention, lung health, smoking control and environmental health. In April, 2012, the American Lung Association published the 2012 Air Quality Report of California. It pointed out that air pollution would continue to threaten the safety and health of millions of Californians.

Replacing fossil fuels with high-quality PV modules can help to reduce air pollution and benefit lung health. Trina Solar donated 10.5 kw PV modules to the association's office in San Diego. The project was expected to provide 25% electricity for the daily operation in the building. It would reduce 256 tons carbon emission in 25 years, which equals to the carbon reduction amount of 10,220 trees.



China: Improving Transport Infrastructure

Traffic is the lifeblood of economic development. Wuqia is located in the western frontier of China in Xinjiang, with a small population of 60,000. The economy grows slowly because of the small population and basic transport infrastructure. In 2011, in response to a local government request, Trina Solar built Trina Road in Wuqia.

In 2012, Trina Road was formally opened. The vice-president of Trina Solar, Xiaozhong Yang gave a speech on the opening ceremony: "Today we build Trina Road to connect people in Changzhou and the people in Wuqia. In future, as a leader in the photovoltaic industry, we will continue to take our social responsibility and make more contributions to the clean energy industry and electricity supply of Xinjiang. We will work with each party to create green development in Xinjiang, where there is the ample sunlight. Let solar benefit all the people in Xinjiang."

Global: Energy for Society

In September 2012, the World Economic Forum started a project named "Energy for Society Initiative" which was aimed to lead all the energy enterprises to jointly build a healthier business ecosystem and get people out of poverty through developing cheap and convenient new energy products.

About twenty leading companies worldwide in energy business, including Trina Solar, promised to observe the "five principles":

- Secure and affordable access to energy;
- Efficient energy systems;
- Responsible citizenship;
- Contributing to economic development;
- Promoting energy literacy.

Only when all the energy enterprises work together to create cheap sustainable and affordable energy, can everyone enjoy the clean energy.

The project features the 24 best examples to show each company's efforts to meet growing energy demands and improve people's living standards. The power station of Trina Solar, built in Qamdo, Tibet, is one of the 24 examples.

Case Study: 40 Solar Off-grid Stations in Tibet

On the rolling grassland, rows of solar panels are sparkling in the sun under the vast blue sky and white clouds. The unique landscape has been there for ten years, bringing warmth and light to the local area in Tibet.

Early in 2003, Trina Solar built 40 solar off-grid power stations, letting people in electricity-deficient regions enjoy modern conveniences with solar energy and maintain the beautiful snow plateau scenery. The construction of the solar power station enabled the underdeveloped areas to realize energy independence and economic growth, and drive the overall progress of the local supply chain and related business. We haven't stopped here because green development is our long-term pursuit.



Haiti: Humanitarian Relief

The electricity penetration in Haiti is the lowest in the world. Among the nine million people, only 12.5% have access to electricity through power grid, some wealthy people rely on diesel generators. In 2012, Haiti suffered from a 7.0 magnitude earthquake. The infrastructure was totally destroyed. People could only get electricity from expensive diesel generators, which pushed Haitian people into a desperate situation.

We believe saving lives and creating hope are the essential significance of technology innovation. In March, 2012, Trina Solar donated 300 PV modules and installed them on the central plateau, which provided urgently-needed electricity to local people.

Case Study: The sun lights the way



Trina Solar and NRG Energy Inc. donated solar electric systems to 20 schools located in Haiti's Central Plateau, in addition to a solar system that will power a drip irrigation system to support agricultural production in the region. Through collaboration with the Solar Electric Light Fund (SELF), a nonprofit organization that designed and implemented the systems, Trina Solar and NRG is helping to improve the quality of education for more than 6,000 Haitian students by providing the electricity needed to power lights, communication systems, laptop computers and other school equipment.

Volunteer Activities

Trina Solar encourages employees to organize volunteer activities for people in need in each area we operate. In China, this can involve events for poor children and actively participate in community services and environmental protection projects to support their sense of community, school visits, food waste-reduction education and the participation in Earth Day. In other countries we also encourage and support volunteer activities.

Cherish Food & Prevent Food Waste

As the Chinese proverb goes “success comes from diligence and thrift, while failure results from the luxurious corruption”, we believe that environmental protection not only means the protection of ecological environment, prevention of water and air pollution, but also has the intrinsic meaning of saving food, water and electricity. In May 2012, Trina Solar organized a promotion campaign with the theme of “Cherish Food & Prevent Food Waste” in the employees’ canteen on each campus. Employees signed a paper to show their commitment to cherish food and to contribute to waste minimization and environmental protection.

Delivering the Green Message & Caring for the Planet

Our Labor Union launched an Environmental Cycling Excursion themed with “Care for Resources and Change our Lifestyle” on 22nd April 2012, the 43rd World Earth Day. 50 volunteers from Trina Solar set off from the company, rode bicycles from northeast to southwest and crossed the entire Changzhou city to the West Lake Taihu. The excursion advocated the concept of low-carbon life to the public.

Care for Stay-at-Home children

With the urbanization of China, there is a group of children whose parents leave home to work in the city. These children are usually taken care of by their grandparents. The children only feel the presence of their parents when receiving an occasional call from their parents in remote cities. We name the group of children as stay-at-home children. Labor Union of Trina Solar focuses on taking care of the special group of children.



On 3rd June, 2012, representatives from Trina Solar Labor Union visited the children in Sunshine Station of Tao Town, located in Zhuze, Liyang county. We donated computers, books, school bags, stationery and food to the stay-at-home children. We also invited the senior psychological consultant, Huying Sun, to give psychological talk to the children. We made our efforts to ensure that those children could grow up healthily and happily. We wish the children could study hard and make contributions to the society in the coming future.



GRI Content Index

This GRI Content Index is provided to assist readers in understanding how our report aligns with the Global Reporting Initiative* (GRI) G3.1 Sustainability Guidelines.

Indicator Numbers	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
1.Strategy and Analysis					
1.1-1.2	Statement from the most senior decision maker; Description of key impacts, risks, and opportunities.	●	Message From Chairman and CEO Challenges and Opportunities	15	
2.Organization Profile					
2.1-2.9	Name of the organization; Primary brands, products, and/or services;Operational structure of the organization; Location of headquarters;Nature of ownership; Markets served; Scale of reporting organization;Significant changes during the reporting period.	●	Explore Trina Solar Organization	01 05	
2.10	Awards received in the reporting period.	●	Awards	17	
3.Report Parameters					
3.1-3.4	Reporting period; Date of most recent previous report; Reporting cycle; Contact point for questions regarding the report or its contents.	●	About the Report		
3.5	Process for defining report content.	●	About the Report		
3.6-3.8	Boundary of the report; Limitations on scope and/or report boundary; Basis for reporting on joint ventures, subsidiaries, etc.	●	About the Report		
3.9	Data measurement techniques and the bases of calculations.	●	About the Report		
3.10-3.11	Explanation of the effect of any restatements of information provided in earlier reports; Significant changes from previous reporting periods.	●	About the Report		
3.12	Table identifying the location of standard disclosures in the report.	●	GRI Index	63	
3.13	Policy and current practice with regard to seeking external assurance for the report.	○			
4.Governance, Commitments, and Engagement					
4.1-4.4	Governance structure of the organization, including committees under the highest governance body; Indication of whether the chair of the highest governance body is also an executive officer; Number of members of the highest governance body that are independent and/or non-executive members.	●	Corporate Governance	07	
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance.	○			
4.6	Processes in place for the highest governance body to ensure that conflicts of interest are avoided	●	Corporate Governance	07	
4.7	Process for determining the qualifications and expertise of the members of the highest governance body on economic, environmental, and social (EE&S) topics.	▼	Corporate Governance	07	

● Covered in the Report ▼ Partially Covered in the Report ○ Not Covered in the Report

Indicator Numbers	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
4.Governance, Commitments, and Engagement					
4.8	Internally developed statements of mission or values, codes of conduct, and principles.	●	Message From Chairman and CEO Corporate Culture Corporate Governance	03 07	
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of EE&S performance.	●	Corporate Governance Challenges and Opportunities	07 15	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to EE&S performance.	▼	Corporate Governance	07	
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	●	Corporate Governance	07	
4.12	Externally developed EE&S charters, principles subscribed to.	●	Policies Environmentally friendly Operation Addressing Climate Change	11 21 23	
4.13	Memberships in associations and/or advocacy organizations.	○			
4.14-4.17	List of stakeholder groups engaged by the organization; Basis for identification and selection of stakeholders; Approaches to stakeholder engagement; Key topics and concerns that have been raised through stakeholder engagement and how the organization has responded to those key topics and concerns, including through its reporting.	●	Communication with Stakeholders	13	
5.Economic Performance Indicators					
EC1	Direct economic value generated and distributed. (Core)	●	Performance Summary	16	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change. (Core)	●	Addressing Climate Change	23	
EC3	Coverage of the organization's defined benefit plan obligations. (Core)	○			
EC4	Significant financial assistance received from government. (Core)	○			
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation. (Additional)	●	Performance Summary	16	
EC6	Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation. (Core)	●	Supplier Management	35	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation. (Core)	●	Employee Rights	41	
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement. (Core)	●	Supporting Education Donations Volunteer Activities	55 57 61	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts. (Additional)	●	Challenges and Opportunities	15	
6.Environmental Performance Indicators					
EN1	Materials used by weight or volume. (Core)	○			
EN2	Percentage of materials used that are recycled input materials. (Core)	●	Environmentally friendly Operation	27	
EN3	Direct energy consumption by primary energy source. (Core)	●	Addressing Climate Change	23	
EN4	Indirect energy consumption by primary source. (Core)	●	Addressing Climate Change	23	

● Covered in the Report ▼ Partially Covered in the Report ○ Not Covered in the Report

Indicator Numbers	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
6.Environmental Performance Indicators					
EN5-EN7	Energy saved due to conservation and efficiency improvements.(Additional); Initiatives to provide energy-efficient or renewable energy-based products and services. (Additional); Initiatives to reduce indirect energy consumption and reductions achieved. (Additional)	●	Addressing Climate Change	23	
EN8-EN10	Total water withdrawal by source. (Core); Water sources significantly affected by withdrawal of water. (Additional); Percentage and total volume of water recycled and reused. (Additional)	●	Environmentally friendly Operation	27	
EN11-EN12	Location and size of land owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value. (Core); Description of significant impacts on activities, products, and services on biodiversity in protected areas and areas of high biodiversity value. (Core)	○			
EN13	Habitats protected or restored. (Additional)	○			
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity. (Additional)	○			
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.(Additional)	○			
EN16-EN18	Total direct and indirect greenhouse gas emissions by weight.(Core); Other relevant indirect greenhouse gas emissions by weight (Core);Initiatives to reduce greenhouse gas emissions, and reductions achieved.(Additional)	●	Addressing Climate Change	23	
EN19	Emissions of ozone-depleting substances by weight. (Core)	▼	Addressing Climate Change	23	
EN20	NOx, SOx, and other significant air emissions by type and weight. (Core)	●	Environmentally friendly Operation	27	
EN21	Total water discharge by quality and destination. (Core)	●	Environmentally friendly Operation	27	
EN22	Total weight of waste by type and disposal method. (Core)	●	Environmentally friendly Operation	27	
EN23	Total number and volume of significant spills. (Core)	○			No such incident
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.(Additional)	○			
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff. (Additional)	○			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. (Core)	●	Corporate Sustainable Development Environmentally friendly Operation	21 27	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category. (Core)	●	Policies Environmentally friendly Operation	11 27	
EN28	Monetary value of significant fines and total number of nonmonetary sanctions for non-compliance with environmental laws and regulations. (Core)	○			No fines and sanction for non-compliance with environmental laws and regulations
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce. (Additional)	●	Addressing Climate Change	23	
EN30	Total environmental protection expenditures and investments by type.(Additional)	●	Performance Summary	16	

● Covered in the Report ▼ Partially Covered in the Report ○ Not Covered in the Report

Indicator Numbers	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
7.Social Performance Indicators: Labor Practices					
LA1-LA2	Total workforce by employment type, employment contract, and region. (Core); Total number and rate of employee turnover. (Core)	▼	Performance Summary	16	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major perations. (Additional)	●	Employee Rights Employee Benefits	41	
LA4	Percentage of employees covered by collective bargaining agreements. (Core)	○			
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements. (Core)	○			
LA6	Percentage of total workforce represented in formal joint management worker health and safety committees that help monitor and advise on occupational health and safety programs. (Additional)	●	Performance Summary Employee Safety	16 47	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region. (Core)	●	Performance Summary Employee Safety	16 47	
LA8	Education, training, counseling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases. (Core)	●	Training and Development Employee Well-being Employee Safety	43 45 47	
LA9	Health and safety topics covered in formal agreements with trade unions. (Additional)	●	Work-life Balance Employee Safety	46 47	
LA10-LA11	Average hours of training per year per employee, by employee category. (Core); Programs for skills management and lifelong learning that support continued employability. (Additional)	●	Training and Development	43	
LA12	Percentage of employees receiving regular performance and career development reviews. (Additional)	●	Employee Rights Employee Advancement	41 42	
LA13	Composition of governance bodies and breakdown of employees by category according to gender, age group, minority group membership, and other indicators of diversity. (Core)	▼	Performance Summary	16	
LA14	Ratio of basic salary of men to women by employee category. (Core)	●	Employee Rights	41	
LA15	Return to work and retention rates after parental leave. (Core)	○			
8.Social Performance Indicators: Human Rights					
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening. (Core)	○			
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken. (Core)	●	Supplier Magagement	35	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained. (Additional)	●	Training and Development	43	
HR4	Total number of incidents of discrimination and actions taken. (Core)	●	Employee Rights	41	
HR5-HR7	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights. (Core); Operations identified as having significant risk for incidents of child labor, or forced or compulsory labor, and measures taken to contribute to the elimination of child labor. (Core)	●	Employee Rights Supplier Magagement	41 35	

● Covered in the Report ▼ Partially Covered in the Report ○ Not Covered in the Report

Indicator Numbers	Description	Status	Report Section(s)	Page(s)	Explanatory Notes
8.Social Performance Indicators: Human Rights					
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations. (Additional)	○			
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken. (Additional)	○			
HR10-HR11	Percentage and total number of operations that have been subject to human rights assessments and number of grievances resolved. (Core)	○			
9.Social Performance Indicators: Society					
S01	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting. (Core)	●	Supporting Education Volunteer Activities	55 61	
S02-S03	Percentage and total number of business units analyzed for risks related to corruption. (Core); Percentage of employees trained in organization's anti-corruption policies and procedures. (Core)	●	Corporate Governance	07	
S04	Actions taken in response to incidents of corruption. (Core)	●	Corporate Governance	07	
S05-S06	Public policy positions and participation in public policy development and lobbying. (Core); Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country. (Additional)	●	Challenges and Opportunities Supporting Education Donations	15 55 57	
S07-S08	Total number of legal actions for anti-competitive behavior, antitrust, and monopoly practices and their outcomes. (Additional); Monetary value of significant fines and total number of non-monetary sanctions. (Core)	○			No such legal action
S09-S10	Operations with significant potential or actual impact on local communities and prevention/mitigation activities. (Core)	●	Environmentally friendly Operation Volunteer Activities	27 61	
10.Social Performance Indicators: Product Responsibility					
PR1	Life-cycle stages in which health and safety impacts of products and services are assessed for improvement. (Core)	●	Policies	11	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. (Additional)	○			No such incident
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. (Core)	●	Policies	11	
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes. (Additional)	○			No such incident
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction. (Additional)	●	Communication with Stakeholders	13	
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship. (Core)	○			
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes. (Additional)	○			No such incident
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data. (Additional)	○			
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services. (Core)	○			No such fine

● Covered in the Report ● Partially Covered in the Report ○ Not Covered in the Report

