



TSRC CSR Report



Editorial Principles

TSRC's core values –integrity, innovation, teamwork, professionalism, and excellence. Our mission is to building our success by adopting eco-friendly manufacturing process to supply value-added products and using effective systematic problem solving approach to become a preferred polymer supplier and joint-development partner of our key customers. It is rooted in working attitude of staff and is in our culture. We welcome whoever with these qualities to join TSRC.

This is TSRC's second official public CSR report with TUV-Nord assurance. In 2013, we extended CSR concept from headquarter in Taiwan to 5 subsidiaries in China. We want to set up correct concepts for our staff, extending them to be the communication base with increased stakeholders.

Should you have any comment, suggestion or question, please feel free to contact us.

TSRC CSR Promotion Secretariat

E-mail csr.admin@tsrc-global.com

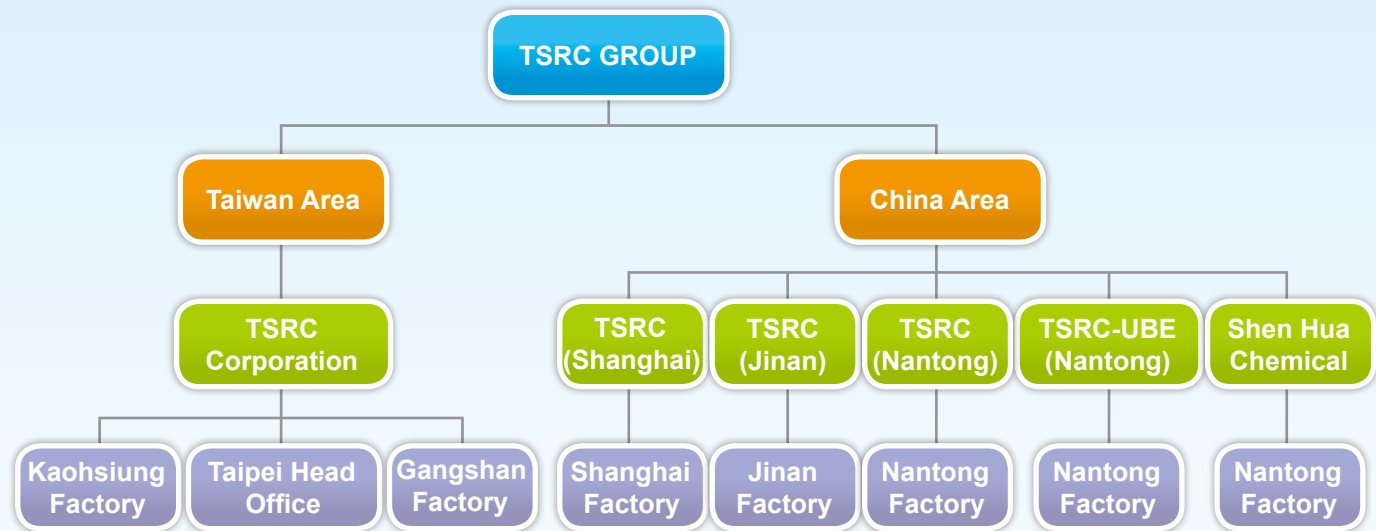
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Boundary and Scope of the report

As TSRC's 2012 CSR report indicated, the boundary of TSRC CSR Report for 2013 is TSRC corporation in Taiwan (including Taipei Head office, Kaohsiung factory and Gangshan factory) and 5 subsidiaries in China (including Shen Hua Chemical, TSRC (Nantong), TSRC-UBE, TSRC (Shanghai) and TSRC (Jinan)). In the future, subsidiary in the United States will be included. The scopes disclosed in this report cover the performance of economic, environmental and social aspects.



Reporting period

January 1~ December 31 in 2013. The relevant fact, policy, goal, and plan for the past or the future will also be disclosed in this report.

Data measurement techniques and the bases of the calculations

Global Reporting Initiative (GRI) version 3.1. This report discloses TSRC's strategies, ideas, measures and performances on CSR, and the discussed contents of the report and the defined process are in line with the requirements of the standard of the

AA1000 (2008). The financial statement figures in this report are calculated by NTD (new Taiwan dollars), and relevant performances of safety, health and environmental protection are expressed by the international indicators. On conditions of estimations or assumptions, we will notify in relevant chapters.

Assurance for the report

The assurance has been commissioned and carried out by TUV Nord against AA1000 AS (2008) type 1, moderate level and GRI G3.1 application level B. The assurance statement is attached in appendix.

Reporting cycle

— **Scheduled to issue annually**

Date of Current issue: Jun 2013

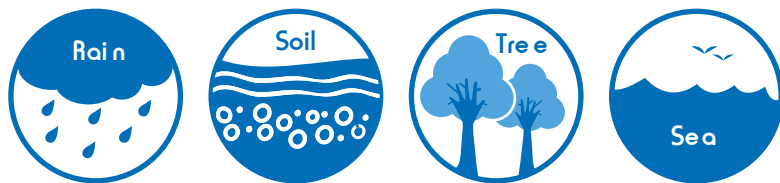
Date of Last issue: Jun 2013

Date of next issue: Scheduled in June, 2015

Channel of receiving the report

1. On-line version, <http://www.tsrc.com.tw>
2. The book—TSRC CSR report

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TSRC's Vision and Mission

Vision

Taking on social responsibilities, and continuing on innovative development
Cherishing Earth's resources, improving human well-being
Implementing Operation Performance, being an enterprise model

Mission

Building our success by adopting eco-friendly manufacturing process to supply value-added products and using effective systematic problem-solving approach to become a preferred polymer supplier and joint-development partner to our key customers.

TSRC's Core Value

TSRC's core value is based on governance and integrity—to employees and stakeholders.

Core Value	Definitions
Integrity	Conduct honest, committed, proactive, cordial and graceful acts.
Innovation	Act agilely and responsively award contributing ideas of high value.
Teamwork	Provide total services of teamwork to customers of all angles.
Professionalism	Dwell on competency and knowledge passionately.
Excellence	Pursue excellence with enthusiasm & incessancy.

To All Stakeholders



Chairman
Shao-Yu, Wang

A handwritten signature in black ink, appearing to read 'S. Y. Wang'.



President/CEO
Wei-Hua, Tu

A handwritten signature in black ink, appearing to read 'W. H. Tu'.

In 2013, TSRC celebrated the 40th anniversary. We want to give gratitude to all hardworking staff and supportive stakeholders. Hope we work together to implement TSRC's global planning.

In the rubber industry, the supply of synthetic rubber in Asia increased a lot; oversupply caused low operating rate for almost all players in the industry. Petrochemical manufacturers in China had advantages of upstream integration and performed low-price competition, and TSRC's profit is significantly influenced. Our staff improved product quality continuously, established long-term relationship with major tire customers, conducted profit-oriented marketing strategies and controlled costs effectively to finally have a better-than-average profit in 2013.

We finished the trial run of the new project of SIS in TSRC (Nantong) in 2013 and made it to mass production already. ESR factory in India, co-founded in 2010 with Indian Oil Corporation and Marubeni Corporation, is also in mass production and is winning customer's verification. Taiwan Advanced Materials Corporation, our joint venture, is under construction continuously. We also keep upgrading TPE and its new

development for its popularity in international market.

We expect in 2014 synthetic rubber is still in a state of oversupply. Although the global economic recovery is in good condition and demand of cars and synthetic rubber industries is expected to be increased, new capacity is still too much to reach balance. Therefore, we positively respond to price changes of raw materials, adjust utilization, and strengthen differentiation and product portfolio to increase market share and profitability.

TSRC has been closely paying attention to the changes, opportunities and challenges of environmental protection, and acted on controlling the status of GHG emissions of the 5 subsidiaries in China and had Kaohsiung factory in Taiwan verified with ISO 50001, the energy management system. In 2014, we will meet tire customers' needs to promote environmentally friendly synthetic rubber and related materials and to expand them to commercial scale so that more consumers can reduce the environmental impact in the use phase.

On monitoring of occupational health and safety, all factories in TSRC are actively looking for

chances to improve the safety data in production line management and quality assurance. Kaohsiung factory won the award for the Kaohsiung excellent Continuous Emission Monitoring system (CEMS) vendor evaluation, 2012-2013". As for social aspect, TSRC continues to cooperate with our value chain to utilize mutual resources to make products for the disadvantaged: In Taiwan, floor mats and sandals for the mentally disrupted; in China, floor mats and toothbrushes for the elder protection organizations in Shanghai. TSRC continued donations through chamber of commerce and

Manufacturers Association, and sponsored "Chemistry on the Go", the chemistry education activity for rural areas for the 3rd year.

TSRC committed ourselves to sustainable management and corporate social responsibility. TSRC will never damage the environment or the community for our own investment benefits. We will develop more environmental friendly materials and high-quality products, care for our community and win more recognition of stakeholders.

Highlight

1

Energy Saving and Carbon Reduction:

The energy management system ISO50001 in Kaohsiung Factory and Carbon Inventory in 5 subsidiaries in China

In Kaohsiung and Gangshan factory, we have inventoried GHG and have been externally verified since 2005 to 2012, and finished the GHG calculations in 2013 using the verified method set into CSR System, an IT system helping us to collect all CSR information. Furthermore, Kaohsiung factory is also verified with ISO50001 to know all the energy use to focus on a significant energy use.

As for the 5 subsidiaries in China, in 2012 the GHG inventory following ISO14064 was implemented in Shen Hua Chemical, TSRC (Nantong), and TSRC-UBE (Nantong), and GHG calculations with CSR system in TSRC (Shanghai) and TSRC (Jinan) was done as well. In 2013, all the GHG calculation for Taiwan site and Chinese subsidiaries is finished.

By understanding the GHG status for the global trend of carbon reduction, we can reduce carbon emissions efficiently. In 2013, TSRC's energy-saving programs are as below.



Highlight 2

CSR Training from Taiwan to China

Target

Employees in 5 subsidiaries in China

Story

The real implementation of CSR is to be responsible not only to shareholders, but also to all stakeholders, and the employee is one of the most important groups. In 2013, TSRC CSR Promotion Secretariat and external CSR counselor conducted a solid CSR Training to employees in 5 subsidiaries in China. Through sophisticated education and training programs, the concept of accountability, corporate governance, environmental protection and social aspects are well communicated and executed.



CSR training in TSRC (Shanghai)



TSRC CSR Promotion Secretariat from headquarter encourages staff to join CSR



CSR training in TSRC (Jinan)



CSR Training in TSRC-UBE (Nantong) & TSRC (Nantong)



Staff training in TSRC (Nantong) and TSRC-UBE



Staff training in Shen Hua Chemical

Highlight 3

Our Products for Social Application

Floor mat, Sandals and Toothbrush

Since the CSR counseling starting from 2012, staff in Taiwan learned more about the "community", and deepened the connection with local community to understand the viewpoint of the community toward TSRC. Using TSRC products-rubber as a raw material, and co-manufacturing with our value chain, we maximize our limited resource to help the institutions taking care of the minority, wishing to therefore stabilize our society.

To prevent risks of falling of the mentally disrupted, TSRC donated slippery-proof, shock-absorbing mats and sandals. Meanwhile, TSRC (Shanghai) donated toothbrush to the elder protection institute. TSRC expects to help more local disadvantaged groups with TSRC's product instead of just money in the near future.



New Buffalo Sandals: Non-toxic, light weighted, slippery-proof and bendable.⁴



Middle: Mr. Wei, General Manager of New Buffalo Sandals



Floor Mat Supported by Long Future Co., Ltd³



Floor Mat Paved in Anan Home



Anan Home¹



North Kaohsiung Children Care Center



Leren Center²



Floor Mats and Toothbrushes for the Elder Protection Organizations from TSRC (Shanghai).

¹ Leren Center, <http://hn86874300.myweb.hinet.net/>

² Anan Home, http://www.anan.artcom.tw/ap/cust_view.aspx?bid=22

³ Long future Co., Ltd, www.eva-make.com

⁴ New Buffalo, <http://www.newbuffalo.com.tw/>

Our Products for Social Application (continued)



Anan Home



Thank-you Card from Kids in North Kaohsiung Children Care Center



Leren Center



North Kaohsiung Children Care Center



Floor Mat Paved in Leren Adult Center



Floor mat Paved in Leren Kid Center

Donated in 2012

Our Products for Environmental Application

ECO Tires

Application of TSRC products is mainly tires. As the rubber supplier of tires, TSRC has started selling SSBR for energy-saving and low GHG emission tires. TSRC and a customer participated in environmental friendly tire materials and application affiliate program, supported by the MOEA⁵ in Taiwan, and the program's performance showed that with the same safety performance (such as grip), the ECO tire shows 20% lower rolling resistance, 3% lower fuel consumption and wear resistance of tires extends from 40,000 km to 80,000 km, which means fewer waste tires and less environmental impacts they bring.

In 2013, TSRC had 5 more ECO formulation for sale already; each has its own specialty like highly wearable or lower rolling resistance. We sell them to Japan and China and the revenue is growing.



Grading System and Label for Tires in Japan

ACME TIRE COMPANY WILEY RR-S SIZE: P225/60R16



Tire Fuel Efficiency Labeling in US

⁵ Ministry of Economic Affairs

CSR Organization and Dialog with Stakeholders

CSR Organization

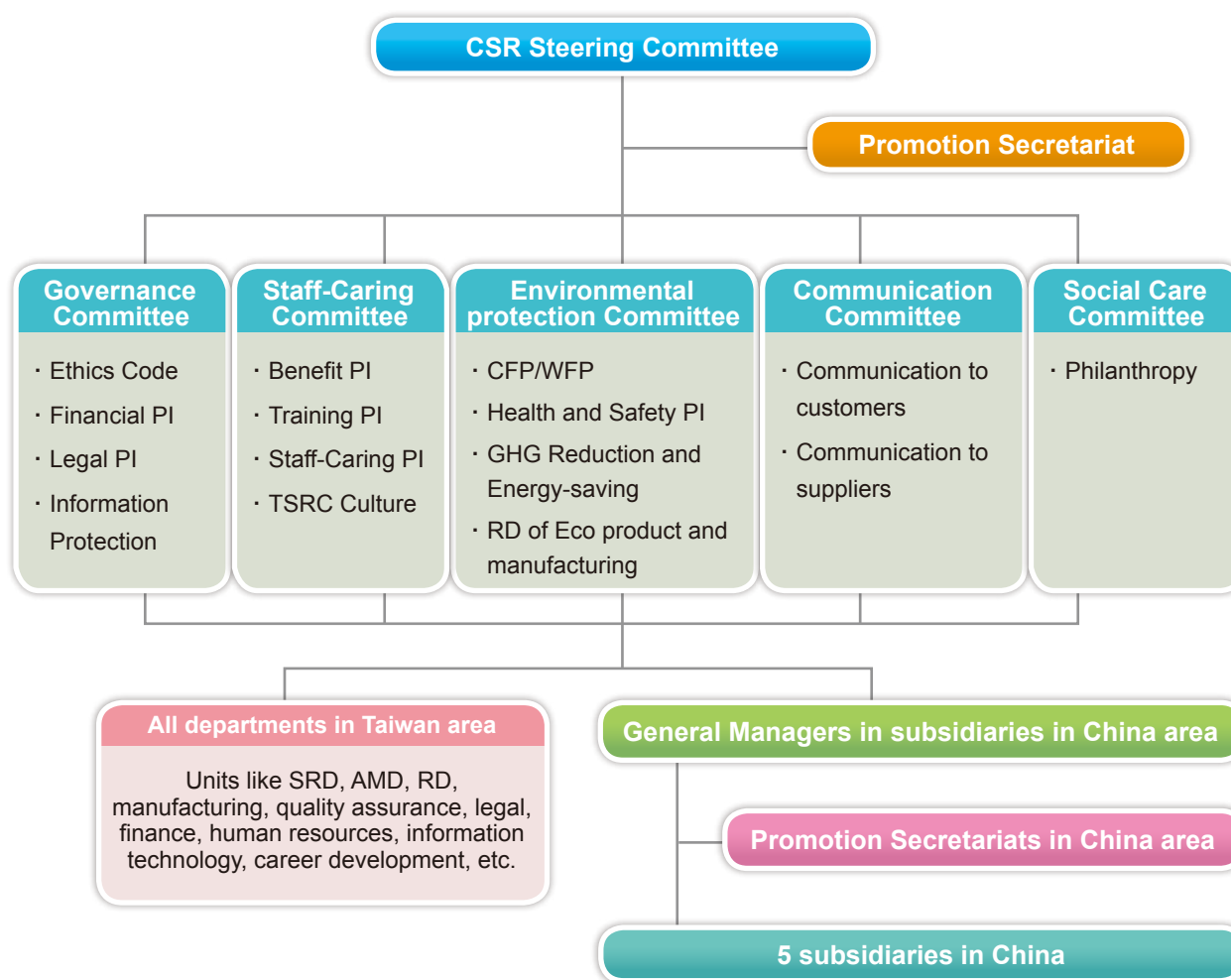
For CSR in TSRC, year 2011 is a start and we issued the first official public CSR report in 2013, with boundary of factories and office in Taiwan only.

Furthermore, in 2013 we expanded the CSR Declaration, CSR concepts and confirmation method linked with the internal systems from headquarter in Taiwan to 5 subsidiaries in China, and all stakeholders related. The number and level of stakeholders involved is increased, the communication base is the correct understanding toward CSR.

TSRC's CSR Steering Committee, led by CEO, is responsible for summon meeting for promote and strategy. It comprises 5 sub-committees, Governance Committee, Staff-Caring Committee, Environmental Protection Committee, Communication Committee, and Social Care Committee, to carry out the management and monitor the PIs on the triple bottom lines. In 2013, it included the 5 subsidiaries in China. General managers and secretariats in China all cooperate actively to combine economic, environmental and social performance indicators with daily operations, to consider CSR in daily work and found out things previously never noticed.

CSR Promotion Secretariat is responsible to summarize the results and observations annually to report to the CSR Steering Committee. Also CEO will report the performance and strategy to the Board.

CSR Steering Committee



Stakeholders and Material Topics

Communication with stakeholders and screening out the material topics is important in corporate social responsibility. Understanding the topics stakeholders concern, and disclosing them by CSR report, then we let stakeholders know TSRC's CSR efforts and achievement in 2013.

CSR Promotion Committee identifies stakeholders and screens out the material topics based on daily operations and external business communication. Our stakeholders are customers, employees/unions, investors, the media, suppliers, government and the community. The material topics are as below.

In addition to the diverse communication channels, we set up corporate social responsibility email box and the questionnaire on official web site for statistics use and communication to the stakeholders. Material topics in 2013 are the sum of questionnaire result in 2012 and website questionnaire result in 2013. We analyze by 2 factors, Significance of CSR Impacts, and Influence on Stakeholder Assessments and Decisions, to understand the economic, environmental and social impact to stakeholders and disclose them in the relevant chapters to be the direction of future planning.



Material Topics

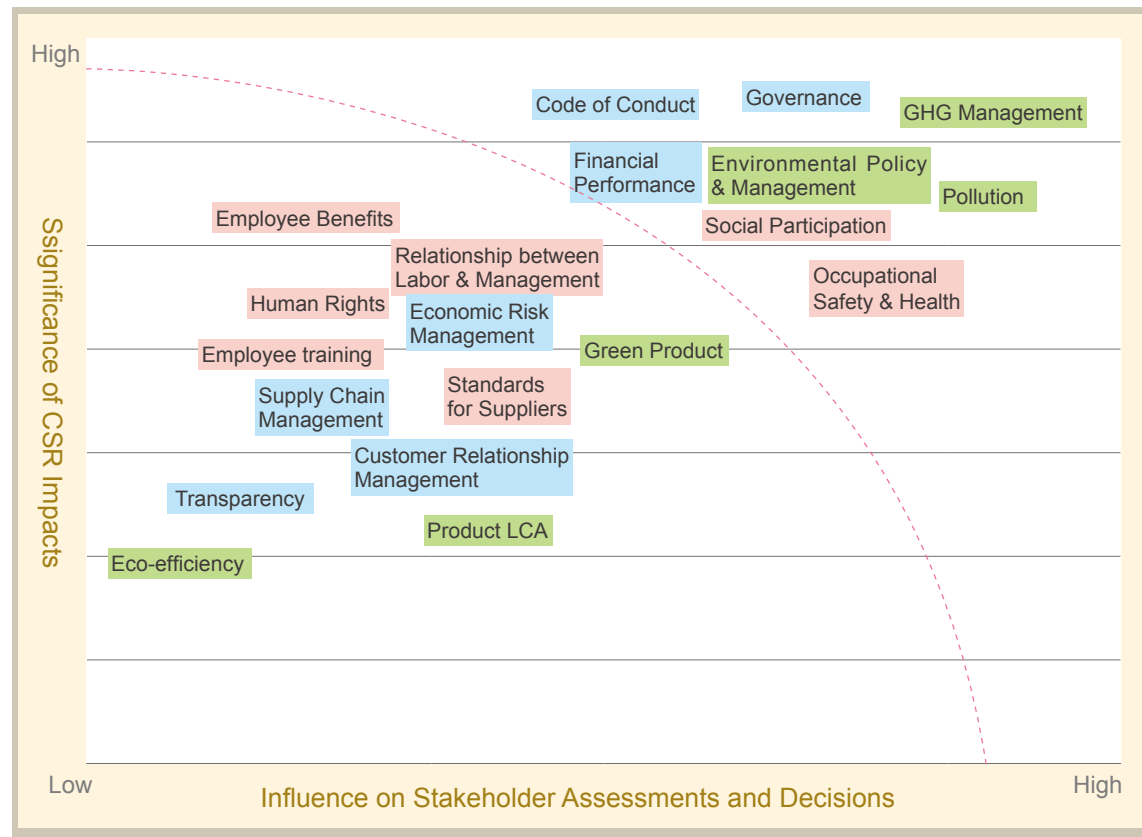
Stakeholders	Material Topics.	Channels and Frequency to Communicate
Customers	Economic Risk Management	Annual customer satisfaction survey
	Customer Relationship Management	Annual interactive seminars
	Financial Performance	Interview (email, telephone, interviews, questionnaires, etc.)
	Governance	Technical or industry seminars from time to time
	Product LCA	Exhibitions at home and abroad
Employees/ Unions	Employee Benefits	Staff forum in intranet as an ombudsman mechanism
	Relationship between Labor & Management	Talk to CEO (on demand)
	Occupational Safety & Health	Union collective agreement (every three years)
	Employee training	Labor Conference (quarterly)
	Product LCA	Trade union's cadre communication meetings (on demand)
		Annual corporate strategy development meeting
Investors	Financial Performance	Employee welfare committee (quarterly)
	Supply Chain Management	Responsible care committee (Every February)
	Economic Risk Management	Labor Safety and Health Committee (quarterly)
	Employee Benefits	Employees safety communication meetings (quarterly)
		Annual shareholders' meetings
		MOPS, Market Observation Post System
		Stock Agent Office
		Description meeting of annual business operations
		Annual financial statements and operating reports
		Website

Stakeholders	Material Topics.	Channels and Frequency to Communicate
The media	Pollution ¹	Visits, calls, or transcript from time to time
	Occupational Safety & Health	
	Governance	
	GHG Management	
	Green Product	
	Eco-efficiency	
	Social Participation	
Suppliers	Relationship between Labor & Management	Annual supplier satisfaction survey Annual supplier assessment Visits, emails, or questionnaires from time to time
	Standards for Suppliers	
	Supply Chain Management	
	GHG Management	
Community	Pollution	Visits from time to time Industrial District Manufacturers Association Industrial District Service Center
	GHG Management	
	Social Participation	
	Communication with Stakeholders	
Government	Pollution	Government propaganda Official document communication Regulations Seminar Regular or irregular inspections
	GHG Management	
	Occupational Safety & Health	
	Compliance	

Environmental Economic Social

¹ Pollution here means hazardous substances and polluting emissions to the environment.

Matrix of CSR Material Topics



Overview of Business Operations

● The Market

TSRC's sales of rubber products are closely related to the growth automotive market. Despite the slowdown of overall automobile market in China after the booming in 2009 and 2010, the growth of automobile demand from the second / third tier cities in China is still expected steady. As for the supply, the rapid increase of Asian synthetic rubber production caused a serious oversupply, not to mention a volatile price change of raw materials—all the above made negative influence on our profits. In addition, considering the green trend, international brand customers are focusing on non-toxic, low pollution, recyclable TPE material. With excellent processing performance on thermoplastics and with traditional rubber's elasticity, TPE has gradually become a substitute of PVC and traditional rubber and is in rapid development in various industries.

● The Strategy

To have a higher-than-average profit, we held special sources of raw materials from exposure of risks of high costs; dealt contract terms with major customers, and adjusted flexibly the operating rate and procurement of raw materials with market conditions carefully. At the same time, we promote environmental friendly TPR application on the automobile and new products.

● For 2013

The consolidated revenue is 34.4 billion with EPS1.9. The major markets are Japan, Thailand, China, Malaysia, Vietnam, Germany and the United States.

● For 2014

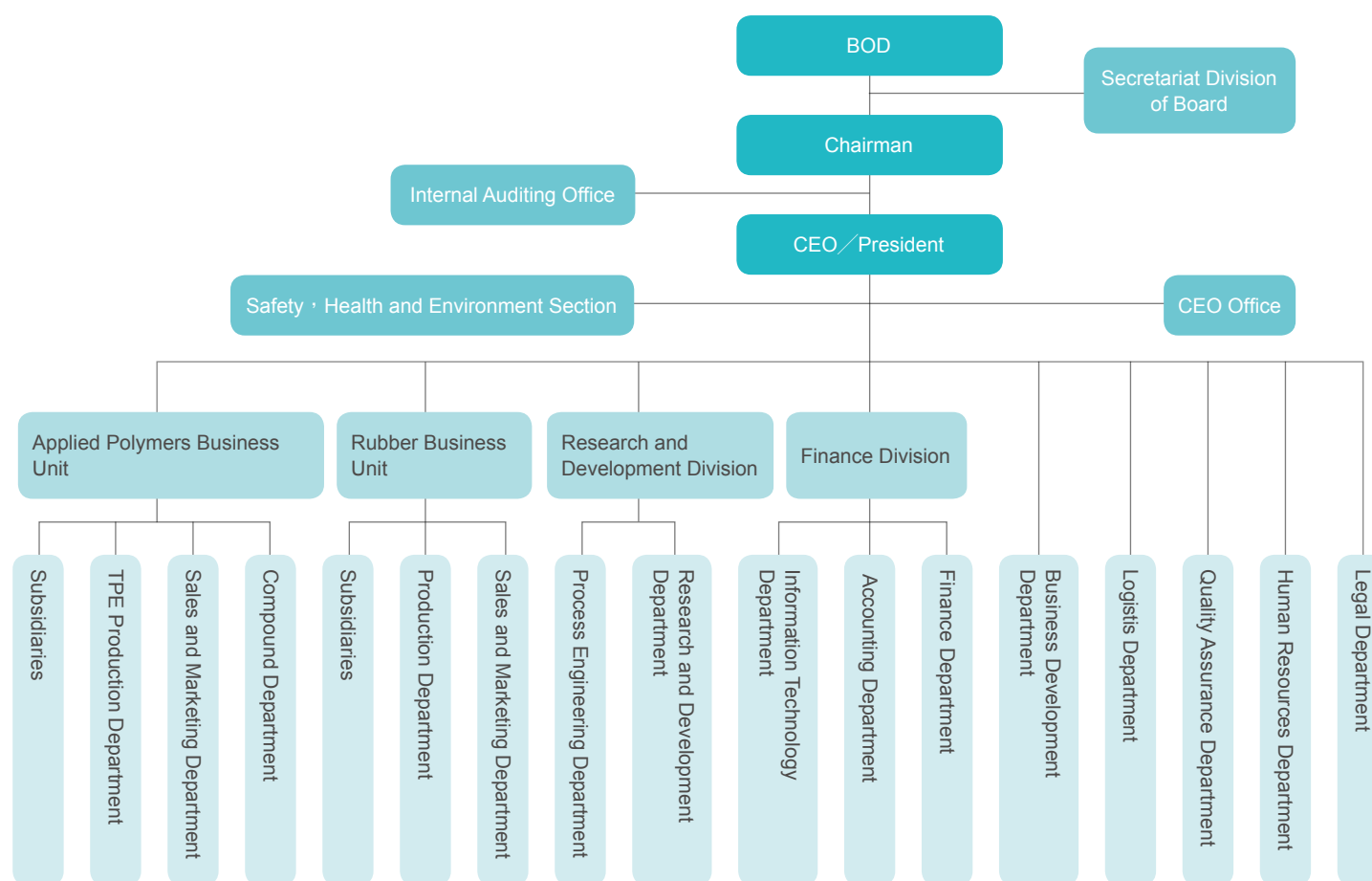
SSBR, the environmental friendly product, is expected to grow rapidly in response to EU's environmental tire label. TSRC will visit the major tire customers actively to promote SSBR and TAIPOL, our own brand. In addition, E-SBR plant in India finished trial run in 2013 and will develop the local and foreign customers to meet their needs. We also completed the Advanced Shoe Material color database and commercial production lines and started promotion toward international brands customers, and developed environmental friendly water-proof TPR membrane.

| Company Profile |

1. TSRC is a listed company (2103) in Taiwan stock market with shareholders of domestic and foreign legal entities and individuals.

TSRC Corporation was founded in Dashe petrochemical industrial District in Kaohsiung Taiwan in 1973. The Kaohsiung Factory is still one of the most important production bases.

▼ TSRC Management Organization



TSRC's main business is to manufacture and sell a variety of synthetic rubber, and TSRC is still a brand company- the brand Taipol and T-Blend. The product lines contain E-SBR, S-SBR, BR, TPE and TPR-- raw materials for production instead of consumer products. Main applications are for automobile industry like tires, Automotive engine tubing, airbag covers and window trim, while shoe soles, toys, building materials, daily necessities , and industrial supplies in other industry. Main markets are Japan, Thailand, China, Malaysia, Vietnam, the United States and Germany.



▼ Products in development

R & D Items
1. Continuous development of SSBR for high-performance, energy-saving tire rubber.
2. Continuous development of NBR for automotive industry and consumer rubber
3. To improve the quality and process of SBS and SIS to explore the international market
4. High value-added HSBC ¹ to meet the for needs of international customers .

From the sole manufacturer of synthetic rubber in Taiwan 40 years ago, to the rubber industry leader in Asia today, TSRC is actively engaged in internationalization in these years: On R & D and technology, we focus on global planning-- merged Dexco in the United States to utilize advanced process technology for high value-added products, and developed customized products to expand applications and enhance the high value-added TPE sales. We established operation center and sales channels in Europe, produced in Asia and have five subsidiaries and warehouses in China, including a joint venture in Nantong with the German company Lanxess. Indian Synthetic Rubber Ltd., a joint venture factory focusing on India's demand with Indian Oil Corporation, has started mass production.

¹ Hydrogenated Styrenic Block Copolymers

2. Overview of Financial Status

Unit : NTD1,000

R & D Items		2012	2013
Revenue	Revenue	45,364,375	34,422,999
	Total assets	35,575,078	33,372,364
Profitability	Profit after taxes	3,139,901	1,715,482
	EPS (after tax, NTD)	3.22	1.9

※ The above data is from “2013 TSRC Corporation and subsidiaries consolidated financial statements”, covering other TSRC subsidiaries outside the boundary.

3. Research & Development Expenditure

Unit : NTD1,000

	2012	2013
Revenue	45,364,375	34,422,999
R&D expenditure	351,239	389,147
R&D ratio	0.8	1.1

※ The above data is from “2013 TSRC Corporation and subsidiaries consolidated financial statements”, covering other TSRC subsidiaries outside the boundary.

For higher profits, R & D department actively develops the most advanced formulation in line with the trend to meet various customer's needs and provide a full range of services. Research and development expense for the year 2013 is NTD 390 million, accounting for 1.1% of net sales.

TSRC positively applies patents to protect R & D results, sophisticate manufacturing process and be differentiation. In 2013, 4 patents applied and 11 approved.

R & D Items	Performances
Patents	4 patents applied and 11 approved.

Development of advanced SBS and SIS products

Leverage the technology of TSRC and Dexco, U.S. subsidiary, to develop high -quality SBS and SIS for the global market

Development of advanced TPE process	Develop advanced process technologies to enhance the TPE product quality and performance.
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4. Organizations TSRC's Engaged in

- Petrochemical Industry Association of Taiwan
- Taiwan Rubber & Elastomer Industries Association
- Da-she Petrochemical Industrial District Manufacturers Association
- Interlibrary Cooperation Association
- The Institute of Internal Auditors, R.O.C.
- Chinese society for quality
- Industrial Safety and Health Association of the R.O.C.
- Association for the advancement of labor safety and health, Ren Da Industry Park
- Taiwan Responsible Care Association
- IISRP, International Institute of Synthetic Rubber Producers
- IPR Association of Chinese National Federation of Industries
- Chinese National Association of Industry and Commerce, Taiwan
- Safety & Health Association of Taiwan

5. Awards in 2012 and 2013

- (1) Award for International Trade from Ministry of Economic Affairs



- (2) Product Innovation Award from Ministry of Economic Affairs for Successful development of high-performance SSB for energy-saving tires



- (3) Award for the Kaohsiung excellent Continuous Emission Monitoring system(CEMS) vendor evaluation



- (4) Award for the National Factory Awards for Industrial Safety and Hygiene Cooperation Service



Corporate Governance

To better corporate culture, company's image and business ethics, TSRC's Standards of Business Conducts and Code of Ethics are set compliant with "Company Act", "Securities and Exchange Act" and "Corporate Governance Best-Practice Principles for TWSE/GTSM Listed Companies" to rule and guide all employees and the board members. TSRC forbids an unfair advantage for personal interests in business behavior and procedures, and procedures of whistle, discipline and grievance are in use. We check corporate mission, vision, values regularly and require staff to comply with core functions and management functions valued in annual employee performance appraisal. If any violation happens, we handle by Rewards and Punishments Regulations.

1. TSRC Governance Organization





Session shareholders, composed by all the shareholders, are the highest command authorities, electing directors as executive authorities and supervisors as supervisory authorities. The chairman of the directors is acting as the representative externally and has no administrative post in the company. TSRC's directors and supervisors attend corporate governance training held by Taiwan Securities and Futures Institute (SFI) and the Corporate Governance Association (CGA) from time to time.

2. Directors

The board, elected by the shareholders, is the highest authority on corporate governance. The main tasks are: to set up and oversee the goals for operation, to appoint and supervise management team, to decide strategy, to ensure the effective operation of governance, to confirm the internal audit system of financial accounting, and to assess business risks, and so on.

There are 9 directors (including 2 independent ones) and 2 supervisors in TSRC Board of Directors. 1 of them is a woman, and the ages of the directors are over 50 years old. In 2013, the board held 7 meetings.

There are 4 functional committees under the board of directors-- Corporate Governance Committee, quasi-Audit Committee, the Remuneration Committee and management committee. The directors are knowledgeable and experienced to lead, to judge on business

operation, to analyze accounting and finance reports, to administrate, to do crisis-handling, and to have international vision to govern the company.

3. Supervisor

TSRC's 2 supervisors exercise the power of supervision independently by law, such as: to audit financial statements with CPA to ensure the reasonableness and adequacy of the financial statements, to check auditors' independence and related party transaction, and to ensure the effectiveness of internal control system. In 2013, the supervisors held 7 meetings

In addition to attending the board meeting to present their views, supervisors also attend various functional committees of the Board.

4. The linkage between remuneration of the board and performance of TSRC

According to TSRC internal Articles, the remuneration of the directors and supervisors is linked to profits after taxed and the surplus available for distribution. The plan of the remuneration is drafted by the Board of Directors and reported to Session Shareholders. Details can be found in annual report.

5. Policy of anti-corruption and privacy protection

For staff to follow without misunderstanding, TSRC disclosed Security and Confidentiality Policy,

Privacy Policy, Standards of Business Conducts and Ethics to protect

Intellectual property rights, business secrets, prevention of insider trading, avoidance of interest conflicts and inadequate profits, and prohibition on bribery. No bribery is acceptable for anyone's interests, and improper gifts or treatment are forbidden. TSRC enables the employees to contribute to the protection of official secrets, such as stock price, and understand the importance

Up to now, TSRC has not received any complaints about invasion of customer privacy or sanction of penalty for violation of the financial and business-related domestic and foreign policies, laws and regulations.

6. Enforcement of Internal Control and Auditing System

The internal auditing department reports directly to the Board of Directors, responsible for checking the internal control system, and tracing all the incompliance and abnormality till improvements are done. All the audit reports and the inspection reports within each department will be reviewed by the board and top managers. The internal audit system is part of the internal control system. In addition to the regular annual check of the internal control system, TSRC also reviews and revises the internal control system following internal and the global trend at any time. Any new clauses or amendments must be reviewed by the Board of Directors.

¹ Information of directors and supervisors-- Annual Report, www.tsrc.com.tw

Green Activities As a Producer

● Product Responsibility and Customer Satisfaction

Producer's responsibility is not only to meet the needs of the users, but also not to impose any safety and health risks on them. TSRC considers the impact of health & safety in important stages in production, communicating sustainability considerations in marketing process and tracks customer satisfaction annually following quality policy spirits.

● GHG Reduction

TSRC's 2013 greenhouse gas (GHG) emission is 505,318 tons CO₂e (carbon dioxide equivalent); among them the scope 1 accounts for 59 % and the scope 2 41 %. Via the 2012 GHG inventory, we understood that the majority of scope 1 is from burning coal and fossil fuels, scope 2 from purchased electricity. Therefore the key point of GHG reduction is the use of low-carbon fuels and electricity saving.

For use of low-carbon fuels, in cooperation with Foundation of Taiwan Industry Service on the Project for GHG Reduction & Offset, TSRC obtains third-party confirmatory statement confirmed by the Environmental Protection Department in Taiwan. The reduction values of the project can be converted to economic value for upcoming domestic emissions trading market transactions or credits for total amount controlled. And EPD passed our application for re-designing the fuel from heavy oil to natural gas for No. 3 boiler. For energy saving, TSRC has worked hard through process improvement and integration, equipment replacement for efficiency and optimization of the operating conditions. TSRC will remain committed to making progress toward reducing energy consumption and GHG loading to the environment.

● Water Management

In 2013 the overall water used is about 3.88 million tons. All sites are working on water-recycling in TSRC, not to mention TSRC (Jinan) is established as a Zero Water Emission Factory.

● Energy-Saving

TSRC is committed to energy efficiency to reduce energy consumption, to monitoring and improving energy-saving goals by continuously updating process and equipment, and to recycling activities. On green product development, TSRC has developed SSBR rubber material for demand of high-performance and environmental friendly tires to enhance energy conservation in the use stage.

● Waste Management and Reuse on Raw Materials

The permission application and tracking of waste disposal and other polluting gas emissions is compliant with the regulations. General industrial waste and hazardous industrial waste are managed systematically with solid storage management and tracking to prevent pollution to the environment. TSRC also announced lists of waste items and containers which need to be reused, and established a strict separation and recycle system. Also, by improving processes and integrate all kinds of technologies, TSRC manages to reuse/recycle all kinds of raw materials to reduce the impact on the environment.

● Compliance

TSRC is committed to environmental responsibility. In compliance with regulatory requirements, we create solid environmental performance.



Environmental Policy

We cherish the Earth's resources to fulfill our environmental responsibilities; continuous improvement and run business with sustainability

Principle

- Use resources reasonably. All raw materials, products and process development and improvement must be evaluated by internal regulations on safety, health, environmental protection to lower the impact on the environment.
- Set up goals and targets on saving energy and reducing waste, and actively improve via production and environmental management system.

Enforcement measures: Continuously educate all staff so that everyone understands and complies with health, safety and environmental laws, regulations and related requirements.

- Running a business must keep balance thinking on product quality, environment improvement and the overall effectiveness. Any feasibility analysis must be equipped with an environmental impact assessment.



Energy Policy

Compliance with laws and regulations Implementation of energy inventory
Screen out efficient equipment Improve energy performances
Continuous improvement Reduction of greenhouse gas emissions.

Product Responsibility and Customer Satisfaction

Policy of Hazardous Substances Free (HSF)

- Compliance with HSF regulations and environmental requirements from customers
- Continuous improvement on product environmental standards and Continuous production on HSF products

Product Responsibility

Producer's responsibility means not only to meet the needs of the users, but also not to impose any safety and health risks on the users. TSRC considers the impact of health & safety in important stages in production, communicates sustainability considerations in the production and marketing process and tracks customer satisfaction annually.

In the following life cycle stages, TSRC reports here whether the health and safety impacts of all TSRC 8 major product lines are assessed for improvement :

	Yes	No
Development of product concept	✓	
R & D	✓	
Certification		✓ ¹
Manufacturing and production	✓	
Marketing and promotion	✓	
Storage and distribution	✓	
Disposal, reuse, or recycling		✓ ²

1 Development of product concept and R&D

When we design products, compliant with safety regulations is a must and we also take into account impact on human health of the additives and raw material.

For example, as for compound products, traditionally shoe makers use glue for binding, while many solvent and peroxides in some glue are harmful to the environment and human body. Therefore, TSRC developed low pollution materials to achieve the bonding to reduce the hazardous substances and reduce process costs in the same time.

TSRC selects hazardous free and reusable raw materials in the beginning of R & D, and all the compounding in the formulation process is physical mixing to make the products and waste safe. That is so called preventive treatment instead of end-of-pipe treatment.

- Certification: TSRC's products are not suitable for product certification. But we are compliant with regulations and customers' needs to fulfill health and safety. For example, we performed inventory every lot of SVHC substances so that customers producing consumer products can be more confident with our TAIPOLE brand for materials intended for contact with food.
- Stage of Disposal, reuse, or recycling: TSRC's products are raw materials, not consumer products, and generally our customers instead of TSRC consider this stage.
- Preventive treatment: Take production processes in a factory for example. If we choose environmental friendly raw materials and manufacturing processes in the beginning, the production ends up with no hazardous waste output, and there is no need to spend money and efforts to deal with or eliminate toxicity or odor and the consequent legal disputes.

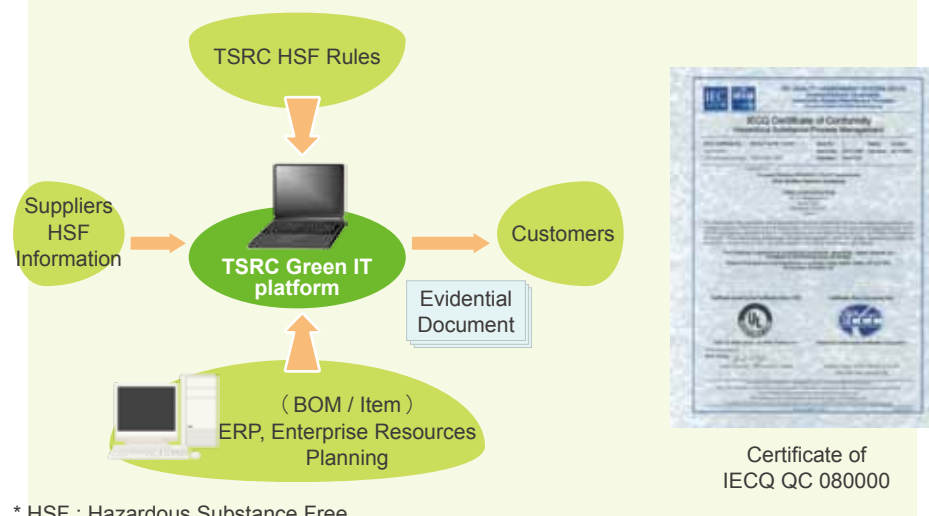
2 Manufacturing

Hazardous substances need to be compliant and systematic controlled

TSRC upholds the absolute law-abiding attitudes to maintain best interests of consumers, and strictly controls not only just those hazardous substance RoHS announced but also substances compliant with international and domestic environmental regulations.

To further control of hazard substances, TSRC started establishing Hazardous Substance Process Management (HSPM¹) system in factories in Kaohsiung, Gangshan and Nantong area to systematically manage hazardous substances, and Kaohsiung factory passed third-party verification on IECQ QC 0800001.

▼ Green supply chain management system



* HSF : Hazardous Substance Free

* ERP : Enterprise Resources Planning

3 Marketing and Promotion

When marketing products, TSRC also evaluated our competitiveness on the health and safety impacts in the global trend, and actively highlights our advantages in the exhibition or business visit. We consider the rising awareness of environment protection and green trend of synthetic rubber, TSRC also began the development of environmental friendly rubber and began communication with customers the efforts we have made. Details are in the table below.

▼ Sustainability products and services messages

TSRC's instructions clearly disclose consideration of sustainability in the following procedure.

	Yes	No
The sourcing of components of the product	✓	
Content, particularly with regard to substances that might produce an environmental or social impact	✓	
Safe use of the product	✓	
Disposal	✓	

1. TSRC procurement department had controlled measures on HSF toward suppliers and requested HSF supporting information even just trying samples to make sure all products are compliant with HSF. In the procurement, TSRC gives priority to the purchase products approved by the environmental labels, with recycled materials, low pollution, energy-saving and recyclable products. Also, part of the promotion materials emphasized these recyclable qualities of TSRC products.

¹ HSPM: Hazardous Substance Process Management

4 Storage and distribution

- In the first delivery, TSRC's products must be attached with SDS² which clearly discloses the prohibited substances information, disposal method and use conditions. In addition, TSRC provides SDS upon customers' requests.
- TSRC performs the HSF quality satisfaction survey any time, and communicates TSRC's sustainable concepts when visiting clients or in public occasions, such as seminars and product launch and on website.
- TSRC performs chemicals substance database check for product safety assessment upon customers' HSF survey. We also ask QA, R & D department to respond to customers' demand according to HSF management operational procedures. In the future, sales department will check customers more carefully to ensure compliance.
- All the above procedures are applied to TSRC's all eight product categories-- EBR, BR, NBR, SIS, SBS, SEBS, SSBR, and Compounds.

Risks of traffic accidents, collapse and warehouse fire, etc. are subject to strict management.

Take TSRC (Nantong), TSRC-UBE, TSRC (Shanghai) for example. Trucks of our contractors carrying products and raw materials must drive at specific routes in factory area. Hazardous chemicals must be classified with identification / inspection mark (to be inspected / pass / fail) and stored in a cold, dry ventilated premises. The contractors must pass our assessment evaluation for vendors, and participate in TSRC's emergency Response Training (on occasions of leak / Fire / scenarios, etc.) to have emergency response capabilities. In the operation of storage and transportation, injury, property loss, or death did not occur throughout the year.

In 2013, TSRC did not violate any regulations on safety and health, product descriptions, marketing and promotion, nor violation of customer privacy, any loss of customer data and other relative aspects of the complaints.

| Customer Satisfaction |

Quality Policy

Adhere to the principles of “Do It Right the First Time” and “Let Deeds Match Words” and continuously improve quality to provide products and services that satisfy our customers.

TSRC is convinced that customer satisfaction is an important indicator of dialogues with customers. When customers reflect a problem, TSRC has procedures and subsequent improvement of mechanisms-- Quality Assurance department convenes a meeting to investigate, analyze, review the communication method, provide solution, and finally organized a report and handle it by customer's procedures to solve troubles on quality and hazardous substances.

Complaints and customer satisfaction results will be reviewed at the quality review meeting for improvement and all information will be shared within the organization to prevent from re-occurrence, to be the baseline of improving quality and to create customer-oriented spirit of service.

Due to different product characteristics, every subsidiary constructed a different satisfaction surveys. Details are as below.

In 2013, the nonconformity in customers' audits has been improved and replied.

▼ TSRC corporation (Rubber Business Unit)



Scoring from very satisfied (5) to very unsatisfied (1)

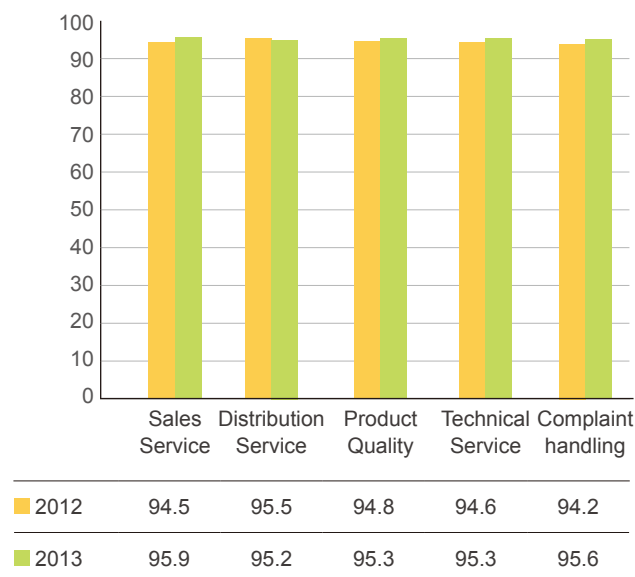
² SDS: Safety Data Sheet

▼ TSRC corporation (Applied Polymers Business Unit)



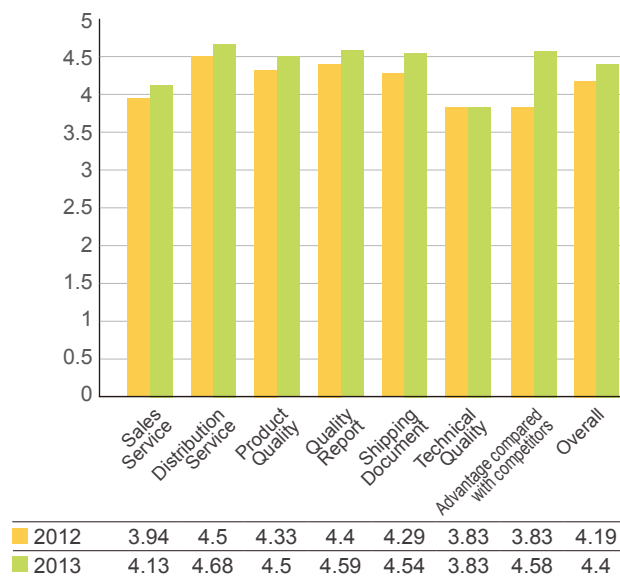
Scoring from very satisfied (5) to very unsatisfied (1)

▼ Shen Hua Chemical



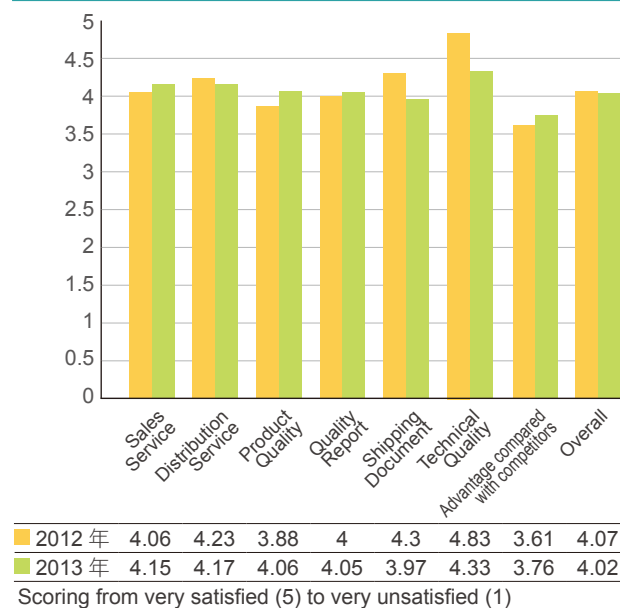
Scoring from very satisfied (100) to very unsatisfied (0)

▼ TSRC-UBE



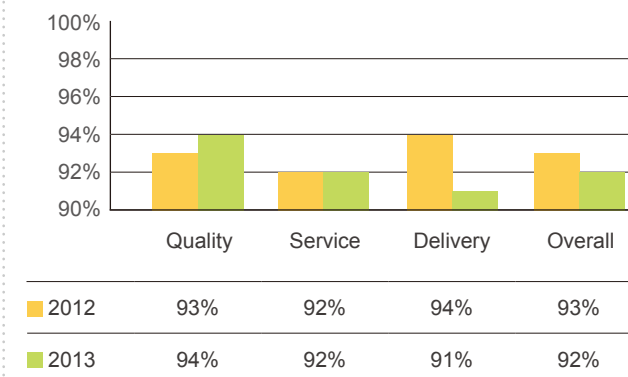
Scoring from very satisfied (5) to very unsatisfied (1)

▼ TSRC (Nantong)



Scoring from very satisfied (5) to very unsatisfied (1)

▼ TSRC (Shanghai)



Scoring from very satisfied (100) to very unsatisfied (0)

▼ TSRC (Jinan)



Scoring from very satisfied (100) to very unsatisfied (0)



To improve customer satisfaction, in 2013 TSRC promoted CIT, Continuous Improvement Team, using a cross-functional team to improve quality.

CIT in Kaohsiung factory, Shen Hua factory and factories in Nantong was set up to do problem analysis / logical and statistical methods to find out the problem. A number of quality improvements are made and announced.



CIT Performance Announcement



CIT Training in TSRC-UBE



CIT Performance Praise



CIT Training in TSRC (Nantong)

Management and reduction of GHG

GHG Management	In 2020, GHG emission of Kaohsiung factory will go back to that in 2005
2013 GHG Reduction Goal	10% GHG Reduction in Kaohsiung factory compared to that of 2012
2013 GHG Reduction Performance	13% GHG Reduction in Kaohsiung factory compared to that of 2012
2014 GHG Reduction Goal	3% GHG Reduction in Kaohsiung factory compared to that of 2013

- ¹ Scope 1 emissions are direct emissions from owned or controlled sources.
- ² Scope 2 emissions are indirect emissions from the generation of purchased energy.
- ³ Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

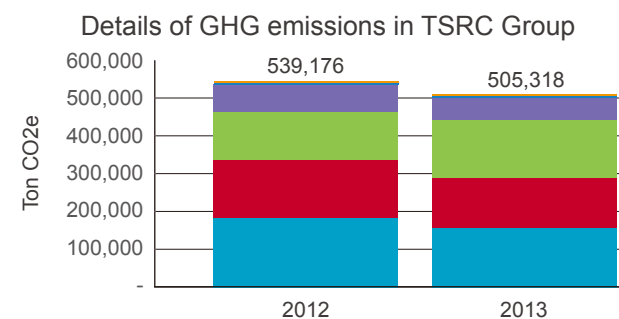
Management and reduction of GHG

Kaohsiung Factory and Gangshan Factory in TSRC corporation received ISO 14064-1 external verification in 2011 (Inventory from 2005 to 2010), and finished 2011 and 2012 inventory in 2013. TSRC registered the results in Environmental Protection Agency - National Greenhouse Gas Platform.

In order to control the status of GHG in the group, and get a favorable opportunity in energy-saving, in 2013 TSRC used the verified methodology to do internal inventory on Taipei Office in Taiwan and 5 subsidiaries in China. The 2012 inventory result showed that coal and fuel oil occupies the largest part in direct energy and electricity the largest in indirect energy, and those are the directions we should focus on.

TSRC's total GHG emission in 2013 calculated by the internal system is 505,318 tons CO₂e. Among them, scope 1¹ accounts for 299,651 while scope 2² 205,667 tons. We also finished identification of scope 3³. GHG emission volume is as below.

▼ GHG emission of TSRC Group and subsidiaries during 2012~2013

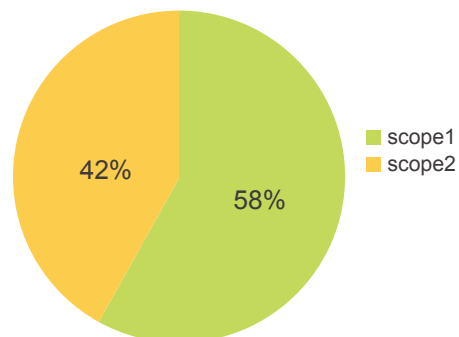


TSRC (Jinan)	735	549
TSRC (Shanghai)	1,812	1,821
TSRC-UBE	75,648	58,514
TSRC (Nantong)	136,937	153,159
Shen Hua Chemical	137,340	130,165
TSRC corporation	186,654	161,110

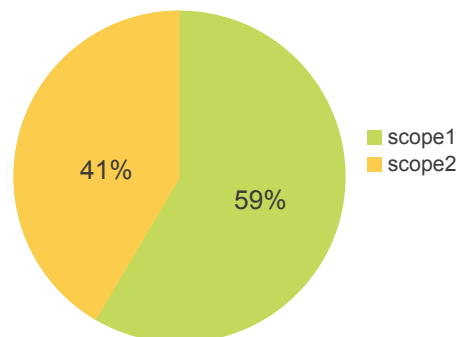


▼ The percentage of scope 1 and 2 GHG emission of TSRC Group during 2012~2013 is both around 6 : 4.

The percentage of scope 1 and 2 GHG emission of TSRC Group in 2012

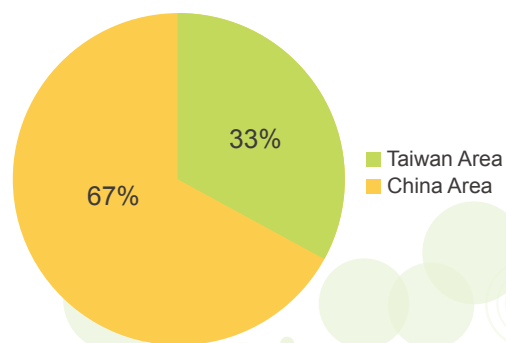


The percentage of scope 1 and 2 GHG emission of TSRC Group in 2013

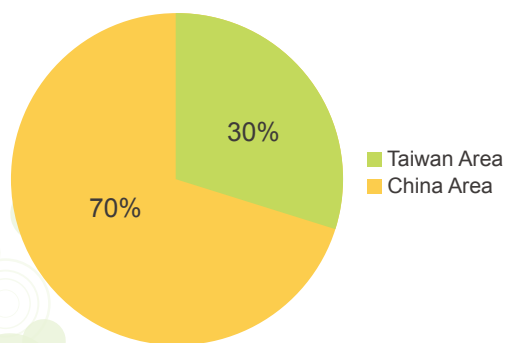


▼ The percentage of scope 1 and 2 GHG emission of Taiwan area both occupies about 30% for the whole group in 2013

The percentage of scope 1 GHG emission of Taiwan and China in 2013

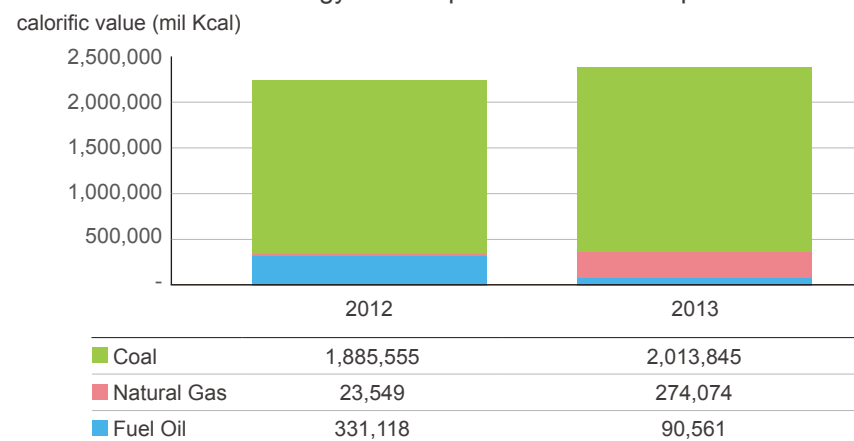


The percentage of scope 2 GHG emission of Taiwan and China in 2013



▼ Coal, natural gas and fuel oil occupies the largest part in direct energy consumption in TSRC Group.

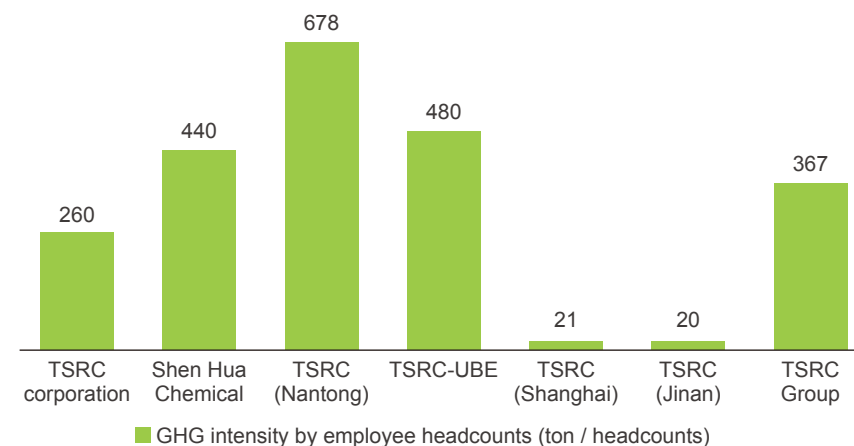
Direct energy consumption in TSRC Group



Here are graphs of GHG emission by employees and GHG emission by sales.

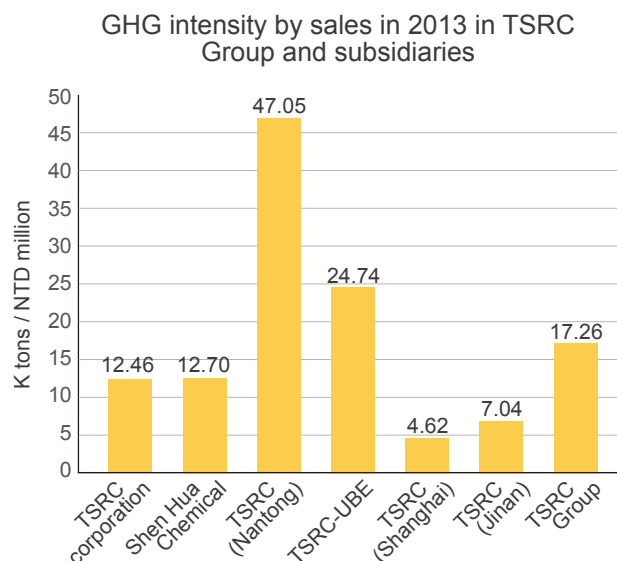
▼ Trend of GHG intensity

GHG intensity by employee headcounts in 2013 in TSRC Group and subsidiaries

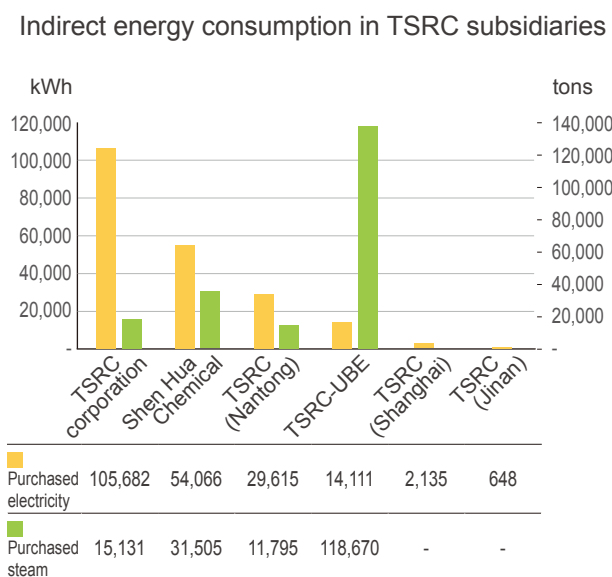




▼ GHG intensity by sales



▼ Indirect energy consumption in TSRC subsidiaries



GHG reduction plan and the effectiveness

TSRC's environmental work started from setting energy-efficient and waste reduction in development and manufacture as an important goal in early years to green technology development. Then, Kaohsiung Factory and Gangshan Factory in TSRC Corporation have participated in the Ministry of Economic Affairs' "voluntary energy-saving and GHG reduction project" since 2004. By upgrading processes, equipment and efficiency, GHG reduction has shown effects---38,610 tons was reduced in 2012, known by 2011 and 2012 GHG verification. With capital investment, we strengthened the process and equipment efficiency and take feasible measures year by year to promote energy conservation and carbon reduction. Also we committed ourselves GHG emission in 2020 to go back to that in 2005 to show our determination.

The Project for GHG Reduction& Offset in 2012 in cooperation with Foundation of Taiwan Industry Service, TSRC obtains third-party confirmatory statement confirmed by the Environmental Protection Department in Taiwan. In 2013, with the project of re-designing the fuel for No. 3 boiler from fuel oil to natural gas, a relatively low-carbon fuel, TSRC was chosen to be a model business on GHG reduction. Under the circumstances that low carbon fuel is not mandatory yet, TSRC voluntarily made a step forward to lower impacts on environment.

IT System for CFP and WFP Constructed to seek opportunities for carbon reduction

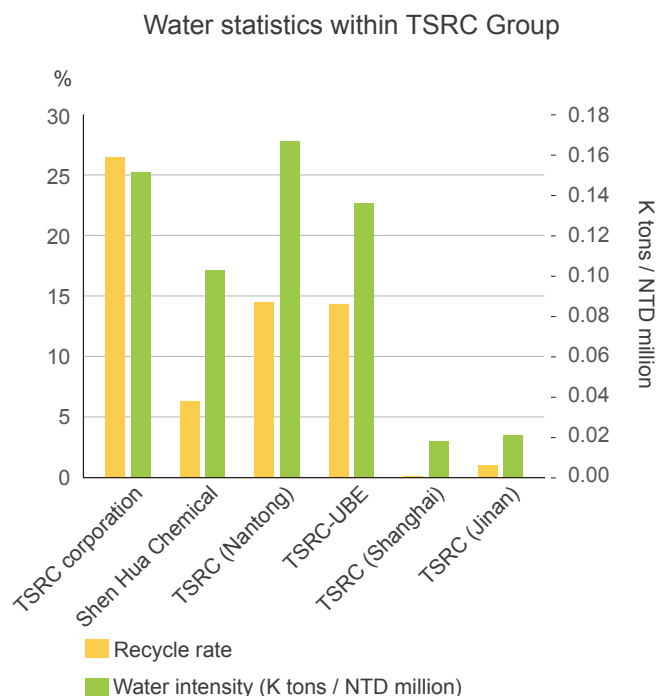
TSRC built up Demeter, the CFP and WFP calculation IT system, and finished the CFP and WFP inventory and verification on 3 representative products to construct ability to inventory on our own. TSRC not only can monitor GHG emissions at every stage in the life cycle to seek opportunities for carbon reduction, but can also choose a low-carbon raw material in the production or development, and reduce the environmental loading.

Water Management

The sole source of water in TSRC group is tap water, and the total water consumption in 2013 was 3.88 million tons, 2% higher compared to that in 2012 for newly setup processed in Nantong area in China. All factories in TSRC group are engaged in improving water system and reducing water use in manufacturing. Especially for TSRC (Jinan) -- The initial condition to set up TSRC (Jinan) factory is zero wastewater discharge, meaning that all process wastewater must be purified and then used for living area. TSRC (Jinan) is still working on reducing process water to reduce the impact of water resources to a minimum. In 2013, total discharge of TSRC is 2.35 million tons. All factories in TSRC group discharge waste water to wastewater treatment plants regulated by those Industrial Zones our factories located at. We stay compliant with laws and regulations and implement water inspection regularly.



▼ Water statistics within TSRC Group



| Energy-saving |

TSRC has long been concerned about climate change and energy efficiency improvement; the measure and the concept on energy conservation has become TSRC culture.

With daily equipment modification in factory and office, Kaohsiung factory was verified with ISO50001 in 2013. With a systematic inventory, significant energy use was screened out and

baseline data established to set up energy efficiency goals.

1. Energy-saving in production lines

To enhance energy efficiency, lower operating costs and reduce GHG emissions, Kaohsiung factory was verified with ISO50001 in 2013.

Before establishing energy baseline, digital meters were installed in energy-consuming areas and equipment. After check and comparison, the gap between the amount of calculated power (by rated plates or rated currents, etc.) in the initial investigation and the meter amount was only 1%, indicating reliable former energy control and energy baseline.

As for the 5 subsidiaries in China, in order to respond to government requirements controlling key energy-using enterprises, we will speed up elimination of outdated equipment for their high energy consumption, adjust the structure of energy consumption of the products, and leverage the trend of clean energy to upgrade products.

In the future, TSRC will continue to carry out energy-saving measures in the processes, equipment efficiency, recycle on waste heat and waste water and optimization on operating conditions. With the implementation of ISO-50001 energy management we target to reduce electricity consumption by 1% and the amount of steam 3% in 2014.

Take TSRC (Nantong) for example, staff

compiled pamphlet regularly to enhance employees' awareness on energy conservation from every little thing around us.

Energy Management Policy	To be compliant with laws and regulations, to implement of energy inventory, to select efficient equipment , to improve energy efficiency performance, to continuously improve ourselves, to reduce greenhouse gas emissions.
2013 Goal	To set up Energy Management Policy and System in Kaohsiung factory
2013 Performance	Kaohsiung factory was verified with ISO50001 in 2013.
2014 Goal	1% lower in Electricity and 3% in Steam in Kaohsiung factory compared to that in 2013



Kaohsiung factory was verified with ISO50001.



▼ Energy-saving Activities in Every Factory

2013		
Factory	Energy-saving Activities	Effects Shown
TSRC corporation Kaohsiung factory	To add waste heat recovery equipment in BR line for use of reboiler	11,000 tons of steam saved.
	To inhale process tail gas into SBR flare to reduce steam	4,836 tons of steam saved.
	To equip inverter on brine pump PP - 3503B	NTD0.3 mil electricity bill saved.
	To use waste BD as fuel for RTO to replace LNG	88.8tons of LNG saved.
	To improve equipment performance, and reduce the failure rate to increase the amount of recycled waste in BR line	Waste water recycled throughout the year increased about 40,380 tons.
TSRC corporation Gangshan factory	To install vacuum pump water treatment systems for recycling process water	5.7tons of process water saved for products per ton.
	To set up power-monitoring system for the whole factory	29,403.5 kWh saved, occupying 1.93% of that in the whole factory.
	To replace diesel stackers with electric ones	70L of diesel saved in 2013 Dec.
Shen Hua Chemical	During 2007 to 2014, 36 units of ammonia tube replacement (2 sets were replaced in 2013)	3.9kWh of electricity saved for products per ton.
	Renovation on Loop cooling tower	43,500kWh of electricity saved every year.
	To change all indoor lighting to LED lamps	79,200kWh of electricity saved every year.
	As for the Dechlorination of water—we replace boil water (by burning coal) with chemical dechlorination	213 tons of coal saved.
	To reduce use of soft water	14,667tons of soft water saved.

2014		
Factory	Energy-saving Activities	Predicted Effects
TSRC corporation Kaohsiung factory	Waste heat recycle system improvement in coagulating area in BR line	To save 2,000tons of steam per year
	To start batch operations in BD tower and benzene tower in BR line	To save 10,000tons of steam per year
	To install hydraulic coupling in forced draft fan	To save 20% electricity
	Air compressor replacement	To upgrade air compress to screw type to save 5% electricity
	Replacement of circulation pump in cooling tower circulation pump	High efficiency model can enhance 300 tons /hr circulating volume with other conditions the same.
TSRC corporation Gangshan factory	To rearrange the pipes to make of use waste heat in RTO to boiler system	To save 1,600 tons of steam in 2014 and 2,400 tons for the following year.
	To upgrade cooling tower windmill	New FRP blades can save 20% electricity under with other conditions the same.
	To replace diesel stackers with electric ones	To save 840L of diesel every year
Shen Hua Chemical	To reuse water, like to replace purified water with the desulfurization wastewater to wash floor in boiler room	To save 15,000 tons of purified water
	During 2007 to 2014, 36 units of ammonia tube replacement (1 set will be replaced in 2014)	The total upgrade effect of reactors can save 390,000kWh electricity, calculated by a yearly production of 100,000tons of products.
	Education toward staff on electricity reduction	To drop electricity intensity from 600 to 570 kWh/ton



2013

Factory	Energy-saving Activities	Effects Shown
Shen Hua Chemical	To upgrade program of purification and inspection on loop water system and add steam condensate recycle system	35,000 tons of water saved.
TSRC (Jinan)	Recycle/ Reuse on water	Water intensity dropped from 2.5 to 2.2 ton/products per ton.
	All the waste water must be purified and reused.	Zero waste water discharge
TSRC (Shanghai)	Education toward staff about electricity-saving	Electricity intensity dropped from 427 to 415kWh.
TSRC-UBE	To add crumb concentrator to raise the efficiency of stripping	Steam intensity was the same as that in 2012.
	To upgrade program of loop water system	Electricity intensity was the same as that in 2012.
	Electricity-saving lighting in BR line	30,860kWh of electricity saved.
	Improvement on processes of reuse raw material / solvent	50 tons of the BD discharged to the flare in SEBS recycled.
	To adjust pH of waste water to increase the reuse rate	650,000RMB of water bill saved per year.
TSRC (Nantong)	Electricity-saving lighting in SEBS line	74,340kWh of electricity saved.
	To add inverters in hydrogen compressor and part of motors	48,000kWh of electricity saved.
	Use of pump to adjust speed of cooling fan	600,000kWh of electricity saved.
	Chilled water was controlled by the unified department and used in polymerization zone and manufacturing zone	100,000kWh of electricity saved.
	To recycle the BD discharged to the flare by SEBS	90 tons of steam saved.
	To use steam ejector in stripper to reuse the steam	360 tons of steam saved.

2014

Factory	Energy-saving Activities	Predicted Effects
TSRC (Shanghai)	Recycle/ Reuse on water	To drop water intensity from 1.10 to 0.93 ton/products per ton
TSRC-UBE	High yield intermittent operation, setup of standard operating rules, water-cooling system as an alternative to air conditioning, and management and regular inspections on the temperature of steam trap in pipeline in BR	To drop steam consumption to 3.0MT/MT-BR and electricity 340 kWh/MT-BR.
	Improvement on processes of reuse raw material / solvent	To reuse 120 tons of BD per year
	To reduce the use of solvent	Solvent intensity is lower than 14kg/MT-BR.
TSRC (Nantong)	To add cooling water heat exchanger on ice water loop	To reduce use of ice water by controlling the temperature of cooling water in the chamber
	To raise reuse percentage on waste water	To raise it to 33%
	To reduce evaporation to reduce water usage in cooling tower	To save 16,500 tons of water per year
	To add inverter in equipment	To save 15 tons of coal per year (or to save 248,000kWh of electricity)
	To upgrade flue gas waste heat heater and sonic soot blower in boiler intake pipes	To save 430 tons of coal per year
	To replace steam with hot water in heating and steam tracing	To save 600 tons of coal per year
	To use steam ejector in vapor recycle for use of stripper	To save 5,820 tons of coal per year
	To increase the heat recycle in solvent tower	To save 1,000 tons of coal and 2,160 tons of steam per year
	To replace steam with hot water in BD drying System	To save 3,500 tons of steam and 263 tons of coal per year
	To upgrade economizer of No2. boiler	To save 150 tons of coal per year



Environmental Impact Arising from Transportation

2. Energy-saving in office

TSRC stresses the importance of energy-saving and disclosures that in daily life, and encourages individuals or the whole departments when contributions made. Through advocacy and education, employees understand importance to follow the administrative measures about energy-saving such as turning off lights when you leave, 26 °C setting for air-conditioner in summer, carpool for business trips, etc.. TSRC also works hard for replacement for the energy-saving equipment and lighting, and pays attention on reasonable brightness in working area.

3. Energy-saving in product's usage stage

TSRC products' application is mainly tires. Responding to the energy-saving tire requirement and regulations from EU, USA and Japan, TSRC developed and produced a pretty ECO material—SSBR, for energy efficiency improvement and reduction of GHG emissions. Please check the Highlight 3 for details.

TSRC's factories are all located in the industrial district instead of resident community. Therefore, employees' commuting has a quite limited impact on residents and the area nearby. In addition, TSRC's contract manufacturers are requested to transport raw materials in accordance with the industrial district route, and apply for the approval when bring into hazardous substances. Therefore, no significant impact on the environment is found. The contractors must be legal transport companies with capabilities and plans of emergency response, and with training and drills implemented every year. The transport tanks should be regularly inspected and should be qualified with inspection certificate, and the tank truck drivers should receive the professional training and regularly participate in other on-site job training.

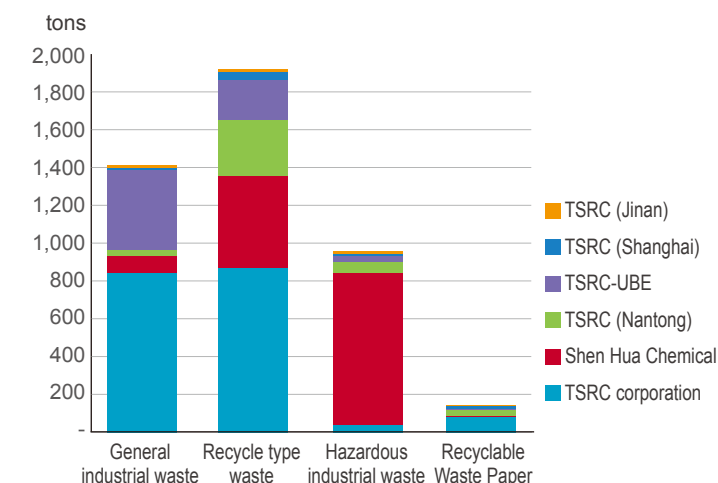
Local procurement is prioritized. TSRC establishes long-term partnership with local suppliers to safeguard the development of the domestic economy and to reduce the energy consumption and costs incurred due to long distance logistics (whether by air or sea transportation), and thus achieve the purpose of carbon reduction. TSRC Corporation's domestic procurement ratio is about 70-80%, and 5 subsidiaries in China also conduct local procurement.

Waste and Other Emission Management

Waste

Waste is generally divided into 3 kinds in TSRC group--general industrial waste, hazardous industrial waste and recycle type waste. All of them are handled by laws. General industrial waste and hazardous industrial waste are general controlled by management unit systematically---the storage, transportation and track reporting must not cause any environmental pollution. Resource waste like waste glue, metal, plastic, wood, paper and carton, must be categorized and recycled by the permitted contractors. Internally, we educate and announce reusable waste and containers to have solid categorization. In addition, improving processes to lower industrial waste is a good way to lower impact on environment.

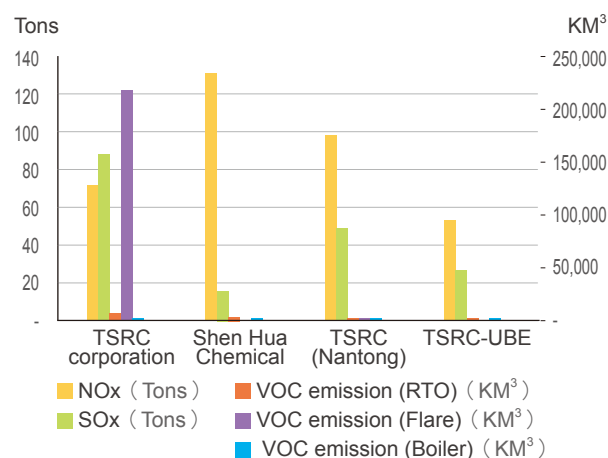
Weight of all kinds of waste in TSRC subsidiaries



Other polluting emissions

TSRC set up air pollution control equipment and the boiler chimney exhaust automatic monitoring system lawfully to control air pollutants. With operating permits and regular testing operations of flue exhaust, TSRC keeps an eye on test results and continues tracking, monitoring and analyzing to ensure that the factory exhaust emission in line with regulations. TSRC group's main air pollutant items are VOCs, NOx and SOx.

▼ TSRC Group's Air polluting emissions (TSRC (Shanghai) and TSRC (Jinan) do not emit these pollutants for their product properties.)



Domestic and International Environmental Compliance

During the reporting period, TSRC Corporation had one air pollutant violation when EPA in Taiwan conducted random test on equipment devices, and TSRC (Shanghai) has received

one improvement-asking document from local government on suspended solids in waste water with no administrative or economic punishment. Besides, TSRC (Nantong) internally found waste water spilled on the ground and floating into rain water storage system but with no pollution outside the factory. All the above incidents are handled with pipeline reform, remind signs and re-education on relative staff.

No serious spills in 2013 and TSRC Group has never imported and exported waste.

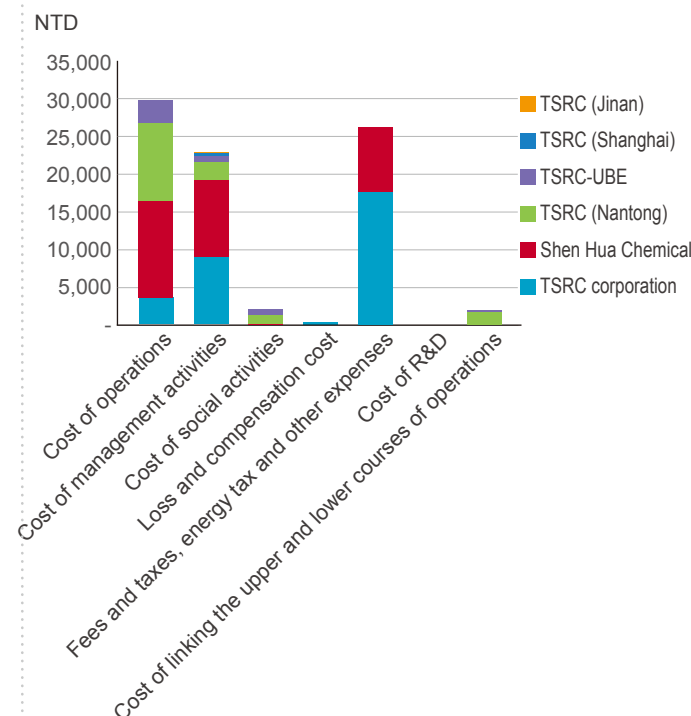
TSRC Group's production bases and offices are all located in industrial/ business district established and recognized by all the countries, and not in or close to any protected area or a biodiversity area declared by those countries or IUCN (International Union for Conservation of Nature). In addition, TSRC corporation and the 5 subsidiaries in China confirmed that no biological species in the neighborhood are on the IUCN Red List or national conservation list, and confirmed that all the environmental protection are compliant with the laws. Therefore, no evidence shows any significant impacts on biodiversity due to activities in the factories. Kaohsiung factory in TSRC Corporation was planted with 3,008m2 of lawn and plants under Kaohsiung government's green requirement.

Total Environmental Protection Expenditures and Investments

TSRC Group's Environmental Protection Expenditures and Investments in 2013 is NTD83.4 million. The categories cover environmental

operation costs, environmental management activity costs, environmental social activity costs, environmental loss-compensating costs, environmental related fees and taxes, environmental research and development expenses, and environmental upstream and downstream related costs, etc.. Take TSRC Corporation for example, it purchased products, air-conditioners, PC application and equipment with ECO labels and low energy-consuming level marks. In the future, TSRC Group will continue promoting and purchasing products of ECO labels and reuse/ recycle.

▼ Environmental accounting expenditures



Labor and Human Rights

● The Rights and Welfare of Workers

TSRC guarantees employees fair job opportunities and evaluation system, provides lawful and competitive salary and rewarding system, and pays attention to local employment responsibility. We perform lawful insurance and pension system for employees. Several communication channels between employers and employees are available for unfair incidents. TSRC takes the responsibility for employees' healthy and safe environment, and also pays attention to their mental health, providing sports venues to work out and to relieve stress.

● Occupational Health and Safety

Inherited from the spirit of Responsible Care Commission in the chemical industry, TSRC strengthened the implementation of occupational safety system in every production site and never neglected workplace dangers. We thoroughly discuss prevention and post-processing of career disasters and diseases. From the ignition point characteristics of raw materials and the product, the safety of the working environment during operation, health risks to local communities, to "safety, health, environmental protection and green", we work to comply with industry standards and community / social expectations. TSRC also sponsored the academic forum of Taiwan's security education, and the annual fee of Taiwan Responsible Care Association.

● Training and Education

In response to internationalization and competition in the industry, TSRC aggressively invests in education and diverse learning for employees to grow together. Based on "TSRC Internal Staff Training Approach", we focus on professional skills and management skills aligned with trends in the market and the environment.

| Labor and Human Rights |

In 2013, TSRC total employees in the reporting boundary are 1,376 (at the end of 2013). Geographically, staff in China occupied 55%. On gender, female occupies 15%.

Performance evaluation of employees emphasizes individual ability and performance qualifications instead of age, gender, region, marital status and sexual orientation, which was held twice a year and conducted on every employee. When hiring new staff, TSRC follows the standard process considering the expertise and work experience for the job. With other conditions the same, the priority will be on local candidates to strengthen the relationship with the community. TSRC Group's production bases and offices are all located in industrial/ business district established and recognized by all the countries, and no negative impacts on the local community found after a comprehensive assessment of conditions on the operation and employment.

▼ Ratios of Employee in area, age and gender

Age	Gender	Employees in Taiwan Area			Employees in China Area		
		Ratio (%)	The ratio of Executives ¹ (%)	The ratio of Handicapped	Ratio (%)	The ratio of Executives (%)	The ratio of Handicapped
Under 29	Male	6	0	0	34	0	0
	Female	3	0	0	6	0	0
30~49	Male	47	10	40	48	25	0
	Female	10	5	0	10	0	0
Over 50	Male	32	75	60	3	75	0
	Female	2	10	0	0	0	0
Total	Male	85	85	100 ²	85	100	0
	Female	15	15	0	15	0	0

On human rights and related training, TSRC's CSR Declaration and all relevant internal rules are

compiled and executed following local regulations, specifying protection of personal freedom, no discriminate, and forbiddance on child labor. Employees receive job description when on board or job transfer and can apply for resign application from free will. No forced or compulsory labor occurred. In 2013, no breach of the labor regulations, discrimination or violations on the rights of employees or aboriginals occurred. Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms such as trade union, HR department and audit mechanism is 0(zero).

Whenever the regulation about human rights publishes or updates, like laws of gender equality or sexual harassment prevention, TSRC will definitely educate colleagues. CSR counseling materials and related international standards are part of training materials and are available in the TSRC's internal Web site for study.

In 2013, TSRC Corporation developed Supplier Code of Conduct as the extension of CSR Counseling, indicating no compulsory labor, asking for compliant with local laws on working hours, salaries and holistic benefits, and strictly forbidding child labor and no corporation with suppliers using child labors. In the future, we will promote it to subsidiaries in China.

TSRC Corporation is equipped with trade union and collective agreement mechanism to promote the management-worker harmony and protect labor

¹ Definition of Executives is Grade 13 (equivalent to Assistant Vice President) or higher.

² Handicapped employees in TSRC Taiwan area are all male.



rights. Freedom of speech, collective bargaining method and participating rate are all compliant with laws. Topics like communication of overtime were official talked---Considering the well-being for the employees, supervisors can assign employees to work overtime only when necessary and sufficient rest will be provided afterward following the law.

Subsidiaries in China also have smooth communication methods.

Benefits Provided to Full-time Employees

Incentive compensation³ and reward program are designed for TSRC employees, concerning operating profits, competitiveness in the market, employees' performance and definitely compliant with local laws. Insurance and pension are also compliant with local laws. In addition, TSRC provides the superior group insurance to protect the safety of employees in work and life, and subsidies on meals, annual dinner, occupational

health exams, annual outing, long-served honor, marriage, birth, illness, and funerals. TSRC also provides some subsidies for disadvantaged employees on holidays. In summer, TSRC subsidiaries in China provide cooling subsidies additionally.

If employees want to resign, TSRC will arrange interviews to understand the reason. If there is still a discrepancy after the interview, the termination of labor contracts work in accordance with the law.

Outing of TSRC (Shanghai) and TSRC (Jinan)



Management Training in TSRC (Shanghai)



Exemplary employees in TSRC (Shanghai)



Outing of Shen Hua Chemical



Exemplary employees in TSRC Corporation



Outing of TSRC (Jinan)

³ Incentive compensations include patent applications and rewards, honor for exemplary employee and long-served employees, etc..

Employees' interaction

Employees are the most important assets in TSRC. Every factory has recreation room to enhance interaction, so that employees can develop relationships not just by work and have a positive influence. For example, employees' welfare committee encourages 25 club activities like Bicycling, Charities, bridge game, table tennis to enhance employee productivity, morale, team work, understanding, and participation.



Table tennis club



Bridge game club



Gourmet club



Pool club



Badminton game

Occupational Health and Safety

Policy of Safety & Health

"Human-oriented", TSRC's core values, is functioned by the following principles to pursuit the goal of zero disaster and zero injuries.

1. Technology: With the foundation of health and safety, we develop management strategies and production techniques.
2. Safety & Health Culture: By setting goals and incentives and full participation in activities of safety and health, we continue to improve management performance and develop an excellent health and safety culture.
3. Responsibility: Compliance with applicable health and safety regulations and other requirements to prevent accidents and injuries. Preventing occupational diseases is not just corporate social responsibility, but everyone's responsibility.
4. Communication: Through training and meetings of health and safety, all personnel working under TSRC's management can understand and implement work on safety and health.

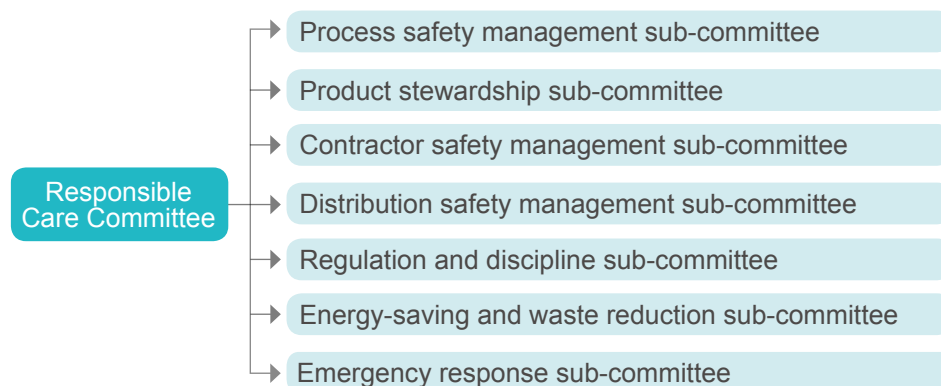
Organization and management system of occupational risks

TSRC is committed to safe working environment. In addition to TSRC Corporation's Responsible Care Committee, which features both OHSAS 18001 and CNS15506, subsidiaries in other areas have committees or divisions handling occupational safety and health affairs following local regulations, and hold regular occupational safety meeting with general manager or his representative.

Proportions of labor representatives are all compliant with local laws

(for example, over 1/3 in Taiwan by law) to really reflect labors' voices and to communicate.

From the ignition point characteristics of raw materials and the product, the safety of the working environment during operation, health risks to local communities, to "safety, health, environmental protection and green", we work to comply with industry standards and community / social expectations.



Kaohsiung factory has been certified with OHSAS 18001 / CNS15506, occupational health and safety management system. For the goal of zero accidents and zero injuries, on one hand TSRC Corporation hired external professional consultants to educate us on topics of workers exposure to environment, and types and quantities of chemicals used in the manufacturing process by laws. On the other hand, it also regularly commissions third-party to testify the operating environment.

To implement concept of prevention instead of post-processing, TSRC Group emphasizes on education of safety and environmental protection toward new employees, and performs training on types of occupational accidents, knowledge of first aid, emergency equipment and health protection.

TSRC (Nantong) passed government's review of Work Safety Standardization Grade 2 in 2013; and Shen Hua Chemical's safety performances are all grade A.

Formal agreement about health and safety are clearly set in TSRC's collective agreement. 2013 health and safety topics covered in formal agreements are as below.

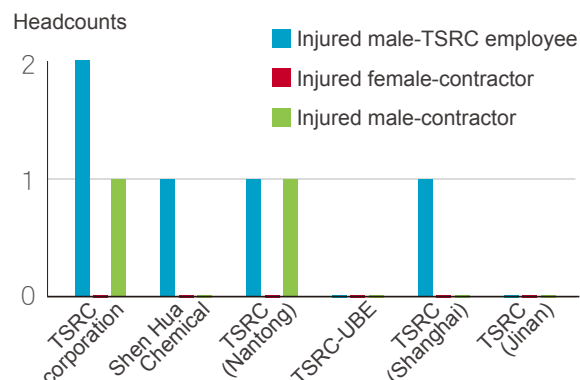
Within TSRC Group	For Suppliers of TSRC
<ul style="list-style-type: none"> Health exams and promotion, and tumor risk management Risk assessment on processes and operation Work Safety Standardization. Safe operation with zero accidents and injuries. Solution and implementation toward abnormal incidents 	<ul style="list-style-type: none"> Safety management toward contractors To add "health and safety management" into yearly supplier assessment weighting list

In 2013, there are 7 occupational accidents and no fatalities in TSRC Group.



Industrial safety commission meeting in Shen Hua Chemical

▼ The number of injured¹ people and gender in occupational accidents in the TSRC Group's operating areas in 2013



2013	TSRC ² Corporation	Shen Hua Chemical ³	TSRC (Nantong) ³	TSRC-UBE ³	TSRC (Shanghai) ³	TSRC (Jinan) ³
Injured male-TSRC employee	2	1	1	0	1	0
Injured female-contractor	0	0	0	0	0	0
Injured male-contractor	1	0	1	0	0	0



Fire drill in TSRC Corporation



Leaking response drill in TSRC Corporation



Chamber leaking response drill in TSRC (Nantong)

▼ LDR and IR⁴

2013	TSRC Corporation	Shen Hua Chemical	TSRC (Nantong)	TSRC (Shanghai)	Remark
Lost day rate (LDR)	1.21	1.94	3.79	54.77	LDR=(The total lost days / the total number of hours scheduled to be worked) *200,000 ⁵
Injury rate (IR)	0.34	0.27	0.42	1.30	IR=The frequency of injuries / the total time worked by the total workforce in the reporting period. *200,000 ⁵

To fulfill responsibility on environment, employee's safety and other stakeholders' rights, TSRC Group holds the consistent methodology of ISO-14001 and OHSAS 18001/TOSHMS since 1998 and 2009 respectively. We continuously target at zero accidents and zero injuries by environmental management, such as air pollution control, waste water and waste management and recycling, toxic chemical substances, noise control and energy-saving and by safety management such as legal permits monitor, safety patrol and inspection, chemicals management, automated inspection, emergency response plan, contractor management, operating environment inspection, and safety and health training.

¹ Commuting traffic accidents are included.

² Data of TSRC Corporation are calculated by Labor Safety and Health Act in Taiwan.

³ Data of 5 subsidiaries in China are calculated by Regulation on Work-Related Injury Insurances, the State Council.

⁴ Contractor's data are not included in LDR and IR

⁵ The factor 200,000 comes from 100 employees working 40 hours a week and there are 50 working weeks per year.



Fire drill in Shen Hua Chemical



Response drill in Shen Hua Chemical 1



Response drill in Shen Hua Chemical 2

Joint supervision for public safety toward large petrochemical factories

In addition to monthly ESH inspection in line with regulations, we pay attention to the global ESH accidents and disasters to understand the reasons for our own examination. For example, when the multiple fire and explosion accidents of another huge petroleum enterprise happened in 2010, TSRC Corporation tried to find out the reason and internally strengthened daily management, corrosion prevention of equipment pipeline, and safety checks before process.

And for that accident, Taiwan's government started "Joint supervision for public safety toward large petrochemical factories" since Nov 2010 and TSRC Corporation, led by our CEO Mr. Tu, was scheduled to be supervised on May27~28, 2013. The supervision was conducted by ESH and fire experts from the industry, government and academics. Following the guidelines of the supervision, we re-examine our air pollution, waste water, waste, toxic chemicals, safety, health, fire, construction management, etc.. No violations found in the supervision.



CEO Mr. Tu and Joint supervision members



Vice president encouraging our staff on EHS issues



EHS Inspection on site

Education and prevention of the disease for employees

TSRC attaches great importance to mental and physical health of employees, providing health exams superior to or compliant with lawful regulations and doing tracking management and seminars for those with abnormality. We also provide sports venues to relieve pressure and make posters to educate correct concepts on health and safety and posters for education on health management.

On specific occupational diseases, TSRC Group educates employees the concept of safety and health, conducts training to make it habits and reduce human negligence, and arranged health exams following the law for those engaged in hazardous operations.

Over the years, not only the lawful inspection toward the operating environment, air pollution control equipment, odor and noise around factory boundary and other special environmental items, we have also added the inspection of ionizing radiation, and kept monitoring and analyzing the results to reduce environmental loading and our impact on human health.

Data of health exams and results of environment inspection becomes feedback to further strengthen and analyze for health management effectively.

According to the measured results on operating environment, TSRC Corporation needs to implement 3 special health checks toward operators-- benzene, dust and noise. The results are all "grade 2 management"¹. Among them, higher proportion of abnormal hearing found. So, to effectively manage it, we not only required the use of hearing-protecting equipment, but also took a monthly record. For anyone inspected Grade 2 management for 2 years in a row, he/she will be transferred away from noise operation area and be tracked for 2 years in a row on hearing to make sure no deterioration happens.

¹ Grade 2 management: results or tracking result of special health exam shows some or all of items abnormal, but they may not be related to occupations.



Health seminar in TSRC Corporation



Training on learning oxygen resuscitator in Shen Hua Chemical



Poster to educate CPR in TSRC Corporation



Poster to educate health issues in TSRC (Nantong)



Poster to educate serious diseases in TSRC UBE



Training and Education

In response to internationalization and competition, TSRC Group aggressively invests in education and diverse learning for employees to grow together. The policy and direction of training focused on professional skills to enhance competitiveness for future trends in the market. Based on "TSRC Internal Staff Training Approach", we make annual training plans aligned with company strategy, demand for job, laws and requirements to plan on general knowledge, professional skills, management skills and verification to achieve the goal of "lifelong learning".

In 2013, a total of 6,190 headcounts participated in internal and external training in TSRC Group, total training fees NTD8.7mil and 20 training hours per employee on average.

training hours per employee (hour/person)	Job-title	TSRC Corporation	Shen Hua Chemical	TSRC (Nantong)	TSRC-UBE	TSRC (Shanghai)	TSRC (Jinan)
By job-title category	Executives	2	13	16	9	10	0
	Middle level/Junior managers	2	44	56	66	35	0
	Non-manager Indirect employees	21	37	37	35	25	5
	Direct Employees	10	32	26	31	32	0
By gender	Male	14	37	29	35	13	3
	Female	11	29	44	33	15	2



Management training in TSRC (Shanghai)

Potential accident screening and control of safe production



Self-contained Breathing Apparatus (SCBA)



Hazardous substances training in TSRC Corporation



Traffic safety training in TSRC Corporation



Recognition calling



| Celebration for the 40th anniversary with charity activities |

TSRC is 40 years old since established by Mr. Glyn T.H. Ing in 1973. With our profession and creation, TSRC has become leader in rubber industry in Asia and hoped to create another 40 years. In 2013, we celebrate the 40th anniversary with charitable activities in Ten Drum-Clatou-Creative Park in Kaohsiung.

40 years celebration 1



40 years celebration 3



Chairman's charity donation



Chairman and CEO's speech



Dancing-- staff in Taipei office



Dancing-- staff in Gangshan factory

40 years celebration 2



40 years celebration 4

Support to the Community

- **Philanthropy**

Take active action to care for disadvantaged groups and charitable institutions

- **Support on Chemistry Education to Local Elementary schools and Local Agricultural Products**

With human resource and financial aids, TSRC sponsored Chemistry On The Go, a project providing chemical education to students in elementary school in remote areas, and supports to local agricultural products.

- **Community Involvement**

We support the local community through Manufacturers Association every year on subsidies of local citizen's water and electricity bills, on scholarship for school children, and on meals for the needed elders.

Philanthropy

“Charity Club” Set up by Employees

Under support of TSRC Employee Benefits Committee, some of employees voluntarily participate in Charity Club. In 2013, it donated supplies to schools in Orchid Island and Lishan Mountains, Eden Social Welfare Foundation, Huashan Social Welfare Foundation and Yongan organization for children protection.

Chinese New Year's dinner for the needed elders in Da-she District in Kaohsiung



Winter vests for Eden Social Welfare Foundation



Yongan organization



Drinking water machine for Ping-Deng Elementary School in LiShan Mountains.
Left: Principal Chen.



Cleaning implements to the Yongan organization in Da-liao District in Kaohsiung



TSRC's Participation in Society

In China

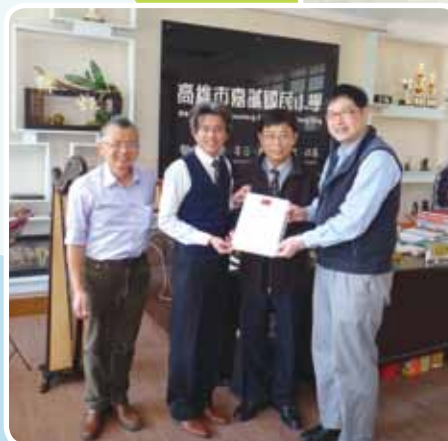
Association of Taiwan Enterprises in Nantong City founded Taiwan's Foundation for Poverty Alleviation in Nantong in 2009 for support and donations to schools, the needy families and special groups. TSRC (Shanghai), TSRC (Nantong), and TSRC-UBE (Nantong) jointly donated to the Foundation.

In Taiwan

1. Special funds for 3 elementary schools in Da-she District¹
2. Donation to Children Are Us Foundation, purchase of moon-cake made by the children there, and request of paid percussion music performance in TSRC's 40-year-old anniversary event.
3. Donation to The Association of Zhejiang Province for winter aids and scholarships.
4. TSRC Corp. donated NTD1.3mil and other supplies totally in 2013.



Thank-you card
from Da-she Elementary School



Donation to Jai-Chen Elementary School.
Second left: Principal Lin.



Donation to Guan-In Elementary School.
Left: Principal Yun.

Donation to Jai-Chen Elementary School.
Front left: Principal Liu.



Talks in Da-she Elementary School
with Principal Liu and Kaohsiung City
councilor Ms. Hsu (Leftward 4th).



Donation to the needed
students in Nantong city.

¹ Nowadays, a lot school children cannot accept government subsidy because their families own the real estate even it is with lots of loans. Since 2012, with the research of the administrative secretary Mr. Chang, the Social Care Committee in TSRC provided special funds for 3 elementary schools in Da-she District where TSRC's Kaohsiung Factory is located in to sponsor the fees for school meal, tuition or special urgent costs for needy students without the title of low-income households. 517 headcounts have been helped and TSRC restricts ourselves accepting only thank you letter in return.

Chemistry Education

Chemistry On The Go was Originated in 2011 to echo the events of International Chemistry Year, and has not finished yet. In contrast to the large-scale chemistry competition designed for elite students, a much smaller Mobile Laboratory is considered more attractive to Dr. Gao's team, Tamkang University. The Mobile Laboratory in a 3.5 ton truck loading lab ware and stage travels through remote areas in Taiwan. Through performances, exhibitions, lectures and experiments, Chemistry On The Go stimulates students' interests in chemistry.

TSRC identifies with goals of Chemistry On The Go. In 2013, TSRC continued to sponsor financially and provided 25 headcounts of employees to support those events held in Shenkeng Junior High Schools in Taipei and Da-she and Da-zou in Kaohsiung. By Leading the students to do experiments and introducing trend of chemical industries, TSRC employees had better understanding of schools and the community, and therefore motivated the teachers and the students to know the chemical industry.





Support on Local Agriculture

To support local agriculture, a part of Employee Benefits Committee's seasonal gifts to employees have becomes local fruits.



Community Involvement

TSRC supports the local community through Manufacturers Association¹ in Da-she district every year on subsidies of resident's utilities fees, scholarship for school children, meals for the needed elders, and educational fund to subsidize tuitions and English lessons in primary and secondary schools in this district.

This excess English training in Da-she, Guan-In and Jai-Chen Elementary School is funded by Manufacturers Association.



The training materials is funded by Manufacturers Association.



The English joint performances in Da-she, Guan-In and Jai-Chen Elementary School is funded by Manufacturers Association.

¹ Website of Manufacturers Association in Da-she district : http://www.dsrtg.gov.tw/p06_07.aspx?type=5

Appendix

- Assurance Statement
- Abbreviation, Full Name and Application of TSRC's product
- GRI G3.1 Content Index



▼ Assurance Statement

Assurance Statement

TUV NORD

TUV Asia Pacific Ltd. Taiwan Branch ("TUV NORD") has been commissioned by the management of TSRC Corporation ("TSRC") to carry out an independent assurance of TSRC Sustainability Report for the fiscal year 2013 ("CSR Report") against the AA1000 AS (2008), TUV Asia Pacific CSR Assurance Protocol for Assurance of Sustainability Reporting and the Global Reporting Initiative 2011 Sustainability Reporting Guidelines Version 3.1 ("GRI G3.1").

TSRC is responsible for the collection, analysis, aggregation and presentation of information within the Report. TUV NORD's responsibility is performing this work (assurance of the report) in accordance with terms of reference agreed in the scope of engagement with TSRC. The management and stakeholders of TSRC are the intended users of this statement.

The assurance engagement is based on the assumption that the data and information provided to TSRC sustainability report is complete and true.

Nature and Scope of the Assurance

The scope of the assurance, based on the AA1000 AS (2008) Assurance methodology, include the text, and data in accompanying tables, contained in this report.

TUV NORD has developed a set of protocols for the Assurance of Corporate Social Responsibility Report based on AA1000 AS (2008) and guidance provided in the Global Reporting Initiative Sustainability Reporting Guidelines (2011).

The assurance of TSRC Sustainability report for the fiscal year 2013 related to its businesses: (Taipei Head Office, Kaohsiung Factory, Gangshan Factory, and 5 Subsidiaries in China (TSRC (Shanghai) • TSRC (Jinan) • TSRC (Urumqi) • TSRC (Nantong) • Shan Hai Chemical)) includes the following:

- 1) Reporting of economic, environmental, and social indicators; the year of activities covered in the Sustainability Report is 01.2013 to 12.2013;
- 2) Information related to TSRC issues, responses, performance data, case studies and underlying systems to manage Sustainability related data and information;
- 3) Information related to TSRC adherence to inclusivity, materiality and responsiveness and stakeholder engagement;
- 4) Evaluation of the Accountability Principles (Type I) and specified performance information with a MODERATE level of Assurance, according to AA1000 AS (2008)
- 5) Verification of GRI G3.1 Application Level B+.

Assurance Methodology

TUV NORD is a licensed global assurance provider of Sustainability services, with quality, environmental, social and sustainability assurance specialists working all over the world.

Our assurance engagement was planned and carried out in accordance with the AA1000 AS (2008) and the TUV Asia Pacific CSR Assurance Protocol for Assurance of Sustainability Reporting. Assessment of TSRC adherence to inclusivity, materiality and responsiveness and stakeholder engagements was based on AA1000 AS (2008)

The Report has been evaluated and assured against the following:

- Criteria of adherence to Inclusivity, Materiality and Responsiveness
- GRI G3.1 Application Level B+

Our assurance involved the following activities:

- * Gathered objective evidence on the performance indicators as mentioned in the report.
- * Reviewed any issues raised by external parties that could be relevant to TSRC policies.
- * Reviewed expectations of local and national regulations, international standards and those of general concern to the public and/or raised by expert opinion.
- * Reviewed the documentation and records of the report contents against the GRI's G3.1 application requirements.
- * Discussed with managers and relevant staff on TSRC approach to stakeholder engagement.
- * Interviewed relevant staffs involved in sustainability management, gathering information and report preparation.
- * Reviewed key organizational developments.
- * Reviewed internal and external audit findings.
- * Reviewed supporting evidences based on the information made available in the report.
- * Sampling method was used to verify the correctness of the data.

TUV NORD

Opinion Statement

The TSRC's Sustainability report provides an appropriate view of the TSRC's CSR programs and performances during fiscal year 2013.

The economic, social and environment performance indicators as mentioned in the Sustainability report are represented appropriately. The CSR performance indicators disclosed in the report demonstrates TSRC efforts recognized by its Top Management and stakeholders.

Inclusivity: TSRC conducted the participation of all stakeholders for developing and achieving an accountable and strategic response based on the methodology of 2012 report. The participation of all stakeholders also supplements the feedback obtained from TSRC's website. In this 2013 report, TSRC demonstrated its commitment to its stakeholders. This effort has been showcased in the relevant sections of the report. The reporting systems developed by the organization to gather the required information is appropriate. However, this mechanism is less extensive; the organization is recommended to ensure that the communication to all stakeholders could be more comprehensive.

Materiality: TSRC has established related procedures at the corporate level to identify all types of issues, and the issues identified by all departments were prioritized according to the extent of impact and applicable criteria for sustainable development of the organization. For response to the materiality, the organization is recommended to establish a clear link between material aspects and their related performance indicators.

Responsiveness: In response to the expectations and perception of its stakeholders, TSRC committed itself to implement the CSR practice and demonstrated it through the related performance information captured in the CSR Report. For future reports, the organization is recommended to (i) Document more in detailed the other risks, implications and opportunities related to climate change in the economic section of the report, (ii) Provide more comparative performance indicators to show the outcome of the strategies implemented.

Reliability and accuracy of performance information

In accordance to Type I, Moderate level of assurance requirements, it can be concluded that the contents mentioned in the sustainability report is reliable. TSRC has a robust management system for obtaining objective evidences and data for the reporting in TSRC Sustainability Report.

Statement of Independence and Competence

TUV NORD Group is the world's leader in inspection, testing and verification, operating in more than 70 countries throughout the world and providing services which includes management systems and product certification; quality, environmental, social and ethical auditing and training; environmental; social responsibility and sustainability report assurance.

TUV Asia Pacific Ltd. Taiwan Branch, affirms its independence from TSRC and confirms that there are no conflicts of interest with the organization or any of its subsidiaries and stakeholders when performing the assurance of the Sustainability Report. TUV Asia Pacific Ltd. Taiwan Branch was not involved in any manner with TSRC, when the latter was preparing the Sustainability report.

The assurance team consists of well experienced, qualified and registered Quality - ISO 9001, EMS - ISO 14001, GRI - ISO 14064-1, OHSAS 18001, SA 8000 Lead Auditors and AA1000 AS (2008) Accountability trained CSAP - Certified Sustainability Assurance Practitioner. The team based on their qualifications, extensive knowledge and experience of the industry provided the much required expertise for this assignment.

Jack Yeh
General Manager
TUV Asia Pacific Ltd., Taiwan Branch



Issue Date : 2014-05-13
TUV Asia Pacific Ltd., Taiwan Branch
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▼ Abbreviation, Full Name and Application of TSRC's Product

Abbreviation of TSRC's Product	Full Name in English	Application
SRD Product		
1.ESBR	Emulsion Styrene-Butadiene Rubber	Automotive tires, shoe soles , conveyor belts, rubber belts, military caterpillar and tow trucks tracks, sports equipment, toys, etc.
2.SSBR	Solution Styrene-Butadiene Rubber	Energy-conserving(low rolling resistance), high performance, and all-season tires, etc.
3.BR	PolyButadiene Rubber	In the production of plastic modification for HIPS and high-speed radial tires, etc.
4.NBR	Nitrile-Butadiene Rubber	Oil hoses, oil seals, rollers, industrial gaskets, belts, shoe soles, rubber plastic foam sheet, conveyor belts, etc.
AMD Product		
5.TPE	Thermoplastic Elastomer	The Taipol® TPE, with the inclusion of SBS, SIS and SEBS
5.1 SBS	Styrene-Butadiene-Styrene Copolymer	With the mixed properties of plastics and rubber, thermoplastic TPE is widely used in high-grade shoe soles, asphalt modification, plastic modification, and adhesive, etc. The Taipol® TPE, with the inclusion of SBS, SIS and SEBS can meet the needs of different clients in different fields
5.2 SIS	Styrene-Isoprene-Styrene Copolymer	
5.3 SEBS	Styrene-Ethylene-Butylene-Styrene Copolymer	
6. Compounds	Thermoplastic TPR (Thermo-plastic Rubber)	TSRC launched T-BLEND® product, which is blended material with SBS or SEBS as major ingredients It boasts a number of advantages including good tactile texture, customizable hardness, excellent weather resistance, low temperature endurance, and thermal-plasticity. Mainly used in daily applicant parts, super-soft gels, low-voltage, flame retardant halogen-free cable products, SEBS foaming agents, window, doors, and refrigerator seals, flexible films, etc.

Sources : <http://www.tsrc.com.tw>



▼ GRI G3.1 Content Index

Profile Disclosure		Disclosure ● Full Disclosure ○ Partial Disclosure ○ Non-disclosure	Page/ Direct answer
Description			
Strategy and Analysis	1.1	Statement from the most senior decision maker of the organization.	● 6
	1.2	Description of key impacts, risks, and opportunities.	● 6
Organizational Profile	2.1	Name of the organization.	● 1
	2.2	Primary brands, products, and/or services	● 14
	2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries and joint ventures.	● 14
	2.4	Location of organization's headquarters	● 1
	2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	● 1,14
	2.6	Nature of ownership and legal form	● 14
	2.7	Markets served (including geographic breakdown sectors served, and types of customers/beneficiaries).	● 14
	2.8	Scale of the reporting organization	● 32,15
	2.9	Significant changes during the reporting period regarding size, structure, or ownership	● No significant changes

Organizational Profile	2.10	Awards received in the reporting period	●	16
Report parameters	3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	●	2
	3.2	Date of most recent previous report	●	2
	3.3	Reporting cycle	●	2
	3.4	Contact point for questions regarding the report or its contents.	●	1
	3.5	Process for defining report content	●	11
	3.6	Boundary of the report. See GRI Boundary Protocol for further guidance	●	2
	3.7	State any specific limitations on the scope or boundary of the report	●	2
	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	●	2
	3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	●	2
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	●	2
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	●	2
	3.12	Table identifying the location of the Standard Disclosures in the report.	●	49
	3.13	Policy and current practice with regard to seeking external assurance for the report.	●	2



Governance, Commitments, and Engagement	4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	●	16
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer	●	17
	4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	●	17
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	●	11
	4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	●	17
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	●	17
	4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	●	17
	4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	●	4,19,34
	4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	●	10
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	●	16

Governance, Commitments, and Engagement	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	●	16
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	●	16
	4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	●	16
	4.14	List of stakeholder groups engaged by the organization.	●	11
	4.15	Basis for identification and selection of stakeholders with whom to engage.	●	11
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	●	11
	4.17	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.	●	11
Economic Performance Indicators		Management Approach		5
Economic performance	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	●	15
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	○	
	EC3	Coverage of the organization's defined benefit plan obligations.	●	33
	EC4	Significant financial assistance received from government.	●	None.



Market presence	EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	●	33
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	●	29
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	●	32
Indirect economic impacts	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	○	
	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	●	32
Environmental Performance Indicators		Management Approach		19
Materials	EN1	Materials used by weight or volume.	○	
	EN2	Percentage of materials used that are recycled input materials.	○	
Energy	EN3	Direct energy consumption by primary energy source.	●	24
	EN4	Indirect energy consumption by primary source.	●	25
	EN5	Energy saved due to conservation and efficiency improvements.	●	27
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	●	27
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	●	27

Water	EN8	Total water withdrawal by source.	○	
	EN9	Water sources significantly affected by withdrawal of water.	●	25
	EN10	Percentage and total volume of water recycled and reused.	●	26
Biodiversity	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	○	
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	○	
	EN13	Habitats protected or restored.	●	30
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	●	30
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	●	30
Emissions, effluents and waste	EN16	Total direct and indirect greenhouse gas emissions by weight.	●	23
	EN17	Other relevant indirect greenhouse gas emissions by weight.	●	23
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	●	23,25
	EN19	Emissions of ozone-depleting substances by weight.	●	No ozone-depleting substances emitted in TSRC production lines.
	EN20	NOx, SOx, and other significant air emissions by type and weight.	●	30
	EN21	Total water discharge by quality and destination.	●	25
	EN22	Total weight of waste by type and disposal method.	●	29



Emissions, effluents and waste	EN23	Total number and volume of significant spills.	●	No significant spills happened in the reporting year.
	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.	●	30
	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.	●	30
Products and services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	○	
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	○	
Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations. °	●	30
Transport	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	●	29
Overall	EN30	Total environmental protection expenditures and investments by type	●	30
Labor Practices		Management Approach	●	4
Employment	LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	○	
	LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	○	
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	●	33

Employment	LA15	Return to work and retention rates after parental leave, by gender.	○	
Labor/management relations	LA4	Percentage of employees covered by collective bargaining agreements.	○	
	LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	○	
Occupational health and safety	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.	●	35
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	●	36
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	●	38
	LA9	Health and safety topics covered in formal agreements with trade unions.	●	35
Training and education	LA10	Average hours of training per year per employee by gender, and by employee category.	●	39
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	●	39
	LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	●	32
Diversity and equal opportunity	LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	○	
Equal remuneration for women and men	LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	○	

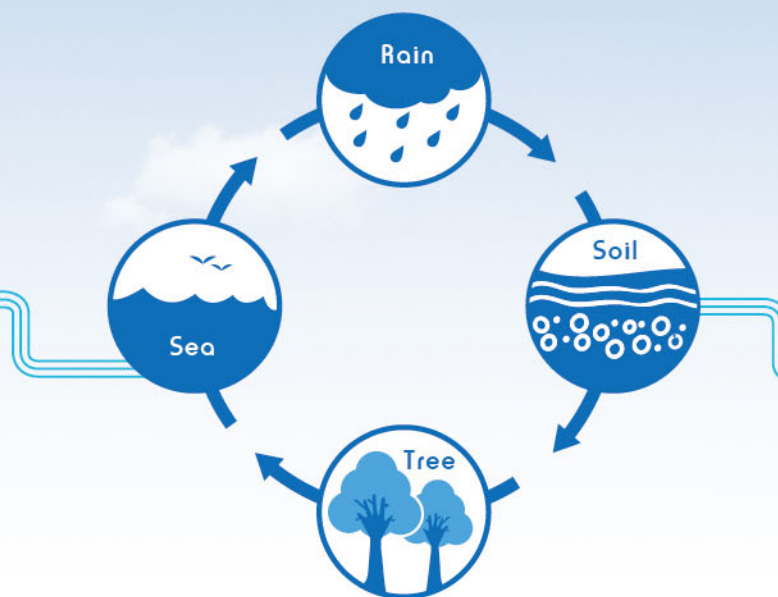


Human Rights		Management Approach		4
Investment and procurement practices	HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	○	
	HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	○	
	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.	○○	32
Non-discrimination	HR4	Total number of incidents of discrimination and actions taken.	●	32
Freedom of association and collective bargaining	HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	○○	33
Child labor	HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	●	32
Forced and compulsory labor	HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor.	○○	32
Security practices	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	○	
Indigenous rights	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	●	32
Assessment	HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	○	

Remediation	HR11	Number of grievances related to human rights filed, addressed and resolved through formal	●	32
Society		Management Approach		4
Local communities	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	●	32
	SO9	Operations with significant potential or actual negative impacts on local communities.	●	32
	SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	●	41
Corruption	SO2	Percentage and total number of business units analyzed for risks related to corruption.	○	
	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	●	17
	SO4	Actions taken in response to incidents of corruption.	○	
Public policy	SO5	Public policy positions and participation in public policy development and lobbying.	○	
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	●	Due to foreign ownership in the stock structure, no political donations allowed according to the law.
Anti-competitive behavior	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	○	
Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	○	



Product Responsibility		Management Approach		19
Customer health and safety	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	●	19
	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.	●	21
Product and service labelling	PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	●	20
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	●	21
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	●	21
Marketing communications	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	○	
	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.	●	21
Customer privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	●	21
Compliance	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	○	



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Design Concept :

Water, starting from raindrops, flowing into streams, soil and trees, converges to streams, then oceans. While ground water is evaporated to rising steam, it becomes a circle, with no beginning and no end.