



Create Value For

Customers, Employees, Shareholders And The Society

ANSTEEL GROUP CORPORATION
Sustainability Report **2011**



About the Report

Scope of the Report

With Ansteel Group Corporation as the subject, the report covers Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. as well as their affiliated entities. The report discloses the management issues of social responsibility implementation and sustainable development as well as operational performance of Ansteel Group Corporation. The data included in the report is as of December 31, 2011. With a view to familiarizing stakeholders with the progress in terms of social responsibility implementation and sustainable development of Ansteel Group Corporation, this report discloses the actual data of the past 5 years. This report is an annual report.

Main Referenced Standards of the Report

Guiding Opinions on the Implementation of Social Responsibility of State-owned Enterprises Supervised by the Central Government issued by State-owned Assets Supervision and Administration Commission of the State Council (SASAC).

Guidelines on Sustainable Development Report (2006) issued by Global Reporting Initiative (GRI).

Preparation Guidelines of Social Responsibility Report of Chinese Enterprises (CASS-CSR2.0) issued by Chinese Academy of Social Sciences.

Guidelines on Social Responsibility of Chinese Industrial Enterprises and Industrial Associations (GSRI-CHINA2.0) issued by China Federation of Industrial Economics.

ISO26000 published by International Organization for Standardization.

Quality Assurance of the Report

The financial data included in this report conforms to *Accounting Standards for Enterprises* and relevant accounting systems promulgated by the government and is subject to auditing in accordance with Internal Audit Standards of China, thus being a real indicator of financial index and operational conditions of the Corporation. The financial data in the report is in the unit of CNY unless otherwise stipulated. The report has been internally audited and a grading institute of social responsibility report has been invited to give advice and comments on the report, which ensures the authenticity, accuracy and completeness of the report.

Access to the Report

This report will be published in two forms: print and online, and the online report will be available at the Ansteel Group Corporation's website (<http://www.ansteelgroup.com>).

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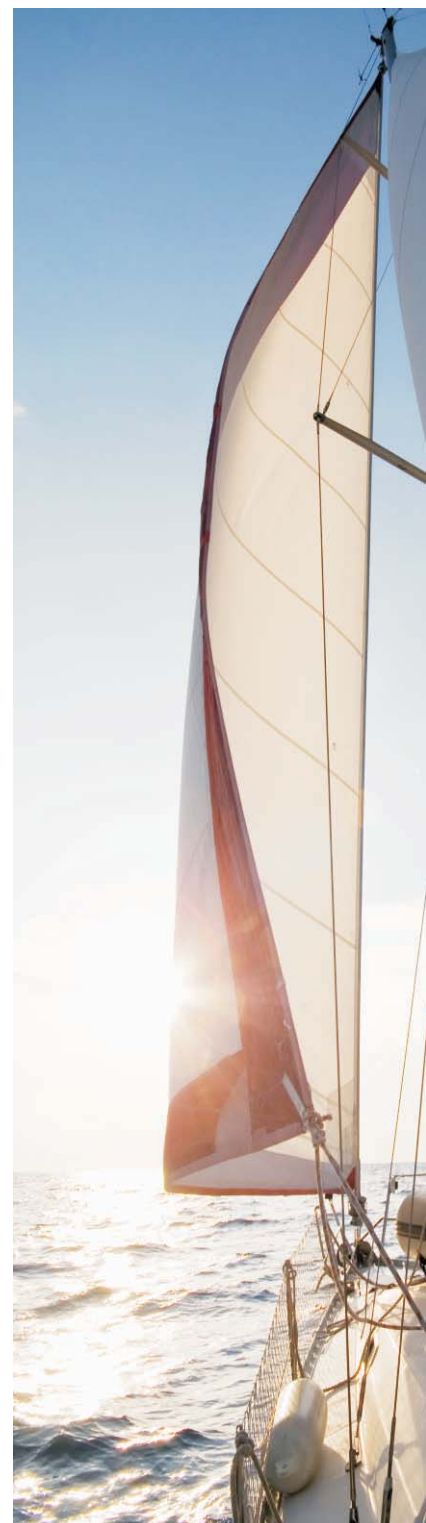
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President's Message



Zhang Xiaogang, Secretary of Party Committee & President of Ansteel Group Corporation

In 2011, Ansteel Group Corporation encountered the most rigorous adversities and challenges ever since the global financial crisis. Confronted with the grave asperities, Ansteel Group Corporation took advantage of the reorganization and consolidation as a golden opportunity, deepened reform and innovation, optimized resource allocation, brought cooperation into full play, maintain commitment to innovation, practicality, endeavor and dedication, and improved in an all-round manner the overall capability of fulfilling social responsibilities, thus ensuring a good start for the execution of the Twelfth 5-year Plan.

The overall competitiveness of Ansteel Group Corporation further improved in 2011. Its domestic and overseas strategic plans approached perfection as times went by. In China, the reorganization and consolidation between Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd.

made substantial progress, and the risk of second cash option of Pangang Group Steel Vanadium & Titanium Co., Ltd was successfully averted by virtue of asset replacement. The plan of reorganization with Fujian Sangang (Group) LLC was approved by the Ministry of Industry and Information Technology, and the projects of iron and steel bases along the coast of southeast Fujian province were listed into the Twelfth Five-year Plan of the Steel Industry. The comprehensive utilization project of vanadium & titanium resources in Xichang of Sichuan province was completed and started operation. As for business overseas, Ansteel Group Corporation, together with Stemcor, established Ansteel Holdings (UK) Ltd which bought two-third stake in USS Processing Center. Ansteel Group Corporation also jointly bought 15% of the stake in CBMM together with four other companies including CITIC Limited. New achievements were made in technological renovation and won 11 awards for scientific and technological progress made in the country and in the industry as well as the World Steel Association 2011's Innovation Award.

In 2011, Ansteel Group Corporation stuck unswervingly to environmentally-friendly development and made great efforts in improving the Corporation's social and environmental benefits. Power generation capacity of gas-fired power generation project of Chaoyang Anling Iron & Steel Co., Ltd and Bayuquan Iron and Steel Base increased by 90,000 kilowatts. The desulfurization capacity of Anshan and Bayuquan Iron and Steel Bases increased by more than 9000 tons in a year, and reconstructed equipment of distillation of salt by means of coking desulfurization and decyanation waste liquid was put into operation. Exhaust fans of coal dust of the furnaces in Bayuquan Iron and Steel Base were transformed to be capable of frequency conversion, and the transformed machine set was the first of the energy performance contracting projects to be put into operation whose power-saving rate was 47%. The estimated power-saving rate of the frequency conversion project of

combustion promoting fans of the new No.4 furnace in the headquarters of Ansteel Group Corporation was 30%. Ansteel Group Corporation became one of the two steel companies that were eligible for implementing energy performance contracting projects and applying to the Ministry of Finance for financial reward. Ansteel Group Corporation was awarded the honorary title of "Excellent State-owned Enterprise Supervised by the Central Government and boasting remarkable energy-saving and emission reduction in the Eleventh 5-year Plan period" launched by SASAC.

Ansteel Group Corporation made new achievements in building spiritual civilization and enterprise culture in 2011. Guo Mingyi, an employee of Ansteel Group Corporation, was awarded as the national model of morality and the national model of work ethic for workers. Hu Jintao, General Secretary of the Communist Party of China, remarked that Mr. Guo, who had learned from Lei Feng, carried forward the spirit of Lei Feng, devoted himself to work and was ready to help others, was a model of morality of the new era and we all should learn from him.

2012 is an important year for the implementation of the Twelfth 5-year strategic plan when Ansteel Group Corporation will continue to implement the Scientific outlook on development, promote reform and renovation, reinvigorate competitiveness, adhere to human-oriented policies, boost low-carbon and environmentally friendly development, fortify the Corporation's development momentum, increase the economic, environmental and social benefits, implement the Corporation's mission of building a powerful country by developing steel industry and create value for customers, employees, shareholders and the society, and make more contributions to the establishment of a resource-efficient and environmentally friendly society.



Profile

Profile of Ansteel Group Corporation
Social Responsibility and Sustainable Development

Profile of Ansteel Group Corporation

Ansteel Group Corporation was established through the reorganization of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. in May 2010. Hailed as the “cradle and the oldest son of the Chinese steel industry”, Anshan Iron and Steel Group Corporation was the first steel conglomerate whose production was resumed and the first steel production base that was built after the founding of the People’s Republic of China. Pangang Group Company Ltd. is China’s largest and the world’s second largest vanadium production company as well as the China’s largest production base of titanium raw material and an important production base of titanium dioxide and steel & seamless steel tube used in railway. Ansteel Group Corporation has now evolved into a cross-regional and multi-base internationalized iron & steel company with a sound layout in China and the greatest resource advantage after reorganization. Ansteel Group Corporation owns three bases in northeast China, Anshan Iron & Steel Base, Bayuquan Iron & Steel Base and Chaoyang Iron & Steel Base respectively, and it has production bases in Panzhihua, Chengdu, Jiangyou, Xichang and Chongqing in southwest China. In north China, it reorganized Tiantie Metallurgy Group Co., Ltd in Tianjin. The plan of its reorganization with Fujian Sangang (Group) LLC in Southeast China was approved by the Ministry of Industry and Information Technology and the cold-rolling project in Putian has been completed and commenced production. Ansteel Group Corporation boasts a complete series of products, including hot-rolled sheets, cold-rolled sheets, zinc-plated



▲ Anshan Iron and Steel Base



▲ Panzhihua Iron and Steel Base

sheets, color-coated sheets, cold-rolled silicon steel, heavy rails, seamless steel tubes, wire rods and steel ropes, etc, as well as the world leading vanadium industry and China's largest titanium industry.

Ansteel Group Corporation holds two wholly-owned subsidiaries, namely Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd.. Anshan Iron and Steel Group Corporation now has 16 wholly-owned subsidiaries, 3 holding subsidiaries and 21 affiliated entities. Pangang Group Company Ltd. has 4 wholly-owned subsidiaries, 4 holding subsidiaries, 3 directly-affiliated entities and 1 branch. Ansteel Group Corporation has a total of 225,000 employees of whom 199,000 are on the job. Ansteel Group Corporation produced 30.5 million tons of iron, 29.75 million tons of crude steel, 27.96 million tons of finished steel, 26,000 tons of high-vanadium steel and 60,000 tons of titanium powder in 2011, earning a business income of RMB 155.7 billion.

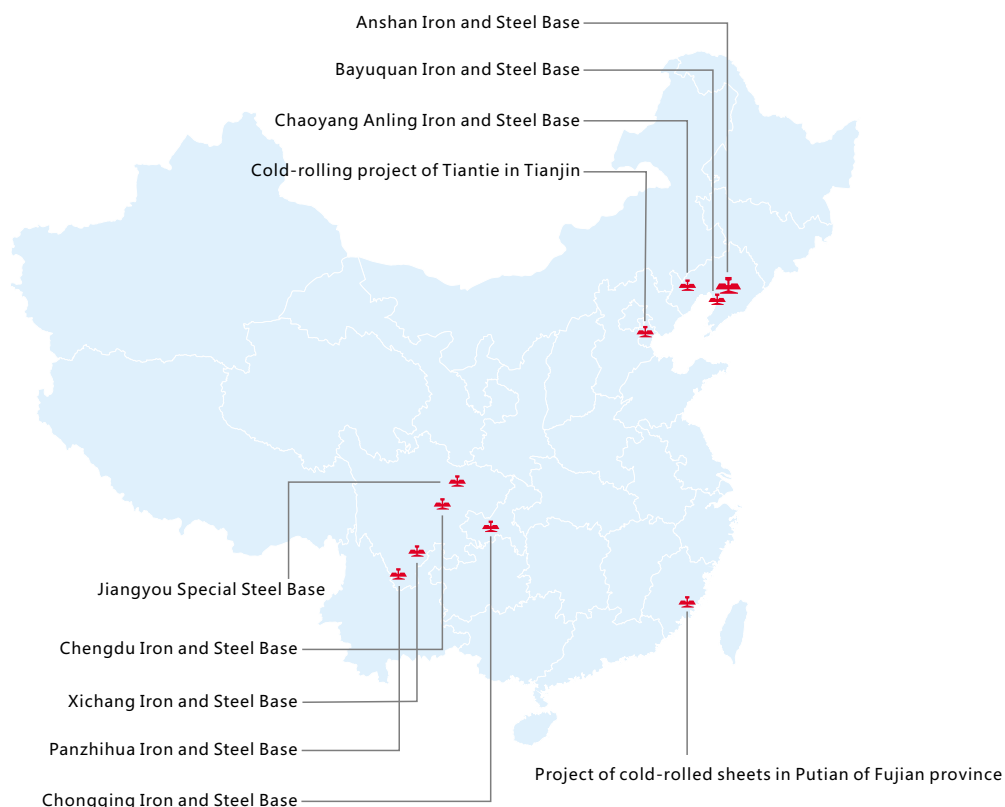


▲ Bayuquan Iron and Steel Base



▲ Xichang Iron and Steel Base

Distribution of Iron and Steel Bases of Ansteel Group Corporation in China



Distribution of Global Business of Ansteel Group Corporation



Social Responsibility and Sustainable Development

Establishing a Management System of Social Responsibility and Sustainable Development

Ansteel Group Corporation kept improving the organization, process and system building of social responsibility and sustainable development as well as incorporating social responsibility work into the corporate development strategy and the strategic performance evaluation. In accordance with the new management and control model, Ansteel Group Corporation consolidated the social responsibility and sustainable development systems of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd., improved the management system of corporate social responsibility and sustainable development, built an indicator system covering strategic management, business performance, technological innovation, resource environment, employee protection and social development, and established a management and control system covering system, process, operation and evaluation, which laid a management foundation for continuous promotion of corporate social responsibility and sustainable development.

Establishing a Report Review System

The matters and data revealed in the report were reviewed by business directors and review team of Ansteel Group Corporation according to the management procedure. Meanwhile, Corporate Social Responsibility Research Center, Department of Economics, Chinese Academy of Social Sciences graded the report from the aspects of completeness, substantiality, balance, comparability, readability and innovation.

Establishing an Report Release System

Ansteel Group Corporation established a report release system featuring clear division of management responsibility, optimized business process, organized work system, sound organizational system, strict supervision and evaluation, and detailed and complete report contents, which ensured standardized, orderly and transparent management work of the company.



Strengthening the Management and Implementation of Corporate Social Responsibility

Ansteel Group Corporation proactively participated in the research, training and exchange of corporate social responsibility work organized by social organizations, and strengthened the Corporation's implementation of social responsibility from such aspects as management notions and practices. It also strengthened the evaluation by incorporating the social responsibility work into the evaluation system of the Corporation's regulations and system, improved the employees' sense of implementing social responsibility and made great management achievements. In the social responsibility work meeting of the state-owned enterprises supervised by the Central Government convoked by State-owned Assets Supervision and Administration Commission of the State Council in 2011, Ansteel Group Corporation introduced its experiences from three aspects — building of innovation system, practice of green production, commitment to energy conservation & emission reduction — by delivering a report entitled *Building A Green Factory Implementing Social Responsibility*. Ansteel Group Corporation's cases entitled *Learning from Guo Mingyi, Carrying Forward Ansteel Spirit*, and *Exerting the Driving Force of Corporate Culture and Forging Green Production Chain and Realizing Resources Conservation and Cleaner Production* were respectively selected as excellent social responsibility practices of state-owned enterprises supervised by the Central Government in 2011.

In 2010, Ansteel Group Corporation consolidated the management systems and rules systems of social responsibility and sustainable development of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd., established a working mechanism supporting the new management structure, and published the first sustainable development report of Ansteel Group Corporation which was rated as an excellent social responsibility report (4-star) by rating institute. In 2011, Ansteel Group Corporation further improved the index and process system of social responsibility and sustainable development as well as the Corporation's management of social responsibility and sustainable development. *Sustainable Development Report of Ansteel Group Corporation 2011* was rated as a leading social responsibility report (4.5-star).



▲ Ansteel Group Corporation contributed to the exchange on resource conservation and environmental protection issues in the social responsibility work meeting of state-owned enterprises supervised by the Central Government convened by SASAC.



Chapter 01 Strategic Management

Core Values
Strategic Planning
Major Risks of Sustainable Development and Measures
Corporate Governance
Punishing and Preventing Corruption
Communication with Stakeholders

Core Values

◎ Corporate Culture

Corporate mission: to build a powerful country by developing steel industry and create value for customers, employees, shareholders and the society.

Corporate spirit: innovation, practicality, endeavor and dedication.

Core corporate values: to build a powerful country by developing the steel industry and bring benefits to the society.

Corporate vision: to become a leading enterprise in China's iron & steel industry.

Development concept: to accelerate the "four transformations" to achieve sustainable development through "six major strategies".

Operational concept: deliver high-quality products to customers so as to achieve a win-win result with good faith.

Management concept: employee-friendliness, pursuit of excellence, strict standards and strict implementation.

Environmental protection: green manufacturing and green steelworks.

Safety concept: Life is valuable, safety is a duty, System is a guarantee and execution is critical.

Employees' moral standards: devotion to work and pursuit of excellence.

◎ Target of Corporate Culture Building

To promote the corporate culture innovation by consolidating the basic work of corporate culture building, to build a corporate culture system that is consistent with the development strategic plan of Ansteel Group Corporation, to create values that the general employees identify with to a significant extent and practice on their initiative, and to create an advanced corporate culture by 2015.

Execution of Corporate Culture Building

1. Ansteel Group Corporation further boosted corporate culture building by attaching great importance to the promotion of cultural integration of the Corporation. It promoted corporate mission, vision, core values and spirit, etc and the development objectives in the Twelfth 5-year Plan, and implemented the plan of building corporate culture in the Twelfth 5-year period of Ansteel Group Corporation. The Corporation organized a series of activities themed on "Ansteel Group Corporation — Our Common Homeland", which reinforced the corporate cultural integration and employees' identification with the corporate culture, enabled employees to be more acquainted with the origin as well as the relevant historical background of reorganization of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd., laying a solid ideological and cultural foundation for the promotion of reorganization work.



▲ Ansteel Group Corporation wins the honorary title of "10 Exemplary Cases of 30 Years of Corporate Culture Practice".

In the Chinese and Foreign Enterprises Culture Beijing Summit 2011 hosted by the China Corporate Culture Institute, Ansteel Group Corporation won the award of "10 Exemplary Cases of 30 Years of Corporate Culture Practice".



▲ Hu Jintao, General Secretary of the Communist Party of China, Chinese President and Chairman of the Central Military Commission, and other officials of the Central Government meet with the main staff of the drama *Guo Mingyi*.

2. The Corporation further promoted the activities of learning from Guo Mingyi to bring this exemplary role into full play. It gave its full support and cooperation to the shooting of the film *Guo Mingyi* in Anshan Iron and Steel Group Corporation. *Guo Mingyi* was a film celebrating the 90th anniversary of the founding of the Communist Party of China and was awarded China Huabiao Film Award. It cooperated with relevant government departments in the promotion of Guo Mingyi spirit in government departments, enterprises, communities, armies and campuses with the theme of calling on people to "learn from Guo Mingyi and be Lei Feng of modern times". Guo Mingyi, an employee of Ansteel Group Corporation, was awarded as "National Model of Morality" in the third appraisal activity of national model of morality organized by Propaganda Department of the Communist Party of China and Central Civilization Office, etc.



▲ The main staff of the film *Guo Mingyi* is awarded as "honorary staff of Anshan Iron and Steel Group Corporation" by Anshan Iron and Steel Group Corporation.



▲ The promotional activity of Guo Mingyi spirit in government departments, enterprises, communities, armies and campuses with the theme of calling on people to learn from Guo Mingyi and be Lei Feng of modern times is held in Beijing University.

3. The Corporation offers vocational education to employees. It further popularized vocational knowledge, enhanced the standardization, normalization and institutionalization among employees, and improved the employees' work ethic and technical ability. It launched the promotional activities themed on "Anshan Iron and Steel Group Corporation-a place of heroes and models", demonstrating the development and contribution of Anshan Iron and Steel Group Corporation in different historical periods and describing the background of the stories of these models in different historical periods which further improved its brand image. Meanwhile, it edited and published *Model Workers of Pangang Group Company Ltd.*, telling the stories of the model workers of Pangang Group Company Ltd. working in various areas in the last 40 years, and it also organized tour speeches by representatives who were loyal to Pangang Group Company Ltd. or made great contribution in their posts.



▲ History of Anshan Iron and Steel Group Corporation 1986-2008



▲ Picture Album of Titanium Industry of Pangang Group Company Ltd.

4. The Corporation continued to compose History of Anshan Iron and Steel Group Corporation and edited and published History of Anshan Iron and Steel Group Corporation 1986-2008 which gave a general picture of the history of Anshan Iron and Steel Group Corporation from 1986 to 2008 including the overcoming of numerous obstacles in the most arduous period of the reform of state-owned enterprise, the establishment of modern enterprise system through "reform, restructuring, transformation, and strengthening of enterprise management", and the initial revitalization, "two-step leap" and

the acceleration of "four transformations". It designed and produced Picture Album of Titanium Industry of Pangang Group Company Ltd. as well as organized the shooting of television documentary of titanium industry of Pangang Group Company Ltd..

5. The Corporation proactively implemented the building of spiritual civilization to promote the harmonious development of the Corporation. It prepared for the performance of its part in "Passion Square — Singing of Patriotic Songs" broadcasted on CCTV which promoted the mainstream values in modern times and demonstrated to the full extent the corporate spirit — innovation, practicality, endeavor and dedication — as well as a brand new image of building a powerful country by developing steel industry and creating benefits for the society.



Strategic Planning

Strategic Objectives

By 2015, Ansteel Group Corporation will have made its way to the world top 5 steel producers by annual output, thus becoming a super large-sized transnational group that will be the most internationally competitive and be able to set the trend for the world steel industry development, with coordinated development of an ultra-heavy principal business of iron and steel, a world leading vanadium industry, the domestically largest titanium industry, diversified industries.

Strategic Paths

“Four transformations”: from the major investment in new construction projects to equal stress on the new construction investment and the merger and reorganization in the growth model; from the inland expansion to the coastal expansion and internationalized operation in the industrial layout; from a "follower" to a "pacemaker" of core technologies in independent innovation; from the single product export to the technology & management export in the foreign trade.

Overall Development Train of Thought

Building up the extra heavy steel Industry; Strengthening the distinctive vanadium and titanium Industry; Fulfilling the technical lead; Constructing the advantage of resources; Expanding the transnational operation; Realizing the scientific development.

Building up the extra heavy steel Industry: bringing into play the synergy advantage of reorganization and make the steel Industry to be the best and biggest through scaling the capacity, balancing the product mix, multiplying the layout regions and optimizing the logistics.

Strengthening the distinctive vanadium and titanium Industry: bringing into play the advantage of comprehensive utilization to realize the serialization and scaling of the vanadic and titanic products through appreciating the industrial chain value by developing the high-end products and merging the low-end products.

Fulfilling the technical lead: bringing into play the advantage of independent innovation to become the leader to the steel industry development through making the core technologies and the principal products low carbon and benchmark.

Constructing the advantage of resources: bringing into play the advantage of owning resources to improve the resourcing capacity and advance the support capacity of the low-cost resources through tapping the internal resources and controlling the external.

Expanding the transnational operation: bringing into play the advantage of corporate brands to cultivate the capacity of transnational operation and advance the level of internationalization through globalizing the value chains.

Realizing the scientific development: bringing into play the advantage of state-owned enterprise exemplification to promote the cyclic economy and realize the green growth through adjusting the principal business structure, diversifying moderately, strengthening the combination between the steel business and the financial business and the construction of IT business and adhering to the people- oriented principle.

Objectives for the Corporate Development during the Twelfth Five-Year Plan Period

Scale

- The annual sales revenue will reach more than RMB 300 billion.
- The production capacity of crude steel will reach 60 million tons/year.
- The self-sufficiency rate for iron ore concentrate will be over 65%.
- Vanadium products (V_2O_5): 45,000 tons/year.
- Titanium ore concentrate: 1 million tons/year; titanium dioxide: 510,000 tons/year; titanium products: 10,000 tons/year, if the conditions allow.
- The proportion of revenues from diversified businesses to those from the principal business of iron, steel, vanadium and titanium will remain stable at 10%-15%.

Products

Core iron and steel products and vanadium & titanium products will reach a leading level in the industry; balanced development of product mix will be realized through merge and reorganization; the proportion of long sheets will be gradually improved; the proportion of sheets will be no higher than 80%. Core iron and steel products include automotive steel, railway steel, petroleum and petrochemical steel, household electrical appliance sheets, ship sheets, electrical steel, container sheets and mechanical sheets as well as special steel like precision steel pipes, nuclear power pipes, die steel and steel for national defense and military use, etc;

Layout

To expand global distribution; to realize strategic domestic distribution in northeast China, southwest China, coastal southeast China and north China; to realize reasonable industrial layout in all bases, coordinated division of responsibility of production between production lines and optimized resource allocation.

Environment

To build a resource-efficient and environmentally-friendly low-carbon enterprise and exemplary steel bases featuring "green production and operation".

Profitability

The profitability of Ansteel Group Corporation is higher than the average profitability of China's iron and steel enterprises and the Corporation will increase the profitability of merged or reorganized enterprises. The financial income will account for 15-20% of the group's profit.

Implementation of Strategic Planning

Strategic Layout was further improved

Great progress was made in the substantial reorganization of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. Angang Steel Co., Ltd. whose principal business is iron and steel and Pangang Group Steel Vanadium & Titanium Co., Ltd whose principal businesses are iron ore resource and vanadium & titanium were listed on stock exchange. The reorganization plan with Fujian Sangang (Group) LLC was approved by the Ministry of Industry and Information Technology, and the projects of iron and steel bases of Anshan Iron and Steel Group Corporation along the coast of southeast Fujian province were added into the Twelfth Five-year Plan of Steel Industry. The project of cold-rolled steel sheets in Putian and the project of comprehensive utilization of vanadium & titanium resources in Xichang were completed and put into operation. The project of steel processing centers in Shanghai, Guangzhou, Ningbo, Changsha and Zhengzhou made stable progress.

Resource and business diversification project made progress

The renovation project of iron ore mine in Anshan area commenced; the plan of comprehensive utilization of vanadium and titanium resource and industrial structure adjustment of Pangang Group Company Ltd. was approved by the government; the plan of expanding the production capacity of iron ore concentrate was being made; and the main work of Baima Iron Ore Project Phase II was completed. The coking coal project which Ansteel Group Corporation had cooperation with Shanxi Wuchan Group, the waste steel project of Dalian New Green Recycled Resources Corporation in which Ansteel Group Corporation had a share, and the project of scrap iron and steel processing base in Shenyang jointly funded by Ansteel Group Corporation and Sinosteel Corporation were all in progress. It signed strategic cooperation agreement with Guizhou Panjiang Investment Holding (Group) Co., Ltd.

Business diversification was in steady progress. Ansteel Group Corporation established a joint venture together with Anshan Falan Steel Strips Co., Ltd, a leading enterprise in the industry of steel strip for packing in China, which signified its first successful cooperation with a local privately-owned enterprise. The steel rope project in Anshan Steel Wire Rope Co., Ltd and the steel rope project in Qingdao jointly funded by Ansteel Group Corporation and Bekaert, a Belgian enterprise, the auto parts project in Changchun jointly funded by Ansteel Group Corporation and Mitsui & Co., Ltd., and the project of tally center of boat deck of China Shipbuilding Industry Equipment and Materials Co., Ltd in Bayuquan in which it had a share were all underway. Ansteel Group Corporation signed strategic cooperation framework agreement with China Gezhoubu (Group) Corporation. The bearing repair project which it cooperated with Timken was completed and put into operation. The No.2 roller chromeplating production line on which it cooperated with Shanghai Kede Roller Surface Treatment Co., Ltd was put into operation.

New achievements were made in technological innovation

Four research projects including production technology of high-quality medium and heavyplates passed the inspection of the government. Special steel sheet for liquefied ethylene gas tanker was successfully researched which was the first of such achievements in China. Ansteel Group Corporation organized the preparation of national standards for hot-rolled steel sheet for nuclear power use and became the only iron and steel enterprise in China that could produce the steel for key equipment of nuclear island. Part of the oriented silicon steel products realized mass production. Online heat treatment of guard rail of railroad switch was accredited by the Ministry of Railways. Ansteel Group Corporation successfully developed aluminum-zinc plated steel sheet and color-coated aluminum-zinc plated steel sheet and acquired the capability of producing high-quality tin-plated base plate. It also successfully developed new products such as steel sheet pile, the third-generation nuclear power tube, vanadium-aluminum alloy, and titanium alloy.

The independently developed ultra-fast cooling and laminar cooling equipment and automatic control system of 4300mm heavy plate production line was put into use, which was a breakthrough in the new hot rolling process of heat engine. It built an extra-large system of coke oven gas injection into blast furnace which was the world's first one. It developed China's first shape measuring and control system of cold-rolled steel strip for industrial application. The Corporation successfully applied the EDC technology of high speed wire rod which was the first of its kind in China and made major breakthrough in the research of

technologies of preparation of titanium dioxide for high-end market, rolling of high-precision rail, bright drawing of seamless steel pipe, continuous hot-rolling of titanium coil, and production of titanium sponge, etc.

➤ New breakthrough was made in green development

In 2011, Ansteel Group Corporation saw a 1.85% decrease in comprehensive energy consumption per ton of steel, a 6.05% decline in fresh water consumption per ton of steel, a 25.6% decrease in emission of sulfur dioxide, a major pollutant, and a 2.1% decline in the emission of COD compared with the same period of last year. The capacity of power generation using blast furnace gas in Bayuquan Iron and Steel Base increased by 40,000 kw. The two flue gas desulfurization devices of sintering machine in Anshan and Bayuquan Steel Bases were put into use, and the annual desulfurization capacity increased by more than 9,000 tons. The reconstructed equipment of distillation of salt from coking desulfurization and decyanation waste liquid was put into operation. Projects including recovery of waste heat in phase II of renovation of sintering system of Panzhihua New Steel & Vanadium Co., Ltd, renovation of removal system of dust which was created from the crushing and noise treatment in the mineral processing plant of Pangang Group Mining Co., Ltd in Midi, and renovation of steam recovery of converter of Pangang Group Chengdu Steel & Vanadium Co., Ltd were completed and put into use.



Zhang Xiaogang, General Manager of Ansteel Group Corporation, was invited to give a report to the organizations of SASAC

Zhang Xiaogang, Secretary of CPC Committee and General Manager of Ansteel Group Corporation, was invited by SASAC to give a report to the Commission on March 3, 2011. He talked about the development strategy of Ansteel Group Corporation in the report entitled "Implement the 'Four Transformations' and Endeavor to Become A Leading Enterprise in the Iron and Steel Industry" from three aspects — strategic positioning, strategic path and strategic planning, as well as the experience accumulated by Ansteel Group Corporation in the promotion of development strategy.

Shao Ning, Deputy Director of SASAC and a member of CPC Committee, hosted the seminar. He recognized the great contributions that Ansteel Group Corporation made to the economic construction and iron & steel industry development of China and the strategic objectives of forging an extra-large multi-national iron and steel group made by the new leadership since 2007 and a set of significant changes that had taken place ever since. He also said that the report was vivid and insightful, and the thoughts on corporate development scale, combination of industry and financing and internationalization, etc enlightened the members of SASAC.

Information of Key Projects

➤ The Project of Comprehensive Utilization of Vanadium and Titanium Resource in Xichang was Completed

The project of comprehensive utilization of vanadium and titanium resource in Xichang was completed on December 22, 2011. This was an important strategic measure that Ansteel Group Corporation had taken for the acceleration of comprehensive utilization of strategic resources in Panxi region and rejuvenation of China's vanadium and titanium industry, and it will have an important and profound impact on the acceleration of development of vanadium and titanium industry of China. This project simultaneously used vanadium, titanium and iron and adopted the most advanced production processes, technologies and equipment of vanadium and titanium in China so as to improve the overall efficiency of comprehensive utilization of resources.



▲ The project of comprehensive utilization of vanadium and titanium resource in Xichang was completed

► Project of Reconstruction and Expansion of Iron Mine in Old Mining Area

In 2011, *Report on the Environmental Impact Assessment of the Reconstruction and Expansion Project of Iron Mine in the Old Area of Anshan Iron and Steel Group Corporation* passed the technical evaluation of environmental evaluation center of Ministry of Environmental Protection. The transport system building and equipment supply were completed for the three renovation or expansion projects including the expansion of Dagushan Iron Mine (phase II), expansion of East Anshan Iron Mine (phase II), and external expansion of Dumu Mining Site of Gongchangling Iron Mine. The deepening and mining of central zone of underground mine of Yanqianshan iron mine and underground mine of Gongchangling iron mine went on smoothly, and the mining of hanging wall ore of west wall of Yanqianshan mine was in stable progress. *Plan of Comprehensive Utilization of Vanadium and Titanium Resource and Industrial Structure Adjustment of Pangang Group Company Ltd.* was approved by National Development and Reform Commission; the main work of Baima Iron Ore Mining Project Phase II was almost completed; the project changing mining in the open to underground at Jianshan Iron Mine was in the stage of trial production.

► Project of Cold-Rolled Steel Sheets (in Putian)

The project of cold-rolled steel sheet of Anshan Iron and Steel Group Corporation in Putian was to build a large cold rolling production line in Fujian province with an annual production capacity of 1 million tons of cold-rolled steel sheet and zinc-plated steel sheet and was commenced from February 2010. In 2011, the combined pickling – rolling unit of this project was already used in production; the trial run of continuous annealing unit was completed; for the hot-dip galvanizing unit, the construction of the main plant and equipment manufacturing were underway; the finishing unit was being installed and commissioned; and the construction of public and auxiliary facilities was all completed and they had already been put into use.

► Sponge Titanium Project

As an important part of the Ansteel Group Corporation's strategy of "building the biggest titanium producer of China", sponge titanium project took advantage of the vanadium-titanium magnetite resource of Panzhihua by using the titanium slag created during the production of titanium ore concentrate as raw material to produce sponge titanium products. This project introduced large sets of world advanced equipment of combined titanium and magnesium production for molten salt chlorination and refinement of crude titanium tetrachloride by removing vanadium with aluminum powder, etc including four processes — chlorination, reduction-distillation, magnesium electrolysis and refining, and crushing processing. The sponge titanium project commenced on March 2009 and the trial production was conducted at the end of 2011.

Major Risks of Sustainable Development and Measures

◎ Analysis of Sustainable Development Risks

The outlook for the global economy was uncertain and the chances of global economy weakening were accelerating. IMF lowered the growth forecast of world economy from 2011 to 2012 to 4% after mainly lowering the economic growth forecast of major developed countries. The debt crisis in the European sovereign was spreading from the periphery countries to the core members of the euro currency union and was very likely to worsen. The emerging economies grew fast overall but their growth rates were decreasing.

China's economy was still unbalanced, uncoordinated and not sustainable, and was confronted with new problems and changes. The demands that drove the economic growth were weakening, the economic growth rate slowly decelerated and the commodity prices were high, which posed greater challenge to the macroeconomic regulation.

The iron and steel industry faced a grave situation and the tough times have come. The production capacity of crude steel in the world gradually bounced back in recent years, with the production of crude steel repeatedly breaking records, and the imbalance between supply and demand was aggravated. Many countries adopted trade protection policy to place a restriction on steel import so as to protect the iron and steel enterprises in their countries, which increased the competition in the global iron and steel market. In 2011, the production of crude steel in China was close to 0.7 billion tons, and the imbalance between supply and demand was striking. The problems of competitive convergence and supply exceeding demand were getting serious. As the government accelerated the adjustment of economic structure and

change of economic development mode, the iron and steel industry would face a grave challenge caused by surging resource prices, slowly growing demands and environmental protection stress for a long period in the future. China's iron and steel industry was generally making meager profit with small operational cash flow, and the continued tightening of monetary policy has resulted in capital insufficiency in the market which then led to the capital insufficiency in the iron and steel industry. The downstream demands in China were not strong because of tight regulation in real estate industry, fall in auto production and sale, slow recovery of shipbuilding industry and slow growth in investment in railway, etc. The prices of raw materials and fuels such as iron ore and coal remained high, which increased the costs of iron and steel enterprises.

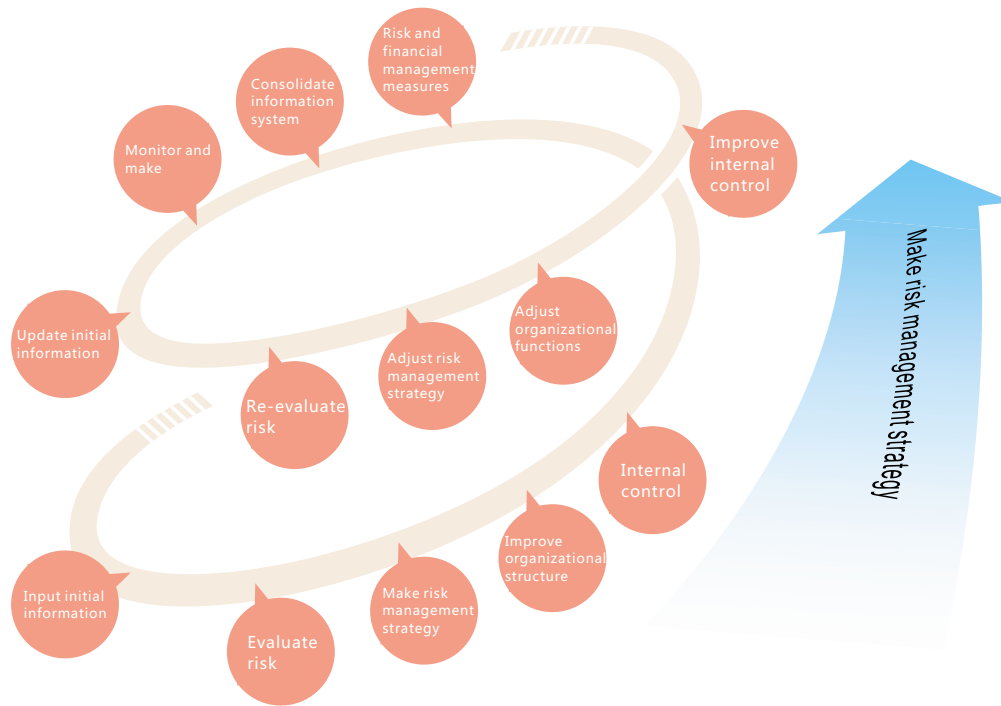
Measures for Sustainable Development

Firstly, to take advantage of the building of management structure of Ansteel Group Corporation, promote the reform and innovation, improve the management, and build a management mechanism that can rapidly respond to the changes in the market. Second, to increase the competitive advantage, take advantage of the favorable conditions and development potential in resources, scale, layout, manpower and corporate culture, etc in the reorganization of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd., strengthen the synergy advantage so as to improve the core competitiveness and profitability, and turn the favorable conditions into new competitive advantage. Thirdly, to increase input and technology introduction, establish advanced environmental protection technology system, and create economic growth through new market development, technological export and management export. Fourthly, to carefully study and predict the market change tendency of important resources and expand cooperation in resources from an international perspective while increasing the advantage of self-owned resources so as to turn the risks in resources into competitive advantage. Fifthly, to make prospective study and adopt active management strategy, flexibly adjust operational strategy and product mix, and increase the synergy between production and sales systems to better respond to the market change. Sixthly, to strengthen the centralized management of the Corporation's capital and improve the capital management system, processes and standards so as to effectively control the risks due to internal factors. Meanwhile, to alleviate the impact of external risks by means of setting up financial platform of the Corporation or other strategic measures.

Promotion of the Effective Operation of Total Risk Management System and Prevention of Various Risks

1. Total risk management system was improved. Ansteel Group Corporation established the new responsibility system of risk management, defined the responsibilities of risk management of the Corporation and its regional enterprises, and established a risk management system featuring both centralized management and hierarchical management (Major risks were managed on a centralized basis and the risk systems of regional enterprises ran independently). The Corporation consolidated and revised relevant systems and processes of total risk management and made its total risk management system as well as first-level processes of risk evaluation, response and reporting, etc to promote the effective association of the risk management systems and processes at different levels of the Corporation.
2. The self-evaluation for internal control was organized. Self-evaluation work for internal control of core businesses was organized in all business departments and experimental entities of Ansteel Group Corporation according to the core business processes at the headquarters of Ansteel Group Corporation and the ten major risks identified during the risk assessment in 2010. The business departments of Ansteel Group Corporation conducted self-evaluation on key control activities from three aspects — core business responsibilities, management processes and management system, recorded the business management work that needed improvement, and made improvement proposal, which laid a foundation for further improvement of measures for internal control of risk, improvement of business management level and risk prevention capability. The experimental entities recorded and commented on the management system and relevant processes and key control activities according to Basic Regulations on Internal Control of Enterprise and the basic requirements in the guidance which promoted the constant improvement of their internal control systems.
3. Special risk management was implemented. In 2011, Ansteel Group Corporation issued Decision on Implementation of Special Work of Risk Management and implemented special work of risk management in such aspects as finance, environmental protection, marketing and resources within the Corporation and systematically implemented the work of risk identification, analysis and assessment. The Corporation conducted analysis and assessment on the identified risks, determined major, medium and general risks that should be given special attention to in 2011 and made major risk management strategy and measures to be take.

Business Flow of Total Risk Management System of Ansteel Group Corporation



Risk Control

Financial Risk Control

Fund control was tightened. In 2011, Ansteel Group Corporation further improved the first-level centralized control system of fund and improved the system, processes and standard of fund management. Ansteel Group Corporation determined its overall risk limit and the credit risk limits of its subordinate units, created credit files of business partners, and conducted customer credit rating to determine the credit limit and credit period.

Cost control was tightened. Ansteel Group Corporation implemented the budget management. It made rules for implementing the budget management, optimized the processes of budget management, strengthened the tracking and monitoring of budget execution, and brought the risk control function of budget management into full play so that the production costs could be continuously lowered. In 2011, in response to the high prices of raw materials and fuels of the iron and steel industry, weakening consumption demand for steel products and the continuously declining profits, Ansteel Group Corporation issued a notice entitled Notice on Tightening of Funds Control and Lowering of the Costs and Expenses in the Current Grave Situation, promoted the sense of austerity in the Corporation, rigorously controlled investment costs and lowered costs and expenses to ensure the smooth production and normal operation of funds. The Corporation did benchmarking and potential tapping, conducted comparative analysis on various economic indicators and technical indexes and financial data, and increased cost competitiveness through cost reduction and efficiency increase involving all employees, the whole processes and all aspects.

Legal Risk Prevention System

Ansteel Group Corporation strengthened the management of legal risk and made instructions on legal risk prevention which divided the major legal risks of the Corporation and general legal risks of all entities from the aspects of internal governance and external operation into 2 categories, 21 disciplines and 80 sub-disciplines and covered the legal risks of over 270 major areas relevant to operational compliance of enterprise and also made prevention measures item by item to avoid and eliminate legal risks. The Corporation conducted legal confirmation of the compliance of major decisions to prevent major decision-making faults and avoid or alleviate the corporate economic loss. It conducted legal risk argumentation on major projects to avoid major legal risks as well as protect rights and interests and create value.



▲ Ansteel Group Corporation held lectures on the practice of prevention of legal risks in investment and cooperation in and out of China

The Corporation conducted continuously overall planned pre-caution and major random pre-caution. It prepared Notice on Legal Risk Pre-caution of Anshan Iron and Steel Group Corporation and the Analysis of Legal Dispute Cases of Anshan Iron and Steel Group Corporation to give guidance on the legal risk prevention work. There was a column in Ansteel Daily where analysis was conducted on potential legal risks in the daily production and operation management of enterprise and prevention measures were suggested in the form of reply from corporate legal counselor and case analysis. The Corporation invited renowned domestic and foreign law firms to deliver lectures on practice of prevention of legal risks in investment and cooperation in and out of China in order to improve the Corporation's capability of preventing legal risks.

Intensification of Audit System Building

Ansteel Group Corporation conducted internal audit work on the corporate production and operation and technological transformation in accordance with the Audit Law and relevant regulations made by SASAC and National Audit Office. Risk management oriented, the Corporation attached great importance to internal control, emphasized process monitoring and improved the efficiency and effects of audit work through audit confirmation, assessment and consultancy.

In 2011, Ansteel Group Corporation conducted economic accountability audit on the administrative personnel of 30 entities as well as audit on costs, finance and management of over 20 projects including continuous casting project of Anshan Iron and Steel Group Corporation in Bayuquan and the project of Pangang Group Xichang New Steel Enterprise Co., Ltd. Meanwhile, it conducted over 30 special audits including financial audit, operational management audit, audit on risks and internal control, investment management audit, etc. 691 problems were revealed during the audit in 2011, and 494 audit opinions or suggestions were put forward. The Corporation audited the project investment of RMB 10.5 billion, decreased project expenses by RMB 33.48 million through audit, and adjusted erroneous value of RMB 85.43 million; therefore, it was awarded as a "National Model Entity for Internal Audit 2008-2010" by National Audit Office and a "Model Entity for Internal Audit of Liaoning Province" by Liaoning Provincial Audit Office.



➤ Establishment of the System of the Board of Supervisors in Subsidiaries

Ansteel Group Corporation implemented the system of the board of supervisors in subsidiaries. The board of supervisors focused on financial monitoring and exercised supervision over the business operation, decision-making procedures, financial position and the state-owned assets operation of the wholly-owned subsidiaries and directly affiliated enterprises of the Corporation according to the relevant laws and regulations as well as the regulations of Ansteel Group Corporation. The board of supervisors of subsidiaries of Ansteel Group Corporation intensified the monitoring in 2011 when it conducted centralized annual inspection, ordinary monitoring & inspection and special inspection, etc and found 117 problems and put forward 123 suggestions, which effectively safeguarded the state-owned assets.

Corporate Governance

🎯 Management System

➤ Control System

As for the management of its subsidiaries, Ansteel Group Corporation adopted a strategic control mode featuring “centralization of decision-making for major matters, authorization for regional operation management and independent operation of branches and subsidiaries” as well as “moderate power centralization, reasonable power decentralization and systematic monitoring”.

Ansteel Group Corporation played a pivotal role in decision-making and served as strategy management center, capital operations center, financial management center, risk control center, business coordination center and resources sharing center. In accordance with the laws, Ansteel Group Corporation exercised its powers over state-assets management, decision-making for major matters, administrator’s selection, state-owned assets earnings and financial monitoring. Ansteel Group Corporation made an overall planning in strategy development planning, fund and budget management, capital operation and project investment, bulk procurement and marketing, R&D and technological innovation, systematic innovation and risk control, human resources development and executives selection, performance assessment and income distribution, IT application and management, and corporate culture and party building.

Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. as the wholly-owned subsidiaries of Ansteel Group Corporation were regional operation centers and profit centers, and they, with a goal of maximizing the interests of shareholders, implemented the development strategy of the Corporation as well as operational objectives, plans, budget and various commands made by the Ansteel Group Corporation and managed the internal operation to ensure the appreciation of state-owned assets as authorized by Ansteel Group Corporation and as stipulated in the laws.

➤ Improving System for Regulations and Institutions

Management system was built according to the new control model of Ansteel Group Corporation. The first set of management rules & regulations of Ansteel Group Corporation covering strategic management, investment and asset management, planning & finance and budget management, organizational system and institutional processes management, human resources management and income distribution, etc were made according to the principle of “phase-by-phase implementation and systematic & orderly improvement”. In order to strengthen the execution of rules & regulations of Ansteel Group Corporation and improve the review and assessment system of rules & regulations, the annual inspection and assessment was changed into quarterly inspections and end-of-year assessment, and the review emphasized on the major work of the Corporation, and review and assessment were conducted on the execution of important rules and regulations made to ensure the stable production and operation and those concerning control of costs and expenses, emergency response plan, responsibility system for safe production, financial capital budget, management of procurement through bidding, income distribution, efficiency monitoring, IT application and confidentiality management, etc. Suggestions for improvement were made accordingly to ensure all rules and regulations were implemented and management system with PDCA method was improved.

➤ Optimization of Management Process

In 2011, Ansteel Group Corporation kept improving management system of business process and system of process optimization and made great efforts in the optimization, detailing and consolidation of core business processes. Ansteel Group Corporation prepared the third sets of operation manual of business process and improved the system of process management files. It tracked and tested the core business processes and gave solutions to the problems identified during the test and strengthened the control over core business process operation. It continued with the work of applying information technology in processes; it prepared the core business processes and core management system of Anshan Iron and Steel Group Corporation and published them for the use of management personnel at all levels; it gradually consolidated the core business processes in all information systems.

Corporate Reform

Promotion of Internal Structure Adjustment and Increase of Resource Allocation Efficiency

In Anshan Iron and Steel Group Corporation, internal resources of the same kind were integrated. Firstly, it completed the optimization of steel-making system by merging three steel-making plants of Angang Steel Co., Ltd. into a main steel-making plant which helped to improve the efficiency of core assets, reduce the management costs, and increase the decision-making efficiency and control capability of Anshan Iron and Steel Group Corporation. Secondly, in order to realize intensive operation, mechanical loading company was incorporated into the production coordination center for professional and centralized management. Thirdly, educational and training resources consolidation of Anshan Iron and Steel Group Corporation was completed, Party School of Anshan Iron and Steel Group Corporation and Employees' College were merged into an Educational and Training Center so that the educational and training quality could further be improved through the transformation of operation mechanism.

Pangang Group Xichang Steel and Vanadium Co., Ltd was established for regional control purpose, which served as a new platform for the building of experimental area for the innovative development of strategic resources of Panxi region of China and building of a world-class base of new materials of vanadium and titanium. Pangang Group Engineering Technology Co., Ltd was established after the merger of Pangang Group Information Technology Co., Ltd and Pangang Group Metallurgical Engineering Technology Co., Ltd to accelerate the intensive development of engineering technology industry. Ansteel Group Energy Conservation Technology Service Co., Ltd was established for the purpose of cultivating the R&D team of energy conservation technology and products and promoting the development of diversified businesses.



▲ The inauguration of the main steel-making plant of Angang Steel Co., Ltd.



▲ The inauguration of Pangang Group Xichang Steel and Vanadium Co., Ltd.



▲ The inauguration of Pangang Group Engineering Technology Co., Ltd.

Promotion of Optimization of Organizational Structure and Increase of Systematic Operation Efficiency

Optimization and consolidation were conducted on the internal organizational structure of the subordinates of Anshan Iron and Steel Group Corporation according to the principle of "compliance with strategy, improvement of capability and efficiency, consistency of authority and responsibility and centralized management". 106 organizations were removed of which 29 were of the level of deputy factory director/deputy division director or above and 77 were of the level of section chief, meeting the objective of removing 10%-20% of the organizations. Adjustment and optimization were made on structure of subsidiaries including mining enterprises, titanium enterprises, Chengdu Steel & Vanadium Co., Ltd, Jiangyou Changcheng Special Steel Co., Ltd which were engaged in the vanadium and titanium industrial chain of Pangang Group Company Ltd. 16 subordinates were removed, business relationships were sorted out and operation efficiency of industrial chain was increased.

Protection of Shareholders' Rights

Improvement of Governance Structure and Protection of Shareholders' Rights and Interests

In 2011, Angang Steel Co., Ltd. further improved its internal control system and governance structure in accordance with the requirements of *Basic Regulations of Internal Control of Enterprise* jointly issued by Ministry of Finance and China Securities Regulatory Commission, etc.

Angang Steel Co., Ltd. paid great attention to the return on investment of the investors, and made a long-term and stable profit distribution policy. As stipulated in the profit distribution policy, the distributed cash in a year must not be less than 50% of the net profit of that year, and the continuous and stable profit gave investors a good return on investment. Angang Steel Co., Ltd. totally paid cash dividend of RMB 1.085 billion to shareholders in 2011 (RMB 1.5 every 10 shares). Pangang Group Steel Vanadium & Titanium Co., Ltd tried every means to increase its profit and maximize the profit of shareholders in a market with surging prices of raw materials and fuels in iron and steel industry, minor fluctuation in product prices and intensified competition.

Information Disclosure

Ansteel Group Corporation made a regulation regarding information disclosure and built a platform for information communication to ensure the authenticity, accuracy, completeness, timeliness and fairness of information disclosure in accordance with relevant laws and regulations and the regulations of the Stock Exchange of Hong Kong Limited and Shenzhen Stock Exchange. It made announcements to the public via some designated media — *China Securities Journal* and *Securities Times*, and the websites of Cninfo and Hong Kong Stock Exchange and disclosed its real business performance and important matters to investors in detail. In 2011, Angang Steel Co., Ltd. disclosed 31 pieces of information to the public while Pangang Group Steel Vanadium & Titanium Co., Ltd disclosed 113. The information about Anshan Iron and Steel Group Corporation, a big shareholder, buying more shares of Pangang Group Steel Vanadium & Titanium Co., Ltd was also timely disclosed to the public to ensure all investors could obtain relevant information in a fair, accurate and timely manner.

Building of Harmonious Relationships and Improvement of Corporate Image

Ansteel Group Corporation built harmonious relationships in various ways to present investors the value for investment of the Corporation and to improve the corporate image in capital market. The listed enterprises under Ansteel Group Corporation made standard management regulations of investor relationships to strengthen the communication between the enterprises and investors. Angang Steel Co., Ltd. held meetings in Hong Kong on a regular basis to report its annual business performance and biannual business performance where executives of the company could communicate with investors face to face so that investors could learn the information of the company. In 2011, Angang Steel Co., Ltd. received domestic and overseas investors, fund managers and industry analysts for 21 times (total number of visitors were 86) and attended over 100 meetings held by overseas investors, fund managers and analysts upon invitation. Pangang Group Steel Vanadium & Titanium Co., Ltd received personnel from Huachuang Securities and Hongyuan Securities as well as individual investors when they conducted onsite investigation.

Mechanism for Employees' Participation in Corporate Management

Ansteel Group Corporation which paid much attention to the communication between employees and the management encouraged the employees to participate in corporate production and operation. Firstly, the Employees' Congress was regularly held so that the employees' representatives could make suggestions on the production and operation, reform and renovation, management and innovation, and remuneration and welfare. Secondly, a regular discussion was held between the management and employees to ensure that the management could tune in to the concerns of employees. Thirdly, the "reception day" system ensured that the management could hear employees' opinions on all aspects of the Corporation by reading the employees' letters and receiving their visits. Fourthly, the management collected rationalization suggestions from employees. The opinions and suggestions made by employees were adopted by relevant persons in charge or relevant departments; and employees who made brilliant opinions and suggestions were commended and awarded.

On December 27, 2011, the following documents were approved in the 11th Session of the 10th Employees' Congress of Anshan Iron and Steel Group Corporation: *Plan of the Use of Welfare Funds of 2012 of Anshan Iron and Steel Group Corporation (Draft)*, *Collective Contract of Anshan Iron and Steel Group Corporation (Draft)*, *Collective Contract on the Protection of Rights and Interests of Female Employees of Anshan Iron and Steel Group Corporation (Draft)*, *Management Regulations of Non-regular Employees of Anshan Iron and Steel Group Corporation (Draft)*, and *Regulations of Performance Assessment and Evaluation of 2012 of Anshan Iron and Steel Group Corporation (Draft)*. In the sessions of Employees' Congress, the management of Pangang Group Company Ltd. disclosed the information on production and operation, the implementation of the proposals of employees' representatives, hospitality expenses, implementation of collective contract, and use of welfare funds, etc to employees.

In 2011, Ansteel Group Corporation held video symposium attended by model workers and the management where they communicated about how to solve the problems in the corporate development, how the model workers could play the exemplary role, and how model workers could encourage other employees to go through the tough times with the Corporation.

Activities were held to solicit rational suggestions. Anshan Iron and Steel Group Corporation organized activities to encourage employees to make rational suggestions on cost reduction and economic performance enhancement as well

as energy conservation and emission reduction. 75,626 rationalization suggestions were made, and 34,343 of them were accepted by the management which then translated into economic benefits of RMB 375 million, and those who made brilliant suggestions were commended. Employees of Pangang Group Company Ltd. made 42,554 rationalization suggestions of which 24,856 were accepted, and those who came up with the 10 best suggestions, 20 excellent suggestions and 30 good suggestions were commended.



▲ Video symposium attended by model workers of Ansteel Group Corporation

Performance Evaluation and Monitoring Mechanism

Ansteel Group Corporation established a strategic performance management system based on value creation and combined the Corporation's long- and medium-term strategic development plan with annual plan, budget, performance evaluation and income distribution so as to make performance management an effective tool of implementing strategies. It incorporated the strategic orientation and value creation into the system of key performance indicators for performance evaluation and promoted in the Corporation a concept that emphasized on value creation and business performance enhancement through indicator breakdown, implementation of responsibilities at all levels, and association of performance evaluation results with salaries, etc. Ansteel Group Corporation made the Performance Assessment and Evaluation Regulations of 2011 and Interim Regulations for Performance Evaluation and Salary Management of Persons in Charge of Subsidiaries according to the principles of "distributing income based on work and prioritizing efficiency and paying attention to fairness". Letters of responsibility for annual business performance were signed between Ansteel Group Corporation and its 24 subsidiaries including Angang Steel Co., Ltd., Pangang Group Company Ltd., Ansteel Group Mining Company, Ansteel Group International Trade Corporation and Ansteel Group Finance LLC, etc. The strategic performance management system based on value creation of Anshan Iron and Steel Group Corporation was spoken highly of by SASAC. In the Work Meeting of Business Performance Evaluation of Persons in Charge of State-owned Enterprises Supervised by Central Government held in December 2011, Anshan Iron and Steel Group Corporation was awarded by SASAC the honorary title of "State-owned Enterprise Boasting Excellent Business Performance in Evaluation of 2011". In the Palladium Strategy Execution Forum held in Bombay of India on June 21, 2011, Anshan Iron and Steel Group Corporation was awarded "The China Hall of Fame for Palladium Strategy Focused Organizations 2011", therefore becoming the third Chinese winner of this award in China.



▲ Work summary meeting of performance evaluation of Ansteel Group Corporation

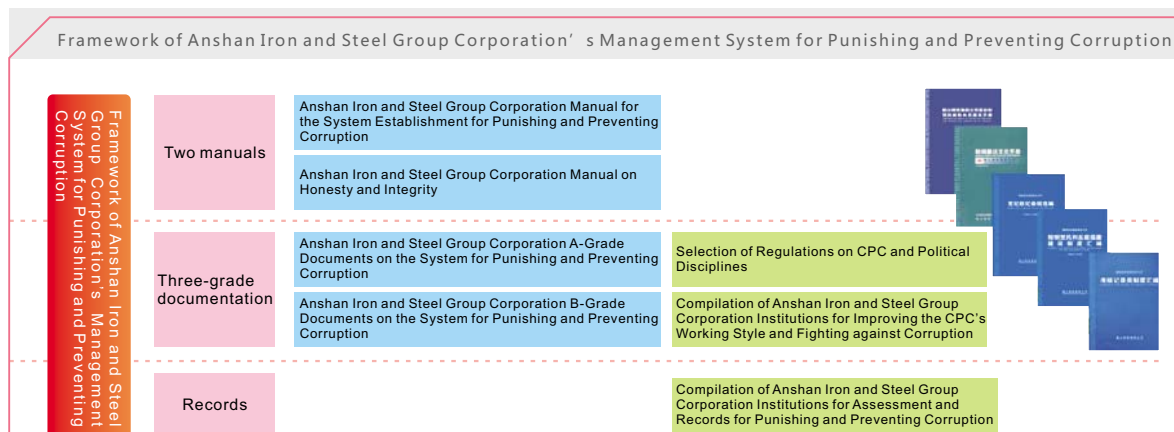


▲ Anshan Iron and Steel Group Corporation is awarded "The China Hall of Fame for Palladium Strategy Focused Organizations 2011"

Punishing and Preventing Corruption

System for Punishing and Preventing Corruption

Ansteel Group Corporation is unswervingly improving the construction of system for punishing and preventing corruption and compiling the Anshan Iron and Steel Group Corporation Manual for the System Establishment for Punishing and Preventing Corruption, Anshan Iron and Steel Group Corporation Manual on Honesty and Integrity, Anshan Iron and Steel Group Corporation A-Grade and B-Grade Documents as well as Assessment and Records on the System for Punishing and Preventing Corruption to build up a framework of the management system for punishing and preventing corruption with the special Anshan Iron and Steel Group characteristics. A study has been made on the integration of three systems (the system for punishing and preventing corruption, the corporate risk management system and the corporate social responsibility system), and a pattern of the three systems integration has been established to fit the construction of punishing and preventing corruption in the various processes of production operation and enterprise management. Furthermore, the integration of combating corruption and promoting integrity in both Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. has been completed. With the improved communication and synergy, the system and management process for punishing and preventing corruption has been integrated, and the branch venues were set up in Panzhihua and Chengdu respectively to convene the video warning and education conferences of Ansteel Group Corporation.



▲ "Three Systems as An Entire Unity" information website for developing the honest and clean governance in Anshan Iron and Steel Group Corporation.

The advantages of the "Three Systems as An Entire Unity" (discipline inspection and supervision, audit and board of supervisors) information website have been exerted for promoting the anti-corruption and integrity. Since the official launch of the "Three Systems as An Entire Unity" information website for the anti-corruption and integrity in 2008, there have been totally over 500 materials including reports on conventions, regulations documents and publications on good experience and practices uploaded. The website thus constitutes a critical working platform and mobile carrier for Ansteel Group Corporation to conduct the combating corruption and building the clean governance, build the punishing and preventing corruption systems and monitor the work concerned. After the OA system of Ansteel Group

Corporation was put into use, the application of the "Three Systems as An Entire Unity" information website has been extended to all OA system users, effectively expanding the coverage and influence of such website.

Enhance the communication with centrally-administered enterprises and regional state-owned assets supervision and administration commissions. As a director of the eighth group for promoting the system development for punishing and preventing corruption in centrally-administered enterprises under SASAC, Ansteel Group Corporation invited 16 centrally-administered enterprises and regional state-owned assets supervision and administration commissions to hold the symposium to exchange views on management system for punishing and preventing corruption in Xi'an and Dalian respectively in 2011.



In the television conference on the system development for punishing and preventing corruption in centrally-administered enterprises convened by SASAC, Ansteel Group Corporation gave the introduction on the experience in the system development for punishing and preventing corruption. Written communication on the *Theory and Practice of System Establishment for Punishing and Preventing Corruption across Anshan Iron and Steel Group Corporation* was conducted in the symposium on the theory of fighting against corruption held by the Central Commission for Discipline Inspection of CPC. Ansteel Group Corporation was recognized as the "Model Entity of the Discipline Inspection and Supervision Organizations in Liaoning Province" in the five-yearly selection of discipline inspection and supervision model entity held by the Central Commission for Discipline Inspection of CPC, SASAC and Commission for Discipline Supervision and Administration of Liaoning Province. Pangang Group Company Ltd. was the Model Entity under the Discipline Inspection and Supervision Institutions in Panzhihua City.

According to the poll regarding the improvement of CPC's working style and clean and honest governance, the staff fairly satisfied with the development of CPC's working style and clean and honest governance in Ansteel Group Corporation accounted for 91.8%, which was 3.5% and 20.2% higher than the figure in 2005 and 2002 respectively. About 81% staff viewed that the leaders and management at various levels whose actions were against honesty and integrity have decreased substantially, which was 1.1% and 24.7% higher than the figure in 2005 and 2002. Around 97.8% staff thought the key leadership in charge of CPC and political work in the working units has emphasized the improvement of CPC's working style and the clean and honest governance, which was 2.5% and 4% higher than the results in 2005 and 2002 respectively. About 87.3% staff viewed that the CPC member leaders at various levels in Anshan Iron and Steel Group Corporation had integrity at current stage, which was 1.4% and 3.5% higher than the results in 2005 and 2002.



▲ Ansteel Group Corporation convened a meeting on the development of fighting against corruption in 2011



▲ Ansteel Group Corporation steering group for system establishment for punishing and preventing corruption held its 8th meeting



▲ Ansteel Group Corporation invited the State-owned Assets Administration and Supervision Commission to the 8th group start-up meeting and summary meeting to promote the establishment of punishing and preventing corruption



▲ Ansteel Group Corporation gave introduction on the experience in the television conference on the centrally-administered enterprises' development of punishing and preventing corruption under the State-owned Assets Administration and Supervision Commission of the State Council



▲ Ansteel Group Corporation was invited to deliver a lecture regarding the Theory and Practice on Improvement of CPC's Working Style and Honest and Clean Governance across Anshan Iron and Steel Group Corporation in Hangzhou Training Center of the Central Commission for Discipline Inspection of the CPC



▲ Ansteel Group Corporation exchanged view on the establishment of punishing and preventing corruption with State-owned Assets Supervision and Administration Commission in Jilin Province

Combating Corruption and Upholding Integrity by Punishing Commercial Bribery

In 2011 witnessed that Ansteel Group Corporation had fully exerted the supervision role of "Three Systems as An Entire Unity" and kept improving the "Seven Combinations" system to eliminate the cause for corruption. Ansteel Group Corporation totally dealt with 782 letters and visits from the public mass, filed and closed 57 cases, took disciplinary measures against 98 persons, confiscated illegal earnings of RMB 66.32 million and retrieved economic losses of RMB 22.51 million. On one hand, Ansteel Group Corporation has strengthened the efforts to deal with *the December 10 Case on the fake iron ore powder, May 26 Case on the sales of fake valves to Anshan Iron and Steel Group Corporation, July 7 Case on the depletion of electrical spare parts and Unqualified Caustic Calcined Dolomite Case*, cooperated with the investigation on the cases of waste and scrapped refractory material and finance personnel's illegal acts and discipline-violation and standardized the management of bulk material, machine parts, electrical spare parts, waste and scrapped material and finance, to name just a few. On the other hand, by virtue of the control in the beginning, Ansteel Group Corporation has utilized "Seven Dockings" when dealing with various cases to strengthen the efforts to tackle the problem at source, put forward the correction proposal and standardized the related management. Ansteel Group Corporation, through the commercial bribery handling mechanism, also investigated 6 commercial bribery cases, dealt with 3 persons liable for bribery inside the group and removed 5 unqualified suppliers. Thirdly, Ansteel Group Corporation has formulated the management methods on online whistle-blowing and supervision to enhance the supervision and control of the group over online public opinions and whistle-blowing.

Development of Honesty and Integrity

The clean and honest job-oriented training has been enhanced. By convening the warning education meetings, Ansteel Group Corporation proposed the "elimination of three kinds of mentality and advocacy of four sound practices", namely the elimination of comparison and setting of good example of being indifferent to fame and wealth, elimination of fluke and setting of good example of being awe-inspiring, elimination of utilitarianism and setting of good example of unselfishness and altruism; advocacy of working diligently in defiance and thrifty, advocacy of democracy and solidarity, advocacy of consciously exercising power impartially together with clean and honest practice as well as advocacy of integrity and noble taste. Meanwhile, with multiple severe cases in violation of laws and disciplines exposed, the meeting gave warning to management at various levels to follow the honest and standardized practice. With the promotion of commitment to honesty and integrity across Ansteel Group Corporation, all leadership and personnel at the critical position have openly made their commitments.

The methods and approaches to develop the honesty and integrity have been enriched. The Anshan Iron and Steel Group Corporation Staff Code of Conduct Development Base epitomized by Guo Mingyi spirit was established, and the onsite meeting on the creation of honesty and integrity system was held to strengthen the education on the political morality, work ethics and individual morality for all staff. *Live up to Mission and Hold High the Banner – Learning of Forty Main Questions Concerning the Speech Delivered by President Hu Jintao on July 1st, Honesty and Integrity, and Taking Others as Mirror to Know Gains and Loss – 20 Advices from 20 Typical Cases Across Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd.* have been issued.

The efforts to promote the honesty and integrity have been strengthened. The honest and clean working environment has been built through the selection of honest and diligent model across Ansteel Group Corporation in 2011, opening-up of forum and solicitation of articles on corruption prevention and integrity promotion, production of advertisement promoting honest public welfare as well as other activities such as solicitation of painting and calligraphy together with photo on advocacy of honesty and clean management.



▲ Leadership of Ansteel Group Corporation makes commitment on honesty and integrity



▲ Warning education meeting held in Ansteel Group Corporation



▲ Establishment of Anshan Iron and Steel Group Corporation Staff Code of Conduct Development Base



▲ On-site meeting for launching Anshan Iron and Steel Group Corporation Staff Code of Conduct Development Base and establishment of credibility system



▲ Leaders of Ansteel Group Corporation talk with newly appointed leaders on honesty and integrity.



Ansteel Group Corporation's series of Honesty and Integrity

Effective Supervision

In 2011, Ansteel Group Corporation exercised effectiveness supervision over 346 projects, avoiding and retrieving economic losses of RMB 363 million and making 1,030 proposals on supervision.

Effectiveness supervision across Ansteel Group Corporation. Ansteel Group Corporation carried out special investigation on the management of procurement, receipt, delivery and storage of raw materials, fuels and spare parts and components. The efforts were especially put into the resolution of loose implementation of rules and regulations and the management not up to the standards. Furthermore, Ansteel Group Corporation also conducted overall double check of the "off-book accounts" and took related measures to consolidate the achieved results. In July of 2011, Ansteel Group Corporation exchanged experience regarding the establishment of long-term and effective mechanism for preventing the "off-book accounts" in the centrally-administered enterprises and started self-check of accelerating the transformation of economic development method.

Effectiveness supervision across entrusting parties. Regarding the effectiveness supervision across entrusting parties, Ansteel Group Mining Company carried out the mining resources protection; Angang Steel Co. Ltd. liquidized the scrapped and stocked spare parts and reutilized the worn-out parts; Ansteel Iron and Steel Group Corporation International Trade achieved significant results in the effectiveness supervision on the loss and consumption reduction of fuels and raw materials loading and unloading; and Ansteel Construction Group Corporation improved the credibility by special effectiveness supervision on the economic contracts. Moreover, Pangang Group Company Ltd. built a special inspection team to tackle the prominent issues in the project construction field to inspect the process from decision-making to the completion acceptance for 42 projects and released the *Notice on Inspecting and Addressing the Issues in Project Construction*.







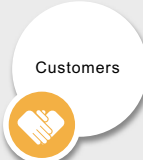
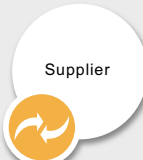

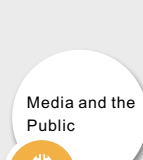
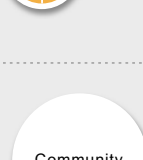
▲ Ansteel Group Corporation is introducing experience on the meeting to exchange experience on the establishment of long-term systems to prevent "off-book accounts" in the centrally-administered enterprises

Communication with Stakeholders

While striving to create values, Ansteel Group Corporation, which puts people first and honors its promises, takes into account the demand of relevant stakeholders by enhancing its communication with them and making a prompt response to their concerns so as to achieve harmonious development with the government, shareholders, staff, customers, suppliers, communities, non-government organizations(NGOs) and other stakeholders.

Communication with Stakeholders

Name of Stakeholders	Means of Communication	Expectation for Ansteel Group Corporation	Requirements of Stakeholders	Major Indicators
 <p>Government</p>	Laws and regulations, policies, meetings, symposium, statements, visits, annual conferences with local enterprises, and special liaison agency with local enterprises.	To achieve steady business growth, pay taxes in accordance with laws, increase employment opportunities, and promote harmonious development of economy, society and environment for common prosperity.	To make contributions to a harmonious and resource-efficient society, and the sustained increase of fiscal revenues of local governments, and compliance with laws and regulations.	Total taxes, job creations, non-profit programs for public good, and compliance of environmental indicators.
 <p>Investors (represented by SASAC)</p>	Laws and regulations, policies, attendance of meetings, resolution implementation, business performance assessment, regular reporting, communication, and statements.	To enhance profitability and core competitiveness to ensure the value maintenance and appreciation of state-owned assets.	Production safety, risk control, and enhanced capability for technological innovation to achieve sustainable development, and value maintenance and appreciation of assets.	Total profits, rate of return on net assets, average owner's equity, ratio of total costs to operating revenues, current asset turnover ratio, main business revenues, total costs, and aggregate assets and liabilities.
 <p>Other shareholders</p>	Shareholder's meeting, information disclosure and written notices to shareholders.	To enhance corporate value and market capitalization of listed companies, rate of return on investment, and risk avoidance.	Public disclosure of major information, equal access to opportunities, and protection of shareholders' interests.	Market capitalization of listed company, rate of return, and rate of return on investment in joint-venture projects.
 <p>Employees</p>	Employees' Congress, rationalization proposals, symposium, suggestion solicitation, and communication.	Stable businesses and sustained development, sharing of the fruits in report and development, and more welfare and growth opportunities.	Occupational training, career development, welfare, and safe and clean working environment.	Employee satisfaction and loyalty, staff turnover rate, and input into training for employees.

Name of Stakeholders	Means of Communication	Expectation for Ansteel Group Corporation	Requirements of Stakeholders	Major Indicators
 <p>Customers</p>	EVI systems, daily contact with sales representatives, exhibitions, customers' conference, regular visits, and suggestion solicitation.	High-quality and low-price products and services, and more customized services.	To focus on customers' demands, offer customized services, and improve the quality of products and services.	Customer satisfaction.
 <p>Supplier</p>	Field survey, contract negotiation, regular visits, tendering conference, and suggestion solicitation.	To provide long-term services, achieve stable and sustained earnings, and carry out sunshine procurements.	Reasonable price, stable policies, mutual benefits and win-win results.	Rate for project cooperation and contract execution.
 <p>Associations and Societies</p>	To join associations and/or societies, assume positions and take an active part in activities.	To fulfill responsibilities in the association and/or society and play an active role in various professional fields.	To take an active part in a activities for environmental protection, economic development and social progress.	Number of the social organizations joined, the annual fees paid and total sum of money donated.
 <p>Media and the Public</p>	Press conference, media communication, information exchange and liaison via telephone, email, fax, letter, visit and website.	To follow the concept of circular economy and green steel, and the path to sustainable development so as to Set an example in fulfilling social responsibility.	To release relevant corporate information in a prompt manner.	Number pieces of news released, and collection of and feedback on public opinions.
 <p>Community</p>	Joint community development, joint project development and regular communication.	To promote civilized production and achieve community harmony by providing a clean and healthy living environment.	To make no pollution or damage to environment, and provide resources for harmonious communities.	The amount of input into community development, and the number of pollution complaints.

► Strategic cooperation with stakeholders

By adhering to the principles of "Equality and Mutual Trust, Sharing of Risks and Profits, Mutual Benefits and Joint Development", Ansteel Group Corporation concluded the strategic cooperation agreements with China National Offshore Oil Corporation (CNOOC), China Agri-Industries Holdings Limited, China Unicom, China Gezhouba Group Co., Ltd., China Export & Credit Insurance Corporation and A.P. Moller - Maersk Group, etc. Anshan Iron and Steel Group Corporation signed Letter of Intent with Kobe Steel Ltd. to form a joint venture mainly engaged in the production and sales of cold-rolled advanced high strength sheet for automobile use. Ansteel Engineering Technology Corporation signed the Memorandum of Cooperation with General Electric International Operation Company authorized by General Electric Company to build a joint innovation organization to develop the innovative projects and expand the application of innovative achievements. Pangang Group Company Ltd. signed a strategic cooperation agreement with Guizhou Panjiang Investment Holding (Group) Co., Ltd. to utilize the resources, capitals, technology and management of both parties and the advantages in comprehensive utilization to complement with each other and make both parties the best and biggest. Pangang Group Company, Vanadium and Titanium Co., Ltd. has fulfilled the extensive exchanges with Sichuan Changhong Electronic Co., Ltd. in terms of technology, trade and capital and concluded a strategic agreement to build the strategic cooperation relationship.



▲ Ansteel Group Corporation concludes the strategic cooperation agreement with China National Offshore Oil Corporation (CNOOC)



▲ Ansteel Group Corporation signs the strategic cooperation agreement with China Export & Credit Insurance Corporation



▲ Ansteel Group Corporation concludes the strategic cooperation agreement with China Agri-Industries Holdings Limited

► Exchange with Stakeholders

Ansteel Group Corporation attaches great importance to the exchange with the governments, customers, suppliers, strategic partners and other stakeholders. On March 16, 2011, Chen Zhengao, Governor of Liaoning Province, made an inspection to Chaoyang Anling Iron & Steel Company, Ltd. On September 18, 2011, Gu Xiulian, former Vice Chairwoman of National People's Congress and Director of the China Working Committee for the Caring of the Younger Generation led the representatives of grass-root working meeting of China Working Committee for the Caring of the Younger Generation to visit Anshan Iron and Steel Group Corporation. On December 22, 2011, Liu Qibao, Secretary of CPC Sichuan Provincial Committee and Wu Jianchang, Honorary President of China Iron & Steel Association and other leaders attended the ceremony to celebrate the completion of Pangang Group Company Ltd. Xichang Vanadium & Titanium Resources Multi-purpose Utilization Project. On December 29, 2011, Jiang Jufeng, Governor of Sichuan Province, made an inspection of titanium sponge factory under Pangang Titanium Industry Co., Ltd. Xie Hongguang, Vice-commissioner of National Bureau of Statistics and Fu Jianhua, Deputy Director of State Administration of Work Safety made an inspection and provided guidance successively to Pangang Group Company Ltd. Ansteel Group Corporation has also made exchange on the deepening of cooperation between enterprise and local governments with major leadership of local governments. Moreover, Ansteel Group Corporation also conducted exchange and cooperation with Sinopec Group, China Energy Conservation and Environmental Protection Group, Oriental Electrical Machine Co., Ltd, Dalian Port Corporation Limited, Huaibei Coal Mining Group, Heilongjiang Longmay Mining Holding Group Co., Ltd., Baifushi Company from France, Rutgers Group from Germany, Nippon Yusen Kabushiki Kaisha and Stollberg & Samil Co., Ltd. from South Korea together with other renowned enterprises home and abroad.



▲ Gu Xiulian, former Vice Chairwoman of National People's Congress and Director of the China Working Committee for the Caring of the Younger Generation pays a visit and made an inspection to Anshan Iron and Steel Group Corporation.



▲ Leadership of Ansteel Group Corporation exchanges views with leaders of Shanghai Municipality.



▲ Jiang Jufeng, Deputy-Secretary of CPC Sichuan Provincial Committee and Governor of Sichuan Province makes an inspection to titanium sponge factory under Pangang Titanium Industry Co., Ltd.



▲ Leaders of Sichuan Province and China Iron & Steel Association attend the ceremony to Completion Ceremony of Pangang Group Company Ltd. Xichang Vanadium & Titanium Resources Multi-purpose Utilization Project.

On September 13, 2011, Zhang Xiaogang, President of Ansteel Group Corporation, met with Gary Locke, the United States Ambassador to China, and conducted exchanges with each other on such issues as trading, investing and business activities carried out by Anshan Iron and Steel Group Corporation in the United States. On June 2, 2011, Dr Geoff Raby, the Australian Ambassador to China, paid a visit to Anshan Iron and Steel Group Corporation to observe and study its development, level of technological equipment, production capacity, product structure, etc.



▲ Zhang Xiaogang, President of Ansteel Group Corporation, met with Gary Locke, the United States Ambassador to China.



▲ Dr Geoff Raby, the Australian Ambassador to China, paid a visit to Anshan Iron and Steel Group Corporation.



▲ Chen Zhengao, Governor of Liaoning Province makes an inspection to Chaoyang Anling Iron & Steel Company, Ltd.



▲ Leadership of Ansteel Group Corporation exchanges views with leaders of Mianyang City.



▲ Leaders of Ansteel Group Corporation pay a visit to Liaoning Electronic Power Company Limited.

► Technological Exchange between Anshan Iron and Steel Group Corporation and China Steel Corp in Taiwan

In the wake of the 1st Technological Exchange Symposium between Anshan Iron and Steel Group Corporation and China Steel Corp in Taiwan in 2010, the 2nd Technological Exchange Symposium between the two enterprises was held on September 5, 2011 in Anshan Iron and Steel Group Corporation. The principals and experts of both parties conducted all-around exchange and discussion on the steel and metallurgy process and technology. The aim was to deepen the mutual benefits and cooperation, fulfill the mutual development and ultimately promote the development of steel industry across the Taiwan Straits through the enhancement of technological exchange and cooperation.



▲ The 2nd Technological Exchange Symposium between Anshan Iron and Steel Group Corporation and China Steel Corp in Taiwan was held in Anshan Iron and Steel Group Corporation.

► Omni-directional Exchange between Ansteel Group Corporation and CIMC

The Omni-directional Symposium on the Strategic Cooperation between Ansteel Group Corporation and CIMC was held in Dongguan of Guangdong Province on September 16, 2011. Major leaders from Ansteel Group Corporation and CIMC as well as principals of related authorities (companies) participated in the aforesaid symposium. Centering on the planning of enterprise development strategy, business mode innovation, industry chain connection service, project development and cooperation, mode for control and management and talent cultivation, both parties exchanged views and discussed in an all-around and in depth method, which signified a higher strategic cooperation between Ansteel Group Corporation and CIMC. Both Ansteel Group Corporation and CIMC indicated that both parties would take the exchange as the starting point to further implement the exchange and cooperation projects, improve the mechanism for exchange and cooperation and enrich the fields and contents of exchange and cooperation with a view to making progress together and achieve win-win.



▲ Omni-directional Exchange between Ansteel Group Corporation and CIMC

Participating in Activities Organized by Associations/Societies

Major Associations/Societies Joined by Ansteel Group Corporation

No.	Name of Association/Society	Ansteel Group Corporation's Status in Association/Society	Association/Society's Tasks
1	World Steel Association	Chairman	To promote exchange and cooperation among international iron & steel enterprises.
2	Vanadium International Technical Committee	President	To promote the scientific and technological progress of the international vanadium industry and facilitate the application of vanadium.
3	China Enterprise Confederation China Enterprise Directors Association	Vice President	To promote institutional, management, and technological innovation.
4	China Federation of Industrial Economies	Vice President	To promote China's modernization, institutional reforms in industrial management, and scientific and technological innovation.
5	China Iron & Steel Association	Vice Chairman	To establish and enhance industrial coordination and self-discipline, and promote the sustainability of Chinese iron & steel enterprises , to enhance their competitiveness.
6	Vanadium & Titanium Resources Multi-purpose Utilization Industry Technological Innovation Strategic Alliance	Director-General	To study the critical core technology that restricts the industry development and provide powerful support for the improvement of vanadium and titanium resources multi-purpose utilization in our country.
7	The Chinese Society for Metals	Vice Director-General	To promote technological exchange and cooperation in metallurgical technologies and manufacturing.
8	China Tendering & Bidding Association	Executive Director	To organize tendering and bidding, and promote exchange and cooperation in industry management.
9	China Occupational Safety and Health	Executive Director	To promote production safety and occupational safety and health.
10	China Association for Labor Studies	Vice President	To promote labor studies, consultation, publicity and exchange.
11	China Association of Chief Financial Officer	Vice President	To promote scientific management and internal control, and improve financial management.
12	China Audit Society	Director	To promote audit research and exchange, and the development of the audit industry.
13	China Tax Institute	Director	To study taxation theories, policies and institutions, and conduct academic exchanges in economics and taxation.
14	China Price Association	Director	To study price theories, policies and conduct academic exchanges and cooperation.
15	China Association of Quality	Member	To conduct national quality advancement programs, and promote advanced concepts, methods and technologies for quality.
16	China Association of Plant Engineering	Vice President	To promote the modernization of equipment management, and conduct exchange and cooperation in equipment management.
17	China Institute of Internal Audit	Director	To promote self-discipline for internal audit to ensure the independence and authoritativeness of internal audit.
18	China Metallurgical Construction Association	Vice President	To promote the sustained and sound development of the metallurgical construction industry.
19	China Group Companies Association	Vice President	To promote the establishment of modern corporate systems in large companies, conglomerates and leading companies.
20	China Enamelware Industry Association	Member	To advance the application of new technologies, equipment and materials, and make proposals on the adjustment of the product mix and technological upgrading of products.
21	China Vanadium Association	Chairman	To promote highly efficient utilization and scientific development of vanadium resources in China and give a full play by focusing on the progress of vanadium technology and expansion of vanadium applications.
22	China Association of Resource Comprehensive Utilization	Vice Director-General	To conduct the research and communication on the comprehensive resource utilization and promote the continuous development of comprehensive resource utilization.
23	Wire Rod Product Branch Association of China Steel Construction Society	Director-General	To protect industrial interests and promote industrial development by performing its function of organization, coordination and information exchange.

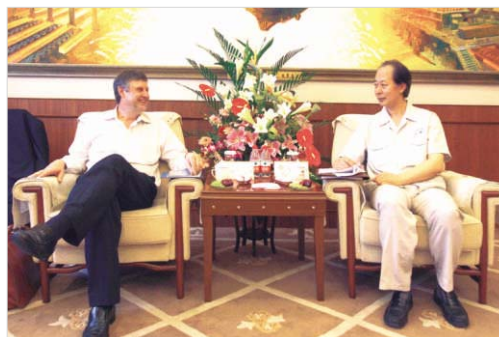
► Committed to the Sustainable Development of Global Steel Industry

Zhang Xiaogang, General Manager of Ansteel Group Corporation was elected as Chairman of World Steel Association at its 45th Annual Conference in Paris, France on October 11, 2011. As the new Chairman of World Steel Association and during his term, Mr. Zhang Xiaogang, apart from hosting the Annual Conference of the Association, the Board Directors Meeting and Executive Committee Meeting of the Association, will negotiate with Vice Chairman and Executive Committee to supervise the work of the Association. Concurrently, Mr. Zhang Xiaogang serves as the member of the Executive Committee, Nomination Committee and Board Directors for the current World Steel Association.

Anshan Iron and Steel Group Corporation joined World Steel Association in 2004 and become the member of its Executive Committee in 2007. Recent years Ansteel Group Corporation had raised the strength of the group by many methods including scientific innovation, consolidation and reorganization and investment in joint-venture projects and made achievements in the globalized development strategy and green steel construction, etc. In terms of building up the global industry chain layout, Ansteel Group Corporation took the responsibility proactively to conduct cooperation in multiple forms with the enterprises in the related industry, which not only had achieved mutual benefits and win-win results for both parties, but also had contributed to the sustainable development of global steel industry.



▲ Zhang Xiaogang, General Manager of Ansteel Group Corporation is elected Chairman of World Steel Association.



▲ Zhang Xiaogang, General Manager of Ansteel Group Corporation meets with Dr. Edwin Basson, Director-General of World Steel Association.

► The Set-up of Vanadium & Titanium Resources Multi-purpose Utilization Industry Technological Innovation Strategic Alliance

On July 12, 2011, Vanadium and Titanium Resources Multi-purpose Utilization Industry Technological Innovation Strategic Alliance was set up in Beijing. Yu Zisu, Deputy General Manager of Ansteel Group Corporation and General Manager of Pangang Group Company Ltd. was selected as Director-General. The aim of the alliance is to rally the most outstanding leading icons and talents in the vanadium and titanium resources multi-purpose utilization field to study the critical core technology that restricts the industry development and provide powerful support for the improvement of vanadium and titanium resources multi-purpose utilization in our country. As the founder of the alliance, Pangang Group Company Ltd. will strengthen the communication and coordination with the members, intensify the organizational system and innovate in the working mechanism to build a first-class technological innovation platform with common industry features and maximize the synergy and role of alliance in driving the core technological innovation in the industry.



▲ Vanadium & Titanium Resources Multi-purpose Utilization Industry Technological Innovation Strategic Alliance was founded in Beijing.

Academic Exchanges

On May 12, 2011, the 5th Council Meeting and the Session for Founding the 6th Council of the Steel Rolling Branch Association of the Chinese Society for Metals was held in Anshan Iron and Steel Group Corporation. Zhang Xiaogang, General Manager of Ansteel Group Corporation was elected as the Director-General of the 6th Council.

On August 3, 2011, Pangang Group Jiangyou Changcheng Special Steel Co., Ltd. co-sponsored the 12th Annual Meeting of China Super-alloy Collections with High Temperature Material Branch Association of the Chinese Society for Metals. There were 306 experts and scholars majoring in super-alloy from 43 domestic scientific research institutes and steel enterprises participating in the meeting. They exchanged views and discussed on the development, application and market prospects of super-alloy industry.

Ansteel Group Corporation co-hosted with Chinese Society for Metals the 2nd International Symposium on Clean Steel Production Technology in Shenyang on August 24, 2011. Nearly 300 renowned experts, scholars and technicians from 9 countries including China, Germany, USA, Australia, Italy and Japan participated in the symposium. Focusing on the six aspects such as study of clean steel fundamental theory, clean steel production process technology, technology of controlling the impurity in the steel and automatics in the production process, people exchanged their views and discussed in the symposium so as to boot the development of clean steel production technology.



▲ Ansteel Group Corporation plays host to the Second Session of International Symposium on Production Technology of Clean Steel

On October 13, 2011, Anshan Iron and Steel Group Corporation hosted the 4th Session of Environmental Policy Committee of World Steel Association to communicate and explore the policy regarding the global climate change and new issues on environmental policies faced by the iron and steel industry.

On October 24, 2011, Pangang Group Research Institute Co., Ltd. and National Key Lab of Vanadium and Titanium Resources Multi-purpose Utilization hosted the 1st Seminar on Advanced Technology in Vanadium Industry. Themed Vanadium Extraction and Deep Processing, the seminar had in-depth exploration and communication on the vanadium extraction technology, vanadium product development and clean production of vanadium.

On November 4, 2011, Pangang Group Research Institute Co., Ltd. co-sponsored 2011 Academic Seminar Blast Furnace Smelting of Vanadium Titano-magnetite with Chongqing University. The seminar carried out the in-depth discussion and view exchanges on the mineral processing technology and low cost smelting of vanadium titano-magnetite based on the blast furnace smelting and multi-purpose utilization of vanadium titano-magnetite.

On November 18, 2011, Pangang Group Company Ltd. and Vanadium and Titanium Resources Multi-purpose Utilization Industry Technological Innovation Strategic Alliance co-hosted 2011 Seminar on New Technology of Vanadium and Titanium Resources Multi-purpose Utilization. The seminar, themed "New Process, New Technology, New Equipment and New Thought of Titanium Resources Multi-purpose Utilization", has conducted exploration and exchange on the process of titanium resource application, nano titanium dioxide new materials, chloride process titanium dioxide, mineral ilmenite direct electrolysis technology and titanium-bearing new material, to name just a few.



▲ Ansteel Group Corporation plays host to the Fifth Session Council Working Conference of the Chinese Society for Metals Steel Rolling Branch



▲ Pangang Group Company Ltd. plays host to the Twelfth Annual Meeting of High Temperature Alloy of China.

Responsibility for Customers

Marketing Philosophy

Ansteel Group Corporation takes as its marketing philosophy "customer-friendly service and win-win cooperation". The demands of customers are what we make utmost efforts to satisfy; the standards and plans of customers are also what we try every means to follow; the interests of customers are also what we do our best to safeguard. Therefore, the customer satisfaction strategy has been implemented across the board.

Customer Service System Establishment

Enhance the service concept. Ansteel Group Corporation has deepened and enhanced the service concept across the board and established a System of "Excellent Service" geared to the demands of consumers, which covers all links in value chains. The omni-directional fast service mechanism has been promoted, and the pre-sale, in-sale and after-sale service system have been continuously innovated to maximize the coordination among industrial managers, technological experts, and administrative staff for contracts and logistics. Hence the One-Stop service has been accomplished.

Customer Management. The efforts have also been made to conduct customer classification management, improve customer evaluation system and strengthen the assessment of customer turnover rate based on the customers' industries, importance and representativeness to continuously raise the service quality. Meanwhile, Ansteel Group Corporation has improved and implemented the accountability system of industry representatives and customer representatives and laid down the *Customer Service Management Measures*. Furthermore, the efforts have been made to identify the shortest complaint handling cycle in the automobile and home appliances industry and improve the customer satisfaction through the improvement of post-sale service, objection management personnel accountability system, qualification system of handling personnel, enhancement of the objections handling quality and acceleration of the handling. Last but not the least, the service quality and efficiency during the whole process of sales have been raised by virtue of the further implementation of e-commerce, and remote material inquiry system, shipping information inquiry and other value-added services.

Start-up of the early vender involvement (EVI). EVI has been practiced in the knock-out products of Ansteel Group Corporation to continue the improvement of the core competitiveness of products. Based on the experience summary of five EVI team building in 2010, there were four EVI project teams added in 2011, namely steel for pipeline team, steel for oil well tubing, high strength steel for engineering mechanism purpose (including high strength bridge steel) and steel for rescue capsule. In all these teams, the EVI team engaged in the automobile steel has completed the material die trial and production in small batch with 7 automobile production enterprises, 9 new models, over 10 grades and over 30 specifications. The EVI team in the nuclear power steel achieved over 10 types of steel on-line production and expanded the direct suppliers to 10.

Establishment of Customer Information Protection System. Ansteel Group Corporation has standardized the management of confidentiality, restricted the entitlement to customer management, centralized the management of sales archives, prohibited the access of sales management system to the Internet and enhanced the training on the confidentiality consciousness of business staff so as to keep strict secret of customer information, contract terms and conditions and cooperation and effectively protect the information and legal rights and interests. In 2011, no customer information leak occurred in Ansteel Group Corporation.

Customer Satisfaction Management

By adhering to the customer orientation and continuous improvement, Ansteel Group Corporation has improved the customer satisfaction survey and monitoring methods. Moreover, Ansteel Group Corporation amended the management process to measure the customer satisfaction and added assessment weight to some significant issues concerned by the customers, organized the customer satisfaction survey on a regular basis, made rectification on a fixed term and provided timely response to customers to continuously enhance the product and service quality and ultimately the customer satisfaction.

In 2011, Wire Rod Factory of Angang Steel Co., Ltd was honored with the title of Customer Satisfaction Enterprise in Liaoning Province. Dongfeng Automobile Co., Ltd., Chongqing Jianshe Industry Group and FAW-GM Hongta Yunnan Automobile Co., Ltd. recognized Pangang Group Company Ltd. as the outstanding supplier and Sichuan South Chun Auto Group Company Limited honored with the title of Strategic Alliance Model 2011.

► Management System Certification

Angang Steel Co., Ltd has obtained the certification of ISO9001 Quality Management System, ISO 14001 *Environmental Management System* and GB/T28001-2001 *Occupational Health and Safety Management System*. The cold-rolled automotive sheets have obtained the certification of ISO/TS16949 *Quality Management System—Particular Requirements for the Application of ISO9001 for Automotive Production and Relevant Service Part Organization*, and the petroleum pipes and line pipes the API (American Petroleum Institute) Monogram Licensing Program. In 2011 part of the major varieties of hot-rolled coil, cold-rolled and hot-dipped galvanized zinc plate and medium and heavy plate obtained the certification of JIS (Japan Industrial Standards), the certification expansion of CE-marked variety and specification for products exported to Europe and certification upgrading of API marked seamless products. The quality, safety and environmental protection management system of Pangang Group Company Ltd. passed the annual audit of Beijing Grand Honour Management System Certification Co., Ltd. on July 1, 2011.

► Quality Management

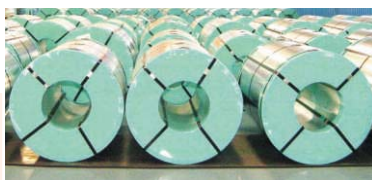
Following the principle of Quality the First and User the Utmost, Ansteel Group Corporation has kept on optimizing the quality control, gave prominence to the quality strategy, taken the variety and quality of premium products as the critical content of product structure adjustment, kept on strengthening the process management and quality management in the process to achieve the steady progress in the product quality. While enhancing the quality consciousness of the staff, Ansteel Group Corporation also facilitated the significant elevation of its core competitiveness through great-leap-forward upgrading of product quality.

In 2011, the extra-deep drawing cold-rolled low carbon steel sheet and steel strip of Angang Steel Co., Ltd. were granted the Top Quality Award for Metallurgical Products of High Quality by China Iron & Steel Association. The hot-rolled product corrosion resisting structural steel, heavy plate product boiler and steels for pressure vessel use were granted "Golden Cup" Award for metallurgical products of high quality. Angang Steel Co., Ltd. won the Governor Quality Prize of Liaoning Province. The cold rolled steel sheet and strip series and other 2 types of products from Anshan Iron and Steel Group Corporation were accredited as brand-name products in Liaoning Province. Panzhihua Steel & Vanadium Co., Ltd. was honored with the title of China Quality Integrity Entity. The track shoes produced by Pangang Group Metallurgical Engineering Technology Co., Ltd. were accredited as the National Customer Satisfaction Product. Furthermore, with the successful production of titanium sponge with the national standard Brinell hardness lower than 90, Pangang Group Company Ltd. achieved an unprecedented record domestically. The heavy rails and 310 Z-shaped steel and other 6 products of Pangang Group Company Ltd. were recognized as brand-name products in Sichuan Province.

► Major Products

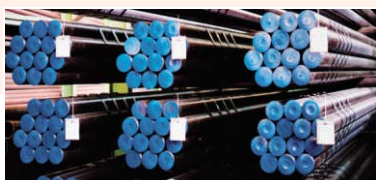
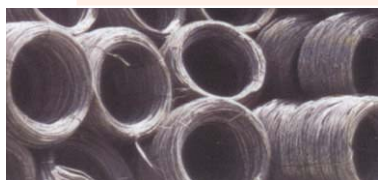
Anshan Iron and Steel Group Corporation boasts around 40 coking and chemical products as well as iron & steel products of 42,000 specifications with 600 steel grades in 120 categories of 16 varieties, including a complete series of products, such as hot- rolled coils and sheets, cold-rolled sheets, galvanized sheets, color coated sheets, cold-rolled silicon steel, heavy rail, medium and heavy plate, seamless pipes, and steel wire rod and wire rope. These products find their extensive application in mechanical, metallurgical, petroleum, petrochemical, coal, power, railway, shipbuilding, automotive, construction, household electrical appliances, and aerospace and national defense industries. In addition, Anshan Iron and Steel Group Corporation is engaged in the R & D and production of special iron & steel products to meet with the special demands of some customers and requirements of state-level engineering projects.

Pangang Group Company Ltd. products, which take on distinctive features, include vanadium series like vanadium-nitrogen alloy, vanadium pentoxide and high-vanadium iron; titanium series like high-titanium slag, titanium dioxide, titanium sponge and rolled titanium; section steel series like steel rails for high-speed railways, 310 Z-shaped steel and oxygen cylinder base; sheet series like sheets for automotive frames, high- strength and deep drawing galvanized sheets, high quality aluminum-plated zinc sheets and other hot-rolled and cold-rolled sheets; pipe series like quality seamless steel pipes; special steel like high-temperature alloys and die steel; and quality steel rebar and wire rod.



Iron and steel products

Form a complete series of products, such as hot-rolled coils and sheets, cold-rolled sheets, galvanized sheets, color coated sheets, cold-rolled silicon steel, heavy rail, seamless pipes and building material.



Vanadium products



钒氮合金



高钒铁



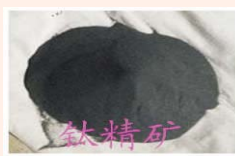
三氧化二钒



五氯化二钒

Vanadium products have independent intellectual property rights, boasting leading technology and variety across the global and including vanadium series like vanadium- nitrogen alloy, vanadium pentoxide, vanadium trioxide, high-vanadium iron and vanadium aluminum alloy.

Titanium products



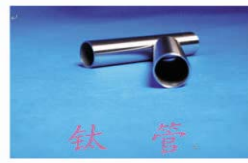
钛精矿



钛渣



钛白粉



钛管

Titanium products boast complete series including ilmenite, high-titanium slag, titanium dioxide, titanium sponge, rolled titanium and titanium alloy. Among these products, ilmenite, titanium sponge and titanium dioxide take the lead domestically.

Supplier Management

Strengthening the Establishment of a Management System for Centralized Procurement

Ansteel Group Corporation has made much headway in the improvement of management system for centralized procurement and brought into full play the large-scale procurement and management synergy. With the compilation and issuance of the *Synergy Procurement Process for Both Ansteel Group Corporation and Pangang Group Company Ltd.*, Ansteel Group Corporation and Pangang Group Company Ltd. fulfilled the synergy procurement of imported raw materials and fuels, optimized the catalogue of centralized procurement, organized the centralized procurement of bulk, general and key items and achieved the centralized and collaborative tendering for general and standard items separately purchased by the subsidiaries.

Supplier Management

In order to create a supply chain with unique competitive advantages for green procurement, Ansteel Group Corporation further specified access for suppliers, built a information platform for qualified supplier resources, identified a catalogue of strategic, significant and general qualified suppliers and established the supplier evaluation and information pre-alerts to provide real-time pre-alert. Moreover, Ansteel Group Corporation implemented the evaluations of suppliers in terms of qualification and capability, product quality, contract execution, after-sale services, environmental protection as well as integrity and honesty to realize the dynamic management and resource sharing of qualified suppliers.

Green Procurement and Sunlight Procurement

Further standardize the bidding procurement by sticking to Green Procurement and Sunlight Procurement. In 2011, Ansteel Group Corporation required the suppliers that manufacture flammable, explosive, toxic or hazardous products or those harmful to the environment, and occupational health and safety obtain a relevant management system certification, be capable of recycling and treating packaging and wastes and follow the state's requirements on production, safety and environmental protection.

Ansteel Group Corporation has built a complete system and process of bidding and tendering, developed an online software platform for bidding and tendering for promotion and fulfilled online announcement of tendering information, online bidding and bid opening and online publication of bid evaluation results and online transfer, verification and approval for various parts of bidding and tendering. In addition, Ansteel Group Corporation made innovations in the supervision methods and standardized the bidding and tendering through the audio and video recording, recording of telephone conversation among multiple parties, inquiry of audio recording in computer for the whole process of bid opening and evaluation to standardize the bidding and tendering.



▲ Symposium on Procurement Supply and Tendering Management in Ansteel Group Corporation



▲ Communication between Leaders of Ansteel Group Corporation and Leaders of Heilongjiang Longmay Mining Holding Group Co., Ltd.

Chapter

02 Business Performance

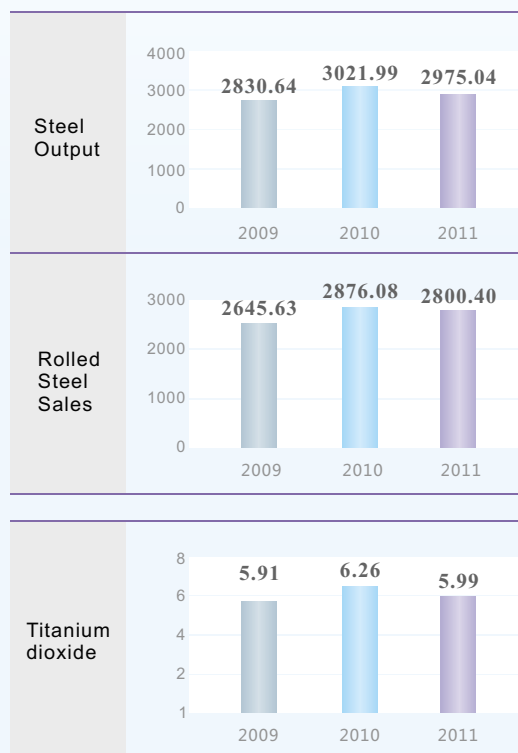
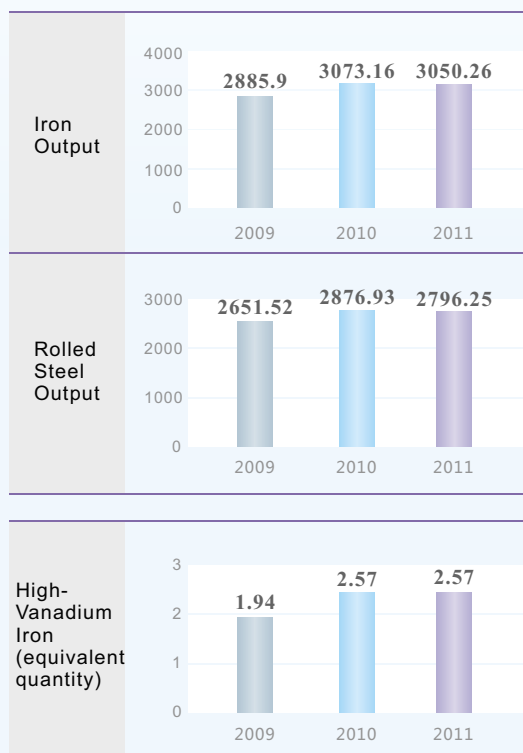
Major Business Indicators
Capital Operation
Technological Innovation
Informatization Construction



Major Business Indicators

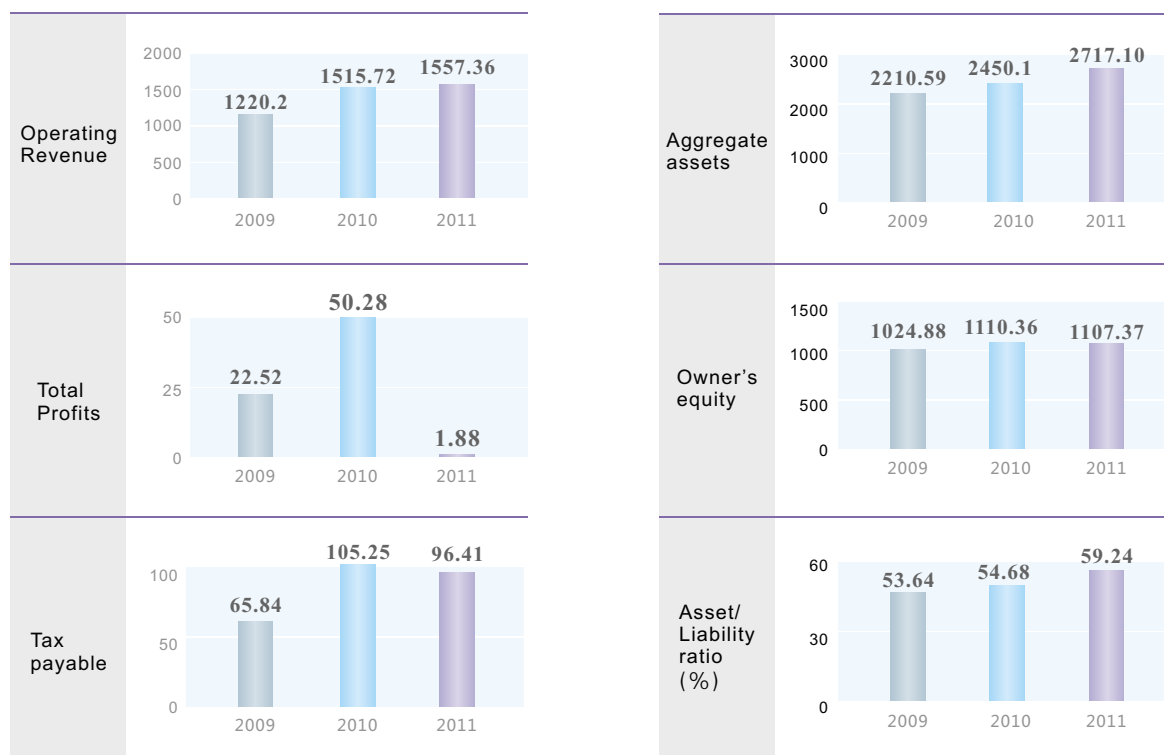
Product Sales of Ansteel Group Corporation

Unit: 10,000 tons



Major Financial Indicators of Ansteel Group Corporation

Unit: RMB 100 million



Analysis of Business Conditions

Impacted by the slow-down of macro-economy, the downstream demand for iron and steel was weakened in 2011. Moreover, the profit of the enterprise was also hit due to the growth of steel product prices lower than the growth of raw materials and fuels purchased outside.

The hiking prices of raw materials and fuels put the production and operation of enterprises under mounting pressure. The prices of coal, iron ore and other bulk raw materials and fuels at home and abroad were running at high 2011. Plus the insufficient demand at downstream, the iron and steel market was in oversupply on the whole. Although the prices of imported iron ore fell in the October of 2011, they rebounded quickly. The domestic coking coal, PCI coal and steam coal prices were also running at high levels. Therefore, the enterprises were under huge pressure of operation while the growing procurement cost was in contrast to the sluggish steel market.

Iron and steel product export faced increasing difficulty. In spite of the overall demand growth in the global steel product market, the export of iron and steel from our country still faced tremendous difficulty given that the great increase of the overall production by steel enterprises across the globe made the competition more intense together with the rising danger of trade protectionism. From July of 2010, the state's adjustment of the export tax rate for some iron and steel products made the export more difficult.

Rising cost of capital. Firstly, the financing cost for enterprises went up. The rise of interest rates for loans for three times by the state in 2011 has burdened enterprise with more interest payment. Meanwhile the change in the state's monetary policy and the constant escalation of banknotes' discount rate were the reasons of discounted charge hiking when the enterprises accepted the banknotes. On the other hand, the decreased liquidity of currency in the market led to a tight budget in both upstream and downstream enterprises and dire finance situation outside Ansteel Group Corporation.

Capital Operation

Assets Replacement

In line with the strategic positioning of its subordinated listed companies, Ansteel Group Corporation has carried out an assets replacement between Pangang Vanadium and Titanium Co., Ltd. and successfully addressed the risk of second cash option during the overall listing of Pangang Vanadium and Titanium Co., Ltd. The asset replacement plan between Anshan Iron and Steel Group Corporation was approved by SASAC, National Development and Reform Commission, Ministry of Commerce, China Banking Regulatory Commission and Australia Government and obtained the final ratification from China Securities Regulatory Commission in 2011. Hence Ansteel Group Corporation fulfilled the strategic positioning of its subordinated listed companies, built two professional listed platforms, i.e. Angang Steel Co., Ltd. was mainly engaged in iron and steel business while the principal business of Pangang Vanadium and Titanium Co., Ltd. was the iron ore mining and manufacturing, processing and application of vanadium and titanium products.

Joint Venture Partnership

Anshan Iron and Steel Group Corporation co-invested with Stemcor Group, UK to found Ansteel Holdings (UK) Ltd. with 50-50 ownership. Then Ansteel Holdings (UK) Ltd. acquired two thirds of equities from USS Processing Center in UK and had the dominant control over the center. In September of 2011, Chinese consortium composed of Anshan Iron and Steel Group Corporation, Citic Group, Baosteel Group, Taiyuan Iron & Steel and Beijing Shougang Co. acquired 15% stake of Companhia Brasileira de Metalurgia e Mineracao(CBMM). The ownership of Anshan Iron and Steel Group Corporation accounted for 16.67% of the consortium joint venture. On September 27, 2011, China Ordins Group Co., Ltd., an entity held by China North Industries Group Corporation and invested by Anshan Iron and Steel Group Corporation and Jiangxi Copper Industry Group Co. as the strategic investors, was founded in Beijing. Pangang Group Company Ltd. signed the *Joint Venture Contract on the Incorporation of Panzhihua CR Gas Co., Ltd. between Pangang Group Company Ltd. and CR Gas Investment (China) Ltd.* on August 20, 2011 to signify the co-investment in the foundation of a joint-venture entity.

In 2011, Anshan Iron and Steel Group Corporation and Angang Steel Co., Ltd. contributed with Anshan Falan Steel Strip Co., Ltd. to incorporate Anshan Falan Packing Materials Co., Ltd with 51% stake of total ownership. Angang Steel Co., Ltd. co-invested with Dalian Shipbuilding Industry Corporation (Group) to found Dalian Shipbuilding Industry Maritime Engineering Company and Dalian Shipbuilding Industry Steel Co., Ltd. with 15% stake of total ownership in the joint ventures.



▲ Anshan Iron and Steel Group Corporation co-invested with Stemcor Group, UK to found Ansteel Holdings (UK) Ltd.



▲ Pangang Group Company Ltd. carried out gas project cooperation with China Resource Gas Group Limited.

Financing Management

In line with the principle of centralized management of funds, Ansteel Group Corporation exercises unified management over the external borrowing, bond issuance and financing leasing. It funded its lending by virtue of short-term financing bonds, financing leasing, trust receipt borrowings, conclusion of financing leasing contract, RMB negotiated financing and inward documentary bills. Ansteel Group Corporation obtained overseas financing through the low-cost capital from Hong Kong, Japan and other countries and regions and issued the letter of guarantee for the railway construction of Karara Mining in Australia through on-shore and off-shore loans.

Technological Innovation

Development Goal during the Twelfth Five-Year Plan Period

The development goal for Ansteel Group Corporation during the Twelfth Five-Year Plan period is to meet the requirements of economic transformation in China, play the role of a technology leader, exert the advantage in independent innovation and give great impetus to the strategic and forward-looking technological innovation and seize the strategic height in the iron and steel technology field to form a batch of world first-class core technologies with independent intellectual property rights. On the other hand, Ansteel Group Corporation will develop proprietary and leading products, further optimize the product structure, keep on improving the resource utilization rate and develop the low-carbon manufacturing process to promote the sustainable development of iron and steel production. Finally but not the least, Ansteel Group Corporation will speed up the transformation of scientific and technological achievements, strengthen the core technology output and transplanting capability and evolve into a leader of industry development through the low-carbonization and benchmarking of core technology and major products.

Technological Innovation System

By further improvement of scientific and technological innovation system and mechanism, a three-level scientific research and innovation system has been forged in Ansteel Group Corporation. Ansteel Future Iron and Steel Research Institute in Beijing is responsible for the R&D of common technology and cutting-edge and long-term projects in Ansteel Group Corporation, the technology cooperation at home and abroad for critical scientific and technological projects, participation of argumentation of imported technology and critical technology reform project in Ansteel Group Corporation as well as the leading role in the guidance of enterprise technology development. The institute also takes charge of the basic application in the iron and steel enterprises and focuses on the basic research of process, technology and products of iron and steel production. All professional research institutes under Ansteel Group Corporation concentrate on the research of process advancement, quality assurance and costdown.

In the meanwhile, Ansteel Group Corporation has made efforts to improve the technological innovation system, formulated the detailed rules on the selection of critical scientific and technological awards, R&D expense management measures, technology trading management methods, new product development management standards, measurement management system manual, measuring process management standards and the *Guidance on Science and Technology Development of Multi-purpose Utilization of Vanadium and Titanium Magnetic Iron Ore during the Twelfth Five-Year Plan Period* to enhance the management of technological innovation.

Much headway has been made in the establishment of R&D approaches, and the Phase I construction of automotive sheets lab has been completed together with the completion of luminance optical spectrometer, X-ray photoelectron spectrometer and phase transformation tester labs. Furthermore, the function optimization and improvement has been completed for four medium experimental lines, namely new techniques for multi-purpose utilization of vanadium and titanium magnetic iron ore, preparation of high-grade titanium-rich materials, extraction of titanium from the blast furnace slag, and clean production of vanadium oxide, and the function design, equipment selection, installation and commissioning have also been achieved. Hence a test platform has been built for the development of titanium castings and titanium alloy products and recycling and utilization of residual titanium.

Establishment of technology exchange platform to bring group synergy into full play. In 2011, Ansteel Group Corporation organized the symposium on the professional benchmarking and technology exchange across iron-making, steel-making, steel-rolling as well as mining and coking areas to carry out benchmarking, promote and make the advanced technology and practice universal and enhance the overall technological indicators of the enterprise.



▲ Ansteel Group Corporation Benchmarking and Technology Exchange in Steel-making Area.



▲ Pangang Group Company Ltd. and Dongfeng Car Wheel Co., Ltd. co-invested a wheel material research institute

◎ Achievements in Technological R&D

Ansteel Group Corporation, which attaches considerable importance to technical innovation, keeps increasing its input into technological R&D and witnesses the innovation results from multiple projects. Ansteel Group Corporation totally handled 54 national R&D projects in 2011. The High Quality Medium and Heavy Plate Production Technology under the Key Projects in the National Science & Technology Pillar Program and other 3 projects have been inspected and accepted by the state. The completed technique and product development of Ultra Accelerated Cooling and Laminar Cooling equipment and automatic control system of 4,300mm rolling mills for medium and heavy plates has made Ansteel Group Corporation the first iron and steel enterprise that adopts the controlled rolling and controlled cooling technique with the new thermal mechanical rolling controlling technology as the core. The first cold-rolled strip shape measuring and control system developed in the country has been successfully put into industrial application. The completed Research on Economic Use of Step-by-Step Middling Flotation of Hematite Containing Carbonate has achieved highly-efficient utilization of inferior resources. The successful application of the first on-line EDC technology of high speed wire rod in the country filled the gap across China. The building of the world first ultra-large blast furnace injection coke oven gas system has become the model project of energy-saving and emission-reducing during iron-making process. The critical technique and equipment research on highly-efficient mining vanadium and titanium magnetic iron ore and research on critical technology of efficient iron, vanadium, titanium and chromium smelting have laid solid foundation for the highly-efficient utilization of vanadium and titanium magnetic iron resource in our country.

The production of high-alloy steel series has been enhanced due to the research on technology of stainless steel production with the commercial steel technique. The ultra high clean and ultra thin product development has been driven thanks to the development of high quality cold-rolled tinplate. The development of steel wire rod for hyperfine sawing wire has broken a new path for the development of high-end wire rods. The R&D of technology for online-testing of roller axial movement has firstly addressed impact on the rolling stability and dimensional precision of the steel rail in the country and established the online controlling model initially.

Ansteel Group Corporation was an active participator in the formulation and amendment of national and industry standards. 2011 witnessed that Ansteel Group Corporation hosted and took part in the formulation and amendment of 48 national and industry standards and met the working target.

Intellectual Property Rights Management

In 2011, Ansteel Group Corporation had 1,598 patent applications (including 586 invention patents) handled, among which 1,227 patents (including 283 invention patents) were granted by the State Intellectual Property Office; 11 patents were granted from abroad; a total of 1,162 proprietary technologies were accredited. On the other hand, Ansteel Group Corporation won 39 scientific and technological progress awards at or above province level. In these awards, the Independent R&D and Industrial Application of Cold-rolled Shape Controlling Core Technology and Research and Practice of Iron Content Improvement and Silicon (Impurities) Reduction System for Domestic Iron Ore Concentrate won the Second Class Award of the State Scientific and Technological Progress Award. At the 20th National Exhibition of Inventions, Ansteel Group Corporation employees were awarded 8 gold awards, 10 silver awards and 7 bronze awards. Particularly, Chen Xin, an employee of Ansteel Group Corporation was conferred the sole Best Invention by Women of World Intellectual Property Rights Organization in the exhibition. The project of "Recovery of Waste Heat and Gas for Reutilization" of Bayuquan Iron & Steel Subsidiary Company of Anshan Iron and Steel Group Corporation was awarded the Annual Award for Technological Innovation of the World Steel Association and became the first domestic iron and steel enterprise to be granted with such honor. Anshan Iron and Steel Group Corporation was recognized the Model Entity for Implementation and Promotion of Intellectual Property Rights Strategy in Liaoning Province.



1. Wang Jingchuan, former Commissioner of State Intellectual Property Office of the People's Republic of China and Chairman of Patent Protection Association of China gave special topic lecture.
2. Employee of Ansteel Group Corporation was conferred Best Invention by Women of World Intellectual Property Rights Organization.
3. Independent R&D and Industrial Application of Cold-rolled Shape Controlling Core Technology won the Second Class Award of the State Scientific and Technological Progress Award.



R&D of New Products

In 2011, Ansteel Group Corporation produced 6.67 million tons of new products through the constantly increasing efforts on new products R&D, making up 23.86% of the total. The output value of the new products amounted to RMB 36.5 billion, recording a 7.6% higher in average selling prices compared with the record in 2010.

Ansteel Group Corporation made the breakthrough in the development of critical new products including nuclear power, shipbuilding plates, automotive sheets, appliance sheets, marine engineering plate together with vanadium and titanium. As the sole iron and steel-making enterprise in China to produce the steel for key equipment for nuclear island, Ansteel Group Corporation developed the stainless steel for main pipelines of PWR nuclear island and successfully forged the main pipes of AP100 nuclear power. The steel for offshore platform ranked the top in China in terms of certified steel grades, types of steel and thickness ranges. During the R&D of the 3rd generation automotive steel, Ansteel Group Corporation for the first time conducted the industrial production of thicker middle plates in China. The successful development of 5% nickel special steel plate for liquefied ethylene gas (LEG) carriers obtained the certification of classification society in China and ended its sole reliance on import of special steel plate for LEG carriers. The color coated sheets for new type solar water heater and steel for battery shells have been developed while the steady production of chassis plate, steel for communication cabinet and color coated appliance sheets for solar water heater has been achieved. The steel wire rod for ultra-high strength tire cord steel supplied Bekaert, which also made Ansteel Group Corporation the first entity in industrial application of such product in China. The successful production of galvanized steel wire rope with diameter of 160 mm has broken the maximum diameter record for steel wire rope produced through one-off spinning in the country. The online heat treated turnover steel rail obtained certification from the Ministry of Railways. The other new developed products included seamless pipe, steel sheet pile and high strength wheel steel for large diameter winding high pressure vessel for trailers as well as the high grade steel and large diameter electronic vessel for transfer of inert gases.

Development and Production of High Strength Steel Plate for Mine Rescue Capsule

In order to fully enhance the technology in the emergency rescue in coal mines of China, Ansteel Group Corporation successfully developed the high strength steel plate for special use by taking the antiknock quality, resistance to elevated temperature and anti-corrosion of mine rescue capsule. Up till now the contract for ordering over 100 such rescue capsules has been concluded and therefore the trial production has wound up.

Informatization Construction

Objective of Informatization during the Twelfth Five-Year Plan

Centering on development strategy of Four Transformations and adhering to the unified planning, standards, management principle, Ansteel Group Corporation has improved the construction of operation and management platform, production management platform and IT system operation guarantee platform, input more efforts to innovate the application supporting power, promoted the establishment of sharing and intelligent service so as to build the first class IT capability by benchmarking the advanced levels at home and abroad.

More efforts have been made to enhance the core value of IT technology, support the continuous elevation of the enterprise core competitiveness, fulfill the transformation from the informatization in the daily business to the deepened application in supporting and promoting the technological innovation, management innovation and service innovation, support the transformation of business mode and operation mode, transformation from integration inside the enterprise to the integration of upstream and downstream industries outside, support the diversified operation and centralized controlling and transform from the informatization only in the management of iron and steel entity to overall informatization across Ansteel Group Corporation.

By 2015, the overall IT system covering all business across Ansteel Group Corporation will be completed at the initial stage, and the IT capability will come up to the advanced level in China.

◎ Informatization

By applying information technology across Anshan Iron and Steel Group Corporation in the informatization investment strategies and structures, system architecture technology roadmap, IT standards and control system, infrastructure, office automation and synergy system, Ansteel Group Corporation has significantly improved the overall work efficiency. Ansteel Group Corporation also has basically finished overall project of IT system security technology protection to enhance the total security protection capability of information system. The establishment and improvement of procurement and supply project, HR project, finance centralized control project, e-commerce project, decision-making support project, fund settlement project, system monitoring, operation and maintenance management platform project, Manufacturing Execution System (MES) and expansion of Enterprise Resource Plan System in Ansteel Group Corporation have been carried forward according to plan. Anshan Iron and Steel Group Corporation basic production and marketing information management has been completed in the main through the establishment of ERP production and marketing system and MES system. Pangang Group Company Ltd. has strengthened the construction of procurement, sales management information system to fulfill the unified platform, standard, process and rules in the procurement and sales management.



▲ Technicians of Ansteel Group Corporation carried out independent R&D of information management system.



Chapter

03 Production Safety

Management System of Production Safety
Safety Management Measures
Emergency Management System
Management of Occupational Health Safety

Management System of Production Safety

Circular of the State Council on Further Enhancing Work Safety in Enterprises was conscientiously carried out, and the primary responsibility of production safety was effectively assumed. The safety notion that “the maximum value lies in life, the highest responsibility is safety, system is the guarantee of safety, and execution is the key to safety” was built up, the production safety goal of “zero damage, zero accident, and zero hidden danger” was proposed, and a long-term mechanism of production safety involving the entire personnel, the whole process, and all dimensions was established.

Safety management assessment was integrated into the strategic performances of Ansteel Group Corporation, production safety work was decomposed quarterly, and the management & control of safety management process was reinforced. The weight of safety in annual performance evaluation of leading groups at different levels increased, and the awareness of production safety responsibility of leaders at different levels also enhanced. The system of production safety responsibility was deepened and improved, professional responsibility with regards to safety management at different levels was specified, responsibility of safety management was effectively implemented, and the executive force and controlling force of safety management intensified comprehensively.

Safety Management Measures

◎ In-depth Development of Standardization of Production Safety

With a view to implementing the guiding principles in *Safety Committee of the State Council on the In-depth Development of Enterprise Standardization Construction of Production Safety Guidance*, Ansteel Group Corporation compiled *Planning of Target Hitting & Promotion of Ansteel Group Corporation on Standardization of Production Safety*, and *Guiding Opinions on Review and Acceptance of Standardization Construction of Production Safety in 2011* in accordance with relevant codes of safety standardization so as to standardize and guide the production safety standardization and target hitting & promotion across Ansteel Group Corporation.

Anshan Iron and Steel Group Corporation organically integrated the competition of “Five Best Team” and the appraisal & selection of “Model Safety Surveillance Post Occupied by Youth” with standardized posts and efforts made by teams to conform to standard, and carried out comprehensively the construction of standardized teams and posts to promote conformance to standards in terms of post, expertise and enterprise. In 2011, altogether 92 manufacturing units passed review and reached Class I and Class II enterprise standards of standardized production safety, accounting for 59% of all the enterprises subject to appraisal. Engaged in the pilot project of standardized Class I enterprises in compliance with the national standard of metallurgical production safety, Angang Steel Co., Ltd. completed the overall self-appraisal and

declaration.

Pangang Group Company Ltd. synthesized the construction of production safety standardization into the whole process of production and operation, promoted the dynamics, standardization, and systemization of the construction of production safety standardization, integrated organically the construction of production safety standardization with the current management system of production safety and operation mechanism, further improved the management system of production safety, ameliorated conditions of production safety, and enhanced the level of accident prevention.

Fortifying Risk Prevention

The overall plan of constructing "Six Systems" of risk prevention in underground mines was formulated, and the system of iron miner positioning underground was upgraded comprehensively, realizing such functions as personnel counting, identification, position monitoring, precaution of danger, prediction and monitoring of electric locomotive operation, and enhancing essentially the safety level of production in underground mines with the digitalized dispatching and directing center as a platform.

Management of three categories of high-risk operation was standardized and improved, i.e. "operation at confined spaces", "operation with relatively higher risks" and "non-routine operation", organized units to create archives of operation approval process, operation guidance book, and pre-arranged planning for the aforesaid three kinds of high risks, so as to ensure that various kinds of high-risk operations are well under safety control.

The management of professional safety & health of construction projects was fortified by virtue of the method of "doing three things simultaneously" in order to ensure all the construction projects comply with regulations and reach standards right from the beginning. The report submission and filing of articles about Xichang Steel & Vanadium Project and articles about equipment design for occupational disease prevention of Pangang Group Company Ltd. were completed, safe completion evaluation and acceptance of metallurgical construction project of Ansteel Bayuquan Iron and Steel Base was finished, review of articles about occupational health of Chaoyang Anling Iron and Steel Construction Project and articles about safety of hazardous chemicals construction project were fulfilled, and acceptance and evaluation of the benzene hydrogenation project of Angang Steel Co., Ltd., preliminary evaluation of safety and occupational health of micro powder project of mineral waste residue from mineral waste residue companies were accomplished.

Regulations concerning access and monitoring of safety production by relevant parties were established and an overall review of qualifications, staff quality, safety management, technical management, equipment management, safety performance and management system, etc. of relevant parties was implemented in accordance with specific quantitative criteria of access conditions, process supervision, and performance evaluation so as to standardize access of relevant parties and process supervision.

Trouble-shooting of Hidden dangers by All Staff

In 2011, Ansteel Group Corporation inspected and rectified 18,908 hidden dangers of different kinds, created a list of peril identification, and compiled over 1,200 pre-arranged planning of perilous operation control, thus effectively preventing various accidents. Anshan Iron and Steel Group Corporation organized all-around safety appraisal by the entire staff. Dangers, hazardous factors, and hidden dangers during the process of production (operation) were identified, inspected and rectified, and a list of dangers and hidden trouble identification was created step by step and layer by layer according to post, team, workshop, management department and safety supervision department of various trades. Safety risks and sources of perils were managed based on different classes and different categories and prevention & control measures were implemented to eliminate hidden dangers in time. Pangang Group Company Ltd. took advantages of such activities as "Production Safety Month", and "Production Safety Year", etc. as golden opportunities, resorting to the way of combining investigation of the entire personnel and special inspection and rectification by departments and experts, carried out all-around inspection and rectification of hidden dangers and set up rectification measures aiming at identified hidden dangers and problems one by one.

Reinforcing Safety Education & Training and Safety Culture Construction

Multiple approaches were adopted to boost safety culture construction. Altogether 31,594 person-time received training for special operation personnel, such as crane operator and electrician. Over 400 were selected and assigned to participate in various kinds of training, i.e., training of National Registered Safety Engineer, training of production safety

standardization review launched by the State Administration of Work Safety, professional safety training of metallurgy and mine sponsored by Northeastern University, improving substantially the management level of safety managers. The prize activity of "Experiences in Team Safety Management" was carried out, 2,395 times of occupational health safety training was organized in various forms, 908 issues of safety boards and pictorials were exhibited, 2,247 times of monitoring and inspection were conducted for labor protection with 12,949 identified hidden dangers including 11,348 rectified under supervision and urgency. Besides, all staff were organized to participate in the "Safety and Health Cup" competition organized by State Administration of Work Safety and All China Federation of Trade Unions, "National Workers Occupational Health and Hygiene Knowledge Popularization, Education and Competition", and "Knowledge Quizzes on Implementing Enterprise Production Safety Primary Responsibility" etc.

Ansteel Group Corporation propagandized the notion of safety and invigorated cultural construction by carrying out safety knowledge quizzes of youth, collection of papers on safety, reflection on typical safety accidents, safety knowledge quizzes, writing and acting out of safety sitcoms, safety forum of team leaders, and collection of epigrams about safety. Anshan Iron and Steel Group Corporation Railway Transportation Company and Ansteel Group Mining Company Dagushan Pelletizing Plant, etc. were both awarded the honorary title of Model Enterprise of Safety and Culture Construction Liaoning Province; TV series Disturbance Before Night Shift produced and played by Ansteel staff members were awarded the third prize of the public welfare category of the Second Session of "Jingmei Cup" China TV Series Competition on Safety. *A Letter Home* wrote by Ansteel staff members was awarded the first prize of Collection of Articles on Safety sponsored by Liaoning Administration of Work Safety.



▲ Youth Arena Contest of Safety Knowledge held by Anshan Iron and Steel Group Corporation



▲ Pangang Group Company Ltd. is publicizing Safety Construction Codes to staff members

Effects of Safety Management

In 2011, no major or serious accidents happened in Ansteel Group Corporation, 5 less and down by 4.8% compared with 2010. Ansteel made exceptional achievements in terms of production safety standardization, and was thus designated by State Administration of Work Safety as a national model enterprise establishing production safety standardization for the metallurgy industry and trade. The project of Ansteel, *Management of Production Safety Standardization for Constructing Long-Term Mechanisms of Production Safety of Large-Scale Iron and Steel Conglomerate* was awarded the second prize of National Enterprise Management Innovation Result. Anshan Iron and Steel Group Corporation, Pangang Group Company Ltd. Vanadium & Titanium Co., Ltd., and Pangang Group Company Ltd. Chengdu Steel & Vanadium Co., Ltd. were rated as winners of "Safety and Health Cup" Competition sponsored by State Administration of Work Safety and All China Federation of Trade Unions. At the achievements release of national team safety construction and management, the safety construction and management results of the electrical station inspection team of the combined unit of Line No. 2 of Cold Rolling Mill of Anshan Iron and Steel Group Corporation was awarded the Excellent Achievement Prize. Pangang Group Company was named Provincial model enterprise of safety cultural construction by Sichuan Province.

The project of "Demonstration Maintenance Line of Fault Diagnosis, Prediction & Foreknowledge in the production process of steelmaking, continuous casting, and continuous rolling" of Anshan Iron and Steel Group Corporation was selected among the first batch of national key projects of "Integration of Informatization and Industrialization" for promotion of production safety. The project integrated the concept of predicative maintenance into the mechanism of operation maintenance of metallurgical equipment system, detected real time comprehensive malfunction information in the production process of large-scale iron and steel equipment according to the data or phenomena measured during production; the data-driven technology of process fault diagnosis was applied to realize on-line monitoring and prediction of running condition of equipment, fault degree and remaining useful life in the production process, reduce damages due to faults to the minimum so as to improve the reliability, safety and validity and to enhance the overall safety degree of the production line.

Emergency Management System

A series of effective measures were adopted to establish an emergency management system across the entire Corporation. Emergency response countermeasures were made to deal with sudden environmental pollution accidents, and a sound emergency mechanism and system were established for sudden environmental pollution accidents so as to improve the capacity to respond to sudden environmental pollution accidents, and control & deal with accidents promptly and in order in the event of environmental pollution accidents. Administrative measures of highly toxic chemicals were formulated to regulate the administration of various links including procurement, use, transportation, storage, abandonment & disposal, and emergency rescue, etc. Earthquake emergency countermeasures were revised, and responsibilities, content of rescue, storage of emergency materials of professional teams were further strengthened, specified and quantified, thus the operability of the preparatory plans was greatly improved. Review and record filing of emergency rescue plans of production safety accidents were completed. Construction of production safety emergency rescue bases of regional non-coal mines was explored. Review and revision of emergency countermeasures of second-tier companies and production units were carried out to realize effective connection between emergency countermeasures at different levels. Specialized training and drills concerning emergency knowledge were organized and carried out, and materials & equipment for emergency rescue were replenished and stored. In 2011, Ansteel Group Corporation conducted 52 times of specialized emergency training with 12,371 emergency team members. Besides, Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. organized large-scale emergency drills of such accidents as intoxication and fire to improve responsiveness to emergency.



▲ Ansteel Group Corporation is carrying out emergency drills of hazardous chemicals.



▲ Ansteel Group Corporation is carrying out fire fighting drills



Management of Occupational Health Safety

Ansteel Group Corporation reported occupational hazards in time based on changes to posts and process, etc., further replenished basic files of occupational health, effectively implemented regular tests of occupational hazardous factors in workplaces and work sites, conducted physical examinations for all-company workers exposed to occupational hazardous factors, and carried out pre-post, in-post, and off-post occupational health examinations, perfected occupational health surveillance archives of all the staff members, thus the coverage of occupational health archives of staff reached as high as 100%.

In 2011, 83,216 person-times of physical health examination for workers exposed to occupational hazardous factors were completed, and the rate of occupational health examination reached 98.7%; occupational hazardous factors such as dust, toxicity, and noise were tested in 10,696 sites, with the monitoring rate of occupational hazard covering 100%, and the overall qualification rate reaching 91.6%; the evaluation of occupational disease hazard of 27 projects was completed.



▲ Workers of Anshan Iron and Steel Group Corporation is detecting the on-site working environment.



▲ Workers of Pangang Group Company Ltd. is monitoring the on-site air quality.

Chapter

04 Environmental Performance

Development Planning
Management Mechanism
Management Measures



Development Planning

Attention was devoted to building a resource-saving and environmentally-friendly iron & steel enterprise and forging a model iron and steel base featuring “green manufacturing and green operation”. Importance was attached to resource development and comprehensive resource utilization. Circular economy was developed vigorously, endeavors were made to realize transformation from traditional manufacturing to low-carbon green manufacturing, and technological and managerial innovation were strengthened to realize advanced technology and management and highly-efficient utilization of resources and energy in the aspects of energy saving, environment protection, and implementation of circular economy of iron and steel enterprises to improve the core competitiveness of the Corporation and realize sustainable development.

Green Manufacturing

Besides low-carbon manufacturing technology was adopted to realize energy saving, emission reduction and cleaner production under the premise of upsizing & modernization of technical equipment as well as ecologicalization of plant environment. The focuses of green manufacturing included utilizing advanced low-energy-consumption, low-material-consumption, and low-emission technology; realizing circular economy by recycling ferrite resources, energy, and water resources and re-resourcing solid waste; designing production lines and factories featuring compact technological layout, low logistics cost, and high labor productivity, and utilizing clean energy, etc.

Green Products

Green manufacturing technologies were adopted to develop “green products” featuring high productivity and quality, long lifecycle, and low environmental load. Prominence was given to green research and development, emphasis was laid on developing and applying reasonable minimization production technology and composition of alloy, extra-low CO₂ emission technology and “carbon” recycling technology were delved into and developed, and new energy, materials, etc. will be developed and applied.

Green Operation

“Green manufacturing” and “green product” expanded to low-carbon operation throughout the value chains and the system, including green procurement, green R&D, green design, green manufacturing, green products, low-carbon office, and low carbon awareness of staff, etc. “Green products” were oriented towards high intensity, minimization, and long service life, and new-generation iron and steel materials were developed; as for “green manufacturing”, advanced low-carbon metallurgical technologies were further developed and applied, and innovations were made in production flow and technologies of iron and steel.

Environmental Targets During the "Twelfth Five-Year Plan" Period

The emission of sulfur dioxide: $\leq 1.0\text{kg/ton steel}$; the emission of nitrogen oxides: $\leq 1.0\text{kg/ton steel}$; the industrial waste water effluent: $\leq 1.0\text{m}^3\text{/ton steel}$; the smoke and dust emission: $\leq 1.0\text{kg/ton steel}$; the resource utilization rate of industrial waste: 100%; and the compliant disposal rate of industrial waste: 100%.

Working Target

Anshan Iron and Steel Group Corporation: accomplishing the task of pollutant reduction as specified in the "Twelfth Five-Year Plan" released by SASAC and as assigned by the authorities of environmental protection at different levels, and realizing stable conformance to emission standards of industrial waste gas and waste water stably. The implementation rate of "doing three things simultaneously" of environmental friendliness of construction projects reached 100%; the standard compliance rate of industrial waste disposal reached 100%. No major environmental pollution accident.

Pangang Group Company Ltd.: the overall qualified rate of discharged pollutant reached 98%; the implementation rate of "three simultaneity" of environmental friendliness of construction projects reached 100%; the emission of sulfur dioxide reduced by over 5% compared to that in 2010; the chemical oxygen demand emission: reduced by over 2% compared to that in 2010. No major environmental pollution accident.

Management Mechanism

Energy-saving and environmental protection systems and management systems at different strata were improved, operation rules and management measures regarding energy saving and environmental protection were made to intensify process monitoring and management of project approval, target responsibility of energy saving and emission reduction was effectively implemented, target responsibility system and performance evaluation system of energy saving and emission reduction were established, energy saving and environmental protection were included in corporate strategic planning, production and operation, and strategic performance evaluation, so that an effective system of monitoring, management and evaluation was formed to regulate energy saving, emission reduction and environmental protection management.

Management Measures

Energy saving and environmental protection were strengthened. In 2011, Ansteel Group Corporation invested RMB 893 million in over 50 projects of energy saving and emission reduction, including waste heat recovery for power generation, frequency conversion for power saving, utilization of gas, wind power generation, desulfurization of sintering flue gas, disposal of coking waste water, salt extraction from desulfurized waste solution, and waste heat recovery of sintering machine, etc. Exceptional results were achieved, and not a single major environment pollution accident happened.

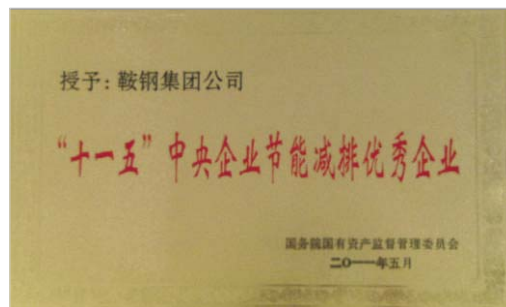
Training and exchange on energy saving and environment protection were strengthened. The Corporation thoroughly carried out National Energy Saving Publicity Week 2011 during which

various campaigns of energy saving were organized and conducted, including knowledge quizzes about energy saving and emission reduction, collection of papers on energy saving, etc.; training for administrative staff of energy saving and environmental protection at various levels were carried out to improve their professional quality and professional proficiency; activities of energy saving and consumption reduction involving the entire staff were carried out, low-carbon green lifestyles were publicized and put into practice, and efforts were also made to enable the staff members to get into good habits of saving and environmental protection. Besides, technological exchanges on energy saving management and new energy saving technologies with renowned domestic and overseas enterprises and research institutes were launched, and the 4th annual conference of World Steel Association Environment Policy Committee was sponsored.



▲ Leaders of the National People's Congress Environmental and Resources Protection Committee are inspecting and guiding work in Anshan Iron and Steel Group Corporation.

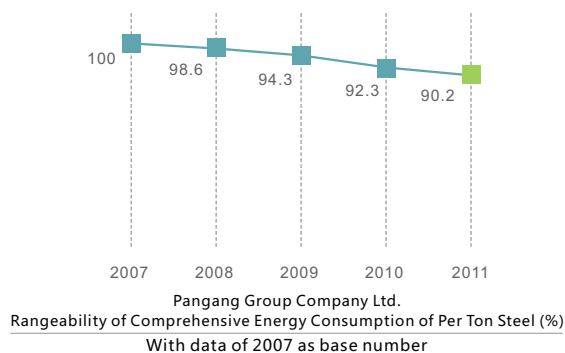
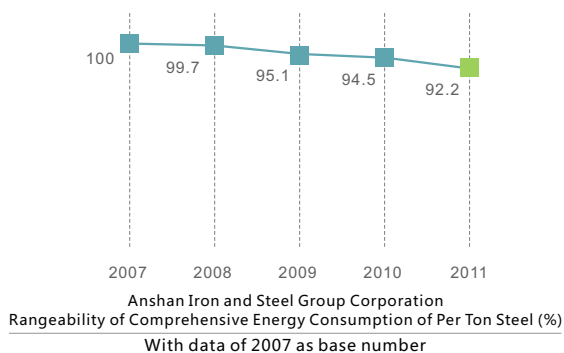
In 2011, Ansteel Group Corporation was awarded the title of "Excellent Enterprise for Energy Conservation and Emission Reduction among State-owned Enterprise Supervised by the Central Governments during the 'Eleventh Five-Year Plan' Period" by SASAC; it was bestowed the title of "National Top 100 Units with Outstanding Contributions to Land Greening" by the Ministry of Land and Resources, and was rated as "Model Entity of Liaoning Province for Energy Conservation and Emission Reduction 2006-2010". Pangang Group Company Ltd. was rated as "Model Entity of Energy Saving and Emission Reduction in Sichuan Province 2011".



Energy Management

Energy Consumption

In 2011, the major energy efficiency indicators of Ansteel Group Corporation hit a record high; both the energy consumption indicators and the indicators of actual energy saved fulfilled the annual target of energy saving, saving energy of 342,000 tons of standard coal. The comprehensive energy consumption of per ton steel of Anshan Iron and Steel Group Corporation reduced by 2.37% compared to that in 2010, and that in Pangang Group Company Ltd. reduced by 2.17% compared to that in 2010.



Energy Saving Measures

Progress in Management and Technology

Angang Steel Co., Ltd. will carry out pilot project of energy management system certification according to the standard of national energy management system certification. It is planned that in 2012 Angang Steel Co., Ltd. will pass external examination of national energy management system certification.

Standard compliance review of energy efficiency was carried out. The content of review includes energy saving organizational structure, progress in energy saving technologies, energy saving technical reform, execution of laws and regulations, and energy conservation supervision, etc. The results of the review were included as factors evaluating clean factories, thus was promoting the effective operation of energy saving management system of the Corporation. In 2011, the number of qualified energy efficiency units of Ansteel Group Corporation reached 135, with the rate of qualification reaching 89%. Those disqualified units were required to rectify and reform and reach the standard within a required period of time.

Energy Management Contract

Projects of energy management contract (EMC) were boosted in line with relevant policies of the State; resulting in the establishment of Ansteel Group Energy Saving Technological Service Co., Ltd.. In 2011, 11 projects of Ansteel Group Corporation EMC were approved. The projects covered three energy saving fields, i.e., frequency control technology in e-power dragging system, waste heat steam in industrial surplus energy recovery and utilization system, and surplus heat power generation in heat-electricity cogeneration system. A total of RMB 203.8 million was invested, and an annual benefit of RMB 104.9 million was realized. Among the projects, the first production project, namely, the project of frequency conversion reconstruction of combustion air fan of 4×900kw blast furnace of Ansteel Bayuquan Iron and Steel Base realized a power saving rate as high as 43%; the project of frequency conversion reconstruction of combustion air fan of 2×1120 kw No. 4 blast furnace in the headquarters in Anshan realized a power saving rate of 30%. Pangang Group Chengdu Steel & Vanadium Co., Ltd. implemented projects of electrodeless lamp green lighting, variable-frequency power turbid circulating water system reconstruction of dust abatement fan of shaft furnace, frequency conversion of sintering draught fan for power conservation, and surplus heat steam recycling of evaporation cooling of shaft furnace, etc., achieving outstanding results and reducing energy consumption substantially.

Recycling and Utilization of Waste Energy

Ansteel Group Corporation promoted recycling and utilization of surplus energy, and kept improving technologies, equipment and operating skills. Surplus heat and surplus energy were effectively utilized by generating power with blast furnace top gas-pressure recovery turbine, dry quenching of coke oven and surplus pressure, gas-steam combined power plant with surplus gas as fuel, superfluous heat of sintering machine, and gas boiler. The equipment rate of power generation with surplus gas pressure at blast furnace roof reached 100%.

Anshan Iron and Steel Group Corporation built two generator units using waste heat steam from sintering machines. By recovering the waste heat of flue gas from annular coolers of sintering machines with dual pressure waste-heat boilers, energy equivalent to 50,000 tons of standard coal was saved annually. Two gas boilers with supporting 20,000kw power generating sets were built in Ansteel Bayuquan Iron and Steel Base to promote the utilization of gas from both coke ovens and blast furnaces, basically realizing “zero” emission of gas. Pangang Group Company Ltd. recycled surplus heat and energy, including gas of converters, waste heat of exhaust gas of sintering machines, waste heat of dry quenching of coke ovens, waste heat of exhaust gas of hot blast heaters, and waste heat of exhaust gas of steel rolling heating furnaces, etc. to generate power. Pangang Group Chengdu Steel & Vanadium Co., Ltd. carried out problem tackling of “improving comprehensive utilization rate of gas and reducing natural gas consumption”, which made the gas emission rate of blast furnaces reduced by 22.96% compared to that in 2010, and saved energy equivalent to 4,900 tons of standard coal.



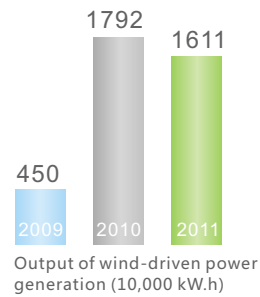
▲ No. 2 power generating set of the power generation project utilizing gas furnace at Bayuquan Iron and Steel Base started to generate power after combination to the grid.



▲ Power generation device by the waste pressure from the new No. 3 blast furnace of Panzhihua Steel & Vanadium Co., Ltd.

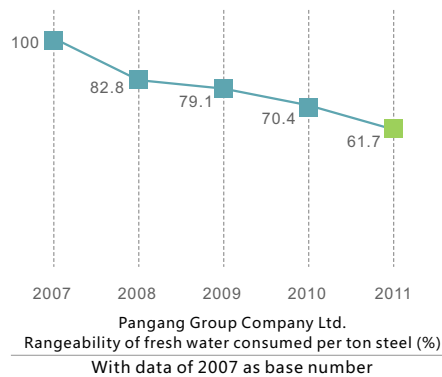
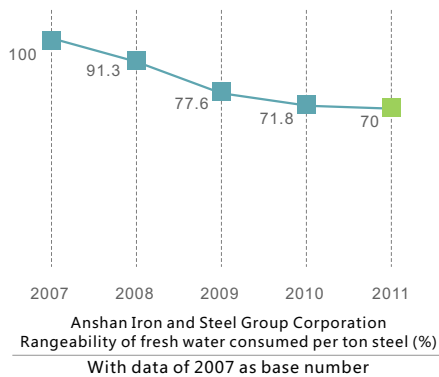
Clean Energy Utilization

The path to the development of a “clean, green and low-carbon” iron and steel industry was constantly explored, new processes and new technologies for “environment-friendly steelmaking” were continuously developed, and wind power was developed and utilized to generate power. In 2011, four wind power generation sets of 1,250kw were built in Ansteel Bayuquan Iron and Steel Base; and the gross installed capacity was expected to reach 14,000kw after completion. Seven sets of wind generating sets with a gross installed capacity of 9,000kw were built, with the annual power generated reaching 16.107 million kW.h.



Water Resource Management

Efforts were made to keep improving the water recycling system management of various production units, thus increasing the efficiency of water resource recycling and utilization, and striking a balance between fresh water and recycled water in use. In 2011, fresh water per ton steel consumed by Anshan Iron and Steel Group Corporation reduced by 2.56% over 2010, saving 1.68 million tons of water; Fresh water per ton steel consumed by Pangang Group Company Ltd. reduced by 12.34% over 2010, saving 5.69 million tons of water.



Equal emphasis was laid on production development and environment protection, and efforts were made in increasing input constantly, intensifying management, and improving disposal capacity of sewage resulting from industrial production. A comprehensive controlling technology of coking waste water pollution was developed in cooperation with Chinese Academy of Sciences. It was a technology with fully independent intellectual property right and featuring comprehensive resource recycling and deep removal of pollutants. A waste water demonstration project capable of waste water disposal of 4,800 m³ per day was built; and the advanced coking waste water treatment technology reached the leading level of China.



▲ Xidagou Wastewater Treatment Station of Anshan Iron and Steel Group Corporation



▲ Wastewater Treatment System of Pangang Group Titanium Industry Co., Ltd.

Addressing Climate Change

Transformation of desulfurizing device for sintering machines was implemented; desulfurization of self-owned power plant and fuel gas desulfurization of sintering machines in the West Zone had been put into operation; based upon which a sintering machine of 360m² and No. 1 desulfurization facility of sintering machine at Bayuquan Iron and Steel base of Ansteel Group Corporation were put into operation respectively, effectively reducing the emission of sulfur dioxide with the desulfurization rate reaching over 85%. Pangang Group Company Ltd. strengthened operation management of environmental protection facilities, rectified and improved projects including the fuel gas desulfurization project of No. 6 sintering machine, the fuel gas desulfurization project of three boilers of the Power Plant of Pangang Vanadium Iron Works, and the fuel gas desulfurization project of sintering machines of Chengdu Steel & Vanadium Iron Works, etc., which enabled the operation rate and desulfurization efficiency of desulfurization facilities to be further improved.

Advantages of indigenous innovation were exerted fully, integrated innovation was made to SDA-method (spray dry absorber) desulfurization technology for sintering fuel gas in order to alleviate pollutants of dust and sulfur dioxide caused by sintering machines; and the technologies were exported to Sha-steel and Han Steel. At present, the technology has been applied to over ten domestic large-scale sintering machines, and good social benefits have been gained.

In 2011, emission of sulfur dioxide reduced by 14.5% over the previous year; emission of chemical oxygen demand reduced by 2.4% over the previous year, and emission of smoke and dust reduced by 13% over the previous year. International cooperation in greenhouse gas emission reduction was vigorously carried out, and the United Nations Clean Development Programme was carried out, with the reduction of emission of carbon dioxide accumulating to about 6 million tons.

Solid Waste Management

All the solid wastes were recycled for re-utilization according to the new circulatory production mode of "resources → products → wastes → renewable resources → renewable products", including water granulated slag of blast furnace, steel slag, converter mud, steel-making dust, gas mud, gas dust, blast-furnace ash, iron slurry, dust in raw material field, and iron oxide, etc. produced during the production process. In 2011, all the converter steel slag produced by Anshan Iron and Steel Group Corporation was disposed through magnetic separation, and the extraction efficiency of metallic iron of converter steel slag reached the international leading level. Pangang Group Company Ltd. adopted strong magnetic technology and flotation technology to recover titanium dioxide in tailings, which improved the recovery rate of mineral resources effectively.

In order to address the austere pollution caused by large amounts of wastes like metallurgical dust and sludge generated during the process of iron making and steelmaking, Anshan Iron and Steel Group Corporation developed the dust and sludge glomeration technology for steelmaking, realizing iron powder recovery and bio-safety disposal of dust and sludge. Moreover, Anshan Iron and Steel Group Corporation drew up the industrial code of *Dust and Sludge Glomeration for Steel Making* was drawn up which played an important guiding role for utilizing metallurgical waste to produce steelmaking raw materials. Meanwhile, Anshan Iron and Steel Group Corporation made in-depth exploration into cutting-edge technologies of solid waste utilization, expanded strategic cooperation with international enterprises and institutions renowned for disposal and utilization of metallurgical slag. By cooperating with University of Science and Technology Beijing, Anshan Iron and Steel Group Corporation researched and developed artificial fishing reef products which not only provided places for fish to multiply, grow, forage and dodge enemies but also benefited emission of carbon dioxide and ameliorated marine ecological environment.

Pangang Group Company Ltd. vigorously carried out R&D and problem tackling for comprehensive utilization of waste resources. Due to the features of vanadium-titanium magnetite in Panzhihua-Xichang area, about 50% titanium dioxide concentrated in blast furnace slag after blast-furnace process, resulting in a comprehensive utilization rate of titanium resources as low as about 14%. With a view to addressing the problem, Pangang Group Company Ltd. independently researched and developed the process technology of "high-temperature carbonization of blast furnace slag – extracting titanium tetrachloride through low-temperature chlorination", forming a complete set of industrialized process and equipment technology of Pangang Group Company Ltd. for the comprehensive utilization of blast furnace slag. The successful R&D as well as application of the process technology enabled the comprehensive utilization rate of titanium resources of vanadium-titanium magnetite in Panzhihua-Xichang area to have improved from 14% to 40%, and broadened the channels of raw materials for the development of high-end titanium industries like chloride process titanium dioxide and titanium sponge, etc. Besides, submarginal ore utilization projects were constructed to further improve the comprehensive resources utilization rate and increase the amount of available resources of vanadium-titanium magnetite in Panzhihua-Xichang area, fulfilling remarkable economic benefits and social benefits.

Ecological Restoration

Afforestation was implemented according to the principles of matching slow growing species and fast growing species, matching evergreen species and deciduous species, and matching trees & shrubs and grass; with great emphasis laid on biodiversity. In 2011, Anshan Iron and Steel Group Corporation planted 607,193 trees, 2.371993 million shrubs, 153,215 hedgerow plants, 18,457 vines, and 76,380 m² of lawns. The percentage of greenery coverage in plant area of the headquarters of Anshan Iron and Steel Group Corporation reached 40%, the area of newly increased woodland from mine reclamation reached about 750,000m², and the greening rate as a result of mine reclamation increased by 0.5% to 43.5%; 994,741m² of green land was built in Chaoyang Anling Iron and Steel Base, completing 96.39% of the planned area; In Bayuquan Iron and Steel Base, 6,169 deciduous trees, 1,778 evergreen trees, and over 36,000 black pine seedlings were planted in accumulation, and the area of newly increased green land reached 107,647m², with the percentage of greenery coverage reaching 30%.

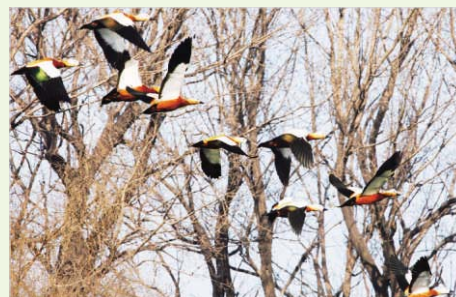
Pangang Group Company Ltd. invested about RMB 100 million in the auxiliary afforestation for such projects as the comprehensive utilization of Xichang vanadium and titanium resources, etc., realizing “three simultaneity” of the afforestation project and the main construction; besides, it put great efforts in afforestation and renovation of plants, afforesting such areas as Power Plant and Pangang Vanadium Iron Works, etc.; it continued to propel vegetation reclamation in stopes, with the total capital investment exceeding RMB one million.

Anshan Iron and Steel Group Corporation has been dedicated to greening and reclamation of slag hills for a long term. In order to solve such problems as high PH value, poor air permeability, strong coagulability of steel tailings in slag hills, and difficulty for plants to survive, etc., Anshan Iron and Steel Group Corporation implemented afforestation of slag hills with reclamation and greening technology of “digging slag, changing soil, reclaiming fields, and tree planting” through repetition tests; a green land area of over 360,000m² was recovered, 380,000 trees and shrubs were planted, and the percentage of greenery coverage reached by 50%. At present, the slag hill has been turned into a place covered with pleasant shade of trees, large patches of grassland, cherry orchards, crab apple orchards, grape orchards, Rhus typhina orchards, and Syzygium aromaticum orchards, etc. with distinguishing characteristics, realizing harmonious development between human and nature.



▲ Project of mine greening and reclamation in the headquarters of Ansteel Group Corporation in Anshan.

The constantly improved environment in plant areas of Anshan Iron and Steel Group Corporation attracts a large number of ruddy shelducks to spend winter there every year. The number of species group of ruddy shelducks has suffered a decrease day by day for several dozen years because of excessive hunting and destroyed ecological environment. Ruddy shelducks have been listed in *Lists of Terrestrial Wildlife under State Protection, Which Are Beneficial or of Important Economic or Scientific Value of China* and *Red Book of International Bird Species* of World Conservation Union (IUCN).



▲ Leaders of Ansteel Group Corporation are participating in voluntary tree planting with Hiesinger, the Chairman of the Board of Thyssen Krupp AG in German.



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1. Environment of plant areas of Anshan headquarters.
2. Environment of plant areas of Panzhihua Iron and Steel Base.
3. Project of mine reclamation of Panzhihua Iron and Steel Base.
- 4.5 Project of greening and reclamation of slag hills of Anshan Iron and Steel Group Corporation.

Chapter

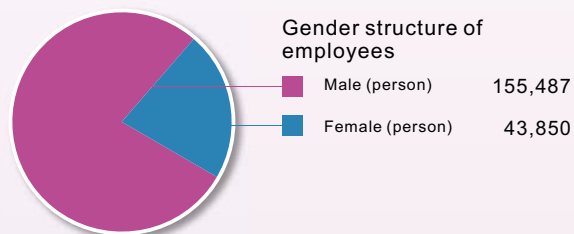
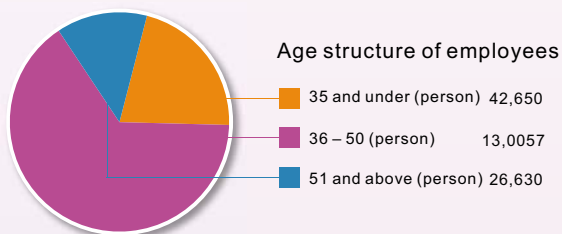
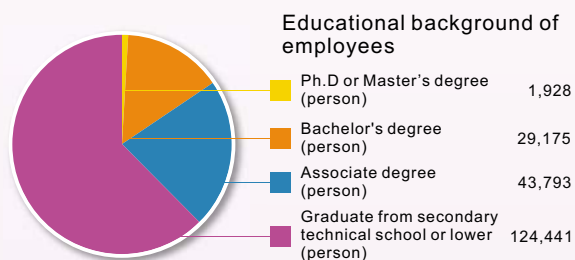
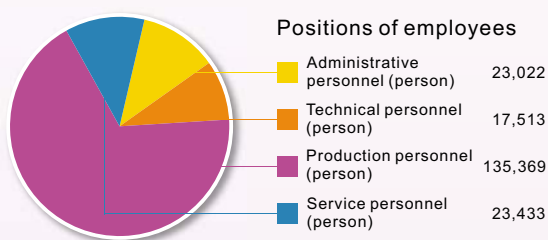
05 Employee Protection

Profile of Employees
Rights and Interests of Employees
Caring for Employees
Employee Development

Profile of Employees

Profile of Employees of Ansteel Group Corporation

Total number of employees(person) **225,154** On-the-job employees(person) **199,337** Non-on-the-job employees(person) **25,817**



Rights and Interests of Employees

● Labor Contract Management

Laws and regulations were conscientiously implemented, such as *Labor Law* and *Labor Contract Law*, rights and interests of employees were earnestly protected, and Labor contracts with employees were signed in compliance with laws. In order to reinforce labor contract management and regulate labor employment, Ansteel Group Corporation revised administrative measures on labor discipline of employees, administrative measures on “three-post” (on-the-post, post-waiting, and post-on-probation) system of employees, administrative measures on human resources market, and administrative standard of Labor employment. In 2011, Ansteel Group Corporation cancelled or terminated labor contracts with 1,368 employees, including 229 from Anshan Iron and Steel Group Corporation and 1,139 from Pangang Group Company Ltd..

Ansteel Group Corporation kept improving system of labor dispute mediation, and formulated regulations on internal labor dispute settlement and labor dispute mediation methods, etc. Organization and construction of labor dispute mediation committee of Ansteel were strengthened, and an all-around and multi-layered organizational system of labor dispute mediation was formed. Ansteel Group Corporation took “prevention foremost, grass roots oriented, and mediation first” as the basic principles of settling labor disputes, established early warning mechanism of labor dispute, enhanced labor dispute prevention, aiming to result in a year-by-year decrease of labor disputes. In 2011, altogether four Labor disputes happened in Ansteel Group Corporation; all of them were mediated with agreements reached.



Chen Zhili, Vice Chairman of the Standing Committee of the National People's Congress (NPC) headed a law enforcement inspection group of the NPC to inspect the implementation of *Labor Contract*, and recognized the achievements of Anshan Iron and Steel Group Corporation in terms of implementing *Labor Contract*.

● Collective Contract

In 2011, Ansteel Group Corporation and its subordinates conscientiously fulfilled the collective contracts, and the employee representatives conducted a regular inspection to ensure that the collective contract system exerted an important role of institutional guarantee in safeguarding legal rights and interests of employees, protecting the rights and interests of Ansteel, and constructing a harmonious and stable Labor relationship, etc. In 2011, Anshan Iron and Steel Group Corporation resigned the collective contracts with employees and special collective contracts for protecting the rights and interests of female employees; thus the coverage rates of both the aforesaid collective contracts reached 100%. Pangang Group Company Ltd. signed collective agreement regarding remuneration with employees, and renewed collective contracts, which enabled the coverage rate of collective contracts to reach 100%.

● Policies for Employee's Remuneration and Welfare

Ansteel Group Corporation has always adhered to the principle of distribution on the basis of labor, carried out its institution of equal access to employment opportunities and equal pay for equal work, with no prejudice on grounds of gender, age, health status, race, and religious belief, etc. In 2011, Ansteel Group Corporation continued to propel reform of remuneration distribution system, unified and regulated remuneration distribution systems, and further adjusted post allocation relationships. By the end of 2011, Anshan Iron and Steel Group Corporation had had 15 pilot units of

remuneration distribution system reformation.

In line with the national and local policies, Ansteel Group Corporation has established a social security system covering endowment insurance, medical insurance, unemployment insurance, employment injury insurance, and housing allowances, etc., and paid various general expenses on time and in full. The insurance coverage rate reached 100%. Besides, according to the actual situation, Ansteel Group Corporation supplemented medical insurance and complementary work-related death insurance, etc. Some units covered employer's liability insurance. National regulations on working hours and paid leave, etc. were strictly enforced, and the standard working system of eight hours per day and 40 hours per week was put in place to guarantee the legal rights and interests of employees.

In order to guarantee reasonable value maintenance and increment of corporate annuity fund and constantly improve the corporate annuity fund system, Anshan Iron and Steel Group Corporation drew up complementary regulations on implementation plan of corporate annuity fund and management measures of corporate annuity fund, etc. A four-party memorandum on corporate annuity fund management was signed with corporate annuity plan manager of Anshan Iron and Steel Group Corporation. Through tendering, Ping An Insurance (Group) Company of China, Ltd. was selected as a legal entity trustee of corporate annuity of Anshan Iron and Steel Group Corporation, which realized the transformation of corporate annuity management of Anshan Iron and Steel Group Corporation from entrustment to the Council to entrustment to a legal entity.

Organization and Construction of Labor Union

All the organizations of Ansteel Group Corporation at various levels set up trade unions, with 2,277 full-time and part-time cadres provided. Both the coverage rate of labor unions and membership rate of employees reached 100%. In compliance with relevant laws and regulations, the labor unions organized employees to participate in democratic decision making, management and monitoring of the Corporation by means of Employees' congress or in other forms. In 2011, Equipment Maintenance Cooperation Center of Anshan Iron and Steel Group Corporation was awarded the title of "National Model Home to Staff Members" by All China Federation of Labor unions, and the Labor Union of Medium and Heavy Plate Plant of Angang Steel Co., Ltd. and the Labor Union of Angang Production Assisting Center were rated as "Advanced Group Boasting Excellent Work for Labor Union" by China Mechanical Metallurgy Building Materials Labor Union.

Labor Protection

Ansteel Group Corporation improved labor protection organizations of labor unions at different levels, put emphasis on supervision & inspection of labor protection, and established a supervision & inspection mechanism of labor protection to be carried out by representative staff members and labor protection supervisors & inspectors. In 2011, Ansteel Group Corporation held 75 training sessions of Labor protection supervising inspectors, and carried out the activity of "sending refreshing coolness to workers at the production line" during the scorching summer to promote the production safety of the Corporation.

Anshan Iron and Steel Group Corporation undertook the 27th annual meeting of Labor Protection Work Association of All China Iron and Steel Enterprises Labor Union (hereinafter referred to as "the National Steel Labor Union") & "Ansteel Cup" Release Conference of Excellent Achievements of Supervision & Inspection of Labor Protection by Grassroots Labor unions where Anshan Iron and Steel Group Corporation was awarded "Special Contribution Prize".



▲ The 27th annual meeting of the National Steel Labor Union is held in Anshan Iron and Steel Group Corporation.



▲ Pangang Group Company Ltd. is conducting special inspection of labor protection on site.

Respecting Female Employees

Special collective contracts with female employees were further improved, and *Special Collective Contracts of Rights and Interests Protection for Female Employees* was re-signed with female employees to ensure that female employees enjoy legal rights and interests as well as special interests.

Close attention was paid to the mental and physical health of female employees to improve the prevention against diseases of female employees. *Regulations on Labor Protection of Female Employees* was meticulously implemented, regular physical health examinations for female employees were organized, and "Uterine Cancer & Breast Cancer" unique to females was prevented in time with the rate of physical examination of female employees reaching 98%. Famous medical experts were invited to give lectures on the special topic of how to prevent diseases common to women; psychological experts were also invited to give lectures on psychological health to female employees. In 2011, Anshan Iron and Steel Group Corporation purchased the *Group Women Safety and Health Insurance* for 21,436 female employees, and loss occurred to 26 female employees. Pangang Group Company Ltd. purchased the 12th batch of mutual critical illness insurance launched by Sichuan Province Federation of Labor unions for 4,566 female employees, and 15 female employees who suffered from severe diseases received insurance benefits.

Efforts were made in caring for and helping female needy employees. In 2011, Anshan Iron and Steel Group Corporation visited and expressed sympathy and solicitude for 723 exceptionally needy female employees. Anshan Iron and Steel Group Corporation visited and expressed sympathy and solicitude for 2,740 female employees with diseases, and aided 245 children with single mothers, or suffering from disabilities or serious diseases or on the verge of dropping out from schools. Pangang Group Company Ltd. aided needy female employees for 2,464 person-times.

In 2011, the continuous casting operation area laboratory of No. 1 Steel-Making Plant of Angang Steel Co., Ltd. was awarded the honorary title of "National Labor Day Female Model Post", and the female driver team of Panzhihua Mining Co., Ltd. Zhukuang Railway Transportation Workshop was awarded the honorary title of "National Labor Day Female Model Post".



▲ Meeting Commemorating "March 8th International Working Women's Day at Anshan Iron and Steel Group Corporation.



▲ Pangang Group Company Ltd. enriches the lives of female employees with recreational and sports activities.

Democratic Management

Opinions on 2011 Opening of Factory Business and Democratic Management of All China Federation of Labor unions was meticulously implemented to earnestly protect the right to be informed, the right to express, the right to participate, and the right to supervise of employees; with both the report rate and standardized deliberation rate of important events reaching 100%. Tasks of handling proposals of representative staff members were emphasized. At the 10th session of the 10th Workers Congress of Anshan Iron and Steel Group Corporation, employee representatives submitted 28 proposals, of which 8 involved production and operation and development planning, 11 corporate reform and management, and 9 interests of employees like housing allowance with a proportion of 29%, 39%, and 32% respectively. Both the proposal addressing rate and opinion solicitation rate reached 100%. Pangang Group Company Ltd. implemented 10 proposals of employee representatives effectively, of which nine were completed, and one was set to be completed in 2012.



▲ Employees learn about disclosed information about factory operation.



▲ Major leaders of Ansteel Group Corporation extend their regards to workers at the production line.



▲ Leaders of Ansteel Group Corporation extend their regards to workers at the production line.

Caring for Employees

Giving financial aid to Employees

The Corporation offered help to employees in line with their demands on a one-to-one or many-to-one basis, and established a long-term mechanism of supporting and helping needy employees. The supporting and helping system on a one-to-one or many-to-one basis was perfected, and measures including getting to know the real situation, perfecting the mechanism, effectively implementing responsibilities, and regulating management, etc. were adopted to exclude the difficulties and anxieties of needy employees, make them feel the caring love and warmth of the Corporation and enjoy the results of corporate reform and development. In 2011, a total of more than 5,600 cadres and employees in Ansteel Group Corporation extended their help to 1,955 employees on a one-to-one basis, 1,298 on a many-to-one basis. Over 98% of the employees in destitution or in poverty were assigned one or several designated cadres and employees. 351 needy employees have overcome poverty since 2010.

The activity of "providing warmth and offering solicitude" was carried out vigorously. In 2011, over 6,700 leaders called at the home of employees in poverty or with illness or staying at home, and retirees for 22,500 person-times, granting financial aid worth RMB 10.21 million. Donation activities of "providing warmth and offering solicitude" was organized and carried out; altogether 83,860 people in the Corporation donated a total sum of RMB 3.1513 million. Pangang Group Company Ltd. carried out such activities as "providing warmth and approaching the grassroots employees – compassion for the employees", and paid a visit to the home of the employees in poverty and with an illness and retirees for more than 4,300 person-times, granted financial aid worth over RMB 2.05 million, granted living subsidies of RMB 12,000 to 13 households of destitute employees, carried out family situation investigation and established files for destitute employees.



▲ Major leaders of Ansteel Group Corporation are visiting retirees of Pangang Group Company Ltd. in Anshan



▲ Leaders of Ansteel Group Corporation extend regards to needy employees and retirees

Caring for Employees with Disability

Units at various levels of Ansteel Group Corporation vigorously carried out activities to help disabled employees to solve practical problems by visiting and extending regards to families of disabled employees. In 2011, Ansteel Group Corporation paid visit to and extended regards to disabled employees for 2,574 person-times, and granted financial aid worth RMB 879,000. The management system of disabled employees was established, and regular activities were carried out, including table tennis, tug-of-war, rope skipping, shuttlecock, painting and calligraphy exhibition, and photography exhibition, so as to enrich the recreational life of the disabled employees.



▲ Table tennis competition of disabled employees organized by Ansteel Group Corporation.

Guaranteeing the Health of Employees

Guaranteeing the health of employees has become an important benefiting project of the Corporation. Ansteel Group Corporation established a "four-in-one" medical security system for employees, i.e., basic medical insurance, over-limit medical insurance, medical financial aid, and complementary corporate medical insurance, which removed future medical worries of employees, and eased their life burden as well as mental pressure. In 2011, 3,486 employees received financial relief aid from the medical financial aid.

The principles of "putting people first" were followed and a new life notion was advocated to guarantee the health of employees. Anshan Iron and Steel Group Corporation has been carrying out physical health examination for employees every year since 2005, and the range of objects cover on-the-job employees and retirees. Besides, Anshan Iron and Steel Group Corporation arranged health rehabilitation and vocations for on-the-job employees and retirees. In 2011, Ansteel Group Corporation organized health rehabilitation and vocations for a total of over 56,200 on-the-job employees and over 5,000 retirees.

Implementing Program of Caring for Employee Health

In order to guarantee the physical health of employees and promote a healthy lifestyle, Ansteel Group Corporation planned and launched Program of Showing Loving Care for Employee Health, implemented health intervention plans, and handed out publicizing brochures, leaflets and products of health education, including weighing machines, no-smoking signs, disks of health information, BMI (body mass index) cards, health information brochures, and health information foldouts, etc.

With a view to achieving the goal of tobacco-free city, Ansteel Group Corporation cooperated with Anshan Municipal People's Government to carry out tobacco control. Through their cooperation, the tobacco control program was implemented in public places to raise the tobacco control awareness of employees and reduce the damages caused by tobaccos, which made contributions to Anshan's being listed as a city of the "Gates - China Tobacco Control Project 2011".

Ansteel Group Mining Company established the first professional mental health consulting organization for the elderly in Anshan – a psychological workshop for the senior named as "Soul Harbor". With "paying close attention to the psychological health of the elderly and improving life quality of the elderly" as the service tenet, the workshop delivered lectures on psychological health of the elderly, popularized knowledge about psychology, and helped the elderly solve psychological problems.



▲ Ansteel Group Corporation engaged psychological experts to give lectures on "psychological pressure and health".

Recreational and sports activities

Various forms of recreational and sports activities were vigorously carried out to enrich the recreational and sports lives of employees. In 2011, Anshan Iron and Steel Group Corporation organized various sports competitions of table tennis, football, badminton, basketball, swimming, volleyball, long-distance running, tug-of-war, chess and cards, and martial arts, sports activities like mountaineering, and cultural activities like speech, chorus, sending artists to factories to spread culture to employees, and exhibitions of calligraphy, fine arts, and photography, etc.; besides, reading rooms of employees were built in both Bayuquan Iron and Steel Base and Chaoyang Anling Iron and Steel Company. Pangang Group Company Ltd. launched recreational and sports activities in various forms, including painting and calligraphy exhibition, Lantern Festival Garden Tour, and competitions of swimming, table tennis, go, Chinese chess, and bridge, and equipped the residential areas of employees with bodybuilding facilities. The recreational and sports venues and gymnasiums held employee activities for 250,000 person times in 2011.

In 2011, Anshan Iron and Steel Group Corporation was awarded the honorary title of "Outstanding Organizer of Fitness Month Activities of Hundreds of Millions of Employees Across China" by All China Federation of Labor unions, awarded the honorary title of "2011 Outstanding Organizer of National Fitness Activities" by General Administration of Sport of



▲ "National Fitness Day" at Anshan Iron and Steel Group Corporation



▲ Leaders of Ansteel Group Corporation are visiting exhibitions of works of employees

China, won men's and women's team table tennis championships at the 4th National Sports Game of the Metallurgical Industry Employees, won the whole pack of seven championships of various levels of men's and women's tug-of-war at 2011 National Tug-of-war Championship & World Tug-of-war Championship, and won one gold medal, one silver medal and three bronze medals in "Liusteel Cup" Dancing Competition of Employees. Pangang Group Company Ltd. came 5th and 7th in team competitions of National Chinese Chess Competition of Metallurgical Employees and National Go Competition of the Metallurgical Industry Employees respectively, came 5th in men's team competition and 8th in women's team competition of National Table Tennis Competition of Metallurgical Employees, and won 12 gold medals, 15 silver medals, and 34 bronze medals, and Prize for Sportsmanship in Sports Games in the 6th Sports Games in Panzhihua.



▲ Volleyball Competition of employees of Anshan Iron and Steel Group Corporation



▲ Basketball competition of employees of Pangang Group Company Ltd.



▲ Entertaining activities of employees of Anshan Iron and Steel Group Corporation.



▲ Entertainment evening party celebrating the 3rd anniversary of Bayuquan Iron and Steel Base.



▲ Pangang Group Company Ltd. is holding an entertaining performance for employees.

Employee Development

Goal of Talent Development Planning

A goal was set up to perfect and innovate the system and the mechanism giving priority to talent development, to vigorously train and attract high-level talents, and to lay a foundation for constructing a more competitive and innovative "talent highland" from now to 2015. By 2020, a talent team with moderate scale, reasonable structure and excellent quality will have been trained and built, comparative advantages of Ansteel Group Corporation in talent competition will have been formed, and a "talent highland" which is based on Ansteel Group Corporation, boasts a leading role in the industry, and serves as a vanguard of the development of the world iron and steel industry will have been constructed, so as to provide steadfast guarantee of talent for realizing the strategic development goal of Ansteel Group Corporation.

Establishment of Employee Training System

Ansteel Group Corporation kept improving the management system of employee education & training and innovating in administrative measures on employee training. In 2011, the human resources development plan of Ansteel Group Corporation was implemented, according to which implementing plans of employee education training in 2011 and detailed safeguard measures were formulated and issued. Besides, *Ansteel Training* started its publication to disseminate innovation theories and promote technological exchange. Efforts were made to develop remote education based on computer network and multi-media technology, with six classrooms for remote live show and 13 special classrooms dedicated to remote training having been built.

Building the Only Training Base of Locomotive Driver in China

A simulative locomotive driving system was built by resorting to technological innovation so as to train locomotive drivers. The simulative locomotive driving system adopted the technology of computer image generation, which enabled it to complete various tasks like "watching railway signals", "operating locomotives" and "detecting equipment failure", etc. The system was awarded as a "Liaoning Province Technological Result". The technology applied in the system, according to leaders and experts from China Iron and Steel Association after inspection and evaluation, reached the top level of China. It became the only domestic locomotive driver training base, and exchanges with domestic iron and steel enterprises have been made.



Occupational Development

By laying emphasis on appointment by competition and selection, the promotion channel for operational and managerial talents was broadened, and efforts were strengthened step by step to make more open the selection of important leaders in grassroots units. Efforts were also stepped up in exchanges with managerial staff by implementing such measures as exchange between executives, and two-way service of temporary positions of executives, etc. Promotion channels for engineering and technical talents and technical operation talents were broadened by laying emphasis on building and perfecting the grading of engineering and technical posts and high-skill talents. Grading of engineering and technical posts and high-skill talents were propelled. The application and incentives mechanism of engineering and technical posts and high-skill talents had been gradually set up.

Employee Training

According to the "Twelfth Five-Year Plan" and the requirements of the goal of human resources training and development, Ansteel Group Corporation intensified efforts in carrying out activities of technical contests and serving temporary posts etc., carried out special training in order which is closely related to practical production, popularized the way of "mentor training apprentices" in an all-around way, selected excellent high-level talents to further their studies in renowned universities, and offered systematic training on innovative ability in the internal training base, so as to guarantee the continuous improvement of the quality of employees. In 2011, Ansteel Group Corporation offered 1,863 Class-I training sessions for 191,304 person-times. The completion rate of training plan was 99.24%, and the rate of credit completion was 98.90%. The total sum of educational training outlay was RMB 100.77 million, with the per capita training outlay being RMB 448.

Training for Top-notch Talents

Four leaders of Ansteel Group Corporation were selected to enroll in the training program given by the Organization Department of Central Committee of the Communist Party of China and SASAC. Three leaders from subordinate companies were selected to learn in Party School of the Central Committee of the CPC, SASAC Branch. Two sessions of training classes on high-level leadership improvement of leaders of Ansteel Group Corporation, and a total of 60 operational and managerial staff participated in the training. Training sessions for top executives were held, and training classes were offered for over 5,000 person-times. 31 personnel on the posts of Principal Staff Members were selected to receive off-job training which lasts for a year in University of Science and Technology Beijing; 34 managerial personnel were sent to Nanyang Technological University in Singapore in order to improve their capability for governance and management.



▲ Training classes of high-level leadership improvement for executives.



▲ Opening ceremony of the training class for young cadres of Ansteel Group Corporation.

► Training of Technical and Administrative Talents

In 2011, in order to further improve quality of employees to adjust to the strategic need of internationalized operation of the Corporation, Ansteel Group Corporation selected 26 employees in administrative and technical posts to further their studies in finance in Shanghai University of Finance and Economics, organized 21 employees to take an intensive English training course which lasted for half a year in Dalian University of Foreign Languages, selected 459 professional and technical employees to further their studies in Northeastern University Continuing Education College, selected 30 managerial personnel to receive training in Anshan Iron and Steel Group Corporation Karara Iron Mine in Australia and Anshan Iron and Steel Group Corporation Spain Branch, engaged renowned domestic and overseas experts to give 15 lectures on special topics, held Ansteel Group Corporation English Competition for Employees with 746 participants, and opened training sessions on theories of leadership, leadership of cadres in the departments of Party-masses relationship and administration, finance for high-level managerial staff, and corporate culture, etc., so as to improve quality of managerial staff.



▲ World famous experts in metallurgical materials are invited to give lectures on special topics.

► Training for Technicians



The site of the 1st Ansteel Group Corporation Technical Contest of Employees

We selected 227 technicians and senior technicians to further their studies in Tianjin University of Technology and Education, selected 32 technicians to receive training in Kunming University of Science and Technology, and held training sessions in creativity of highly-skilled talents, and advanced training for senior technicians like electricians and maintenance fitters. Training and evaluation of technicians were constantly carried out. In 2011, 8,689 employees obtained vocational qualification certificates.

The 1st Ansteel Group Corporation Technical Contest of employees was held, and 11 types of work were set in the competition according to actual situation and characteristics of production process of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd.. The types of work in the competition include drivers of excavator for strip mining, flotation operators, blast furnace operators, steelmaking converter operators, and rolling technicians, etc. The 1st Ansteel Group Corporation Technical Contest of Employees was held to improve the quality of employees, with 50,000 employees participating in technical training of 292 types of work (posts). The technical contest strengthened the technical convergence and exchange between employees of Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd.. 14 employees were honored as "The Top Technical Talents of Ansteel Group Corporation" and 96 employees as "Excellent Technicians of Ansteel Group Corporation".



▲ Commendation Meeting of the 1st Ansteel Group Corporation Technical Contest of Employees.



▲ Ansteel Group Corporation comes in person to the site of the 1st Technical Contest of Employees to offer instructions.

Carrying out Technological Innovations among Employees

Centering on production and operation, Ansteel Group Corporation carried out activities of technological problems tackling and technological innovation. Anshan Iron and Steel Group Corporation popularized advanced operation methods, and held 37 lectures given by inventors of advanced operation methods to make such methods better popularized. 950 technological innovation teams of employees were set up, and 3,100 innovation results were achieved. Pangang Group Company Ltd. commended 75 independent management innovation results, 30 "model innovation teams", and 30 "innovation master-hands", and held exhibition of results of independent management innovation of employees, with 72 innovation results exhibited.

The representative team of Anshan Iron and Steel Group Corporation entered the final as the only enterprise team in the final, and won the third-class team award and prize for excellent organizer at the 1st National Network Analog Design Competition. Anshan Iron and Steel Group Corporation was awarded the outstanding contribution prize at the 7th "Rejuvenation Cup" Liaoning Youth Occupational Technical Competition, and won the first five prizes of converter steelmaking converter operators and maintenance electricians, the first two prizes of operators of rolled finished products and the fourth prize of welders and maintenance fitters; two employees of Anshan Iron and Steel Group Corporation, Zhang Fuduo and Li Yanjia were respectively awarded the honorary titles of "Top Ten Blue-collar Skill Star" and "Meritorious Contributor to the Association of Technology" of Liaoning Province. Pangang Group Company Ltd. was awarded the prize for excellent organizer of Sichuan Province Occupational Skill Competition of Employees by Sichuan Province Federation of Labor unions and prize for excellent organizer of the "Making New Contributions in Post-disaster Reconstruction" labor competition of Sichuan Province. In 2011 Sichuan Province Occupational Skill Competition of Young Employees, young employees of Pangang Group Company Ltd. won the first two prizes of competitions of lathe workers and welders, and seven were awarded the title of "Youth Master-Hand of Sichuan Province".



▲ Employee of Ansteel Group Corporation participates in the TV program of *Infinite Innovation* of CCTV-10.



▲ The representative team of Ansteel Group Corporation takes part in the First National Network Analog Design Competition.



▲ The 7th Liaoning Province Youth Occupational Skill Competition is held in Anshan Iron and Steel Group Corporation.



▲ Employees of Anshan Iron and Steel Group Corporation are awarded respectively the honorary titles of "Top Ten Blue-collar Skill Star" and "Meritorious Contributor to the Association of Technology" of Liaoning Province.



Contribution to the Society
Establishment of Corporate Credibility System
Promoting Local Economic Development

Chapter 06 Social Performance

Contribution to the Society

Guo Mingyi's Love Team

Guo Mingyi's Love Team organized volunteers to actively take part in social welfare undertakings, serve and help disadvantaged groups and played positive roles in advocating the spirit of selfless dedication, leading social ethical trends, and propelling construction of socialist core value system, thus becoming an influential love team across China. Guo Mingyi's Love Team set up seven subordinate teams, donation for education, blood donation without repayment, donation of hematopoietic stem cells, body (organ) donation, charity volunteers, and Emergency Response Unit and Volunteer Service Unit of the Red Cross.

In March 2011, Guo Mingyi's Love Team organized and carried out a large-scale campaign of "learning from Lei Feng spirit: selfless dedication", and over 10,000 volunteers across the country participated in various forms of activities: donation for education, blood donation without repayment, community service, voluntary teaching for rural education, and showing solicitude for stay-at-home children in rural areas and the elderly in gerocomium. On World Blood Donor Day on June 14, 2011, blood donation without repayment was initiated and response was received from over 3,000 volunteers across the country; over 600,000 ml blood was donated on the day. In November 2011, the 3rd National Moral Model Sub-team of Guo Mingyi's Love Team went to Guizhou Province, and donated RMB 180,000 and over 10,000 pieces of clothing to children in families in poverty in mountainous areas. By the end of 2011, over 160 Guo Ming Love Teams had been set up across the country with over 60,000 members. Accumulatively over RMB two million of money was donated, over 2,900 students in poverty were aided financially, over 1.2 million ml blood was donated without repayment, over 5,000 blood samples of hematopoietic stem cells were donated (1 person completed the donation of hematopoietic stem cells successfully), and over 700 people became voluntary body (organ) donors.



▲ The site of the large-scale campaign of "learning from Lei Feng spirit: selfless dedication" initiated by Guo Mingyi's Love Team.



▲ Guo Mingyi at sina.com as a guest.



▲ Guo Mingyi's Love Team carries out the activity of "2011 Winter Hand in Hand Education Aid".



▲ Guo Mingyi's Love Team participates in the activity of blood donation without repayment.

Social Donation

Ansteel Group Corporation formulated regulations on donation management which made corresponding regulations on scope, scale, and procedures, etc. of donation. Besides, it engaged itself vigorously in social investment, charity and public welfare undertaking, and endeavored in poverty alleviation and unit-to-unit aid program. In 2011, Ansteel Group Corporation donated money and materials which equaled to a total value of RMB 10.9623 million. Pangang Group Company Ltd. was bestowed upon the title of "National Model Entity in Poverty Alleviation and Development" by the Leading Group of Poverty Alleviation and Development of the State Council; Anshan Iron and Steel Group Corporation was rated as "Model Entity for Targeted Poverty Alleviation 2011" of Liaoning Province.

In 2011, despite the adversities in production and operation, Anshan Iron and Steel Group Corporation provided a fund of poverty alleviation of RMB 2.8 million for its target unit, Jianchang County in Liaoning Province in order to solve the local water drinking problem and improve the local transportation and medical conditions. It provided financial aid worth RMB 158,300 for poverty alleviation for its target unit, Shihuiyao Township, Xiuyan County, Anshan to help local families in poverty and schools by buying desks and chairs for the schools and buying TV sets, etc. for the families in poverty. The production and living conditions of the local villagers in poverty and the running conditions of local schools were greatly improved, thus promoting substantially the harmony and development of the local economy and public utilities. Pangang Group Company Ltd. provided financial aid worth RMB 3.15 million to help three districts and 12 townships in two counties in Panzhihua by implementing 26 poverty alleviation projects, laying emphasis on construction of village and township roads, reconstruction of drinking water projects for human and domestic animals and agricultural water conservancy projects. It provided financial aid worth RMB 1.1 million to help Puge County and Butuo County of Liangshanzhou carry out three poverty alleviation projects for improving school running conditions and construction of township roads, etc. RMB 2 million was provided to help Panxian County in Guizhou Province in road construction and improvement of production and living conditions of villagers in townships in poverty. RMB 150,000 was provided for Lixian County in Abazhou to train agricultural technicians; and RMB 750,000 was donated to Liangshanzhou to implement "Wooden Bench Project" for the Yi nationality and the post-disaster love retribution project.



▲ Ansteel Group Corporation Volunteer Service Team is greatly concerned about the children in mountainous areas in Xiuyan County, Anshan.



Financial Aid for Schooling in Golden Autumn

Ansteel Group Corporation made consistent efforts to ensure that no children of employee families in financial difficulties who were admitted to universities were deprived of education by poverty, thus the activity of "Financial Aid for Schooling in Golden Autumn" was carried out at the beginning of every academic year. In 2011, Anshan Iron and Steel Group Corporation aided 731 children of employees in poverty or extreme poverty for education, granted financial aid worth RMB 832,300; Pangang Group Company Ltd. financially aided 34 children of low-income employees for education, with a total amount of RMB 22,000 provided.



▲ The leaders of Ansteel Group Corporation are offering grant-in-aid to the children of the employees afflicted with financial troubles.

Activities of Young Volunteers

In 2011, young volunteers of Ansteel Group Corporation set up the goal of striving to be the inheritors of Lei Feng spirit in the new times, and carried out activities of young volunteers extensively by focusing on production and serving the society. Faced with the grave situation of production and operation of iron and steel enterprises, activities in various forms were carried out, such as recovery of iron and steel scrap, repairing the old and utilizing the waste, and cutting the cost to increase profit, etc.; altogether 5,250 tons of iron and steel scrap was recovered, and 10,580 pieces of spare parts were repaired. 396 times of "Saturday Voluntary Dedication Day" themed activities of voluntary service were carried out, with a participation population of 7,776 person-times. The activities focused upon the tackling of scientific and technological problems of the Corporation, tapping the potential to increase profit, energy conservation and emission reduction, environment treatment, trouble-shooting of hidden dangers, and maintenance projects. Guo Mingyi spirit was upheld and promoted. 73 Guo Mingyi Volunteer service teams were established, and 498 times of voluntary service activities were organized, with 7,282 person-times of young volunteers participating. The prevailing practice of education aid was advocated. The activities of education aid were carried out in the form of one-on-one pair aiding. A total fund of RMB 106,000 was raised, and 403 children of employees in poverty of Anshan Iron and Steel Group Corporation received financial aid. The activity of "providing warmth and offering solicitude" themed as "learning from Guo Mingyi spirit to pass on love" was organized and carried out among young volunteers. Visits were paid and regards were extended to 1,089 person-times of young employees in poverty. Helping pairs on a "many-to-one" or "one-to-one" basis were formed with retirees, employees staying at home, and employees in poverty.

In 2011, Ansteel Group Corporation established 177 youth volunteer service centers (stations), and set up 225 young volunteer teams, with 2,330 registered young volunteers across the country.



▲ Young volunteers are providing handy service for the public.



▲ Young volunteers are carrying out the activity of blood donation without repayment.

Establishment of Corporate Credibility System

Regarding credibility as a cornerstone of a company, Ansteel Group Corporation strengthened construction of honesty and credit comprehensively in the aspects of notion, system, institution, and carrier, and constructed management system of honesty and credit, endeavoring to shape the image of integrity of the Corporation.

Operation with Honesty and Credit in Accordance with Laws

National laws and regulations and international conventions were abode by, special attention was paid to exerting brand effect in competition and winning markets with quality brand and service. Operation strategies like dumping and monopoly were resisted in operation. No incidents against laws or regulations happened in international or domestic operation.

Carrying out the Activity of "Honoring Contracts and Valuing Credibility"

The activity of "honoring contracts and valuing credibility" was integrated into fortifying corporate defense against legal risks and comprehensive corporate risk management as well as appraisal of strategic performance. Contract management upgrade was carried out with its main content including institution perfection, procedures improvement, measures innovation and modes building. The management information system of corporate legal affairs with contract management as the main content was established, and the contract performance rate reached 100%. Anshan Iron and Steel Group Corporation had been awarded the honorary title of national-level enterprise of "Honoring Contracts and Valuing Credibility" for 11 years consecutively, and was bestowed upon the honorary title of "Honoring Contracts and Valuing Credibility Enterprise" for 20 Years Consecutively by Liaoning Administration for Industry and Commerce. Pangang Group Engineering Technology Co., Ltd. was awarded the title of "Honoring Contracts and Valuing Credibility" enterprise for the ninth consecutive year since 2003. Panzhihua Mining Co., Ltd., Pangang Group Sichuan Great Wall Special Steel Co., Ltd., and Pangang Group Chengdu Iron & Steel Co., Ltd. etc. had been awarded the title of "Honoring Contracts and Valuing Credibility" enterprise of Sichuan Province for several years consecutively.

Ansteel Group Corporation operated with honesty and credit in accordance with laws and thus won affirmative recognitions from all walks of life. In 2011, the ranking of Ansteel Group Corporation in the list of "China Fortune 500" raised from the 74th to the 56th; Ansteel Group Corporation was ranked 41st, moving up three places in the rankings of the 8th Top 500 Enterprise Brands with the Most Value in China, and its brand value increased by approximately RMB 7 billion. Anshan Iron and Steel Group Corporation was awarded Enterprise Honour Prize of China Grand Awards for Industry, and Pangang Group Company Ltd. was awarded Project Honour Prize of China Grand Awards for Industry. In "China Bellwether Enterprises Development Forum of Industry 2011" sponsored by China Industry News office, Anshan Iron and Steel Group Corporation was awarded the honorary title of "Bellwether Enterprise in Steel Rolling Processing Industry 2011"; both Anshan Iron and Steel Group Corporation and Pangang Group Company Ltd. were rated as AAA enterprises at the top credit level in terms of special credit rating. Pangang Group Panzhihua Steel & Vanadium Co., Ltd. was bestowed upon the title of "Enterprise with AA Credit" by General Administration of Quality Supervision, Inspection and Quarantine of the P.R.C., and Pangang Group Engineering Technology Co., Ltd. was awarded the honorary title of "Model Entity for Honesty and Credit of Sichuan Province".



▲ Anshan Iron and Steel Group Corporation is awarded Enterprise Honour Prize of China Grand Awards for Industry.



▲ Employees are receiving moral education on honesty and credit.

Promoting Local Economic Development

Ansteel Group Corporation highlighted cooperation with local enterprises, stuck to taking propelling local economic development as the important approach to fulfilling social responsibilities of State-owned Enterprise Supervised by the Central Governments, kept expanding cooperative fields, stepped up efforts in cooperating with local governments and enterprises in aspects of industrial development, urban construction, environment protection, land use, and comprehensive use of resources, etc. to promote local economic development.

In 2011, Ansteel Group Corporation signed the framework agreement of the "Twelfth Five-Year Period" strategic cooperation with Anshan Municipal People's Government, planning to strengthen multi-field cooperation and support local economic development and urban construction. Pangang Group Company Ltd. and Panzhihua City held regular project update meetings on cooperation with local enterprises so as to strengthen information docking and communication, and boost the project construction together. In 2011, the industrial added value of the headquarters of Pangang Group Company Ltd. reached RMB 12.3 billion, accounting for 19.05% of the total local output value in Panzhihua.

In the process of internationalized operation, Ansteel Group Corporation vigorously abode by international conventions and policies of local governments, and protected the legal rights and interests of laborers. All the managerial and operational staff members engaged were local people except a small number of managerial staff members, which made contributions to promoting local employment and driving the local economic development, and built a good image of Chinese enterprise brand. In 2011, Ansteel Group Corporation recruited 20 local employees in the project of VIGANO in Italy, and employed 2,000 local employees in construction of the project of Karara iron ore in Australia. Meanwhile, it actively participated in activities organized by local businesses and trade associations to enhance friendly non-governmental exchanges.



▲ Ansteel Group Corporation signs the framework agreement of the "Twelfth Five-Year Period" strategic cooperation with Anshan Municipal People's Government.



▲ Project update meeting on cooperation between Pangang Group Company Ltd. and local enterprises in Panzhihua City.



Looking into 2012

Increasing Differentiated Competitive Advantages and Enhancing Profitability of Iron and Steel Sectors

Ansteel Group Corporation will improve the operation and profitability by transforming advantages in talents and technologies into differentiated competitive advantages of iron and steel as the primary industry by optimizing structure, strengthening synergy, and improving services; Emphasis will be laid on developing high added-value products of high-end quality products, increasing market share and improving the leading position in the industry; Ansteel Group Corporation will innovate in the current operation system, pace up the integration of industrialization and informatization, and boost the exertion of the overall synergistic effect; By means of applying new concepts, systems and mechanisms to the construction of model factories in such new bases as Bayuquan, Xichang, and Chaoyang to tackle development problems, Ansteel Group Corporation will strive to initiate a new development mode of modern iron and steel industry and plays the role of vanguard in this industry.

Increasing Advantages of Self-Owned Brands and Enhancing Supporting Capacity of Important Business Plates

Ansteel Group Corporation will accelerate the comprehensive utilization of vanadium and titanium resources and industrial restructuring and planning, boost effectively the construction of projects of titanium selection in Baima Mine and Xichang vanadium products, etc., effectively carry out the research of process technology of vanadium and titanium and new product development, and propel the leapfrog development of competitive specialty industry of vanadium and titanium; Ansteel Group Corporation will give prominence to implementing the planning of iron ore mines to boost construction of the reconstruction and expansion of iron ore mines in Anshan area, and vigorously propel projects of submarginal ore utilization and expansion & reconstruction of Midi Ore-Dressing Factory, etc. in Panzhihua; Meanwhile, Ansteel Group Corporation will step up efforts in investment in and control of strategic resources to improve the ability of resources guarantee; Ansteel Group Corporation will build an operation mode with marketization as the principle, engineering technological company as the platform, and relevant units as the support to enhance the export capacity of engineering technologies.

Increasing Advantages in Transnational Operation, and Enhancing the Capacity of Internationalized Operation

Ansteel Group Corporation will promote the combination between internationalized operation with construction of the production chain & value chain, and boost the integration of product value chain through integration of global industrial chain; Ansteel Group Corporation will endeavor to realize the optimized combination of various links from product R&D, raw material procurement, and logistic distribution, order processing, manufacturing, and cutting & processing to terminal distribution; Ansteel Group Corporation will improve internationalized operation by planning the layout of overseas bases scientifically, utilizing the current overseas projects, and mastering the rules of construction & operation of overseas production bases.

Increasing Advantages in Indigenous Innovation and Enhancing the Leading Capacity in Advanced Technology

Ansteel Group Corporation will optimize the resources allocation of technological R&D, build a platform for technological resources sharing, pace up and promote infrastructure construction of future iron & steel research institute and construction of existing technological centers, further improve the platform of key laboratories, vigorously boost the R&D of new technologies and processes, etc., and develop high value-added products; Ansteel Group Corporation will generalize, popularize, research and develop new processes, technologies and equipment of energy conservation and emission reduction, broaden the investment channels of energy conservation and emission reduction, generalize the projects of contracted energy management, and carry out the cooperative project of the United Nations cleaner production mechanism.

Innovating System & Mechanism and Improving Managerial Level

Ansteel Group Corporation will promote reorganization and integration in an all-around way, and construct and implement new mechanism of the large group effectively; Ansteel Group Corporation will build and perfect a leadership system for itself and all the subordinate companies to ensure unified decision-making of the Group Corporation on key issues, and efficient as well as standard operation of regional companies; Ansteel Group Corporation will implement integration of businesses of the same kind, and upstream businesses and downstream businesses in the value chain to exert integral advantages and coordinated effects; Ansteel Group Corporation will further integrate important management systems, build and perfect the system of institutional administration; Ansteel Group Corporation will propel the reform of remuneration distribution system, and keep perfecting a remuneration distribution system based on post value and motivates the improvement of both personal capabilities and performances; Focusing upon the activity theme of “strengthening foundation, controlling risks, upgrading transformation, maintaining and increasing value, becoming stronger and pursuing perfection, and developing scientifically” of SASAC, Ansteel Group Corporation will implement reform and innovation, and carry out system benchmarking in 14 aspects, including strategy and investment management, group management and control and reorganization and integration, internationalized operation, scientific and technological innovation, finance and capital operation, procurement and marketing, and human resources, etc., in such a way that facilitates strengthening and perfection, and enhances the core competitiveness comprehensively; Ansteel Group Corporation will construct a long-term mechanism of production safety, implement the primary responsibility of production safety fully, promote the standard compliance and rise in rank of standardization of corporate production safety, and improve the managerial level of prediction & prevention of production safety.

Innovating a Talent Development Mechanism and Providing Intellectual Support for Growing Stronger and Pursuing Perfection

Ansteel Group Corporation will establish a position-based ranking for engineering and technical personnel to achieve a dual channel of promotion for both administrative and technical personnel; Ansteel Group Corporation will step up efforts in training senior technical personnel, organize highly skilled talents to further their study in domestic higher learning institutions, and select technical experts to learn and inspect in foreign countries and participate in academic exchange activities; Ansteel Group Corporation will make great efforts in introducing high-level talents, and introduce domestic & overseas high-level talents required urgently by corporate development in accordance with the requirement of the "1000 Talents" project of the Central Government; Ansteel Group Corporation will improve measures for the implementation of ranking of highly-skilled talents and accelerate the construction of promotion channel for highly-skilled talents.

Combating Corruption and Building a Clean Management to Provide Reliable Guarantee for Enterprise Strengthening and Optimizing

Ansteel Group Corporation will strengthen efforts in system construction, flow management and control, risk management, supervision and restraint, and leading culture, and explore new ideas integrating combating corruption and building a clean management into the production and operation of the Corporation; It will conduct activities of incorruptible employment education by making full use of "Anshan Iron and Steel Group Corporation Moral Cultivation Base of Employees" marked by Guo Mingyi spirit; It will boost the work of combating corruption of the promotion group inside Ansteel Group Corporation, and enable anti-corruption activities to be carried out thoroughly across the Corporation; It will implement and perfect "Seven Dockings", punish corruptions severely, and strengthen education, establish a system, stop up loopholes and exert the function of effecting a permanent cure of exposed problems; It will keep perfecting "three-in-one integration and co-construction".

Safeguarding Rights and Interests of Employees and Supporting Social Public Welfare

Ansteel Group Corporation will stick to the principle of "promoting enterprise development and safeguarding rights and interests of employees", promote the activity of creating an enterprise with harmonious labor relationships so as to construct harmonious labor relationships. It will improve and effectively implement the democratic management system of the Corporation with workers' conference as the basic form, deepen the opening of factory businesses, and genuinely safeguard the rights of employees to be informed of the truth, to express, to participate, and to supervise. It will care for the lives of employees and further the poverty alleviation by cadres on a "one-to-one" and "many-to-one" basis, pay visits and extends regards to employees, solve practical problems for employees, and make them greatly inspired by the warmth and caring love of the Corporation. It will show great concern for the lives of low-income employees suffering from industrial injuries, chronic diseases or extreme financial difficulties, establish a life safeguard mechanism for low-income employees, and strive to realize the goal of "Three Don'ts (do not let a single employee fail to make a living, do not let a single child from employee families fail to afford schooling, do not let a single employee fail to afford medical treatment)". It will make steady efforts to carry out activities of poverty alleviation and financial aid for schooling, etc., reinforce cooperation with local enterprises and promote the local economic development.

Appendix I Social Assessment (2011)

No.	Honors and Awards	Sponsor	Time
1	Pangang Group Company Ltd. was conferred the honorary title of "National Model Entity in Poverty Alleviation and Development"	The Leading Group of Poverty Alleviation and Development of the State Council.	February 2011
2	Anshan Iron and Steel Group Corporation was rated as "Model Entity for Targeted Poverty Alleviation 2011"	The Leading Group of Poverty Alleviation and Development of Liaoning Province.	March 2011
3	Pangang Group Panzhihua Steel & Vanadium Co., Ltd. was awarded the honorary title of "China Enterprise Reputed for Good Faith Quality"	General Administration of Quality Supervision, Inspection and Quarantine of the P.R.C.	April 2011
4	Anshan Iron and Steel Group Corporation won Enterprise Honour Prize of China Grand Awards for Industry, and the project of R&D and industrialization of vanadium trioxide and vanadium-nitrogen alloy of Pangang Group Company Ltd. won Project Honour Prize of China Grand Awards for Industry	China Federation of Industrial Economics	April 2011
5	Ansteel Group Corporation was conferred the "Certificate of Releasing Social Responsibility Report 2011"	China Federation of Industrial Economics	May 2011
6	Ansteel Group Corporation was awarded the honorary title of "Model Entity of Liaoning Province for Energy Conservation and Emission Reduction 2006-2010"	The People's Government of Liaoning Province	June 2011
7	Pangang Group Company Ltd. was conferred the honorary title of "National Model Entity for Confidentiality of the Password of the Metallurgical System"	China Iron and Steel Association	June 2011
8	The Project of Costal Iron and Steel of Ansteel Group Corporation Yingkou Bayuquan Port won the Prize for National Outstanding Investment Project 2011	The Investment Association of China	June 2011
9	Anshan Iron and Steel Group Corporation won the Governor Quality Prize of Liaoning Province	The People's Government of Liaoning Province	June 2011
10	Ansteel Group Corporation was conferred the honorary title of "Excellent Enterprise for Energy Conservation and Emission Reduction among State-owned Enterprise Supervised by the Central Governments during the 'Eleventh Five-Year Plan' Period"	State-owned Assets Supervision and Administration Commission of the State Council	June 2011
11	Anshan Iron and Steel Group Corporation was awarded "The China Hall of Fame for Palladium Strategy Focused Organizations 2011"	Review Council of the World Hall of Fame for Strategy Focused Organizations	June 2011
12	The innovative achievements of employees of Ansteel Group Corporation won 8 gold awards, 10 silver awards, and 7 bronze awards at the 20 th Chinese Invention Exhibition	China Association of Inventions	August 2011
13	Anshan Iron and Steel Group Corporation was conferred the honorary title of "National Model Entity for Internal Audit 2008-2010"	National Audit Office of the P.R.C.	September 2011
14	The project of "Recovery of Waste Heat and Gas for Reutilization" of Bayuquan Iron & Steel Subsidiary Company of Anshan Iron and Steel Group Corporation was awarded the Annual Award for Technological Innovation of the World Steel Association	World Steel Association	October 2011
15	Pangang Group Company Ltd. was awarded the honorary title of "Key Enterprise in construction of the Demonstration Base of Comprehensive Utilization of Mineral Resources"	Ministry of Land and Resources and Ministry of Finance of the P.R.C.	October 2011
16	<i>Learning from Guo Mingyi, Carrying Forward Ansteel Spirit, and Exerting the Driving Force of Corporate Culture and Forging Green Production Chain and Realizing Resources Conservation and Cleaner Production of Ansteel Group Corporation</i> were selected among "Excellent Social Responsibility Practices of State-owned Enterprise Supervised by the Central Governments 2011"	State-owned Assets Supervision and Administration Commission of the State Council	November 2011
17	Ansteel Group Corporation won the Prize of "Ten Classic Cases in 30 Years of Practice of Corporate Culture"	China Corporate Culture Institute	November 2011

No.	Honors and Awards	Sponsor	Time
18	Anshan Iron and Steel Group Corporation was rated as the model entity for demonstration work in the pilot project for intellectual properties, i.e. "Revitalizing Industry and Strengthening Enterprise" of Liaoning Province	Intellectual Property Office of Liaoning Province	November 2011
19	Anshan Iron and Steel Group Corporation was awarded the outstanding contribution prize at the 7 th "Rejuvenation Cup" Liaoning Youth Occupational Technical Competition	China Communist Youth League Liaoning Committee, Liao Provincial Department of Human Resources and Social Security, and Federation of Labor unions of Liaoning Province	November 2011
20	Anshan Iron and Steel Group Corporation was awarded the honorary title of "Leading Enterprise in the Steel Rolling Processing Industry 2011"	<i>China Industry News</i> Office	December 2011
21	Angang Steel Co., Ltd. Wire Rod Plant was conferred the honorary title of "Customer Satisfaction Enterprise of Liaoning Province"	Association for Quality and Consumer Committee of Liaoning Province	December 2011
22	Anshan Iron and Steel Group Corporation was conferred the honorary title of "Excellent Organizer of National Fitness Activities 2011"	General Administration of Sport of China	December 2011
23	Anshan Iron and Steel Group Corporation was conferred the honorary title of "Model Entity for Operation Performance Evaluation of State-owned Enterprise Supervised by the Central Governments 2011"	State-owned Assets Supervision and Administration Commission of the State Council	December 2011
24	Three achievements of Ansteel Group Corporation, i.e. "Standardized Management of Production Safety of Large-Scale Iron and Steel Conglomerate", "Centralized and Unified Elaborate Material Management of Large-Scale Iron Ore Mine Enterprise", and "People-Oriented Management Based on Humanistic Concern and Psychological Counseling of Iron Ore Enterprise", won the second prize of the 18th National Modernizing Enterprise Management and Innovating Achievements	Assessment Committee for Modernizing Enterprise Management and Innovating Achievements of China	January 2012
25	Pangang Group Company Ltd. was awarded the "Prize of Excellent Organizer of Professional Skills Competition of Employees of Sichuan Province"	Federation of Labor unions of Sichuan Province	January 2012
26	Two achievements of Ansteel Group Corporation, i.e. "Indigenous R&D and Industrial Application of the Core Technology of Cold-rolled Shape Control" and "Systematic Research and Practice of Iron Increase and Silicon (impurities) Reduction of Domestic Iron Ore", were granted the Second-Class National Prize for Progress in Science and Technology	The State Council of the People's Republic of China	February 2012
27	The cold-rolled extra-deep-drawn low carbon steel plates and strips of Angang Steel Co., Ltd. won Prize of Extra-Fine Product Quality; seven varieties, i.e. hot-rolled corrosion-resisting structural steel, thick steel plate for boiler and pressure vessel, hot-rolled steel plate for longitudinal submerged arc welded pipe, and hot-rolled steel wire rod for tire cord steel, etc., won Gold Cup Quality Prize for Metallurgical Products	China Iron and Steel Association	February 2012
28	Pangang Group Panzhihua Steel & Vanadium Co., Ltd. was conferred the honorary title of "Enterprise with AA Credit"	General Administration of Quality Supervision, Inspection and Quarantine of the P.R.C.	February 2012
29	Anshan Iron and Steel Group Corporation was rated as an excellent entity in "National Well-Being Cup Competition 2011"	All-China Federation of Labor unions and State Administration of Work Safety	March 2012
30	Anshan Iron and Steel Group Corporation was conferred the honorary title of "Units with Outstanding Contributions to Land Greening"	National Afforestation Committee	March 2012
31	Anshan Iron and Steel Group Corporation and Pangang Group Engineering Technology Co., Ltd. were conferred the honorary title of "Enterprise Honoring Contracts and Valuing Credibility".	State Administration for Industry and Commerce	March 2012



Rating Report on Ansteel Group Corporation Sustainability Report 2011

Entrusted by Ansteel Group Corporation, Research Center for Corporate Social Responsibility, Economics Division, Chinese Academy of Social Sciences selected experts from Chinese Expert Committee on CSR Report Rating to form the Rating Group of Ansteel Group Corporation Sustainability Report 2011 to rate *Ansteel Group Corporation Sustainability Report 2011* (Hereinafter referred to as "The Report").

I. Rating Basis

Chinese CSR Reporting Guide (CASS-CSR 2.0) jointly issued by Research Center for Corporate Social Responsibility, Economics Division, Chinese Academy of Social Sciences, China Enterprise Confederation, China Petroleum and Chemical Industry Federation, China National Light Industry Council, Sino-German Corporate Social Responsibility Project, China WTO Tribune, and China Committee of Corporate Citizenship. 2.0)》。

II. Rating Conclusions

Completeness (★★★★☆)

The Report systematically discloses key indicators of "strategic management", "production safety", "environmental performance", "employee protection", and "social performance", etc., and covers 68.3% of the core indicators of metal smelting and rolling processing industry; thus featuring excellent completeness.

Substantiality (★★★★☆)

The Report discloses substantial issues including "product quality management", "product innovation", "occupational health management", "production safety", "R&D and application of environmental protection technology and equipment", "circular economy", "management of the peripheral environment of plant areas", etc. The Report is sufficient and comprehensive in narration and excels in substantiality.

Balance (★★★★☆)

The Report discloses negative information on "the number of major pollution accidents", "the number of serious, major, and extraordinary major accidents of production safety", "the rate of serious injury accidents", and "commercial bribery", etc., and elaborates on the measures on combating commercial bribery in detail. The Report features excellent balance.

Comparability (★★★★)

The Report discloses historical data on various key performance indicators, thus is rated as fair in terms of longitudinal comparability. No latitudinal data of the industry are disclosed.

Readability (★★★★)

The Report features proper length, reasonable structure, smooth language, and proper layout design, thus is rated as sound in readability.

Originality (★★★★)

The Report presents the honors and awards the Corporation was awarded in 2011 at the end, and discloses independently the establishment of credibility system and promotion of local economic development. It is rated as outstanding in originality.

Composite Rating (★★★★☆)

The Rating Group rated *Ansteel Group Corporation Sustainability Report 2011* as an excellent corporate responsibility report with four stars and a half.

III. Recommendations for Improvement

1. To increase the disclosure of information on key performance data of entities of the same industry to improve the horizontal comparability of The Report.
2. To increase explanations of technical terms to improve the readability of The Report.

IV. Rating Group

Group Leader: Peng Huagang, Executive Vice President of the Center and Director of Research Bureau of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

Group members: Cheng Duosheng, Deputy Director of the Employer Work Department, China Enterprise Confederation

Zhang Wang, Secretary General/Deputy Director of CSR Research Center of Chinese Listed Companies of *Securities Times*

Yang Dongning, Associate Professor of Guanghua School of Management, Beijing University

Zhang En, Executive Deputy Director of Research Center for Corporate Social Responsibility, Economics Division, Chinese Academy of Social Sciences

Chen Jiagui

President of the Center's Executive Council
Member of NPC Standing Committee
Director of Economics Division of Chinese Academy of Social Sciences

陈佳贵

Peng Huagang

Group Leader of the Rating Group
Executive Vice President of the Center
Director of Research Bureau of the State-owned Assets Supervision and Administration Commission of the State Council

彭华岗



中国企业社会责任报告
专家评级委员会
Chinese Expert Committee on CSR Report Rating

Appendix III Index of Standards Referred to in This Report

Opinions of the State-owned Assets Supervision and Administration Commission of the State Council	GRI	CASS-CSR(2.0)	ISO26000	Page Number	Remark
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	1.2	G1.2	7.3	P13-17	
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	2.2	P4.2		P3-5/ P34-35	
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	2.4	P4.1		P3-5	
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	2.7	P4.3		P33-34	
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	3.4	P1.7 P1.8		First Page	
	3.5			First Page	
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	3.12	A3		P77-80	
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9. Improving corporate governance and promoting sound and democratic decision-making	4.1	P4.5 G2.1 G2.3	6.2	P5/P17	
9. Improving corporate governance and promoting sound and democratic decision-making	4.2	P4.5	6.2	P17	
9. Improving corporate governance and promoting sound and democratic decision-making	4.3	P4.6			Not Adopted
9. Improving corporate governance and promoting sound and democratic decision-making	4.4	G5.2 G5.3 S2.25	7.5	P17/P19	
	4.5		7.4	P20	
9. Improving corporate governance and promoting sound and democratic decision-making	4.6	P4.5	7.4	P20	
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	4.8	P3.1 G1.1 G1.2 G1.3 G1.2 G3.1 G3.2 G4.3	7.4	P5-9	
9. Improving corporate management, enhancing capability for control and management, reducing operational costs and strengthening risk management	4.9	P4.5		P13-17 P34/P71	

Opinions of the State-owned Assets Supervision and Administration Commission of the State Council	GRI	CASS-CSR(2.0)	ISO26000	Page Number	Remark
9. Improving corporate management and enhancing capability for control and management	4.10	G4.2 M1.4		P20	
9. Improving corporate management, enhancing capability for control and management, reducing operational costs and strengthening risk management	4.11	G1.2 G3.1	7.6	P13-17	
	4.12	G6.1 G6.2 G6.3	7.6	P7	
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	4.14	G5.1	5.3	P25-29	
	4.15	M3.1 M3.2 M3.3 M3.10 E1.5	5.3	P25-29 P36	
	4.16	G5.1 G5.2 G5.4	5.3	P25-29	
	4.17	G5.1 G5.5 M1.1 M1.5 A4	5.3	P18-19 P25-29/P81	
8. Paying taxes in accordance with laws, and protecting the rights and interests of investors and creditors; 9. Keeping improving capability for continuous profitability; 15. Taking part in non-profit programs for public good, such as charity and donation;	EC 1	M1.2 M1.3 M1.4 S1.6 S1.7 S2.10 S4.2 S4.7 S4.8 S4.9 S4.12 E1.6	6.8	P37-39 P58-59 P67-69	
	EC 2	E1.12	6.5	P49-56	
14. Establishing a mechanism for regular salary increase, and paying social insurance premiums in full and in time	EC 3	S2.3	6.8	P58-59	
	EC 4		6.6	P37-39	
14. Sticking to the principle of distribution according to work and equal pay for equal work	EC 5	S2.10 S2.12	6.4	P58-59	
	EC 6	M3.3 M3.4 S4.5 S4.6	6.6	P36/P71	
	EC 7	S1.8 S4.3 S4.4	6.6	P58-59 P71	
15. Participating in community-based and non-profit programs for public good	EC 8	S4.1 S4.10	6.6 6.8	P43/P67-71	
8. Protecting intellectual property rights 12. Promoting independent innovation and echnological advancement	EC 9	M2.9 M2.10 M2.11 M2.12 M2.13 M2.14 E1.7	6.6	P40-44	
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	EN 4	E2.2	6.5	P49-53	
11. Enhancing resource conservation and environmental protection	EN 5	E2.2 E2.19 E2.20	6.5	P53	
11. Developing energy-efficient products to promote the energy-saving industry and developing circular economy to enhance efficiency in multi-purpose utilization of resources	EN 6	E1.1 E1.2 E1.3 E1.4 E2.1 MEE2.10 MEE2.11MEE2.15 MEE2.16MEE2.17	6.5	P49-53	
11. Enhancing resource conservation and environmental protection	EN 7	E2.2	6.5	P49-53	
11. Enhancing resource conservation and environmental protection	EN 8	MEE2.8	6.5	P53	
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11. Improving techniques and reducing pollution discharge	EN 10	E2.7 MEE2.8 E3.6	6.5	P53	
	EN 11	E1.9	6.5	P53	
11. Enhancing resource conservation and environmental protection	EN 12	E1.9	6.5	P53	

Opinions of the State-owned Assets Supervision and Administration Commission of the State Council	GRI	CASS-CSR(2.0)	ISO26000	Page Number	Remark
11. Enhancing resource conservation and environmental protection	EN 13	E3.15 E3.16	6.5	P55–56	
11. Enhancing resource conservation and environmental protection	EN 14	E1.1 E1.3 E1.4	6.5	P49–56	
	EN 15		6.5		Not Adopted
11. Fulfilling responsibility for energy conservation and emission reduction, and taking the lead in completion of tasks for energy conservation and emission reduction	EN 16	E3.2 E3.13	6.5	P54	
11. Fulfilling responsibility for energy conservation and emission reduction, and taking the lead in completion of tasks for energy conservation and emission reduction	EN 17	MEE2.17 E3.13	6.5	P54	
11. Increasing inputs into environmental protection, improving techniques, reducing pollution discharge, and launching clean production	EN 18	E1.1 E1.3 E3.1 E3.2 E3.12	6.5	P54	
11. Fulfilling responsibility for energy conservation and emission reduction, and taking the lead in completion of tasks for energy conservation and emission reduction	EN 19	E3.13	6.5	P54	
11. Fulfilling responsibility for energy conservation and emission reduction, and taking the lead in completion of tasks for energy conservation and emission reduction	EN 20	E3.2 E3.13	6.5	P54	
11. Fulfilling responsibility for energy conservation and emission reduction, and taking the lead in completion of tasks for energy conservation and emission reduction	EN 21	E3.7	6.5	P53	
11. Fulfilling responsibility for energy conservation and emission reduction, and taking the lead in completion of tasks for energy conservation and emission reduction	EN 22	E3.9 E3.10	6.5	P54	
11. Enhancing resource conservation and environmental protection	EN 23	MEE3.11	6.5	P50–54	
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11. Enhancing resource conservation and environmental protection	EN 26	E1.8 MEE2.17 E3.14 E3.9 E1.2	6.5	P49–56	
11. Developing energy-efficient products to promote the energy-saving industry and developing circular economy to enhance efficiency in multi-purpose utilization of resources	EN 27	MEE2.5 MEE2.6	6.5	P54	
11. Enhancing resource conservation and environmental protection	EN 28	E1.14	6.5	P49–56	
11. Enhancing resource conservation and environmental protection	EN 29	E1.14 E3.14	6.5	P49–56	
11. Enhancing resource conservation and environmental protection	EN 30	E1.12	6.5	P49–56	
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14. Promoting democratic management	LA 4	S2.2 S2.4 S2.8	6.4	P58–60	
14. Improving the institution of Employees' Congress, and stepping up efforts to make company-related issues known to employees, and promoting democratic management	LA 5	S2.24	6.4	P58–60	
13. Ensuring employees' vocational health, and preventing or reducing the incidence of vocational diseases and other illnesses	LA 6	S2.16 S2.17 S3.1 S3.2 S3.3 S3.4 S3.5	6.4	P45–48	
13. Ensuring production safety	LA 7	S2.18 S3.6	6.4	P45–48	
14. Rendering care to employees' life by helping alleviate their concerns	LA 8	S2.19 S2.20 S2.26 S2.27 S2.28 S4.2	6.4	P61–62	
13. Implementing a responsibility system for production safety	LA 9	S2.16	6.4	P48/P58–60	
14. Intensifying on-job education and training, and providing equal opportunity for personal development	LA 10	S2.22	6.4	P63–66	
14. Intensifying on-job education and training, and providing equal opportunity for personal development	LA 11	S2.21 S2.23	6.4	P63–66	
14. Intensifying on-job education and training, and providing equal opportunity for personal development	LA 12	S2.23	6.4	P63–66	
14. Signing the labor contract with employees and honoring the contract in accordance with laws	LA 13	S2.14	6.4	P57	

Opinions of the State-owned Assets Supervision and Administration Commission of the State Council	GRI	CASS-CSR(2.0)	ISO26000	Page Number	Remark
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	HR 3	S2.6 S2.7 S2.9	6.3	P58-60	
14. Respecting and treating employees as equals and preventing any kind of discrimination based on gender, nationality, religious belief and age, etc	HR 4	S2.12	6.3	P58-60	
14. Signing the labor contract with employees and honoring the contract in accordance with laws	HR 5	S2.1 S2.8	6.3	P58-60	
14. Signing the labor contract with employees and honoring the contract in accordance with laws	HR 6		6.3	P58	
14. Signing the labor contract with employees and honoring the contract in accordance with laws	HR 7	S2.5	6.3	P58-60	
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8. Upholding honesty and integrity in business operation	SO 1	S1.8 S4.1 S4.3	6.6	P3-5/P71	
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8. Building business credibility, and preventing unfair competition and corruption in business activities	SO 4	S1.2	6.6	P21-22	
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	SO 6		6.6	P70	
8. Building business credibility, and preventing unfair competition and corruption in business activities	SO 7		6.6	P70	
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8. Abiding by laws and regulations, social ethics, business ethics and industrial rules	PR 4	S1.4	6.7	P33-35	
10. Protecting consumers' rights and interests, and properly dealing with their complaints and suggestions	PR 5	M2.1 M2.2 M2.3 M2.4 M2.5	6.7	P33-35	
8. Abiding by laws and regulations, social ethics, business ethics and industrial rules	PR 6	M1.1 M1.2 M3.5 M3.6 M3.7 M3.8 M3.8 M3.9	6.7	P33-35	
8. Abiding by laws and regulations, social ethics, business ethics and industrial rules	PR 7		6.6	P33-35	
10. Protecting consumers' rights and interests, and properly dealing with their complaints and suggestions	PR 8	M2.4	6.6	P33-35	
8. Abiding by laws and regulations, social ethics, business ethics and industrial rules	PR 9	M2.8 S1.4	6.6	P70	

Appendix IV Questionnaire

Dear readers :

The report is a sustainability report released to the society by Ansteel Group Corporation. We would like to seek your opinions and suggestions so as to help us make an improvement in fulfillment of social responsibility and sustainable development. We would highly appreciate it if you could spare time to share your thoughts with us:

1. Do you think this report reflects the significant impact Ansteel Group Corporation has exerted on the economy, society and environment?

☐ Yes ☐ Fairly ☐ No

2. Does this report make an exact and comprehensive analysis of the relationship between Ansteel Group Corporation and the stakeholders?

☐ Yes ☐ Fairly ☐ No

3. Are the information, data and indexes disclosed in this report clear, accurate and complete?

☐ Yes ☐ Fairly ☐ No

4. Are the content layout and format design in this report helpful for your reading?

☐ Yes ☐ Fairly ☐ No

5. Which aspect in this report strikes you most satisfactory?

☐ Yes ☐ Fairly ☐ No

6. Is there any other information you need which should have been presented in this report?

7. What suggestions do you have on our release of the sustainability report in the future?

YOUR INFORMATION

Name : Title : Tel : E-mail :

Employer :

Thank you for your support!

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