



彩虹集團新能源股份有限公司 IRICO GROUP NEW ENERGY COMPANY LIMITED*


(A joint stock company incorporated in the People's Republic of China with limited liability)
(Stock Code: 0438)

2016

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



* For identification purposes only



This environmental, social and governance (“**ESG**”) report (the “**Report**”) was prepared to present the performance of corporate social responsibility and environmental protection of IRICO Group New Energy Company Limited* (the “**Company**”) and its subsidiaries (collectively, the “**Group**”) for the year from 1 January 2016 to 31 December 2016. The Report was prepared with reference to the Environmental, Social and Governance Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

The board of directors (the “**Board**”) of the Company has overall responsibility for the Company’s ESG strategy and reporting. In line with the Corporate Governance Code, the Board is responsible for evaluating and determining the Company’s ESG-related risks, and ensuring that appropriate and effective ESG risk management and internal control systems are in place. The management of the Company confirm to the Board that these systems are in place and effective. Please see the section headed “Corporate Governance Report – Control mechanism” in the 2016 annual report of the Company for more details.

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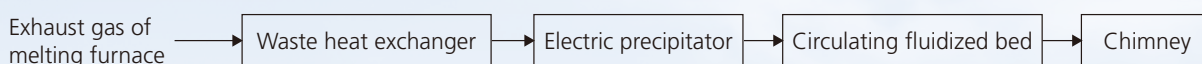
Part I Environmental

Environmental Emissions

The Group strictly complies with national and local laws and regulations on environmental protection, implements stringent management and control of emissions of four types of pollutants (wastewater, exhaust gas, waste and noise) as required by the state, and continuously introduces and develops new technologies and new processes to reduce emission of pollutants.

The Group's main production facilities are based in Xianyang, Shaanxi and Hefei, Anhui in the People's Republic of China (the "PRC"). The main pollutant produced in the production process is the exhaust gas discharged from the photovoltaic furnace. In 2016, the Company achieved up-to-standard emission.

The chart below illustrates the process flow of major furnace exhaust gas treatment of the Group:



Ever since the commencement of production, the Group has been focusing on environmental protection and strictly followed the following relevant applicable environmental rules and standards:

Type	Standards/Rules
Exhaust gas	Air Pollutant Release Standard on Sheet Glass (《平板玻璃大氣污染物排放標準》) (GB26453-2011)
Wastewater	Integrated Wastewater Discharge Standard (《污水綜合排放標準》) (GB8978-1996) and Level II standard under the Integrated Wastewater Discharge Standard for the Yellow River Basin (Shaanxi Section) (《黃河流域(陝西段)污水綜合排放標準》) (DB 61/0224-2011)
Noise	Emission Standard for Industrial Enterprises Noise at Boundary (《工業企業廠界環境噪聲排放標準》) (GB12348-2008)

In 2016, the Group strictly complied with the relevant laws and regulations that have a significant impact on the Group in terms of air and greenhouse gas emissions, emissions into soil and water, and generation of hazardous and harmless pollutants.

The Group will further reduce its future emissions by continuing to streamline its production processes and upgrade existing waste treatment processes.

Part I Environmental (Continued)

Use of Resources

The Group has reduced the energy consumption in the production and operation processes through continued enhancement of its effective energy-saving technology, endeavoring to achieve sustainable development. At the same time, the Group has also developed the environmental awareness of staff and promoted the green office environment by way of providing training and education to its staff, thus reducing the impact of the Company's management and daily operations on environment.

The Group mainly consumes water, electricity, gas and packaging materials during production, storage, packaging and transportation. The Group has formulated relevant management systems at all levels of management to strictly control and reduce the consumption of water, electricity and gas. In addition, the Group reduces the use of packaging materials and avoids waste by reducing the backlog of inventory, avoiding excessive requisition of materials and enhancing the recovery management of packing bags.

Environment and Natural Resources

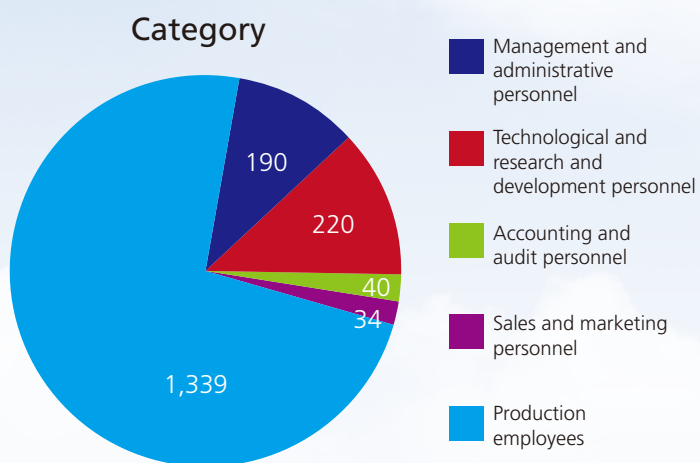
In response to the government's call for environmental protection and energy conservation, the Group continuously implements green office practices, such measures include the use of energy-saving lighting and recycled paper, reduction of paper, reduction of energy consumption through closure of idle lighting, computers and electrical appliances, and replacement of business trips with telephone conferences.

Part II Social

Employment and Labour Practices

Employment

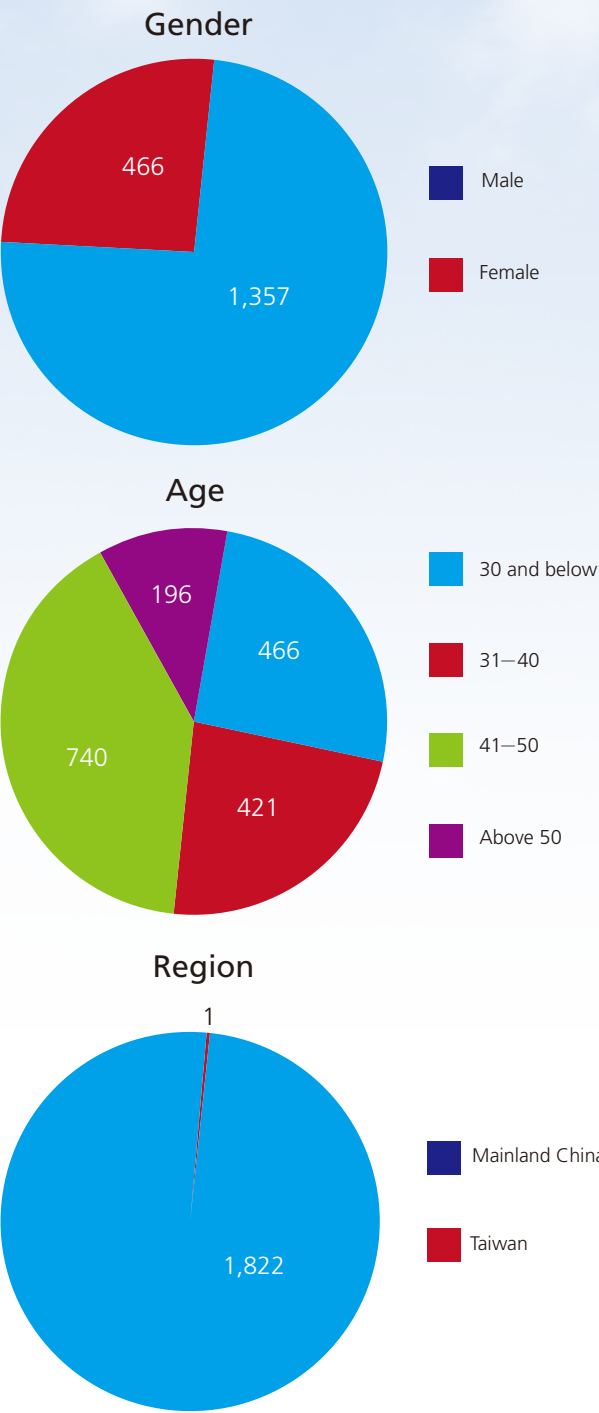
As at 31 December 2016, the Group had 1,823* incumbent employees, of whom approximately 10.4% were management and administrative personnel, 12.1% were technological and research and development personnel, 2.2% were accounting and audit personnel, 1.9% were sales and marketing personnel, and 73.4% were production employees. The total number, composition and turnover ratio of employees of the Group are described as follows:



Part II Social (Continued)

Employment and Labour Practices (Continued)

Employment (Continued)

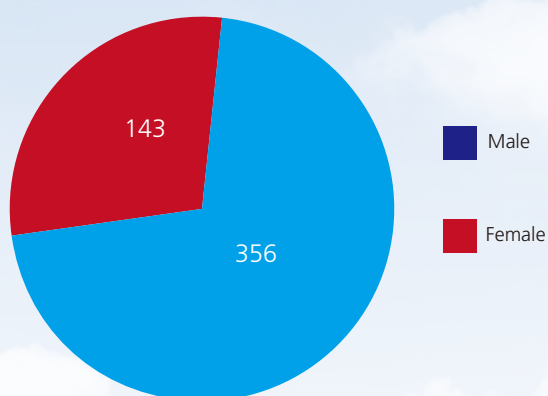


Part II Social (Continued)

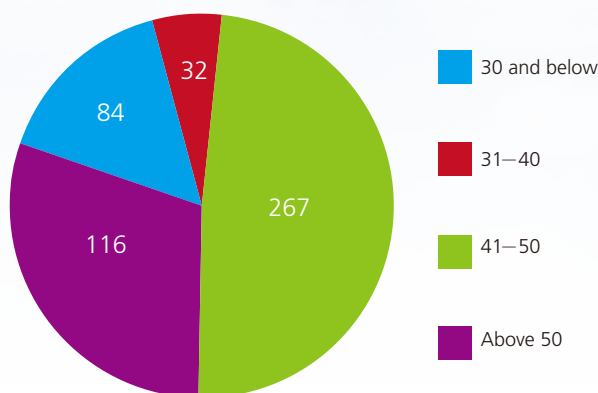
Employment and Labour Practices (Continued)

Employment (Continued)

Employee turnover ratio
by gender



Employee turnover ratio
by age



The Company's employment and remuneration policies remain unchanged as compared with those as described in the prospectus of the Company dated 8 December 2004. The Group has set up a perfect benefits system suitable for corporate development and employee promotion, and developed a remuneration management system and a plan on continued improvement of remuneration. In addition, in accordance with national provisions, the Group purchases relevant social security and provident fund and provides various benefits for employees including paid leave and holidays, home leave, high temperature subsidy and heating subsidy, to ensure full enthusiasm of the Group's employees for work and high quality and reliability of products and services.

In 2016, the Group has complied with relevant laws and regulations with material effects on the Group in terms of recruitment and promotion, working hour, holiday, equal opportunity, anti-discrimination and other benefits.

* Excluding service dispatch workers

Part II Social (Continued)

Development and Training

The Company adheres to the staff training concept focusing on talents development, and provides training opportunities for employees and creates favorable talents selection and employment environment to give full play to the role of talents. The Company continuously strengthens the construction of a training system for all staff and prepares and issues a staff training plan on a yearly basis. All units organise regular internal and external trainings in accordance with the training plan and the trainings cover management skills, professional regulations, specific skills and other aspects, laying a foundation for better discharge of duties and better serving the operation and development of the Company. The Company also encourages employees to learn by themselves to support their personal development.

Total training hours calculated by employee category	Hours
Senior management	66
Management personnel	727
Technological personnel	258
General employee	8,102

Occupational Health and Safety

The Group is committed to guaranteeing the health and safety of its employees, and has established the Company's occupational health and safety management system. Each year, a qualified third party will be engaged to conduct external audit to ensure the continued and effective operation of the system. While continuously improving the occupational health and safety management system, the Group has developed a systematic safety management system and a number of emergency plans. At ordinary times, it ensures safety and health of employees through safety checks and emergency drills. The Company also posts safety warning signs at the workplaces to remind employees to wear personal protective equipment all the time to prevent safety accidents. The Group organises a number of training courses on occupational health and safety every year to enhance the safety awareness of employees. The Group regularly inspects and evaluates the working environment and makes timely improvements.

Health and safety performance	Performance
Number of work-related casualties	0
Number of loss days due to work injury	0
Number of accidents	0

In 2016, the occurrence rate of various safety accidents of the Group was zero. The Group strictly abided by the relevant laws and regulations that had a significant impact on the Group in respect of providing safe working environment and safeguarding employees from occupational hazards.

Part II Social (Continued)

Labour Standards

The Group has clear requirements on the age of recruits and examines applicants' identity information in recruitment, and prohibits child labours. Meanwhile, the Group creates a safe and healthy working environment, provides labour protection, pays reasonable remuneration and offers various benefits for employees, and prohibits forced labour. The union organisation of the Group also plays an active role in guaranteeing employees' interests.

Since our listing, the Group has never used any child labour or forced any employees to work. The Company has complied with the relevant laws and regulations.

Part III Production and Operation

Supply Chain Management

The Group follows the principles of openness, fairness and transparency and conducts online open bidding and auction through the purchasing management system based on the conditions in respect of price, quality, cost, delivery, after-sale services, etc. The Group will monitor quality on a long-term basis and carry out regular review on all suppliers and random checks on different suppliers to secure sustainable supply of quality materials and services.

The Investment and Operation Department, as the competent department of purchase management of the Company, is responsible for:

- (I) Establishment of purchase management system of the Company;
- (II) Management of and instructions on purchase of all departments, and purchase analysis;
- (III) Participation in tender, negotiation and supervision for purchase of bulk goods of all departments.

All departments shall be responsible for the implementation and management of their own purchase and the major duties are as follows:

- (I) Implementation of various purchase management systems of the Company;
- (II) Preparation of their own purchase management system, establishment of goods purchase policy, and engagement in purchase tender, negotiation, contract signing and goods management;
- (III) Management of suppliers' files, quantitative evaluation and management of suppliers and prevention of purchase risks.

Geographical distribution	Number of suppliers
PRC	174
Taiwan	1
Netherlands	1

Purchase Activities Management

- (I) Purchase shall be carried out by way of public tender, online bidding, bid invitation and enquiry, competitive negotiation, etc. in the principle of openness and fairness. Tender discussion can be adopted for single purchase source and businesses that shall be kept confidential. The specific implementation shall be subject to the relevant provisions under the Measures for Contract Review and Tender Management of IRICO Group New Energy Company Limited.
- (II) In principle, purchase pricing shall be determined with reference to the price published on industry websites with certain influence, industrial periodicals, etc. or the same production line, same standards and same quality information of goods to be purchased.

Part III Production and Operation (Continued)

Supply Chain Management (*Continued*)

- (III) All departments shall conduct balanced management for purchase, transportation, loading and unloading, inspection, warehousing and other aspects of materials to prevent out of stock or overstock, and shall prepare appropriate provisions on management of purchase, inventory, and receipt and release of goods.
- (IV) All departments shall establish purchase information management accounts including same production line, same standards and same quality information of goods (purchase information of the department concerned, purchase prices of peers, information on supply to other customers by suppliers, etc.); inventory accounts (including quantity of inventory, funds, monthly average consumption, purchase cycle, spare materials, spare installed capacity to be increased, etc.); goods arrival information accounts (including contract order, quantity of goods arrived, quantity of goods on the way, quantity of goods to be received, etc.).
- (V) The purchase of bulk raw materials shall be conducted in the principle of centralised purchase and a contract shall be signed. In principle, an agreement shall be entered into with the qualified suppliers on a yearly basis. During the term of agreement, an order notice (containing price, quantity, specification and model, time of delivery, etc.) shall be issued to the winning qualified supplier according to the results of each tender, and the winning supplier shall confirm and give a written receipt as a supplement to the agreement.

Product Liability

The Company has adopted a two-tier management system for product quality management and control. The Company has set up a technical and quality department which is responsible for macro management and control of quality and for coordinating and addressing major or cross-business unit user and production line quality issues. Each subsidiary of the Company has set up a technical and quality management department, responsible for addressing issues concerning the Company's product users and production line quality.

The Company and each of its subsidiaries have developed management systems in respect of materials, production techniques, quality information, quality incidents, intellectual property rights and product identification to standardize their respective management procedures. Each subsidiary of the Company has developed sound technical documents and operational standards covering every process of its production activities from acceptance of raw materials to delivery of finished products, and established a reliable product process and ex-factory inspection system in accordance with users' requirements and national standards. The Company and its subsidiaries have established production site process management and product quality inspection systems in place to ensure that the whole process of product manufacturing is in compliance with required standards.

The Company has user service procedures in place. It gains understanding of users' demand through product tracing, user interview, user satisfaction survey, based on which the quality of products is improved. In addition, the Company also has set up supplier management procedures and ensures the quality of raw material procurement of the Company through a comprehensive and sound supplier evaluation system.

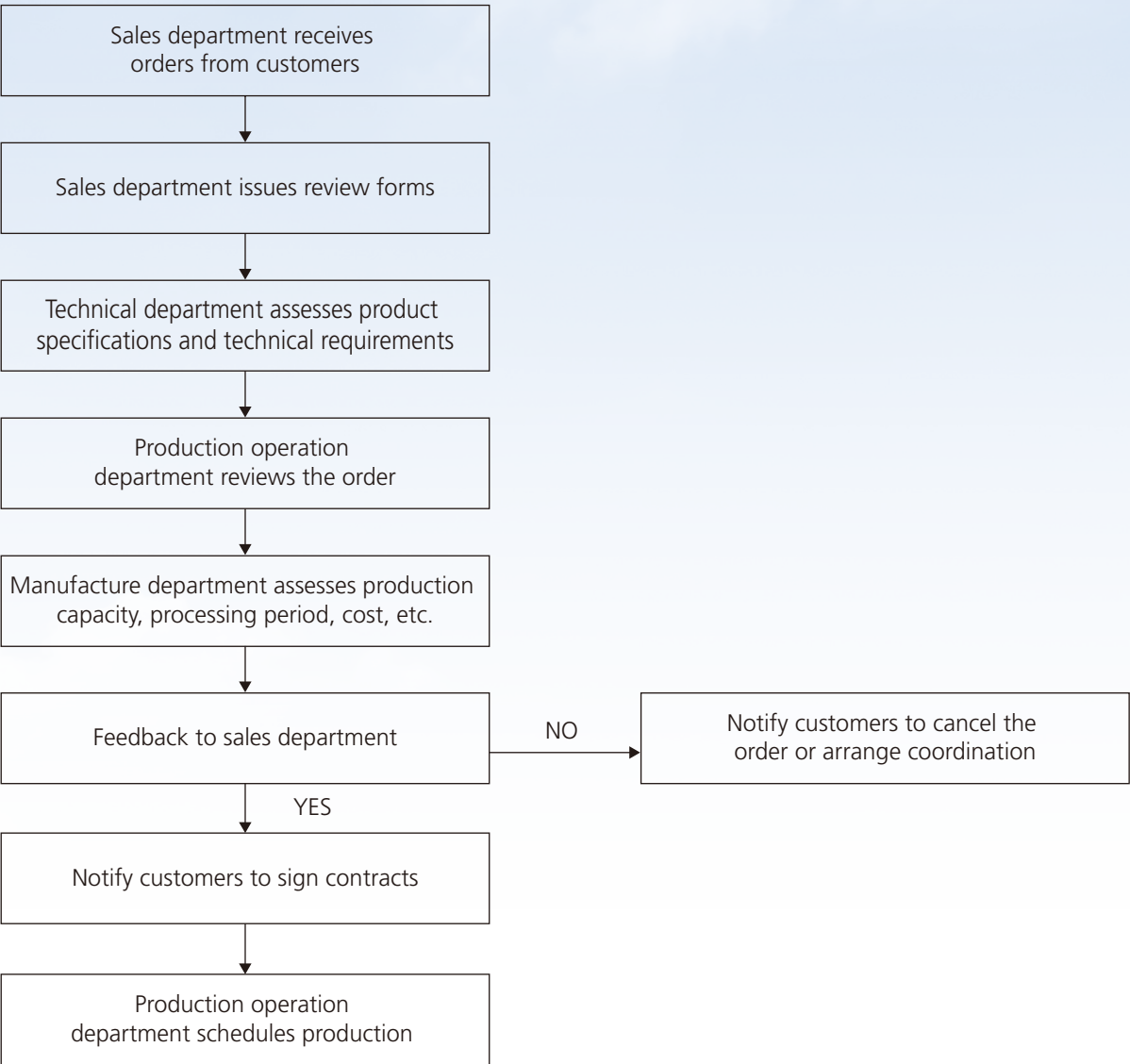
The Company has passed ISO9000 quality system certification and ensures continuing improvement of its quality system through internal audit, management review, third-party supervision and audit, so as to lay a foundation for the enhancement of product quality.

Part III Production and Operation (Continued)

Product Liability (Continued)

The quality control flow charts of the Company are shown in the Chart 1, Chart 2 and Chart 3 below.

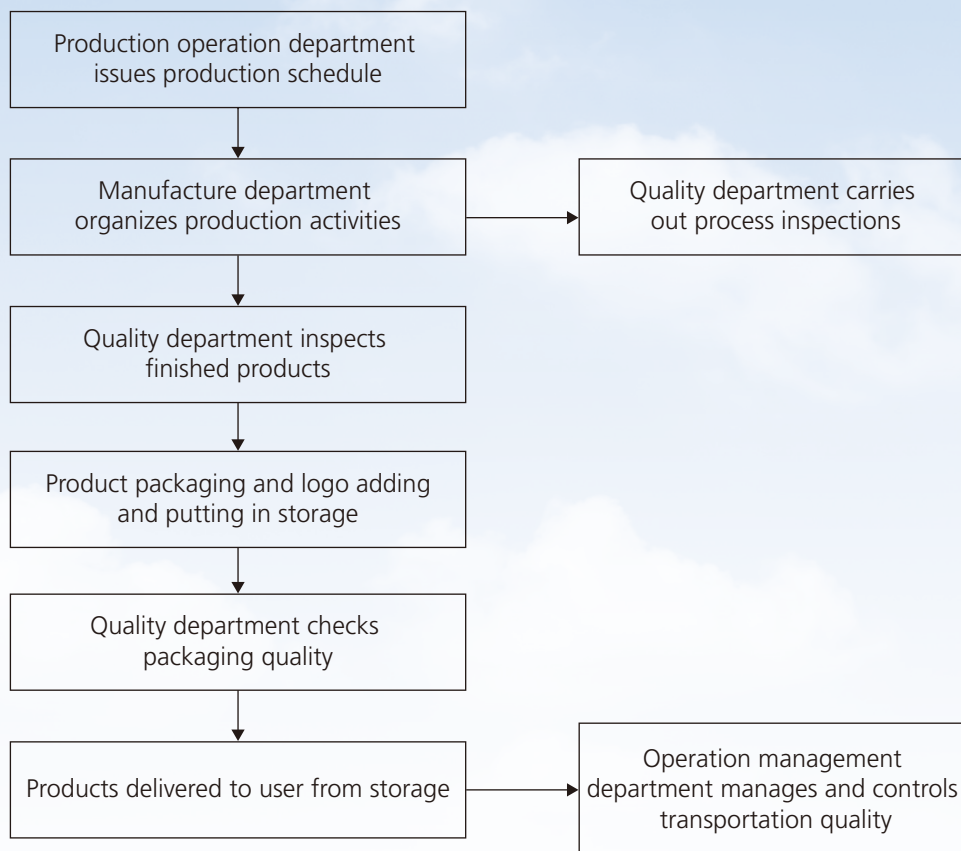
Chart 1: Contract review process



Part III Production and Operation (Continued)

Product Liability (Continued)

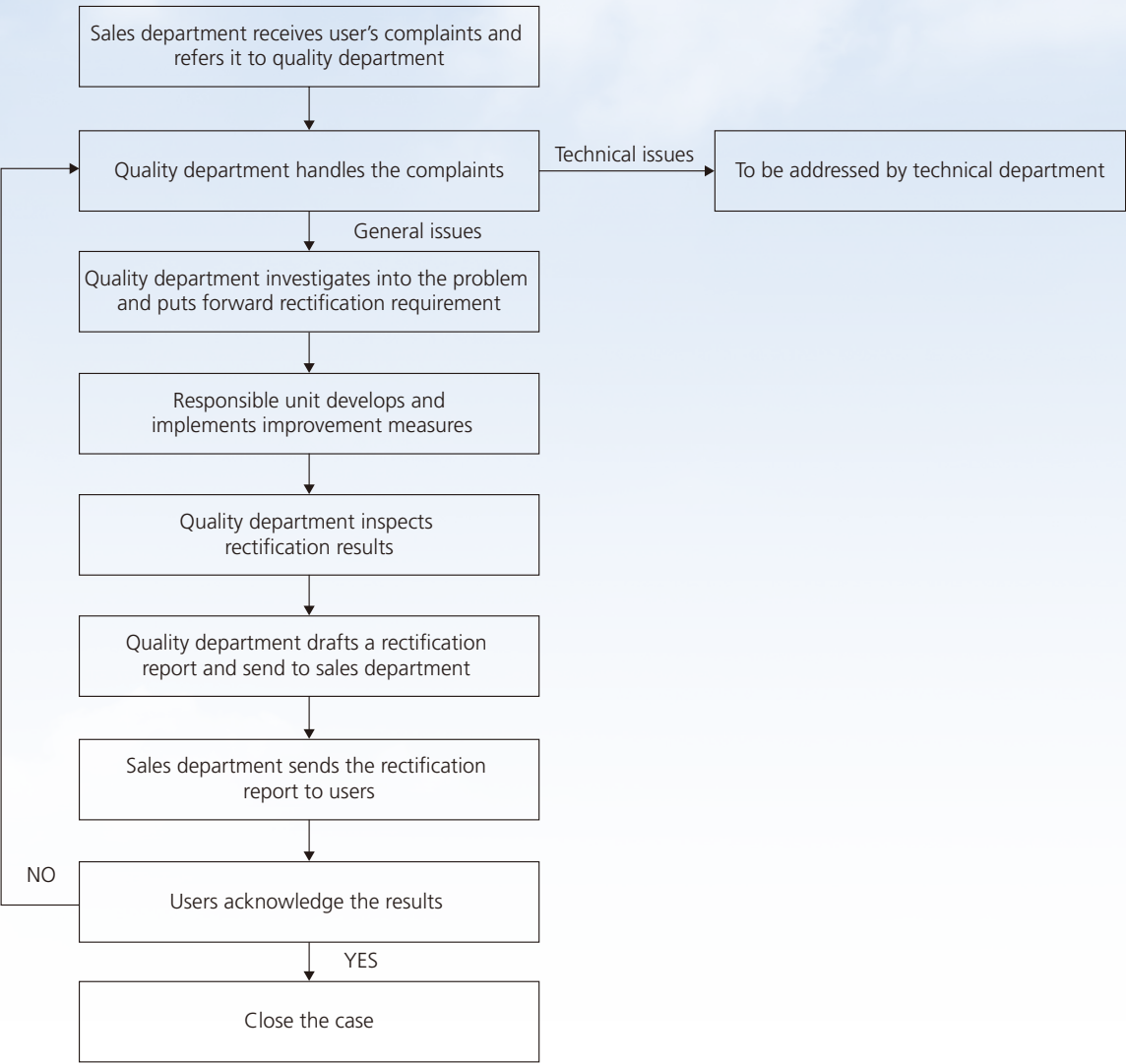
Chart 2: Flow chart for production and delivery of products



Part III Production and Operation (Continued)

Product Liability (Continued)

Chart 3: Flow chart for handling user's complaints



Part III Production and Operation (Continued)

Anti-corruption:

The Company places great emphasis on anti-corruption and firmly fights against any form of corruption by incorporating the practices of anti-corruption and anti-graft into its daily production and operation activities. In particular, for tender and procurement and other activities that are prone to corruption, the Company has formulated the Supervision and Management Measures for Tendering and Bidding Activities and engaged full-time and part-time supervisors to oversee anti-corruption work.

The Company emphasizes anti-corruption publicity and education. Anti-corruption warning sessions are held on a regular basis and persons holding key positions in the Company are required to enter into anti-corruption responsibility statements with the Company. By this way, the Company seeks to incorporate the concept of anti-graft and anti-corruption into its business philosophy and make it the cornerstone for fair competition and integrity-based operation.

As at the end of 2016, neither the Company nor any of its subsidiaries was involved in any corruption or bribery case.

Social Responsibility:

The Company is passionate about public welfare undertakings and has held a variety of volunteer service activities such as “Going Out of Factory to Serve the Community”, “Earth Hour” and “Serving at Social Welfare Homes” to serve local communities and disadvantaged groups. Furthermore, the Company launched a one-to-one targeted poverty alleviation program with Dongzhou Children’s Village, Sanyuan County and held the activities for joint construction of “beautiful village and civilized homeland”. Volunteers from the Company went to the village to offer services, raised donations and purchased materials urgently needed for the village, demonstrating the sense of social responsibility and the civic-minded image of the Company as a state-owned key enterprise. In December 2016, The Company received the “Outstanding Organization Award” jointly granted by the Central Committee of the Communist Youth League of China and the Chinese Young Volunteers Association at the 11th Chinese Young Volunteers Awards.

