



# ANSTEEL

2020

ANSTEEL GROUP CORPORATION LIMITED  
Sustainability Report



## About the Report

Dear readers,

Welcome to read the 14th Ansteel Group Corporation Limited Sustainability Report. Based on feedback information and suggestions from various channels, the report elaborates on social responsibility practices of Ansteel Group in business operation, products and services, environmental protection, staff support and community development.

### Reporting Period

The report discloses information dated between January 1, 2020 and December 31, 2020. Part of the report may refer to previous years as needed.

### Report Boundary

With Ansteel Group Corporation Limited (hereinafter referred to as Ansteel, Ansteel Group, the Company or we) as the main body, the report covers Anshan Iron & Steel Group Co., Ltd. (hereinafter referred to as Anshan Iron and Steel Group) and Pangang Group Co., Ltd. (hereinafter referred to as Pangang Group) as well as their non-steel industry sectors and directly affiliated entities.

### Release Cycle

This report is released annually.

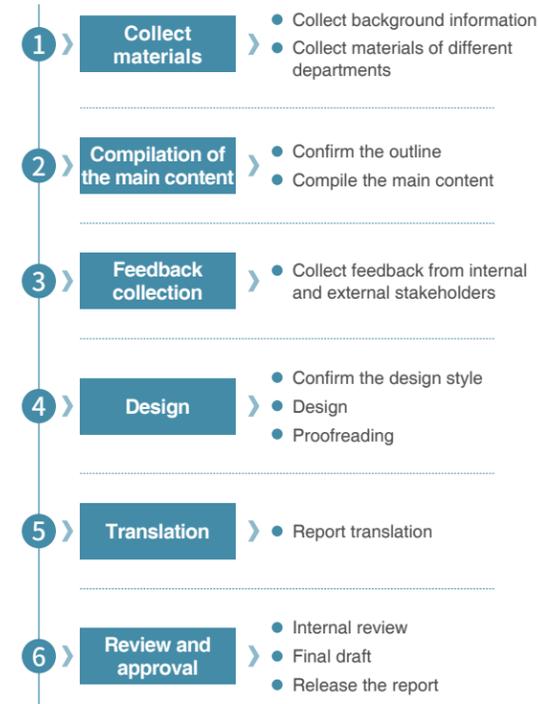
### Reference Standards

- GB/T 36001-2015, *Guidance on Social Responsibility Reporting* issued by Standardization Administration

of the General Administration of Quality Supervision, Inspection and Quarantine

- *Guidelines for the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities* issued by State-owned Assets Supervision and Administration Commission of the State Council (SASAC)
- The *GRI Sustainability Reporting Standards* (GRI Standards) issued by the GRI Global Sustainability Standards Board (GSSB)
- ISO 26000: 2010, *Guidance on Social Responsibility* issued by International Organization for Standardization (ISO)
- *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0)* issued by Chinese Academy of Social Sciences (CASS)

### Report preparation process



### Report Guarantee

The financial data included in the report conform to *Accounting Standards for Enterprises* and relevant accounting systems issued by the authority, and have been audited in accordance with *Internal Audit Standards of China*, thus releasing actual financial indicators and operational conditions of Ansteel Group. All the sums of money in the report are in the unit of CNY unless otherwise stipulated. The report has been internally audited, which ensures its authenticity, accuracy and completeness.

### Access to the Report

The report is issued in printed and electronic versions in both Chinese and English. For the electronic version, please visit Ansteel Group's official website <http://en.ansteel.cn>.

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## Message from the Senior Management

### Tan Chengxu

Secretary of the Party Committee,  
Chairman of the Board, Ansteel Group  
Corporation Limited



### Dai Zhihao

Deputy Secretary of the Party  
Committee, President, Ansteel Group  
Corporation Limited



The year 2020 was such an extraordinary and challenging year in the development of Ansteel. Faced with the unprecedented COVID-19 pandemic, a complicated and challenging international environment, and the arduous tasks of reform and development, Ansteel thoroughly implemented the spirit of a series of important speeches and instructions made by General Secretary Xi Jinping, and resolutely followed the decisions and plans of the Party Central Committee and the State Council. We have overcome various difficulties and made significant progress in containing the pandemic and achieving corporate development through reform. We have achieved historic breakthroughs in promoting the “two reforms”, the reform of the collectively owned factories operated by SOEs involving 150,000 employees, and the transfer of social security accounts of 220,000 retirees to the management of residential communities. In 2020, Ansteel’s operating profit exceeded RMB 10 billion, the best level in history. In addition, the Company outperformed the performance indicators of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), and ranked among the top central SOEs in terms of profit growth. In the face of severe challenges, we continued to serve as the “pillar” and the “ballast” in the national economy, while demonstrating the corporate responsibility of a central SOE.

**In 2020, we launched a resolute battle to prevent and control the spread of the virus, and served as a pillar in the fight against the pandemic.** Facing the unexpected and devastating disease, we resolutely followed the instructions made by the Party Central Committee, promptly established an efficient and coordinated pandemic prevention and control system under a unified command, and adjusted response measures in view of the evolving COVID-19 dynamics. These efforts have enabled us to make phased progress in containing the spread, ensuring zero infections and zero suspected cases among all employees of Ansteel in Liaoning, Beijing, Guangzhou, etc., as well as in foreign countries. We kept in mind the bigger picture, and spared no effort to guarantee supplies to support the fight against the pandemic. We donated funds and materials worth RMB 37.5 million, and donated 2,808 tons of steel specially used for pandemic containment. In addition, 16 medical workers from medical institutions under Ansteel assisted with the fight against the virus in Hubei Province, and more than 300 medical workers fought at the frontline in their local areas. We determinedly ensured stability on six key fronts, and carried out the task of maintaining security in six key areas. In 2020, we did not stop steel production for a single day, which gave a strong impetus to the resumption of work and production of upstream and downstream industries as well as small and medium-sized enterprises. The number of recent college graduates recruited increased by 137% year on year. We also exempted RMB 13.62 million in rentals on the state-owned property for micro, small, and medium enterprises (MSMEs) and self-employed individuals. We responded to COVID-19 and advanced business development, and introduced the *Ten Measures to Cope With the Current Severe Situation and Fight the Battle for Business Survival*. By making every effort to stabilize operations, expand markets, advance reforms, reduce costs, and improve efficiency, we made new gains in improving our quality and performance, and secured a full victory in the fight for survival.

**In 2020, we made every effort to advance the “two reforms”, and basically resolved the longstanding problems.** In order to complete the “two reforms” involving more than 370,000 employees and problems that had remained unsolved for a long time, and cope with the huge pressure on our production and operations caused by the pandemic, we united as one and overcame difficulties with tremendous political courage and a powerful sense of mission. We have built a “five-sphere integrated” working mechanism for strengthening the Party leadership, ideological work, training on policies, publicity and guidance, and maintenance of stability. We adhered to the people-centered approach, and have worked tirelessly to ensure that all employees of the collective enterprises enjoy their rights to medical care, old-age care, and housing, so that they will lead a better life. We were among the first central SOEs by completing the transfer of social security accounts of retirees to the management of residential communities ahead of schedule. We basically completed the reform of the collectively owned factories operated by SOEs, and achieved historic breakthroughs by resolving a number of longstanding problems. In addition to the successful separation and transfer of “three supply” and “one property” (water, power and heat supply, and property management), Ansteel has basically resolved the three longstanding problems during the 13th Five-Year Plan period, smoothly entering the 14th Five-Year Plan period with a brand-new image. The “two reforms” have been fully recognized by Vice-Premier Liu He, State Councillor Wang Yong, the SASAC, and the Liaoning Provincial Party Committee and Provincial Government.

**In 2020, we advanced reform as a crucial move, and promoted comprehensive reform with a focus on the delegation of power.** As a pilot enterprise for comprehensive reform designated by the SASAC, we completed 97.1% of the 68 comprehensive reform tasks. We initiated and completed all 76 reform tasks to promote the three-year action plan for SOE reform in 2020. We authorized and delegated power level by

level to realize the goal of “delegating power and increasing efficiency and vitality”. In 2020, Ansteel Group Chaoyang Iron & Steel launched an upgraded version of reform centered on “authorization + common interests”, achieving a year-on-year increase of 15% in profits with a sales margin of 10.67%, which is 2.3 times the industry average. With the fifteen main technological and economic indicators reaching their best levels in history, and its costs of iron, steel and materials entering the top 5 in the industry, Ansteel has become a steel base with strong cost competitiveness. Moreover, we vigorously promoted the reform experience of Chaoyang Iron & Steel, allowing a number of subsidiaries to achieve remarkable results by advancing reform based on their own actual conditions. These subsidiaries include Bayuquan Steel Subsidiary of Anshan Iron and Steel Group, China National Heavy Machinery Corporation, Sichuan Hongjian Heavy Machinery Manufacturing Co., Ltd., the Eastern Anshan Sintering Plant, etc. We also implemented diversified and multi-level incentive measures, such as the key personnel share scheme for a subsidiary that had intensified mixed ownership reform, equity and dividend incentives for five technology-based companies, follow-on investments in 2 new projects, and equity incentives for one listed company. Six subsidiaries, including Jwell IoT completed the appointment of professional managers, and nine subsidiaries, including Ansteel Group Engineering Technology Corporation, completed the reform of mixed ownership.

**In 2020, we accelerated scientific and technological innovation with a focus on achieving breakthroughs in core technologies for key fields, and played our part in serving national strategies.** With the two state-level key laboratories, the National Key Laboratory of Comprehensive Utilization of Vanadium and Titanium Resources and the National Key Laboratory of Metal Materials for Marine Equipment and Their Applications, In 2020, we completed all assessment indicators of the SASAC and our R&D investment intensity reached 4.04%. We served a number of major science and technology projects in China or conducted by Chinese companies overseas. For example, Ansteel was behind the first power generating operation by the Hualong-1 nuclear reactor by producing steel used for the nuclear generators; Ansteel became the exclusive rail supplier for the Jakarta- Bandung High-Speed Railway, which is financed by China and with construction led by China Railway Engineering Corporation; Ansteel became the world’s first producers of VL4-4MOD low-temperature shipbuilding steel; we launched the world’s first high-strain L485 steel plate for deep-sea pipelines, a result of “High Strain Capacity Sea Pipeline”, a key national R&D project during the 13th Five-Year Plan period; the corrosion-resistant steel produced by Ansteel for cargo oil tanks was first used in domestic Very Large Crude Carriers (VLCCs) construction. We are committed to empowering industry development intelligent manufacturing. In 2020, we used 176 industrial robots for the upgrading and transformation of 15 production lines. The two big data application platforms of Anshan Iron and Steel Group and Pangang Group were rated as demonstration projects by the Ministry of Industry and Information Technology.

**In 2020, we vigorously assumed our responsibility, and made significant progress in fighting the three tough battles.** In terms of poverty alleviation, the two key counties of national poverty alleviation that were supported by Ansteel, as well as the 17 villages in 10 counties that received paired assistance from the Company were all lifted out of poverty. In 2020, we invested RMB 38,403,800 in poverty alleviation, a year-on-year increase of 10.72%. We also implemented 78 poverty alleviation projects, and dispatched 32 cadres to poverty-stricken areas. Ansteel’s targeted poverty alleviation campaign was selected as an excellent case of central SOEs. We effectively prevented and controlled debt risks by completing the three-year task of deleveraging and reducing debt assigned by the SASAC. We reduced our debt-to-asset ratio to 63.97%, a drop of 2.47% from the beginning of the year, which has enabled the continuous optimization of the Company’s financing structure. We also achieved remarkable results in pollution prevention and control by implementing Xi Jinping’s thoughts on promoting ecological conservation, reducing the environmental impact of mining, and adding more than 1 million square meters of green and reclaimed land. We implemented *Ansteel’s Three-Year Plan for Ecological Restoration of Mines*, and jointly built demonstration green parks by reclaiming land from mines with the Anshan City. We continued to improve energy conservation and environmental protection by reducing pollutant emissions, and conducted all the rectifications that were demanded by the inspectors on ecological and environmental protection from the central government.

The road ahead is long; striving is the only way forward. The year 2021 marks the start of the 14th Five-Year Plan, and also the first year to build a new Ansteel through high-quality development. We will continue to follow the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, ground our efforts in the new development stage, apply the new development philosophy, and create a new pattern of development. We will strive to “make breakthroughs in the five key areas” while “focusing on the four key tasks”, and promote the high-quality development of the Company, so that we can celebrate the centenary of the CPC with excellent results, and make greater contributions to the building of a modern socialist country in all respects and the Chinese Dream of national rejuvenation!

## About Us

### Company Profile

Ansteel Group Corporation Limited was restructured from Anshan Iron and Steel Group Co., Ltd. and Pangang Group Co., Ltd. in May 2010. As a central state-owned enterprise (SOE) under the supervision of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), Ansteel Group is headquartered in Anshan City, Liaoning Province and has formed an international development pattern across different regions and multiple bases. Among China's first batch of "innovative enterprises", the Company is the first iron & steel company in China with the capability of complete technology output and ranked 401st in the Fortune Global 500 list in 2020.

Ansteel Group has seven distinctive production bases in northeast, southwest, southeast, and southern China, and has rich iron ore resources in Liaoning and Sichuan, China and in Carrara, Australia. As one of the iron & steel enterprises in China boasting the richest resources, we have 26 subsidiaries and organizations overseas and more than 500 domestic and foreign customers and partners. The products of Ansteel Group are sold to more than 70 countries and regions, with an annual import and export amount of more than 5 billion dollars.

In the new era, Ansteel staff remain true to our original aspiration of "remembering the responsibility of the eldest son of the Republic and dedicating ourselves to serving the country", and commit ourselves to the mission of "producing better material, creating more wonderful life". We follow and strengthen the overall Party leadership, implement the new development philosophy, and expand opening up on all fronts. We continue to deepen reform and innovation and speed up transformation and upgrading for better development, striving to build Ansteel Group into a leader in the high-quality development of China's steel industry and a world-class enterprise with global competitiveness.

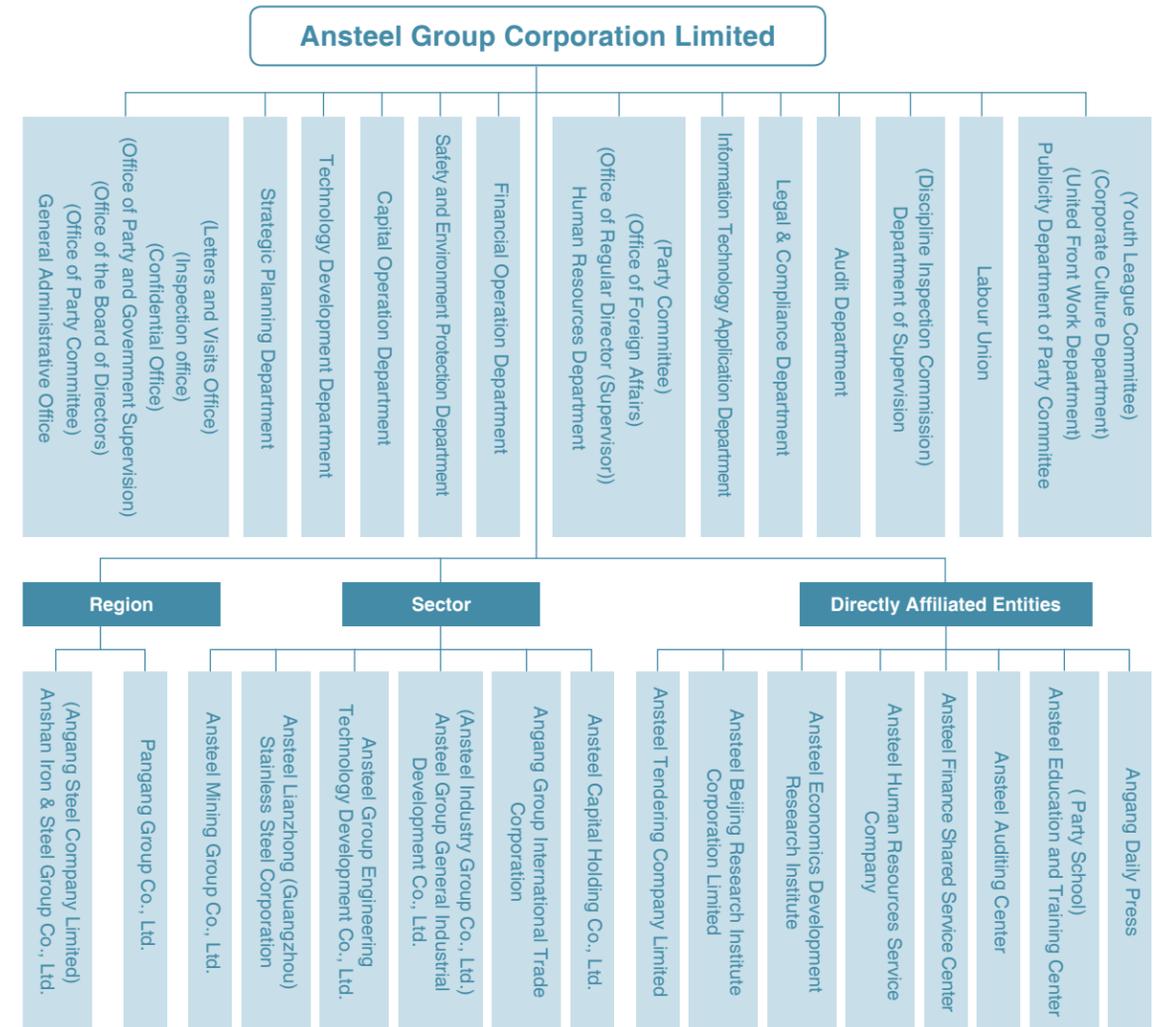
#### Anshan Iron and Steel Group Co., Ltd.

Anshan Iron and Steel Group Co., Ltd. was the first large-scale integrated iron and steel enterprise and the earliest steel production facility established after the foundation of the People's Republic of China. It has made great contributions to the national economic construction and the development of the steel industry and was known as the "eldest son of the steel industry of the Republic" and the "cradle of China's steel industry".

#### Pangang Group Co., Ltd.

Pangang Group Co., Ltd. is the world's largest vanadium producer, China's largest production facility for titanium raw materials, with the full industrial chain. It is the national largest, global leading heavy railway production base and an important production base for automotive steel, home appliance steel and high-strength structural steel.

## Organizational Structure



## Business Scope

We have a whole set of advanced iron & steel production equipment covering mining exploitation, sintering, iron-making, steel rolling as well as coking, fire resistance, driving force and transport, etc. We have capabilities of mine, complete steel production technology and management ability output. We have a rich variety of steel products, vanadium products, titanium products, which are widely used in dozens of industries such as railways, construction, automobiles, machinery, shipbuilding, home appliances, containers, petroleum and petrochemicals, and aerospace. Among them, automotive steel, railway steel, home appliance steel, shipbuilding and marine engineering steel, container steel, electrical steel, petroleum and petrochemical steel, high-end product steel, and special steel lead the domestic market.

We can see the extensive application of Ansteel products in major projects at home and abroad, including China's West-East Gas Pipeline Project, Qinghai-Tibet Railway, Three Gorges Dam, Nanjing Yangtze River Bridge, Hong Kong-Zhuhai-Macao Bridge, Bird's Nest Stadium, Verrazano-Narrows Bridge, and Tanana River Bridge in the United States, making Ansteel a global supplier of many internationally renowned companies.

### Steel product portfolio

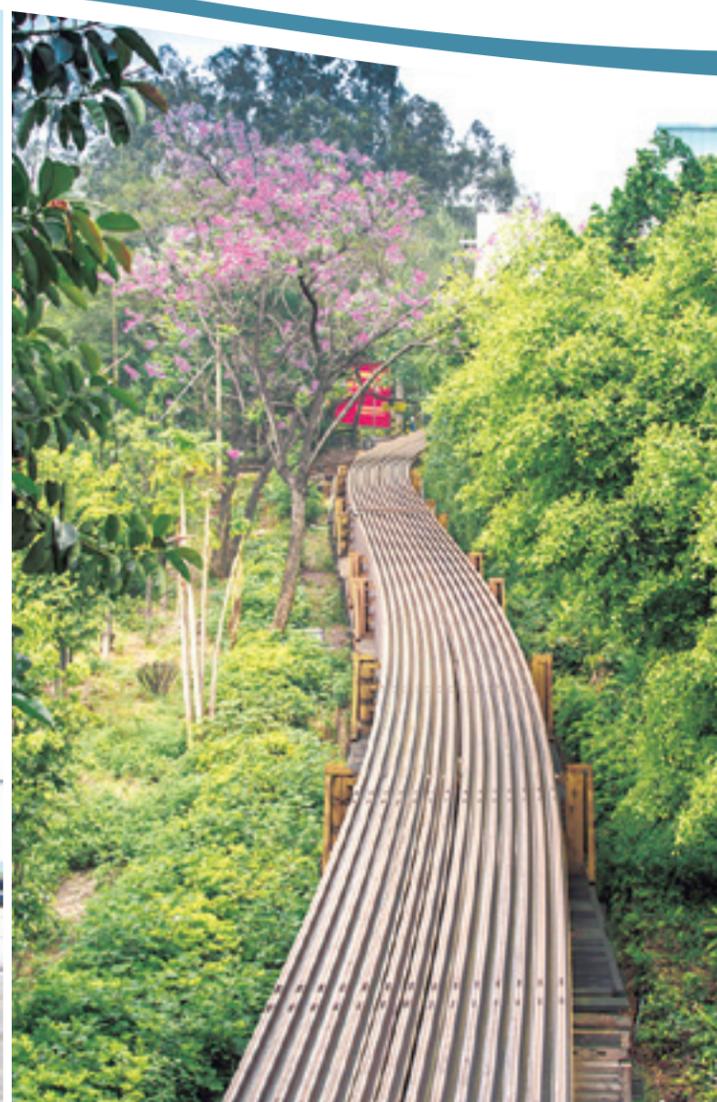
A complete steel product portfolio covering hot rolling plates, cold rolling plates, galvanized plates, color coated plates, cold rolling silicon steel, heavy rails, seamless steel pipelines, steel bars, steel wires, steel ropes, and stainless steel etc.

### Vanadium products

A series of vanadium products including vanadium oxide, high vanadium ferroalloy, vanadium nitrogen alloy, and vanadium aluminum alloy etc.

### Titanium products

A series of titanium products including titanium concentrate, high titanium bearing slag, titanium dioxide, sponge titanium, and other titanium products



## Figures in 2020



### Economy

- The total operating profit exceeded RMB **10** billion, the highest in Ansteel's history.
- Contracted amount of raw material trade reached **41.545** million tons.
- Contracted amount of iron and steel export reached **1.035** million tons.
- Science and technology input was about RMB **8.6** billion.
- Ansteel won **2** second prizes of the National Science and Technology Progress Award.



### Society

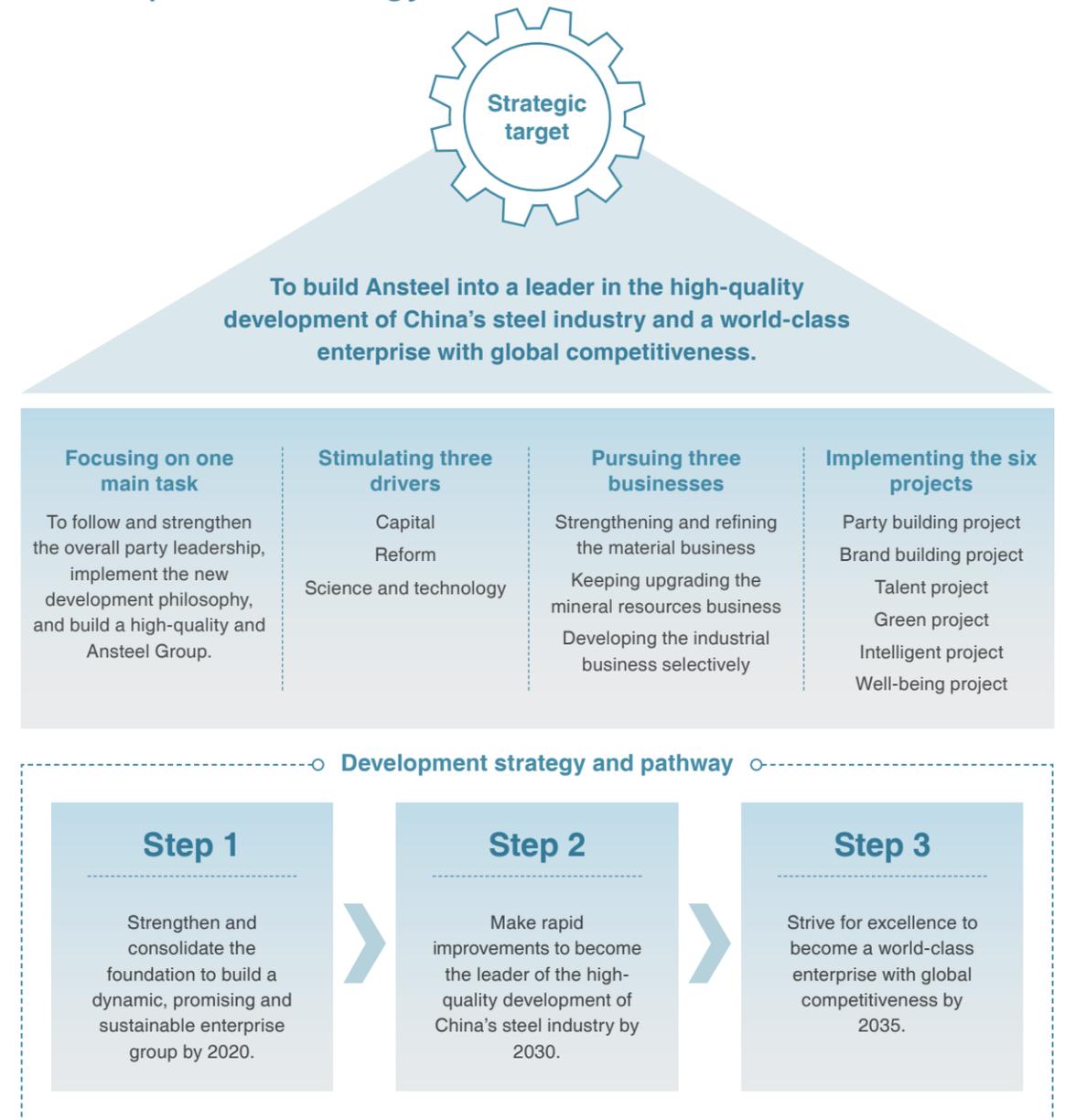
- The number of employees reached **105,762** and the social insurance coverage rate was 100%.
- The number of young volunteers reached **6,775** and we organized **730** volunteer activities.
- We donated RMB **30** million for the prevention and control of the COVID-19 pandemic.
- We invested RMB **38.4038** million in gratuitous services.



### Environment

- Comprehensive energy consumption per RMB 10,000 of output value (comparable price) decreased by **0.95%** year on year.
- New water consumption per ton of steel produced decreased by **2.29%** year on year.
- SO<sub>2</sub> emissions decreased by **4.19%** year on year.
- NO<sub>x</sub> emissions decreased by **0.32%** year on year.
- COD emissions decreased by **0.67%** year on year.

## Development Strategy



## Corporate Culture

<p><b>Vision</b> ⊕ To be an iron and steel group corporation with the most international influence</p> <p><b>Mission</b> ⊕ Producing better material, Creating more wonderful life</p> <p><b>Core values</b> ⊕ Innovation, Practicality, Striving, Devotion</p> <p><b>Cultural inheritance</b> ⊕ The spirit of "Ansteel Constitution", the glorious tradition of Ansteel Group</p>	<p><b>Management philosophy</b> ⊕ Staff first, market orientation, continuous reform, legal compliance, refinedness and rigidity, highly efficient execution</p> <p><b>Behavioral rules</b> ⊕ Compliance, Devotion, Goodness, Civilization</p> <p><b>Corporate image</b> ⊕ A leading, global renowned brand</p>
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## Strengthening Party Building

Upholding the Party's leadership and strengthening Party building are the "root" and "soul" of SOEs. Therefore, Ansteel consolidates its political stance, follows the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and fully implements the guiding principles of the Party's 19th National Congress and the second, third, fourth and fifth plenary sessions of its 19th Central Committee. Focusing on our production and operations, as well as the main tasks of reform and development, we continue to make Party building more scientific, so that we can lay a solid foundation and fully leverage our strengths. We highlight clear priorities and implementation while transforming the political advantages of the Party into the core competitiveness of the Company, thus providing a strong organizational guarantee for the high-quality development of Ansteel Group.

### Enhancing the Party's political building

Following the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and fully implementing the guiding principles of the Party's 19th National Congress; upholding the Party's political leadership; remaining steadfast in upholding General Secretary Xi Jinping's core position on the Party Central Committee and in the Party as a whole, and upholding the Party Central Committee's authority and its centralized, unified leadership; arming ourselves with the Party's scientific theories, resolutely implementing the decisions and plans made by the Party Central Committee, and continuously strengthening the Party's ideological leadership over Ansteel's corporate development.

### Consolidating the Party's organizations

Adhering to the Party's organizational line for the new era while building a contingent of competent cadres; inspecting cadres on the frontline of production and operations, and continuously improving the training and selection of young cadres to stimulate the vitality of personnel; strengthening the Party's organizational system to ensure that it covers the all organizations and operations; consolidating the construction of primary Party organizations to continuously strengthen their political functions and organizational capabilities.

### Exercising strict governance over the Party

Being consistent in exercising strict governance over the Party, and expanding its scope to primary Party organizations; comprehensively promoting the system under which officials "don't dare to, are unable to and have no desire to commit acts of corruption" to foster a healthy political atmosphere of integrity within the Party; giving full play to the leadership role of the Party Committee to ensure that the responsibility for Party building is performed at all levels; deepening the integration of Party building with production and operations, and promoting the organic integration of the Party leadership and corporate governance to lead high-quality development with high-quality Party building.



Organizing Party members of Ansteel to review the Party admission oath

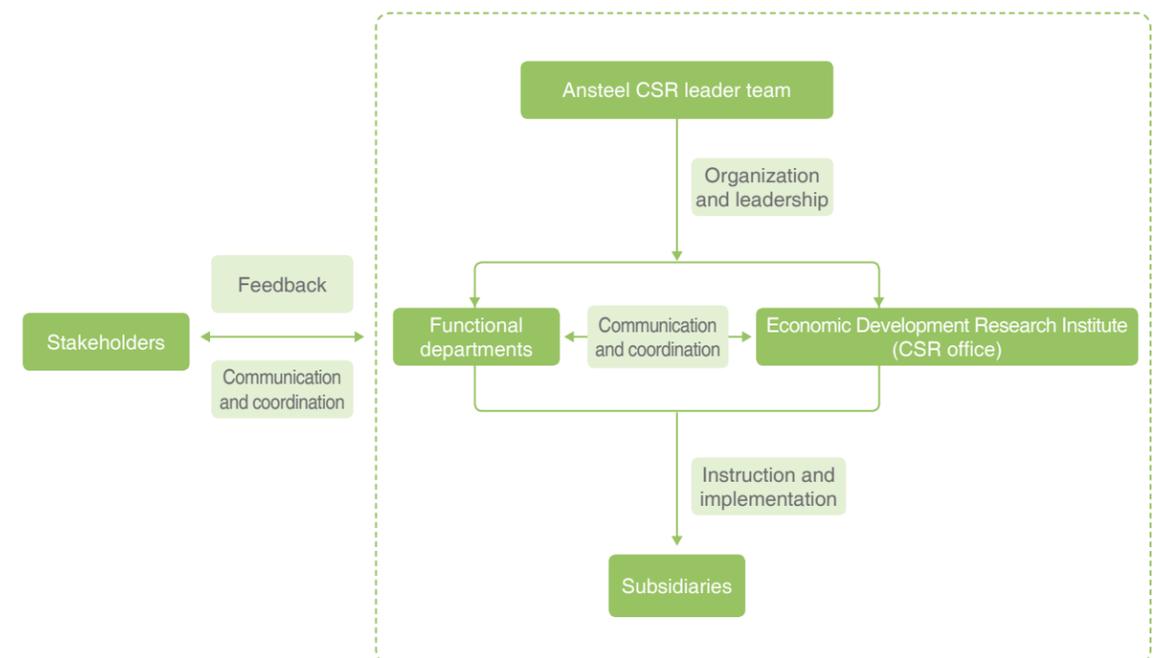
## CSR Management

Ansteel Group continues to strengthen its social responsibility management by integrating social responsibility with business operations, and promoting the integration of social responsibility into all aspects of production, operations, and decision-making. At the same time, the Company actively responds to the demands of stakeholders, such as the government, regulatory agencies, customers, employees, partners, the environment, etc., and is committed to establishing harmonious relations with them that are conducive to the creation of high-value and high-quality social responsibility practices.

## CSR Management

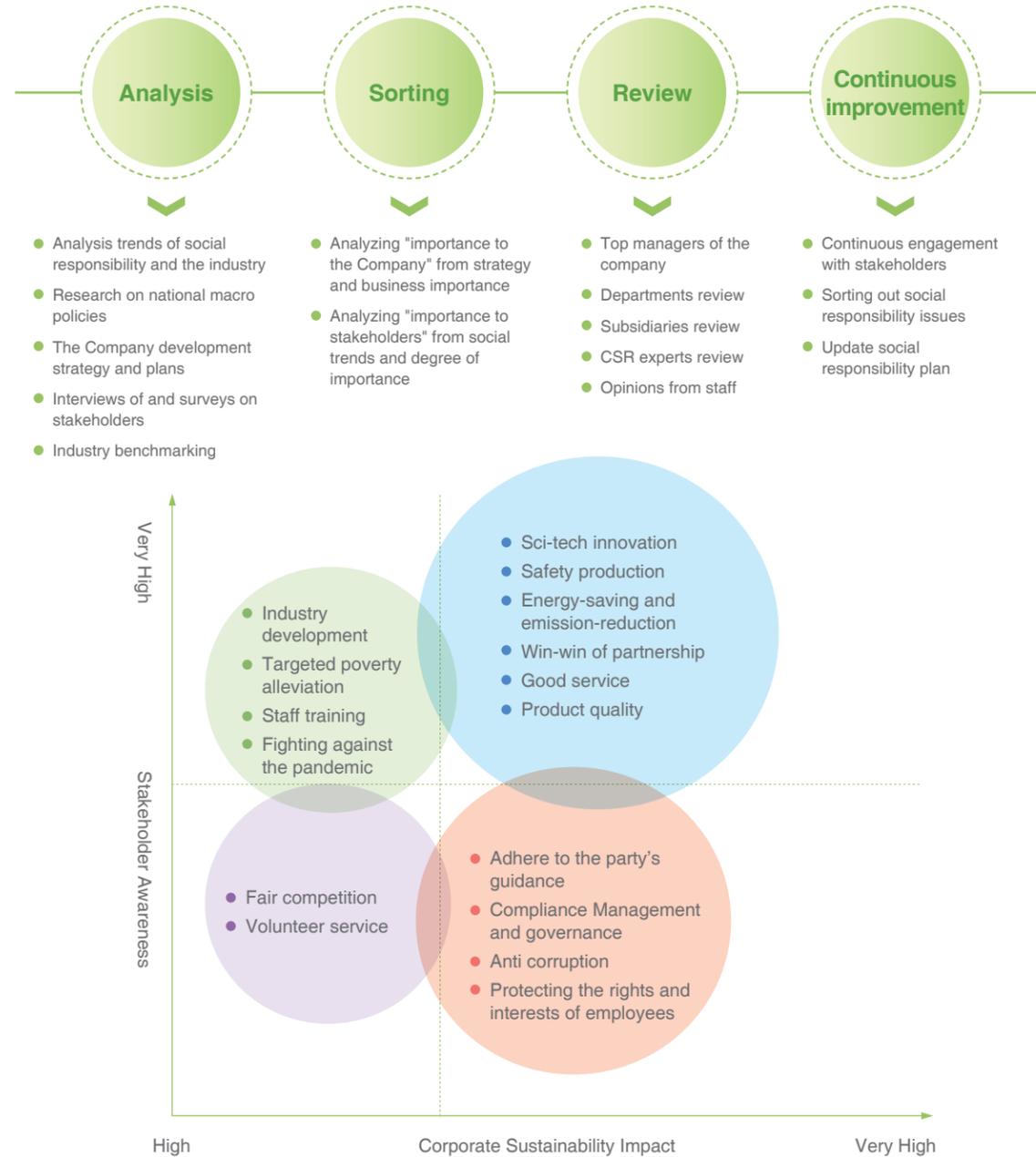
We have strengthened the corporation social responsibility (CSR) and sustainability organization system and management functions, and built an index system with strategic management, business performance, technological innovation, resource and environment, employee protection and social development as the core. We have established a management and control mechanism covering the system, process, operation and assessment which has laid a foundation for further promoting CSR and sustainability management.

We have established a CSR organization system covering the headquarters as well as subsidiaries and ranging from management to execution that systematically sorts out work processes, improves the management organization system, clarifies leadership responsibilities and centralized management departments, and clearly defines job responsibilities and tasks, so as to realize scientific, systematic and standardized CSR management.



## Analysis of substantive issues

Based on the macro environment of sustainable development and our own development plan, we follow the principles of Materiality, integrity and stakeholder participation, comprehensively identifies and sorts the issues affecting the importance of business development and the degree of influence on stakeholders, and determines the material issues of social responsibility of the company in 2020.



## Stakeholder Engagement

The company pay attention to the stakeholder engagement, continuously improves the transparency of enterprise operation, improves the multi-level and multi-directional communication channels with the government, partners, employees, communities and other stakeholders, effectively identifies and actively responds to the expectations and demands of stakeholders, and strives to establish a harmonious relationship with stakeholders.

Stakeholders	Expectations and Requirements	Means of Communication	Our Response
<b>Governments</b>	<ul style="list-style-type: none"> <li>Epidemic prevention and control and resumption of production</li> <li>Promote employment</li> <li>Pay taxes according to law</li> <li>Compliance management</li> <li>Promote local economic development</li> </ul>	<ul style="list-style-type: none"> <li>High level meetings</li> <li>Meet of exchange</li> <li>Information submission</li> <li>Attend meetings</li> <li>Consultation and full-time</li> <li>Liaison organization between the corporation and the local government</li> </ul>	<ul style="list-style-type: none"> <li>Organization and management of epidemic prevention and control</li> <li>Organize production and operation orderly</li> <li>Provide jobs</li> <li>Pay taxes</li> <li>Operate according to laws and regulations</li> <li>Promote the development of local related industries</li> <li>Improve local infrastructure</li> </ul>
<b>SASAC, Shareholders</b>	<ul style="list-style-type: none"> <li>Maintain and increase the value of assets</li> <li>Improve the profitability of the enterprise</li> <li>Improve the rate of return of investment projects</li> <li>Safe production</li> </ul>	<ul style="list-style-type: none"> <li>Special report</li> <li>Information submission</li> <li>Shareholders' Meeting</li> <li>Management performance assessment</li> <li>Company announcement</li> </ul>	<ul style="list-style-type: none"> <li>Deepen reform</li> <li>Reduce costs and increase profits</li> <li>Informatization construction</li> <li>Improve technological innovation capability</li> <li>Protect shareholders' equity</li> <li>Strengthen safe production management</li> </ul>
<b>Employees</b>	<ul style="list-style-type: none"> <li>Salary and welfare guarantee</li> <li>Democratic management</li> <li>Common development</li> <li>Humanistic care</li> <li>Occupational health</li> </ul>	<ul style="list-style-type: none"> <li>Workers' congress</li> <li>Disclosure of corporate affairs</li> <li>Complaint mailbox</li> <li>Rationalization proposal</li> <li>Symposium</li> <li>Communication through the internet</li> </ul>	<ul style="list-style-type: none"> <li>Provide competitive salaries</li> <li>Establish career development path</li> <li>Offer training and education</li> <li>Care for the employees</li> <li>Provide protective instrument and infrastructure</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Abide by commitments</li> <li>Provide good-quality products and services at a reasonable price</li> <li>Improve capability for customized services</li> <li>Open communication channels</li> </ul>	<ul style="list-style-type: none"> <li>Daily contact with sales representatives</li> <li>Exhibition</li> <li>Client meeting</li> <li>Regular visits</li> <li>Opinion solicitation</li> </ul>	<ul style="list-style-type: none"> <li>Pay attention to customer needs</li> <li>Improve the quality of products and services</li> <li>Provide high-quality customized services</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>Save energy and reduce emissions</li> <li>Conserve resources</li> <li>Cope with climate change</li> <li>Protect ecological environment</li> </ul>	<ul style="list-style-type: none"> <li>Manage environment</li> <li>Make rational use of resources</li> <li>Implement energy-saving and emission-reduction</li> <li>Strengthen ecological construction</li> </ul>	<ul style="list-style-type: none"> <li>Conduct energy and water resources management</li> <li>Make rational use of solid wastes, surplus heat and clean energies</li> <li>Build ecological mines</li> <li>Plant trees and vegetation in the enterprise</li> <li>Practice green office</li> </ul>
<b>Suppliers</b>	<ul style="list-style-type: none"> <li>Fair &amp; equitable</li> <li>Honest &amp; faithful</li> <li>Information confidentiality</li> <li>Policy stability</li> <li>Mutual benefit and win-win</li> </ul>	<ul style="list-style-type: none"> <li>Site visit</li> <li>Contract negotiation</li> <li>Regular visits</li> <li>Tendering conference</li> <li>Opinion solicitation</li> </ul>	<ul style="list-style-type: none"> <li>Conduct sunshine procurement</li> <li>Consultation on the basis of equality</li> <li>Abide by contracts</li> <li>Disclose procurement information</li> <li>Conduct compliance procurement</li> </ul>
<b>Associations</b>	<ul style="list-style-type: none"> <li>Fair competition</li> <li>Industry development and progress</li> </ul>	<ul style="list-style-type: none"> <li>Join in associations and take on duties</li> <li>Participate in activities organized by the associations</li> </ul>	<ul style="list-style-type: none"> <li>Participate in activities such as standard setting and industry research</li> </ul>
<b>Community, Media and the Public</b>	<ul style="list-style-type: none"> <li>Improve community environment</li> <li>Respect community culture</li> <li>Support public welfare undertakings</li> <li>Disclose corporate information in an open, transparent and timely fashion</li> </ul>	<ul style="list-style-type: none"> <li>Joint community building</li> <li>Joint project development</li> <li>Regular exchanges</li> <li>Convene community communication meeting</li> <li>Press release</li> <li>Media communication</li> </ul>	<ul style="list-style-type: none"> <li>Participate in community building</li> <li>Support culture and education</li> <li>Undertake volunteer action</li> <li>Disclose information</li> </ul>



## Feature

### Fighting against the Pandemic with the Power of Steel

In 2020, facing the severe combined impact of a sudden coronavirus pandemic, Ansteel Group took a clear political stand and fulfilled its responsibility. We resolutely followed the instructions made by the Party Central Committee, and promptly established an efficient and coordinated pandemic prevention and control system under a unified command. We did our utmost to support the frontline of the fight against the pandemic, and fulfilled our social responsibility to contain the pandemic and fight for survival. As a result, we won victories in containing the virus and safeguarding production and operations.

### Supporting the Fight against the Pandemic on the Frontline with a Strong Sense of Responsibility

As a responsible central SOE, Ansteel Group has ensured that its subsidiaries in various regions cooperate with the local governments' efforts to contain the pandemic, and that they can make donations and guarantee the production of emergency supplies to contribute to the victory in the "war without smoke".

Total value of donations from Ansteel	Fund contributed	Steel specially used for pandemic containment	Total donations from 61,900 Party members
RMB 37.5 million	RMB 30 million	2,808 tons	RMB 4.78 million

Number of medical workers from medical institutions under Ansteel who assisted with the fight against the virus in Hubei Province	Number of medical workers who fought on the frontline in their local areas
16	Over 300



#### Case Providing special steel plates for anti-pandemic efforts

High-quality decorative enamel steel plates are resistant to mold, and only a few domestic steel companies can produce this type of steel plate. In February 2020, all 40 tons of enamel steel plates produced by Anshan Iron and Steel Group arrived in Beijing. They were mainly used in the furniture, partitions and ventilation ducts of the new coronavirus laboratory built by the Center for Disease Prevention and Control of Shunyi District, Beijing. The laboratory, whose construction was completed before February 7, is a new coronavirus testing center designated by the Beijing Center for Disease Prevention and Control.



#### Case

#### Ansteel Group General Hospital offered to assist with the fight against COVID-19 in Hubei Province

Facing the pandemic, the four medical workers of Ansteel Group General Hospital gave up the opportunity to spend the Spring Festival with their families. They joined the Liaoning Province's medical team that fought against the virus in Hubei, fulfilling their promise of healing the wounded and rescuing the dying with practical actions.

**Zhang Xinyu**, deputy director of the infectious disease department of Ansteel Group General Hospital

"I will never forget SARS that hit China 17 years ago. I was young back then, and joined the fight against the epidemic. Facing the unexpected COVID-19 pandemic, I decided to fight the virus on the frontline, even though I'm much older than before. I believe that through our joint efforts, we will eventually achieve the victory."

**Li Qiu**, nursing supervisor of the respiratory hospital of Ansteel Group General Hospital

"I felt the mission and responsibility of medical workers when I arrived in Wuhan. After receiving the training offered by the group of experts, the medical staff quickly grasped the key points of pandemic prevention, which laid a solid foundation for us to perform our duties. We will do our best to save the people in Hubei."

**Qu Hui**, nurse of the respiratory hospital of Ansteel Group General Hospital

Qu Hui excitedly submitted the application for joining the Party after arriving in Wuhan. "I didn't think too much. I'm just an ordinary person, but occasionally I feel like a hero."

**Jin Yu**, nurse of department of critical medicine of Ansteel Group General Hospital

"Every medical worker must feel duty-bound to protect people's lives and health. When the country and people need us, we, medical workers at Ansteel Group General Hospital, will certainly offer our support. In the face of a complicated pandemic, I believe that I will complete my tasks."



Ansteel Group General Hospital dispatched four medical workers to Wuhan in the wake of the outbreak



Medical workers on the frontline



**Case Anti-pandemic teams of young employees fought the virus on the frontline**

Since the outbreak of the pandemic, Ansteel Group has carried out a campaign known as “Carrying Forward the Lei Feng Spirit by Learning From Guo Mingyi” to fight the pandemic and facilitate the resumption of production. The Company has set up a number of anti-pandemic teams of young employees, who have contributed their strength to the victory over the virus.

Anshan Iron and Steel Group has also actively joined the fight against the virus. Team members from the company wore protective clothing and disinfection equipment, and assisted community personnel with disinfection in local neighborhoods. They also conducted disinfection at Anshan West High-speed Railway Station, particularly at the entrances and exits, waiting rooms, restrooms, and taxis on the square outside the station. They also offered volunteer disinfection services at gas stations, convenience stores, and fuel distribution fleets owned by Ansteel Transport Company. At the same time, using online and offline approaches such as the “Anshan Iron and Steel Youth Stage” and posters, they publicized protection knowledge and typical cases among citizens, employees as well as their family members, helping contain the spread of the virus.



Members of Guo Mingyi Loving Team conducts disinfection

## Strengthening Pandemic Containment With Science-Based and Targeted Measures

Since the coronavirus outbreak, Ansteel has resolutely implemented the important instructions made by General Secretary Xi Jinping as well as the decisions and plans by the Party Central Committee and the State Council, and followed the arrangements made by the SASAC, local Party committees and governments for pandemic prevention and control. With a high level of political awareness and a strict working style, we have taken effective measures to curb the spread of the virus, and made every effort to ensure the safety and health of employees.

Strengthening organizational leadership	Fulfilling responsibilities	Supervising and inspecting policy implementation
<p>The main leaders of the Company gave clear instructions in the wake of the outbreak, and made arrangements for the pandemic containment efforts; the Company also established its pandemic prevention and control headquarters, and established a meetup system for regular research and planning of key tasks for pandemic containment.</p>	<p>The Company issued the <i>Emergency Notice on Pandemic Prevention and Control</i> to comprehensively organize the prevention and control work and see that responsibilities are fulfilled at all levels.</p>	<p>The Company carried out supervision and inspection on pandemic prevention and control at primary departments and subsidiaries, including employee health inspection, body temperature measurement and registration, quarantine after returning to Anshan, personal protective measures, food safety, and disinfection of public places, etc.</p>
<p><b>Ensuring the following four aspects</b></p>		
<p>The Company ensured the implementation of all decisions, plans and measures made by the Party Central Committee, the State Council, the SASAC, as well as provincial and municipal Party committees and governments; ensured the safety and health of all employees; ensured that all regional subsidiaries cooperated with their local governments in pandemic prevention and control; ensured that the funds donated to the whole country, especially to Wuhan, were available in time, and that its social responsibility and its role as a central SOE were fulfilled.</p>		

## Ensuring Orderly Production and Operations

All employees of Ansteel Group worked together to conduct pandemic containment and orderly resumption of production and operations. They ensured safe and stable production and operations, and withstood the “big test” of the pandemic. We have served as the “ballast” during the pandemic, and played our part in ensuring stability on six key fronts, and carrying out the task of maintaining security in six key areas. We have made every effort to ensure the stability of the industry chain and supply chain, which has effectively promoted the resumption of work and production of upstream and downstream industries and small and medium-sized enterprises, thus helping stabilize employment and ensure living standards.



**Case “Livestream sales” - a new move by Ansteel E-commerce Platform to fight the pandemic**

During the epidemic, Ansteel E-commerce Platform put customers first, and replaced the previous model of on-site verification of qualifications before the purchase of goods with the new online verification model. During the sales process, Ansteel E-commerce publishes product pictures and videos online. If a customer is interested in a product, the platform will display the product details through one-on-one livestream, which not only avoids gathering of viewers, but also avoids bid-rigging and collusion. While protecting the interests of customers, the new model also delivers greater benefits to the Company.



**Case Supplying Dongfeng Trucks with 911 laser welded blanks for the production of mist cannon trucks in Shiyang**

Ansteel Automotive Steel is the only automotive roof supplier of its strategic customer Dongfeng Trucks. In March 2020, after learning that the Shiyang Plant of Dongfeng Trucks had resumed production, and was producing mist cannon trucks for pandemic containment, Ansteel Automotive Steel immediately offered three supply plans, and it completed the signing of the raw material supply contract with the customer on the morning of March 6. On the evening of March 8, Ansteel Automotive Steel completed the production and packaging of 911 laser welded blanks, which were immediately transported to Shiyang, Hubei Province, which is more than 2,000 kilometers away, to ensure the uninterrupted production of anti-pandemic vehicles at Dongfeng Trucks.



A batch of newly produced rebar is being shipped in a branch factory of the large factory of Angang Steel Company Limited. The rebar will be transported to South China to meet the urgent needs of customers for construction steel after their resumption of production



## Feature

### Shouldering Our Responsibility in Deepening Reform

In 2020, while working to resolve longstanding issues such as the reform of the collectively owned factories operated by SOEs and the transfer of social security accounts of retirees to the management of residential communities, Ansteel Group earnestly implemented the important instructions made by General Secretary Xi Jinping on the full revitalization of northeast China and the rebirth of Ansteel, followed the decisions and plans made by the Party Central Committee and the State Council, and responded to the requirements of the Provincial Party Committee of Liaoning. With a deep sense of responsibility to the Party, the people, the Company and all its employees, we have resolved problems through multi-party coordination, laying a solid foundation for Ansteel Group's high-quality development during the 14th Five-Year Plan period.

### Maintaining Stability in Development

Completing the task of relieving SOEs of the obligations to operate social programs and resolving their other longstanding problems is a major decision made by the Party Central Committee and the State Council. From 1979 to the end of 1995, the collectively owned factories operated by Ansteel Group offered a multitude of job opportunities to the educated youth who had returned to the city and the children of employees, playing an important role in increasing employment and promoting local economic development. During that period, Ansteel offered a total of 183,000 jobs, which accounted for half of the total employment in the city of Anshan. Affected by the rapid development of the market economy, the collectively owned factories operated by Ansteel Group were faced with multiple challenges, such as frequent production shutdowns and a large number of laid-off employees. As a state-owned enterprise with a long history, Ansteel had a large number of retirees and faced complicated longstanding problems. For the survival and development of itself, the Company must have the determination to make painful changes.

With the development of Ansteel Group, we carried out unprecedented cooperation with the Anshan Municipal Government in jointly promoting reforms. During the 13th Five-Year Plan period, we basically resolved longstanding issues such as the reform of the collectively owned factories operated by SOEs and the transfer of social security accounts of retirees to the management of residential communities, smoothly entering the 14th Five-Year Plan period with a brand-new image. Vice-Premier Liu He and State Councilor Wang Yong approved of the "two reforms" conducted by Ansteel with written statements, and the SASAC of the State Council also spoke highly of the reforms. In the future, Ansteel Group and the Anshan Municipal Government will continue to deepen the cooperation for more win-win results.

### Transfer of Social Security Accounts of Retirees to the Management of Residential Communities

Ansteel Group regarded the transfer of social security accounts of retirees to the management of residential communities as an important reform task in 2020. Through careful planning and coordinated efforts, remarkable results were achieved in completing the task. As of November 25, 2020, social security accounts of 225,400 retirees were transferred to the management of local sub-districts and communities, accounting for 99.98% of the total retirees involved in the reform. The transfer of social security accounts of retirees has basically been completed.

### Strengthening organizational leadership

- We established a leading group on advancing the reform. In order to research key and difficult problems and find solutions, we held 5 meetings of the standing committee of the Party Committee, 24 Party Committee secretary meetings, and 26 leading group meetings.
- We established a three-tiered work system covering the headquarters, leading regional units, and subsidiaries to ensure that responsibilities were fulfilled at all levels. We also set up a supervision and guarantee mechanism for carrying out special inspections at the whole group in stages and with different priorities, and conducting timely supervision and dynamic monitoring of the work progress and completion by each unit.
- We held 153 seminars on the reform about retirees, and collected more than 400 opinions and suggestions. We also issued the *Ansteel Group's Work Plan for the Transfer of Social Security Accounts of Retirees to the Management of Residential Communities*, and formulated 12 supplementary policies. With a clear timetable and work goals, we were able to advance the reform in an orderly manner.

### Resolving problems in reform

- In view of the large number of retirees in some areas and the high pressure on local governments in dealing with their social security accounts, we established a joint leading group with the local government, and dispatched officials to provide assistance and improve the management and service capabilities of sub-districts and communities.
- The large number of personnel files of retirees had led to arduous tasks of organizing and digitizing the paper files. Therefore, the Group pooled resources, purchased necessary equipment, and developed the digital archiving system software. As a result, we completed the digitization of personnel records two months ahead of schedule.
- The management of some retirees involved complicated longstanding problems and interest demands. Thus the Company sent special personnel to follow through with the transfer of their social security accounts. They visited these retirees many times and tried to gain their understanding and support. Finally, the transfer was completed.

### Consolidating the foundation for work

- In order to dispel doubts among retirees, gain their support, and create a good atmosphere, we posted articles on "Retirement Management Online", our official account on WeChat, and also published full-page articles on *Ansteel Daily*, such as the *Interpretation of the Policy on the Transfer of Social Security Accounts of SOE Retirees to the Management of Residential Communities* and *Questions and Answers on the Transfer of Social Security Accounts of Retirees of Ansteel Group*.
- After completing the transfer of retirees' social security accounts, we continue to visit them on major holidays and provide them with medical support, so as to ensure that their current benefits, the bond between us, and our retiree service remain unchanged.
- We have strengthened analysis and research, and formulated work plans for stability maintenance. We listen to the voices of retirees, coordinate with local governments, and strengthen the grid management of responsibility lists to resolve conflicts. We have strengthened dynamic tracking of problems, established the daily public opinion reporting system, and stabilized the daily investigation system for risk information. In this way, we can discover and deal with problems in time and maintain the stability of both the Company and society.

## Reform of the collectively owned factories operated by Ansteel

Ansteel Group made full use of its political advantages, and adhered to the leadership of the Party throughout the reform of the collectively owned factories. We carried out overall planning, made meticulous arrangements, and cooperated with local governments in resolving longstanding problems and promoting the implementation of various reform measures in an orderly manner. Following the principle of “one policy for one enterprise”, leaders of the Anshan Municipal Government and Ansteel Group inspected every subsidiary. We made 6 comprehensive revisions to the overall plan, and revised the draft 17 times. We paid visits to 150,000 employees and more than 300 households suffering hardships, and signed agreements with them face-to-face. As a result, we made appropriate arrangements for them, and smoothly advanced the reform.

On December 23, 2020, Ansteel Group and the Anshan Municipal Government signed the *Equity Transfer Agreement for Restructured Enterprises Through the Reform of the Collectively Owned Factories Operated by Ansteel*, and the *Agreement On Supporting the Development of Restructured Enterprises Through the Reform of the Collectively Owned Factories Operated by Ansteel*. The equity of the 113 collectively owned factories involved was officially transferred to the Anshan Municipal Government. They were restructured to form Anshan Metallurgical Industry Chain Group. As an independent market entity, the newly established Anshan Metallurgical Industry Chain Group can better promote the integration of local and Ansteel’s industry chains, adapt to the new development pattern, and achieve higher quality and more sustainable development. About 152,000 employees involved in the reform have received appropriate arrangements, accounting for 99.56% of the total personnel. So far, the reform of the collectively owned factories operated by Ansteel was basically completed.

Ansteel Group undertook the “two reforms” as a major political task, which involved complicated problems that had remained unsolved for a long time and a multitude of personnel. While coping with the huge pressure on its production and operations caused by the pandemic, the Company succeeded in advancing the reforms through coordinated efforts.

<b>Overall planning</b>	➤ We held 10 meetings of the standing committee of the Party Committee and 74 Party Committee secretary meetings to promote the “two reforms.”
<b>Leading the reforms</b>	➤ Members of the Ansteel’s Party Committee took command and led the reforms. They systematically researched policies, led teams to report and communicate the progress, and investigated and solved problems in a timely manner on the frontline to ensure the implementation of key tasks.
<b>Improving the work system</b>	➤ We established a three-tiered organizational system and responsibility system covering the headquarters, host enterprises and collective enterprises, and set up leading groups and special work teams from top to bottom. We adhered to the weekly summary and daily scheduling system to advance the reforms, and implemented dynamic assessments of the progress.
<b>Strengthening organizational guarantee</b>	➤ We built a reform guarantee system aimed at strengthening the Party leadership, ideological guidance, staff training, publicity, and stability maintenance, and implemented grid-based management of maintaining stability through the handling of public complaints. We trained more than 8,300 staff members, appointed more than 1,500 key members, and formulated 58 relevant regulations, which allowed to involve the Party organizations and the management of Party members in the reforms, thereby ensuring the strong Party leadership, the deeply rooted ideology among all employees, and timely and effective stability maintenance.

## Tackling Tough Problems Through Multi-Party Collaboration

Ansteel Group actively sought support from relevant state departments and local governments to jointly promote the implementation of reform policies and ensure the complete separation of collectively owned factories and state-owned enterprises.

The Provincial Party Committee and Government of Liaoning Province coordinated the efforts to tackle practical problems. The Anshan Municipal Party Committee and Municipal Government, and Ansteel Group established an integrated working mechanism, and set up a joint leading group which included 11 specialized groups.

Ansteel has transferred the equity of restructured enterprises to the local government free of charge, and the latter will manage retired employees and employees with work-related injuries of these enterprises.

Ansteel and the local government have signed the *Framework Agreement on Resolving Ansteel’s Longstanding Problem* and a series of sub-agreements to promote the smooth progress of reform and restructuring as well as the joint resolution of practical problems.

## Effectively Protecting the Rights and Interests of Employees

In order to effectively protect the rights and interests of employees, Ansteel Group always regards making appropriate arrangements for employees as the top priority of the reform of the collectively owned factories.

<b>Making targeted arrangement for employees</b>	➤ After conducting extensive research and considering the actual situation of the Company, we made targeted arrangements for employees through internal retirement, termination of labor relations in accordance with agreements, etc., and received general understanding and support from them.
<b>Raising funds to secure jobs</b>	➤ While actively raising funds for handling employees involved in the reform of the collectively owned factories, we organically combined the reform and restructuring with the effort to secure jobs. We offered 1,591 new jobs to laid-off employees, and offered them free training services. We have fulfilled our promise by “preventing current employees from being laid off, giving laid-off employees new job opportunities, and protecting the rights and interests of special groups”.
<b>Attaching importance to the transfer of retirees’ social security accounts</b>	➤ We have transferred 72 service and activity venues to local communities and sub-districts, and dispatched 310 staff members to assist with their management, so as to ensure the protection of people’s livelihood to the utmost extent, and that retirees’ current benefits, the bond between us, and our retiree service remain unchanged.
<b>Striving to ensure that all retirees enjoy their rights to medical and old-age care</b>	➤ We have communicated with and reported to national ministries and commissions as well as provincial and municipal Party committees and governments multiple times, and raised funds through multiple channels. We comply with laws and regulations in resolving key issues, such as paying the arrears of aged-care insurances for employees of collectively owned factories, and the continuation of their medical and social insurances.

## Strengthening the “Five-Sphere Integrated” System

Ansteel Group has always been committed to ensuring the steady progress of reform from the five aspects, including organization, thinking, training, publicity, and maintenance of stability, thereby enhancing the stability and harmony of the Company and society.

<b>Strengthening organizational leadership</b>	➤ We have established a system for holding regular meetings on maintaining stability presided over by the Secretary of the Party Committee of Ansteel, and held 17 such meetings in 2020; we have also set up in cooperation with the local government a leading group for maintaining stability through the handling of public complaints, and improved the joint working mechanism. ➤ We have established a three-tiered organizational system and responsibility system covering the headquarters, host enterprises and collective enterprises, and set up leading groups from top to bottom; we also selected personnel to form teams, and provided them with all-round manpower, material and financial support to achieve tangible results in reform.
<b>Enhancing ideological guidance</b>	➤ Subsidiaries, reform platforms, and collective enterprises have developed lists of key persons and key groups for reform, and clarified the person in charge at each level to ensure the fulfillment of the responsibility for strengthening ideological work.
<b>Improving employee training</b>	➤ Following the principle of “classification, categorization, and time division”, we implemented policy training for leaders, training on reform practices for business personnel, and training for left-behind personnel of collective enterprises. In 2020, more than 8,300 people were trained.
<b>Strengthening publicity</b>	➤ We set up publicity teams composed of more than 1,500 key personnel at all units, formulated the “1+N” policy and publicity outlines, and provided 58 relevant regulations. We have also opened a WeChat official account known as “Reform Online” to collect public opinions around the clock. In 2020, we replied to 1,333 questions of all kinds in a one-on-one form on the internet.
<b>Safeguarding stability</b>	➤ We have made a list of responsibilities for grid-based management of maintaining stability through the handling of public complaints, which covers 6 reform platforms, 3 levels and 164 information collection points. We also set up special teams responsible for maintaining stability through the handling of public complaints, as well as 26 reception sites and 5 branch points, and dispatched 216 reception personnel to these places. We spare no effort to conduct ideological work to ensure the stability of the overall reform.



## Feature

### Contributing to the Victory Over Poverty

Winning the fight against poverty is essential for the building of a moderately prosperous society in all respects, the well-being of the people, and the consolidation of the foundation for the Party's governance. Faced with the "ultimate test" of poverty alleviation, Ansteel Group earnestly implemented the spirit of General Secretary Xi Jinping's important speeches on winning the decisive battle against poverty, as well as the latest strategic plans made by the Party Central Committee and the State Council on poverty alleviation. With a strong sense of political responsibility and historical mission, the Company also built the Ansteel's poverty alleviation model for making "Targeted Efforts in Six Areas".

In 2020, Ansteel Group invested RMB 38,403,800 in poverty alleviation funds, purchased RMB 52.1 million worth of agricultural products from poverty-stricken areas, and introduced RMB 790,000 of aid funds. The Company helped all 17 villages in 10 counties get rid of poverty. The poverty alleviation work of Ansteel Group was rated as "Good" by the former Poverty Alleviation Office of the State Council.

Since the start of the 13th Five-Year Plan period, Ansteel Group invested RMB 15.496 billion in poverty alleviation funds (repayable or given gratis), dispatched 58 officials to serve temporary positions in poverty-stricken areas, and benefited 23,470 people.



In June 2020, Tan Chengxu, Secretary of the Party Committee and Chairman of the Board of Ansteel Group Corporation Limited, led a team to Guizhou Province to inspect poverty alleviation projects, and discussed the progress of those projects



In July 2020, Dai Zhihao, Deputy Secretary of the Party Committee and President of Ansteel Group Corporation Limited, led a team to Tajik County, Xinjiang, to inspect poverty alleviation efforts, and visited local registered poor households

### Strengthening the Top-Level Design of Poverty Alleviation

Always taking poverty alleviation as the primary political task, Ansteel Group strengthened organizational leadership and responsibility implementation, and established an inclusive poverty alleviation responsibility system where "the main leaders personally took command, the leading group made overall plans, the subsidiaries acted collaboratively, and the dispatched official fought poverty on the frontline." We also established a poverty alleviation leading group headed by both the Party Secretary and the President of the Company, and built a poverty relief system with clear responsibilities and strong execution to ensure that responsibilities are performed at all levels.

In 2020, we held 3 meetings of the poverty alleviation leading group, and 7 special meetings on poverty alleviation progress. The main leaders and group members overcame the impact of the pandemic and carried out investigations in all poor areas supported by the Company. They visited registered poor households and officials dispatched to local areas, facilitating the implementation of poverty alleviation projects through investigation and supervision, and contributing to the resolution of practical problems.

### Building Poverty Alleviation Teams

In response to the shortage of management and technical personnel in poverty-stricken areas, Ansteel Group took into account the local conditions, and dispatched officials and technical personnel with high political quality, reliable working style, strong comprehensive capabilities, as well as managerial and technical expertise to those areas.

The officials dispatched by Ansteel Group to poor areas have been fully recognized. In 2020, for example, Comrade Zhang Yong, who was stationed in Panzhou, Guizhou Province, was rated as a first village secretary with outstanding contribution to poverty alleviation in Guizhou Province, and Comrade Ma Rongcai, who was stationed in Tajik County to serve as the deputy county head, was rated as an outstanding cadre who supported Xinjiang's development in Kashgar.

#### Dispatching poverty alleviation personnel

- Considering that Tajik County is located in the border area inhabited mostly by ethnic minorities, we gave priority to selecting outstanding officials with strong political capabilities to the county, and increased support for the local area. We stationed 10 poverty alleviation officials in the county annually, and improved the management of these officials by introducing a regular meeting system.
- We selected 4 outstanding technicians in two batches to assist the feed factory and water plant in Tajik County. They assisted them in establishing production equipment management systems and carrying out regular staff training. With their help, the local operational management and control capabilities have been significantly improved.

#### Improving care for stationed officials

- We strictly implemented the *Management Measures for Officials Dispatched by Ansteel Group Corporation Limited (Trial)*, and guaranteed the salary and benefits, living allowance and phone allowance of dispatched officials and first village secretaries. In addition, we took out personal accident insurances and organized medical examinations for those officials.
- We attached great importance to the training and appointment of officials who served temporary positions in poor areas to ensure that they could devote themselves to poverty alleviation. Since 2016, nine officials who served temporary positions in poor areas have been promoted.

### Developing the Ansteel Poverty Alleviation Model

We made coordinated efforts to carry out poverty alleviation through the innovative Ansteel Poverty Alleviation Model. We improved Party building, supported the development of local industries and education, promoted consumer spending on products from poor areas, and improved living standards in poor areas, sparing no effort to promote economic development and social harmony and stability in poverty-stricken areas.

### Prioritizing Party building in strengthening rural governance

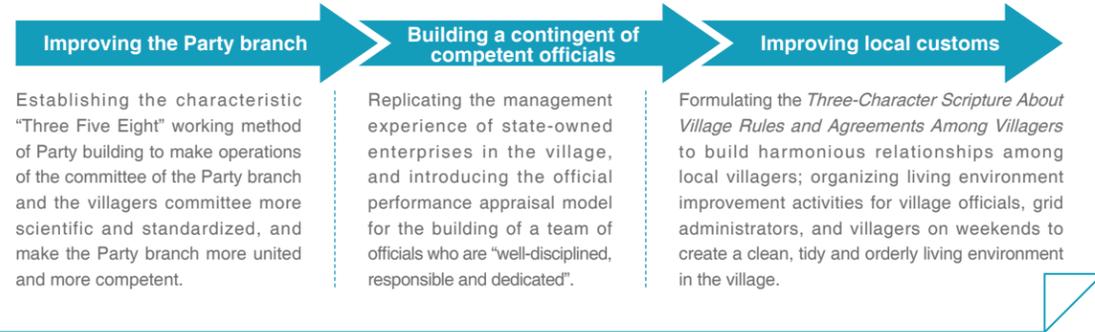
Ansteel Group prioritized Party building while conducting poverty alleviation. The Company focused on improving the organizational capabilities of primary Party organizations by exploring a model that could realize the organic integration of Party building at state-owned enterprises and that at rural Party organizations. By introducing the working methods of Party building at state-owned enterprises to villages and households, we gave full play to the Party's political and organizational advantages and its close ties with the masses, and effectively transformed our advantage in Party building into an advantage in poverty alleviation.



**Case**

**Making targeted poverty in Qujiazhuang Village more effective through Party building and a combination of measures**

In Qujiazhuang Village, Liuguan Sub-district, Panzhou City, Guizhou Province, village officials would change frequently in the past. The committee of the local Party branch and the villagers committee lacked management experience and work plans. Recognizing that strengthening the building of the local Party organization was an issue of crucial importance, Pangang Group conducted Party building work to boost internal forces driving poverty alleviation.



**Reducing Poverty Through the Development of Local Industries**

General Secretary Xi Jinping has emphasized that industries are the foundation of development. Ansteel Group took into account the differences in resources in poverty-stricken areas, adhered to modern governance concepts, and gave full play to the advantages of industrial thinking. By implementing diversified measures to support the development of local industries and building a mechanism for integrating local people's interests into industry chains, we ensured sustained and stable income increase for people in poverty.

In 2020, in order to support the development of local industries, Ansteel Group invested RMB 16,583,300 in Tajik County and Panzhou, accounting for 65.97% of the total poverty alleviation funds to the two areas.

**Tajik County, Xinjiang Uygur Autonomous Region**

Tajik County is located in the Pamirs, and has good conditions for ecological economy. Ansteel Group invested RMB 8.7 million to support the development of the local yak meat deep processing industry by creating the Pamirs yak brand, benefiting 16,518 people in the county and creating 20 jobs. Ansteel also invested RMB 8,494,000 in building pollution-free plateau laying hen farms. By supporting local leading enterprises, cooperatives and farmers, the Company has contributed to the development of local industries, such as the planting of snow chrysanthemum in the Pamirs.

**Qujiazhuang Village, Panzhou**

Qujiazhuang Village in Panzhou is rich in natural spring water resources and has more than 160 acres of high-quality farmland. Ansteel Group invested RMB 5.99 million, and helped the locals build demonstration fruit and vegetable plantations with sound sprinkler irrigation networks, as well as stone frog and crayfish breeding bases, which created more than 100 jobs for local villagers. These local industries have also been expanded to recreational tourism. The village has seen steady growth of its collective economy, which has benefited 558 people from 160 registered poor households.

**Gelanghe Village, Yanyuan County, Liangshan Prefecture**

Gelanghe Village is more than 2,000 meters above sea level with open terrain. Due to inundation in the rainy season, there used to be a lot of idle land in the village. After Ansteel Group repaired the local rivers and levees, more than 650 acres of idle land has been turned into plantations of high-quality tobacco.



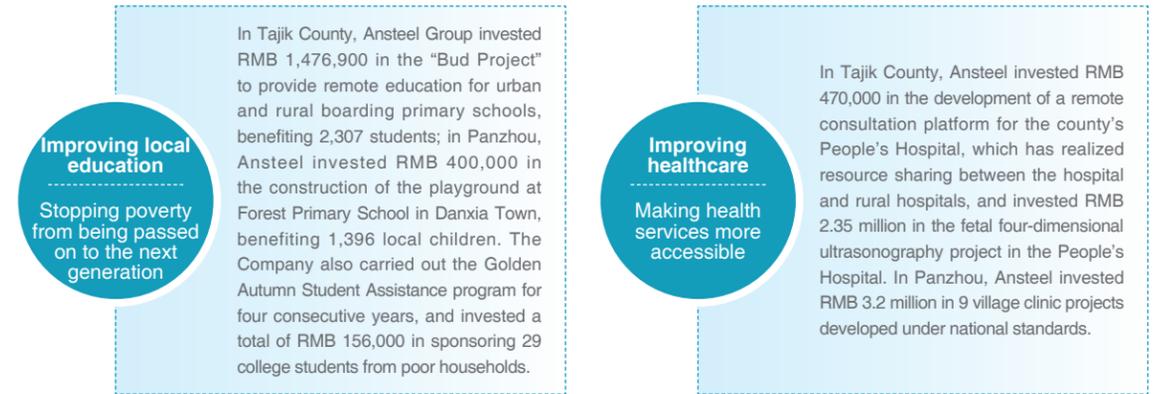
Donating snow chrysanthemum seedlings to Cinde Village, Beldir Township



Poverty alleviation projects in Panzhou aided by Ansteel distribute dividends

**Focusing on the "Two Assurances and Three Guarantees" While Addressing Inadequacies and Shoring up Points of Weakness**

Ansteel Group put people first while striving to deliver the "Two Assurances and Three Guarantees" (i.e. assurances of adequate food and clothing, and guarantees of access to compulsory education, basic medical services and safe housing for impoverished rural residents). We spared no effort to tackle practical problems in impoverished areas, helping the locals fulfill their aspirations to live a better life.



An official dispatched by Ansteel Group to Xinjiang and students of the urban and rural boarding primary school of Tajik County



Purchasing medical equipment and materials, and building standardized village clinics

**Coordinating Poverty Alleviation Through Consumption and Boosting Sales of Products From Poor Areas**

Through overall planning and the five measures on "strengthening organization, deepening cooperation, seeking innovation, cultivating brands, and exploring long-term effects", Ansteel Group increased the purchase of agricultural products from poor areas, and explored a new way of poverty alleviation through consumption. In 2020, the Company spent RMB 52.1 million on the purchase of agricultural products.

In order to promote the sales of agricultural and sideline products from poor areas, Ansteel Group creatively launched a new model integrating online and offline channels. By launching a new poverty alleviation section on Ansteel E-commerce's shopping mall and the corresponding WeChat mini program, and adopting measures such as farming-supermarket integration, purchase instead of donation, video marketing, etc., we have realized the effective connection between agricultural products from poor areas and the consumer market, as well as between supply and demand. We explored a long-term mechanism to help poor households increase their income steadily by signing a poverty alleviation strategic cooperation agreement with the Panzhou Municipal Government and China Construction Bank, and joining the Alliance for Poverty Alleviation Through Consumption of Central SOEs. We also opened the Ansteel Poverty Alleviation Exhibition Hall in 2020.



Ansteel Group and the Panzhou Municipal Government signed a cooperation agreement on conducting poverty alleviation through consumption

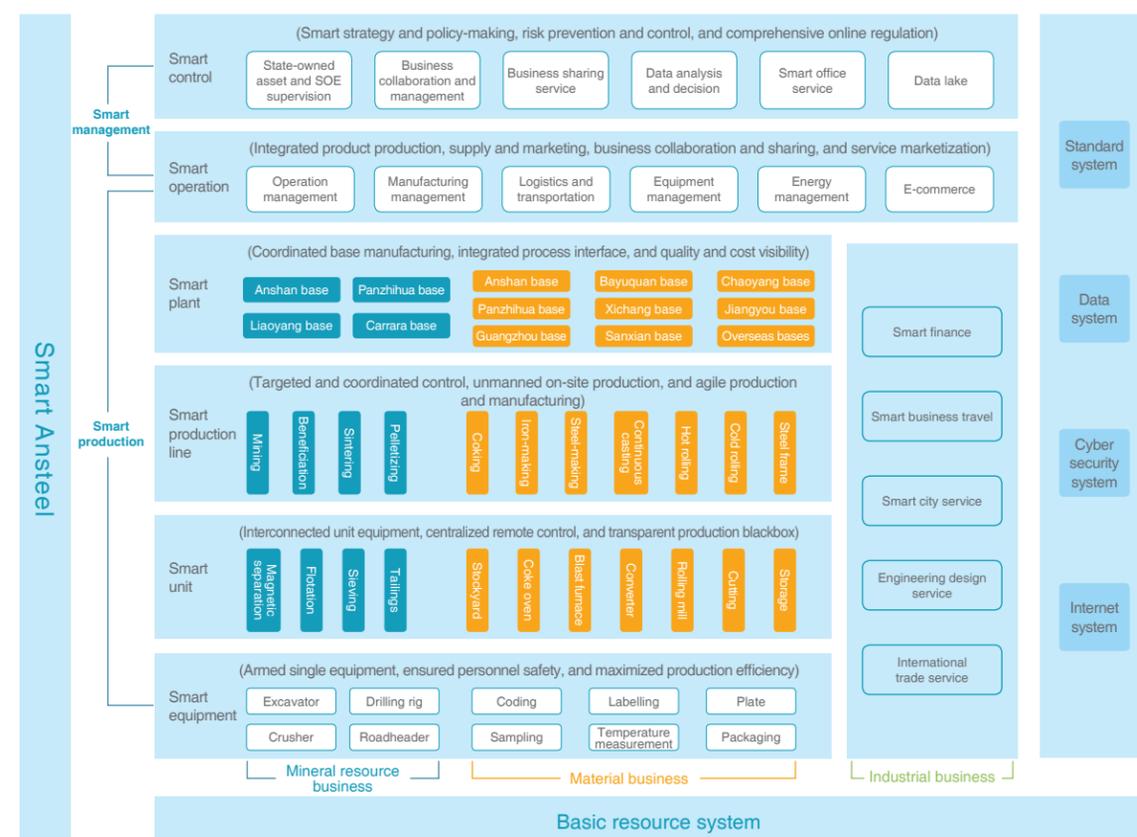


## A Smart Ansteel Leading the Iron and Steel Industry

During the 13th Five-Year Plan period, Ansteel Group earnestly implemented General Secretary Xi Jinping's thought on building the nation into a strong cyber power and spared no effort to pursue the high-quality development of the iron and steel industry. Based on the development strategy of Ansteel in the new era, we consolidated management and enhanced innovation, laying a solid foundation for building a smart Ansteel Group and facilitating smart transformation.

### Mapping out a New Blueprint for a Smart Ansteel

Focusing on "smart management and smart production", Ansteel Group ramps up efforts to promote informatization, digitalization, and intelligentization in six aspects to promote the building of a smart Ansteel in full swing.



#### Pathways of smart management

Focusing our core businesses involving "people, finance, materials, production, supply, and marketing", we improve the state-owned asset regulation, group-wide supervision, management and sharing, and management and manufacturing information systems to break business barriers and achieve process optimization and horizontal & vertical connection. We break data barriers to achieve knowledge sharing and intelligent decision-making, break organizational barriers to realize multi-base collaborative manufacturing and long-term process management of mineral steel, and break industrial chain barriers to realize rapid external response and efficient internal coordination.

#### Pathways of smart production

In terms of long-term process management of mineral steel production, we take a top-down approach to build and improve smart equipment, smart units, smart production lines, and smart plants. Moreover, we actively develop scenarios for the application of new-generation information technologies, striving to build a new model of smart manufacturing that covers the entire process of production, all dimensions of management, and the whole lifecycle of products.



In the "design+" industry base, several employees of Ansteel Group Engineering Technology Corporation are remotely checking the operation of energy-saving equipment in the headquarters, Bayuquan, Xichang, etc



The "robot" takes out the molten steel sample from the sampling cabinet

## Advancing the realization of a smart Ansteel

### Informatization-based standardized management and organizational guarantee

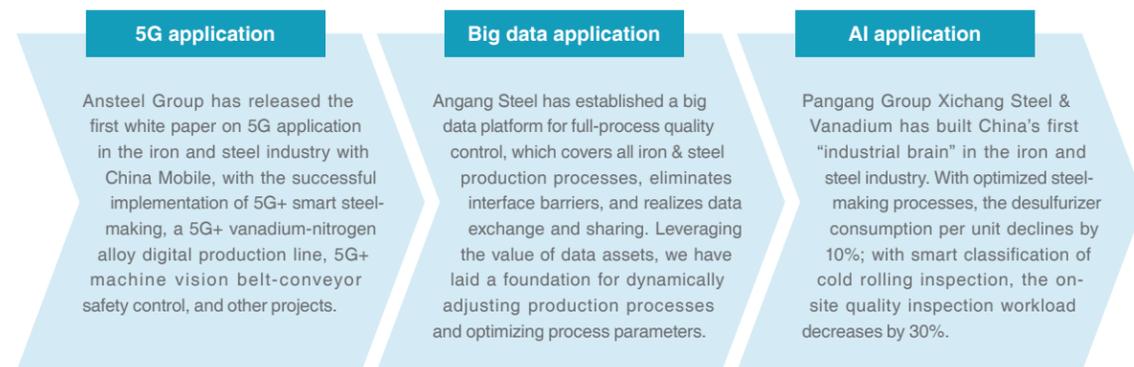
By optimizing informatization management systems, increasing informatization investment and the number of informatization projects initiated and approved, strengthening informatization system operation & maintenance management, and enhancing informatization-based training and software legalization, we comprehensively improve informatization-based standard management of Ansteel Group.



### Building an informatization-based guarantee system

While enhancing the management of basic resources of informatization and improving cyber and information system security, we have basically formed a cloud data center system that is supported by “two places and three centers,” an interconnected cyber system that is supported by seven bases, the first well-developed informatization standard system in the iron and steel industry that covers seven categories, 28 subcategories and 46 informatization standard systems, a data system that is characterized by hierarchical management, classified construction, inclusiveness and sharing, a three-pronged cyber security system that covers management, technology and operation & maintenance, laying a solid foundation for building a smart Ansteel.

Ansteel Group explores the application of the new-generation information technology to improve the process of building a smart Ansteel.



## Smart Management and Smart Production

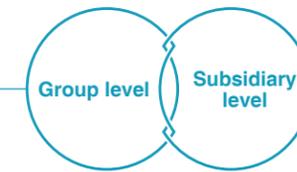
Implementing the requirements for the high-quality development of the iron and steel industry, Ansteel Group has adopted the two pathways specified in the *Smart Ansteel Development Plan*, i.e., “smart management and smart production”, to promote the construction of a smart Ansteel in all respects.

### Enhancing top-level design for informatization

We have formulated the *Rolling Wave Planning of Ansteel Group for Informatization (2020-2022)*, the *Informatization-based Integration Plan of Ansteel Group and Pangang Group*, and the *Informatization and Smart Development Plan of Ansteel Group During the 14th Five-Year Plan Period*, to guide the construction of a smart Ansteel.

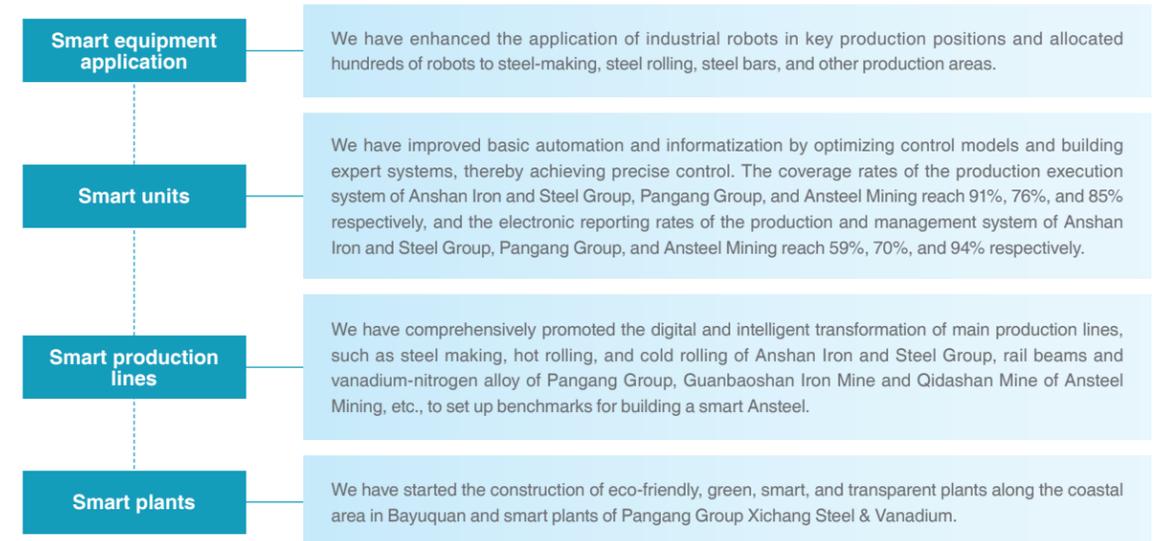
## Promoting smart management to realize business collaboration and information sharing

Based on the “1+2+N” informatization construction framework, in accordance with SASAC’s requirements for online regulation of central SOEs and Ansteel Group’s online management requirements, we have launched the smart office platform, the group-level data lake, performance management, the state-owned assets regulation information system, the disciplinary inspection intranet, and other projects.



In addition to implementing the management information systems of Ansteel Group, we have focused on building business operation and manufacturing information systems and improving specialized management systems. We have completed process optimization and demand analysis of Angang Steel’s management and informatization improvement project, compiling 11 volumes of demand specifications and 13 volumes of process optimization design reports. Moreover, the construction of Pangang Smart Marketing Platform has started, and we have promoted the following projects as scheduled, including the auxiliary decision-making system of Ansteel Group Engineering Technology Corporation, the smart business travel platform of Angang Zhongyuan Industrial Development Co., Ltd., and the capital management system upgrade project of Angang Finance Co., Ltd., etc.

## Promoting smart production for new progress in smart manufacturing



In 2020, the integrated solution of full-process big data quality control of Angang Steel was rated as a demonstration project for industrial Internet platforms by the Ministry of Industry and Information Technology, the JWELL big data application analysis platform of Pangang Group was rated as a demonstration project for the big data industry, the JWELL idle resources and waste recycling platform was rated as a demonstration project for newly emerging information consumption, and several other projects were rated as industrial Internet innovation and development projects by the Ministry of Industry and Information Technology, including the industrial Internet platform application innovation promotion center (focusing on iron and steel, petrochemical, metallurgy, energy, and other industries) in which Anshan Iron and Steel Group has engaged, the production network Ipv6 interworking and integration technology testing platform (focusing on typical industries) in which Ansteel Information has engaged, visual asset management and safety operation technologies & products of industrial Internet companies, etc.



Feature: A Smart Ansteel Leading the Iron and Steel Industry



# Innovation

## Supporting National Strategies

Innovation is the primary driver for development and the strategic support for building a modern economic system. While the country advances the supply-side structural reform, Ansteel Group has vigorously implemented the innovation-driven development strategy to produce first-class products, such as steel for ship and ocean engineering, heavy rails, automotive steel, bridge steel, vanadium and titanium products, with the goal of “becoming an iron and steel group corporation with the most international influence” and the mission of “producing better material, creating more wonderful life”. Being a loyal supporter of major national engineering projects, Ansteel Group has become a key player in building the pillars of a great power.





## New Achievements Testify about New Responsibilities

To meet the needs of national strategic development and contribute to the construction of national supply chains and industry chains, Ansteel Group has actively undertaken national key technological and material research projects. Group-level technical research leading groups and work groups have been established to guide the research on key technologies in the industry, such as developing the high-temperature carbonization demonstration line, the low-temperature chlorination demonstration line and the technology of comprehensive utilization of titanium extraction tailings, and making breakthroughs in key technologies, such as PG5 rail smelting, rolling, heat treatment, and welding.

Participating in national key scientific research projects to provide strong support for building a science and technology power



Led by Ansteel Group, the project team of High-strength Containment Plate Research and Development, a major S&T project assigned by the National Energy Administration for large-scale advanced pressurized water reactors and high-temperature gas-cooled reactor nuclear power plants, has accomplished all tasks as planned. Moreover, the project of Research on Traceless Construction Technology of Large-Size Materials for Nuclear Power Facilities, a major S&T project for large-scale advanced pressurized water reactors and high-temperature gas-cooled reactor nuclear power plants, and the sub-project of Research and Development of High-Purity, Homogenized, Continuous Casting Billets for Nuclear-Grade Heavy Forgings and Extra Thick Steel Plates for Containment Plates, have been progressing smoothly.

Developing key products to help make breakthroughs in major engineering projects



Ansteel Group has supported the first Hualong One reactor's connection to the grid with nuclear power steel and supported China's first high-speed rail export - Jakarta-Bandung High-speed Railway as an exclusive steel rail supplier. Ansteel Group has been the world's first to launch the high-strain L485M steel plate for deep-sea pipelines, and applied the product to straight seam welded pipes with a large thickness to diameter ratio as large as 0.0569 for deep-sea oil and gas transportation, which has passed the inspection and assessment of authorities. Ansteel Group has also been the first in China to launch the Q370qENHY-I high weather-resistance bridge steel, and applied the product to the two sea-crossing bridges at Quanzhou Bay and Anhai Bay without coating. Besides, Ansteel Group has developed the C-Mn series VL4-4 MOD low-temperature steel for liquefied gas ships with a maximum thickness of 60 mm, also the first of its kind developed around the world.

Participating in standardization activities to enhance the voice of Ansteel Group in the industry



In 2020, Ansteel Group released 20 technical standards newly developed or revised, including 3 international standards, 11 national standards, and 6 industry standards. Moreover, we led the revision of 2 international standards.



Newly developed or revised technical standards released by Ansteel Group

20

International standards

3

National standards

11

Industry standards

6



### Case Trial laying of Panzhihua PG5 rails on the railway with world's largest coal transport capacity

In active response to the country's call for long-life heavy-haul railways, Pangang Group has been the world's first to adopt a unique technological pathway - composite microalloying, to allow China to develop high-carbon, high-strength and high-wear steel rails for heavy-haul railways independently. During the research, members of the research team conducted field investigation of Datong-Qinhuangdao Railway several times. By collecting service data of typical existing rail lines and through multiple rounds of industrial optimization tests, the team has successfully developed the PG5 hypereutectoid steel rail that meets the design requirements while showing excellent performance in terms of strength and toughness. In 2020, the PG5 hypereutectoid steel rail developed by Pangang Group was applied to Datong-Qinhuangdao Railway, the railway with the world's largest coal transport capacity, in trial laying.



### Case Supporting the first Hualong One reactor to connect to the grid with nuclear power steel

In November 2020, the world's first Hualong One reactor - the No. 5 unit of China National Nuclear Corporation (CNNC)'s Fuqing Nuclear Power Plant was successfully connected to the grid for the first time, making China one of the countries with advanced nuclear power technology. Ansteel Group has supplied nearly 1,500 tons of nuclear power steel for the project, of which 75 tons of 15MnNi, a first-grade nuclear equipment material produced by Ansteel was applied to support the pressure vessel of the nuclear reactor. The reactor pressure vessel is a core facility of the nuclear power unit, which serves as a safety barrier to avoid leakage of radioactive materials.



The world's first Hualong No. 1 reactor is commissioned at Fuqing Nuclear Power Unit 5



Ansteel's SA-738Gr.B steel plates are applied to the Haiyang Nuclear Power Phase I Project



## Creating New Driving Forces with New Technology

On the new journey towards high-quality development, Ansteel Group needs to stimulate the enormous potentials of science and technology more than ever and nurture new development momentum through innovation. In 2020, Ansteel Group improved the technological innovation system and mechanism, optimized the environment for innovation, and vigorously stimulated the creativity of talents. At the same time, Ansteel Group actively developed high-end, high value-added products and services of steel, vanadium and titanium that meet market demands and development trends, advanced the application and commercialization of high-level technological innovation results, and made greater efforts in R&D to drive high growth with new driving forces.

## Improving the innovation system and mechanism

Ansteel Group has deepened the reform of the scientific research mechanism and improved the mechanism for stable growth of S&T investment. By establishing a system for open and collaborative innovation, and deepening the market-oriented reform of scientific research and design institutions, and formulating a series of policies on strengthening basic research, improving S&T planning management, and accelerating the transformation of S&T achievements, we aim to create a favorable ecology for innovation.

In 2020, RMB 8.6 billion S&T investment

In 2020, we revised the *Regulations of Ansteel Group on Scientific Research Projects* and the *Regulations on International Standards*. Moreover, we tightened management of the initiation, implementation, acceptance and expenditure management of major scientific research projects, increased bonuses for R&D teams that undertake major S&T projects assigned by ministries and major S&T projects of Ansteel Group, and enhanced incentives for making international standards stimulate the vitality and driving force of innovation.

## Strengthening research and development platforms

Ansteel Group has integrated internal and external innovation resources to build platforms for the R&D of key, universal, and forward-looking technologies and facilitate the transfer and transformation of technological results. Through the open, collaborative, highly-efficient technology R&D platform, we makes every effort to build a collaborative innovation community and improve our technological innovation capabilities.

We have also conducted academic exchange and built joint laboratories with universities and research institutes in order to build high-level technological innovation platforms, deepen exchange, and advance the application of technological achievements. Two of our national key laboratories have enhanced external exchange and cooperation and become the pillars that support China in building the marine engineering equipment industry and the Panxi National Experimental Zone for Innovative Development of Strategic Resources, significantly strengthening our R&D capabilities.



Ansteel signs a strategic cooperation agreement with University of Science and Technology Beijing (USTB)

## Stimulating innovation and creation vitality

Ansteel Group pays much attention to discovering, cultivating and gathering talents in innovation activities, striving to create and strengthen new driving forces with the talent-driven approach. In 2020, we released the *Ten Measures for Improving the Technical Talent Team of Ansteel Group*, and enhanced the introduction, cultivation and incentives of technical personnel to build up our talent pool for the high-quality development of Ansteel Group.

### Ten Measures for Improving the Technical Talent Team of Ansteel Group

- Improving political benefits for technical personnel
- Unblocking development channels for technical personnel
- Enhancing the introduction of technical personnel
- Enhancing the training for technical personnel
- Expanding the career development space for technical personnel
- Improving incentives for technical personnel
- Vigorously implementing the "Cradle Program"
- Advancing the construction of the talent cultivation platform
- Establishing the credit mechanism for technical personnel growth
- Improving the technical personnel management system



### Case Stimulating the enthusiasm of R&D personnel

Pangang Group has launched the reform of R&D institutes featuring "one research institute for one industry" and forged a new development pattern featuring "one academy in multiple locations." It has established a dynamic remuneration adjustment mechanism where salary is linked to talent market pricing and the reform & development achievements of Vanadium and Titanium Research Institute (Pangang Group Technology Center), and launched a pilot dividend program. In 2020, the total dividends of six projects, such as precision titanium casting, reached RMB 2.48 million, which is the first million-yuan-level dividend for the project team. This policy has effectively stimulated the initiative and enthusiasm of R&D personnel.

Ansteel Group encourages employees to enhance innovation and creativity, creating an inspiring for front-line innovation and creation. In 2020, we had 287 innovation workshops for employees at the factory level and above and held 1,057 innovation research activities, creating a profit of RMB 326.47 million. We presented 106 prizes of innovation to employees and appraised 21 advanced operation methods and promoted 116 of them, with 8,377 participants in the training. Moreover, we actively promoted the outstanding achievements of employee innovation and creation. Specifically, the Ship Steel Unevenness Adjustment Technology developed by Qu Xiaodong from Angang Steel's Hot Rolling Steel Plant won the first prize of the Metallurgical Science and Technology Award, becoming the only prize-winner as a first-line employee. Two achievements of the Company won the first prizes of the National Iron & Steel Staff Technological Innovation Award, Ma Liancheng from Qidashan Subsidiary of Ansteel Mining won the first prize of Liaoning Staff Skills Competition and Liaoning Staff Innovation Competition (Group of professionals), and eight innovation workshops were included in the list of innovation workshops of Liaoning Province and Sichuan Province. Ansteel Group showcased 133 staff innovation results on the 24th National Invention Exhibition, winning 25 golden medals, 41 silver medals, 34 bronze medals, and the Excellent Exhibitor Award.



Ansteel holds a meeting to commemorate the 101st anniversary of the May Fourth Movement and the promotion of the credit system for young talent growth



An employee gives a thumb up to Ansteel's automatic sampling transmission system



## Technological innovation honors



In 2020, Ansteel Group won two prizes for iron & steel product development and market development, four project prizes of the Golden Bridge Award and one prize for individuals by China Technology Market Association.

In 2020, Ansteel successfully submitted 1,872 patents for approval, among which there were 1,226 invention patents, accounting for 65.5% of the total. Moreover, Ansteel Group applied for four PCT international patents. In terms of patent licensing, Ansteel Group obtained 1,309 licensed patents, including 583 invention patents, accounting for 44.5%.

In the 2020 global 30 iron & steel enterprises innovation (patent) index rankings, Ansteel Group ranked 6th. In the 2020 China's 161 iron & steel enterprises patent innovation index rankings, Pangang Group and Anshan Iron and Steel Group ranked 3rd and 4th respectively, and Ansteel was honored "the enterprises with the highest patent innovation capacity". In 2020, Angang Steel was included into the first batch of high-value patent incubation centers in Liaoning Province.

In 2020, we won **2** second prizes of the National Science and Technology Progress Award; **1** special prize, **1** first prize, **3** second prizes, and **7** third prizes of the Metallurgical Science and Technology Award.

As of the end of 2020, we had obtained **9,140** valid patents, including **4,699** valid invention patents, accounting for **51.4%**; and **109** valid overseas patents, accounting for **1.2%**.

## Exploring New Potentials in New Sectors

Making scientific planning and layout of businesses in diversified industries is key to promoting the structural adjustment, transformation and upgrade of steel enterprises. Therefore, cultivating new growth points, stimulating new driving forces, and building a diversified business layout represented by the new economy has become a must for Ansteel Group to achieve greater development.

Based on market-oriented approaches, Ansteel Group has completed the reform by revitalizing assets and diversifying equity, and constantly explored new businesses and new models. On the basis of analyzing the market while leveraging our own business strengths, Ansteel Group has actively nurtured and developed the new-generation information technology, new materials, new energy, and other strategic, emerging industries to vigorously support and develop diversified development of the industry. Leveraging the Internet Plus model, Ansteel Group has furthered the integration of traditional industries with the Internet to develop new business formats, which become new growth points of the company.



Ansteel Dongshan Hotel's gourmet garden revitalizes the "nighttime economy" with an elegant environment and healthy food



Yunnan Dahai Logistics Park

## Driving New Upgrades with New Models

In 2020, we earnestly implemented General Secretary Xi Jinping's important instructions on the reform and development of SOEs, Party building, the revitalization of Northeast China, and the "Phoenix Nirvana and Rebirth" of Ansteel Group. Under these guidelines, we made full use of the reform to promote conceptual changes, solve problems in development, and stimulate the vitality of market players at all levels to drive upgrades.



Case

### Ansteel Group Chaoyang Iron & Steel has seen the effect of its reform and upgrade efforts

Adhering to "authorization + common benefits", Ansteel Group Chaoyang Iron & Steel has implemented hierarchical and classified authorization to delegate the powers of organization, salary distribution, sporadic project decision-making, procurement, etc. to each factory, workshop, and project team, ensuring adequate saying and decision-making power for frontline workers. Throughout the year, our profit increased by 15% year on year, and the profit margin of sales revenue reached 10.67%, which is 2.3 times the industry average. Besides, 15 major technical and economic indicators reached new highs, and the costs of iron, steel, and other materials entered the industry's top five. All these have made Ansteel Group Chaoyang Iron & Steel a perfect steel base with strong cost competitiveness.



Finished product warehouse of Ansteel Group Chaoyang Iron & Steel



# Coordination

## Facilitating Regional Development

Implementing the national strategy of coordinated regional development, Ansteel Group has actively responded to the Belt and Road Initiative. Specifically, we take corporate reform as a driving force to further promote the integrated development of Ansteel and local industries, cooperated with international partners, and integrate our strengths to create an ecosystem of regional development with shared benefits, jointly mapping out a new chapter of high-quality development.



9 INDUSTRY INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



17 PARTNERSHIPS FOR THE GOALS





## New Progress in Deepening Reform

Ansteel adheres to a three-tier management and control structure where the headquarters of Ansteel Group manages capital, subsidiaries manage assets, and manufacturing units manage production. Taking into consideration the connotations of the Ansteel Constitution and the reform experience of Ansteel Group Chaoyang Iron & Steel, we have improved the strategic management model of Ansteel Group that takes six management elements as the core, i.e., Party leadership, strategic planning, capital operation, resources coordination, innovation-driven development, risk prevention & control. At the same time, we have improved the authorized operation system, the market-oriented operation mechanism, and the mixed-ownership reform to stimulate development vitality and momentum through reform and enhance management capacity. In 2020, the completion rate of Ansteel Group's 68 comprehensive reform tasks reached 97.1%.



### Deepen the reform of the authorized operation system to ensure the dominant market position

- We have implemented the "six-pronged delegation of powers" and built a full-cycle authorization system covering "list of powers - performance specifications - evaluation of power exercise - dynamic adjustments." The number of items reviewed by the headquarters has declined by 24.4% while the number of items reviewed and reported by subsidiaries has declined by more than 20%. Such reform experience has been widely spread among SOEs.
- We have developed rules, regulations and systems of Ansteel Group to consolidate the achievements of the reform and innovation through stringent execution of these regulations. This practice has been covered in the *SOE Reform Updates* by the SASAC.



### Deepen the reform of the market-oriented operation mechanism to fully stimulate development vitality and momentum

- We have deepened contract management, introduced the "horse racing mechanism," and implemented the two-track, five-level comprehensive evaluation system to ensure the implementation of compulsory distribution and the last-place adjustment system, urging subsidiaries to outperform the market and themselves as well.
- We have earnestly implemented diversified, multi-layer incentives, and completed the shareholding by backbone members of one enterprise under the mixed-ownership reform, equity and dividend distribution of five technology companies, follow-up investment in two new projects, and equity distribution of one listed company, building a community with shared interests and risks for employees and the Company.
- We have upheld the principle of "from and to the market." Six units of Ansteel Group have organized the recruitment of professional managers to drive the development of the Company's market-oriented operation.



### Deepen the mixed-ownership reform to improve "quantity" and "quality"

- Nine companies of Ansteel Group have completed the mixed-ownership reform, including Metallurgical Furnace Materials Technology Co., Ltd. of Anshan Iron and Steel Group, Meishan Cold-formed Steel Co. Ltd. of Pangang Group, Engineering Technology Consulting Co., Ltd. of Pangang Group, and Mining Design and Research Institute of Ansteel Group, etc. The percentage of mixed-ownership reform enterprises accounts for 25.1%, up 6.8%.
- We have promoted existing enterprises under the mixed-ownership reform to improve the modern enterprise system and in-depth conversion of the operation mechanism, continuously improving the enterprises' efficiency and profits.



### Make every effort to build a reform demonstration project to play a leading role

- The three "Double Hundred Enterprises", namely Ansteel Mining, Ansteel Group Engineering Technology Corporation and JWELL, , as well as Chengdu Materials Institute have taken the lead in key reform areas, such as the mixed-ownership reform and mid- and long-term incentives.
- Ansteel Group Chaoyang Iron & Steel has upgraded the "authorization + common benefits" reform, contributing to continuous emergence of reform models of Bayuquan Steel Subsidiary of Anshan Iron and Steel Group, Ansteel Hongjian Corporation, and Dongshao Plant of Ansteel Mining to stimulate development vitality and momentum.

## Shouldering Heavy Responsibilities for Revitalization

Ansteel Group has implemented the strategy of revitalizing Northeast China by integrating the high-quality development of the Company with regional development and partnered with local enterprises to innovate in cooperation models and refine cooperation content, manifesting the fulfillment of new missions and new actions to support national strategies.



### Case

#### Joining hands with China FAW Group Corporation to create a new situation for win-win development

As central SOEs based in Northeast China, Ansteel Group and China FAW Group Corporation (FAW) have implemented the guidelines of General Secretary Xi Jinping's important speeches and instructions on the revitalization of Northeast China in the new era, and shouldered their responsibilities as "national pillars." Specifically, the two parties have built up cooperation channels, further deepened the strategic cooperation mechanism, and formed a bunch of cooperation models based on the joint laboratory of automobile steel, the Electric Vehicle Innovation (EVI) technology platform, and other platforms. Through building a long-term, stable cooperation relationship, the two parties have jointly created a new situation for win-win development.



### Case

#### Conducting strategic cooperation with DHI · DCW Group Co., Ltd.

Ansteel Group has established a strategic partnership with DHI · DCW Group Co., Ltd. (DHI · DCW). Upholding the principle of "strong alliance, complementary advantages, collaborative innovation, and shared high-quality development," Ansteel Group has partnered with DHI · DCW on business, technological R&D, intelligent manufacturing of high-end equipment, and Party building, etc. An exchange and coordination mechanism has been built and improved to allow the two parties to give full play to their own strengths and jointly achieve the high-quality development in the comprehensive revitalization of Northeast China.



Automotive structural steel



## Accumulating Resilience to Support Development

Ansteel Group has always kept in mind its role of “the eldest son of steel industry of the Republic.” With this mission, we have supported the development of major engineering projects, livelihood projects and industrial development, and deeply engaged in the international market to enhance the country’s strengths and the people’s livelihood, building up the image of “a steel backbone” of the pillars of a great power in the people’s hearts.

## Supporting National Economic Development

Ansteel Group has actively undertaken national key engineering construction projects and supported the country’s development strategies by providing high-quality steel materials for major national projects and industrial development. In doing so, we have promoted national infrastructure construction, boosted national strengths in energy and other fields, and contributed Ansteel’s strength to national economic development.



### Case Supporting the construction of national key projects

Ansteel Group has provided high-strength structural steel for large-scale infrastructure construction projects, supporting the construction of national key projects.

The expansion project of Hangzhou Xiaoshan International Airport is an important basic supporting project for the 19th Asian Games in 2022. More than 2,000 tons of construction steel of Ansteel Group was used in the Phase III expansion project of the airport, erecting a “steel backbone” for the core airport of the world-class airport cluster in the Yangtze River Delta.

As one of the backbone power sources in the national strategic energy project of West-East Power Transmission, Baihetan Hydropower Plant is the world’s largest hydropower project under construction. After years of R&D and production, Ansteel Group has become the exclusive supplier of 800MPa hydropower steel for the project, for the first time realizing the massive supply of hydropower steel of this grade and accelerating the localized production of hydropower steel.

The Shanghai-Sutong Yangtze River Highway Railway Bridge is the world’s first public-rail cable-stayed bridge entering the “kilometer” era. To meet the needs of large spans and heavy loads, the steel beams must be exceptionally “solid.” The bridge builder puts forward exceedingly high technical indicator requirements for the Q500qE steel grade, which are higher than those of all the other countries and regions in the world. Ansteel Group has successfully won the bid and provided 12,000 tons of Q500qE steel plates and nearly 40,000 tons of Q420qE and Q370qE bridge steel.

As the largest railway station in Asia, Xiong’an Railway Station is built with Ansteel Group’s construction steel Q460GJD, which was the highest-strength structural steel at that time. Leveraging the production, R&D, technical, and quality strengths of “Made by Ansteel,” Ansteel Group has become the country’s first company that specializes in R&D of railway-standard deformed steel bars.



### Case Supporting the country’s industrial development

Ansteel Group has provided high-quality steel to support the development of the energy industry in China, automobile industry and other industries, manifesting the strength and responsibility fulfillment of Ansteel as a central SOE.

With a total length of 8,280 km, the Sinopec Xinjiang Coal-to-Gas Pipeline Project is the largest pipeline project undertaken by Sinopec. Sinopec’s National Emergency Crude Oil Strategic Reserve Project has built 116 crude oil strategic reserve tanks, which require a large amount of steel materials with complex specifications in a tight schedule. Ansteel Group has successively won the bids for two Sinopec projects and overcome difficulties to deliver the first batch of contract orders on schedule, supporting the construction of energy projects in China.

Angang Steel’s Hot Rolling Steel Plant has built an EPS production line with an annual output of 300,000 tons, carried out EPS equipment technology integration and the initiation of projects of EPS product R&D, and successfully produced hot-rolled EPS automobile beam steel plates of two specifications of 5mm and 8mm, making it a competent EPS supplier. This EPS production line has not only expanded the supply scope of Ansteel automobile steel plates, but supported China’s efforts in energy-saving and environmental protection with lightweight automobile.

The project of Key Technologies and Demonstration Applications of Steel for Marine Engineering Equipment under Extreme Environment, a major S&T project of Liaoning Province, has been launched in Ansteel Group. Leveraging the strengths of R&D and production of advanced iron & steel materials, the project has promoted the development of China’s marine equipment metals and technology, advancing the transformation and upgrade of Liaoning’s high-end marine engineering manufacturing industry.



Ansteel’s EPS automobile beam steel plates of two specifications pass the “test”.



## Developing International Markets

Ansteel Group has actively participated in the Belt and Road Initiative, sought for international cooperation, and developed international markets, joining hands with international partners to build a community with a shared future. In 2020, the contracted volume of raw materials of Ansteel Group reached 41.545 million tons, and that of steel export reached 1.035 million tons, reaching the annual target of “going global” set for the year. Moreover, heavy rail and vanadium product export targets outperformed the market and previous performance.



### Case

#### Ansteel's medium and heavy plates realize full-line supply for the China-Russia East Route Natural Gas Pipeline Project

The 8,111-km China-Russia East Route Natural Gas Pipeline (hereinafter referred to as the “China-Russia East Route”) is currently the largest, highest-pressure long-distance intelligent natural gas transmission pipeline in China and a landmark project of the Sino-Russian energy cooperation. Ansteel Group is a major supplier for the northern and middle sections of the China-Russia East Route. With a good brand reputation and comprehensive service capacity, we have provided 90,000 tons of X80M medium-thickness plates for the southern section of the project. In September 2020, Ansteel Group officially began to produce steel plates for the southern section of the project, and supplied medium-thickness steel plates to the entire line of the China-Russia East Route.



### Case

#### Integrating into rail transit construction under the Belt and Road Initiative

Thanks to high-quality steel products and services, Ansteel Steel Rail has won the bid and become the exclusive supplier for Guinea's Dapilon-Santou Rail Project, actively supporting the Belt and Road Initiative. In May 2020, a total of 9,859 tons of steel rails were transported to Bayuquan Port and ready to be shipped for export.

Angang Group International Trade Corporation (India) has signed a supply contract with the main supplier of Bangladesh's Dhaka Metro Mass Rapid Transit Project. A total of 3,400 tons of Ansteel's hot-rolled steel plates will be used in the metro project to support the successful construction of Bangladesh's first subway project in history.

Ansteel Group has provided all steel rails required for the first subway of Pakistan's Lahore Rail Transit Orange Line Project, which is more than 8,000 tons, facilitating Pakistan to officially enter the “Metro Era.” Pakistan's Lahore Rail Transit Orange Line Project is the first rail transit project signed under the China-Pakistan Economic Corridor under the Belt and Road Initiative. The project adopts Chinese standards, Chinese technologies and Chinese equipment, empowering Pakistan to build South Asia's most advanced urban rail transit operation system and enabling advanced, efficient, and safe transportation services for more than 12 million people.

- Anshan Iron and Steel Group has established the department of overseas business and engineering technology service to implement its international development strategy and undertake major overseas engineering projects, striving to build a first-class steel company with international competitiveness.
- Ansteel Engineering Technology Corporation has been shortlisted for the Russian blast furnace project, and actively developed new markets for rolls and iron powder in Turkey, Romania, Morocco, and Vietnam, etc.
- The contract volume of slag powder export to the United States by Angang Zhongyuan Industrial Development Co., Ltd. has reached new highs in sales volume in one order to the United States.
- Indonesia's Jakarta-Bandung High-speed Railway is a landmark project of the Belt and Road Initiative and an important part of the Maritime Silk Road. Pangang Group is the exclusive steel rail supplier for the project.
- Pangang Group has been China's No.1 exporter of vanadium products and actively developed new markets and new customers in India, Malaysia, Japan, Chile and Ethiopia. The approach of combining direct export and indirect export helps achieve new breakthroughs in “Going global”.

## Jointly Promoting Win-Win International Development

Actively expanding new channels for overseas cooperation and exchange, Ansteel Group is committed to leading the future development of the global steel industry, expanding its international influence, establishing a good brand image and improving the position of China's steel industry across the world. In 2020, we participated in the 3rd China International Import Expo (CIIE). On the expo, we signed contracts for deepening future cooperation with seven global renowned machinery manufacturing and spare parts suppliers, including Siemens, ABB, and Primetals, etc.



# Green

## Building a Beautiful Ansteel

Ansteel strives for comprehensive green transformation while accelerating green and low-carbon development. Guided by President Xi's thought on ecological progress, we firmly prioritize eco-friendly and green development, steadily advance energy conservation and environmental protection, and make preparations for peaking CO2 emissions and realizing carbon neutrality. Through such environmental protection efforts, we aim to build a beautiful Ansteel Group that coexists harmoniously with the city with blue skies, lucid waters, and green grass.





## Strengthening Environmental Management

Ansteel continues to improve the environmental management system featuring sound environmental protection organizational and institutional systems. By strengthening the assessment of environmental protection targets and managing and controlling environmental risks in a science-based manner, we endeavor to build a defense line for ecological progress.

Ansteel Group was **honored the Green Development Model Enterprises of 2020** by China Metallurgical News.

Pangang Group was **honored the Environmentally and Socially Responsible Enterprises of 2020** by China Environment News.

### Improving the environmental management organization to consolidate basic management

- We establish a multi-level environmental management organization covering all units, subsidiaries, branches, departments, and positions of Ansteel Group, and assign environmental protection responsibilities to all persons in charge of environmental protection issues clearly. Moreover, the responsibility system of "one post takes dual responsibilities, the Party and government assume same environmental responsibilities, and dereliction of responsibility is held accountable" was implemented to strengthen environmental protection.

### Enhancing the assessment of targets and ensuring the fulfillment of responsibilities level by level

- We analyze, propose and realize Ansteel Group's targets for energy conservation and environmental protection work step by step, and include such targets in the special assessment system for improving quality and efficiency of subsidiaries.

### Improving the environmental management system and deepening the awareness of environmental protection

- We conduct environmental impact assessments and firmly implement the "three simultaneous" (simultaneous design, construction and commissioning of the main project and its pollution prevention and control facilities) system for our projects.
- Through selective application of existing energy conservation and environmental protection systems based on our comprehensive analyses, we have revised the *Regulations of Ansteel Group Corporation Limited on Environmental Protection*, the *Responsibility System of Ansteel Group Corporation Limited for Environmental Protection*, and other systems.

### Strengthening risk management and control and enhancing emergency response

- We carry out whole-process and all-around environmental risk identification and assessment to accurately identify key hazards and establish a hazard list.
- We formulate risk management and control measures and contingency plans for environmental emergencies in a science-based manner and carry out emergency training and drills regularly to enhance our response to environmental emergencies.



### Case

## Ansteel Lianzhong implements quota management for energy consumption

Ansteel Lianzhong has formulated the *Regulations on Energy Consumption Management and Verification* to set energy consumption quotas for each workshop according to the specific conditions of their production lines. Benchmarking itself against leading enterprises in terms of energy consumption, the company demands better performance of all workshops year by year. In 2020, Ansteel Lianzhong decomposed its overall energy-saving goal into 33 energy-consumption indicators, including electricity, LPG, LNG, steam, etc., and carried out systematic energy consumption performance evaluation and management on a monthly basis. Through an online energy consumption monitoring and management system, the company realizes real-time monitoring of the consumption of all types of energy. It has strengthened energy consumption management and control and lowered energy consumption as a whole through maximum demand alarming and control, production line energy consumption per unit quota alarming and control, horizontal and vertical comparison of energy consumption, and systematic and intelligent energy-saving and emission-reducing management.



### Case

## Benchmarking against leading players and pursuing improvements through learning and exchanges

Focusing on green development, Ansteel benchmarks itself against world-class steel companies at home and abroad to find out the gap, so that it can develop targeted measures to make up for its shortcomings in energy conservation and environmental protection, and realize continuous improvement of energy conservation and environmental protection management. We organized field trips to Shanxi Jianlong Industrial Co., Ltd., Shougang Qian'an Iron and Steel Co., Ltd., and Zhanjiang production base of China Baowu Steel Group Corp., Ltd. among other iron and steel companies to learn to apply the technologies for flue gas desulfurization and denitrification, belt conveyor closing, and so on to solving problems encountered in the ultra-low emission transformation. We organize technical exchanges on the high-frequency electromagnetic heat transfer technology and the permanent magnet speed control technology to promote the application of advanced energy-saving technologies. By fully tapping our potential for energy conservation and consumption reduction, we aim to promote the concept of energy conservation and environmental protection management, improve our management culture, systems and processes, and make our management methods more effective.



### Case

## Ansteel Mining basically realizes full-coverage environmental monitoring

In 2020, Ansteel Mining realized new breakthroughs in environmental monitoring. In addition to daily monitoring carried out by the monitoring team, a qualified third-party monitoring agency was hired to conduct systematic monitoring of more important items. It enhanced the operation and maintenance of online monitoring equipment targeting provincial- and city-level key pollution sources, including boiler flue gases, pellets, and exhaust gases from sintering machines of Qidashan mine, ensuring stable operation of online environmental monitoring equipment. Ansteel Mining has basically realized full-coverage environmental monitoring through diversified monitoring methods, bringing environmental risks under control.



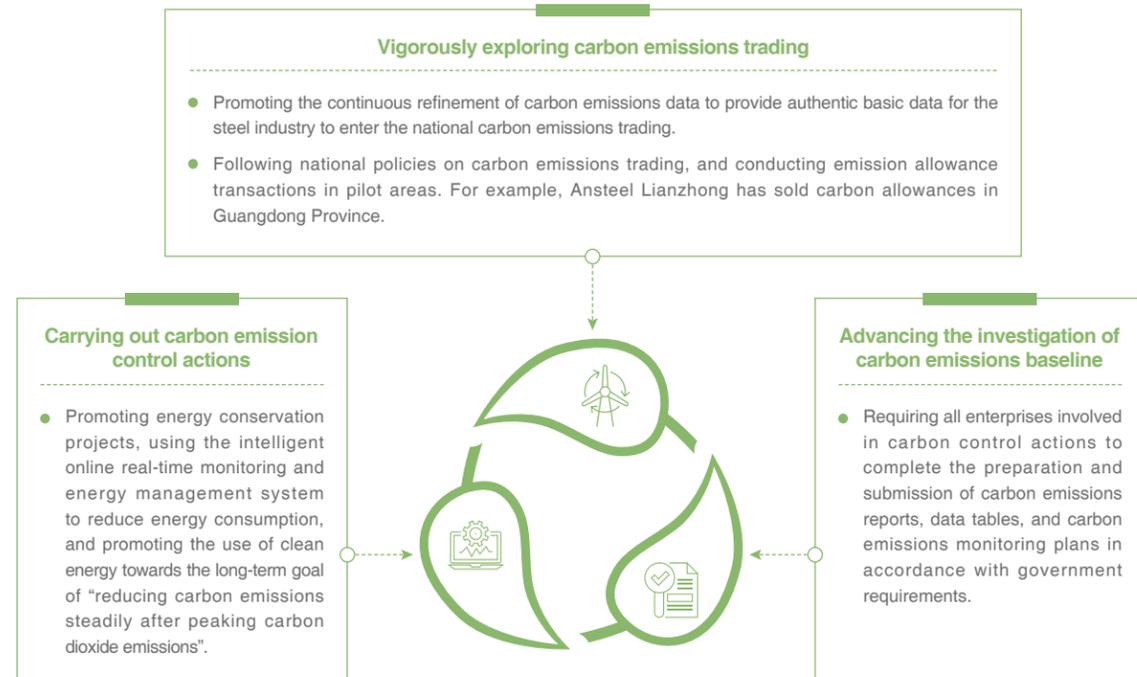


## Remaining Committed to Green Operations

Always pursuing green, circular, and low-carbon development, Ansteel Group has pressed ahead with the implementation of energy conservation projects, the building of the green energy system, the increase of resource utilization efficiency, and the effort to win the battle to prevent and control pollution. In 2020, Ansteel Group invested RMB 3.69 billion in projects for environmental protection and energy conservation. With a total investment of RMB 1.44 billion, Anshan Iron and Steel completed a number of key projects for energy conservation, emission reduction and pollution control, such as the ultra-low emission transformation of coal-fired power generation boilers, the construction of coal stockyard roof enclosure and the ultra-low emission transformation of coal-fired boilers at the Lingshan stockyard, the enclosure of water slag stockyard by Ansteel Zhongyuan Industry Company, etc. These projects have improved Anshan Iron and Steel's overall energy conservation and environmental management capabilities, enabling it to continuously reduce pollutant emissions. In 2020, the company did not see any major environmental incidents.

## Carbon Emission Management

Ansteel Group has vigorously promoted its carbon emission management. The Company clarified carbon reduction targets and tasks, formulated scientific carbon emission control plans, and monitored and reduced carbon emissions by carrying out energy-saving and carbon-reducing projects and promoting major technological innovations in an effort to contribute to China's goals of peaking carbon dioxide emissions before 2030 and achieving carbon neutrality before 2060.



## Energy and Resource Management

Ansteel Group vigorously promoted the use of advanced and applicable energy-saving technologies and equipment to reduce energy consumption and recycle waste heat and energy. The Company also optimized its energy structure, and promoted the use of clean energy to achieve green development. In 2020, with a year-on-year decrease of 0.95% in its comprehensive energy consumption per RMB 10,000 of output value (comparable price), Ansteel maintained a lower level of energy consumption than most key iron and steel enterprises.

Waste heat and waste energy recycling data of Anshan Iron and Steel Group

Name of indicator	2016	2017	2018	2019	2020
Blast furnace gas emission rate (%)	0.524	0.704	0.61	1.76	2.49
TRT power generation (GWh)	912.10	995.636	1,003.334	1,094.50	1,144.18
CCPP power generation (GWh)	3,425.27	3,244.81	3,150.68	3,264.32	4,925.06
CDQ power generation (GWh)	779.962	782.92	758.54	782.366	718.979
Waste hear stream recycled (million GJ)	26.707	26.153	26.943	28.392	28.512
Converted gas recycled (million m <sup>3</sup> )	27.4056	28.546	29.6618	31.6777	31.8949

Waste heat and waste energy recycling data of Pangang Group

Name of indicator	2016	2017	2018	2019	2020
Blast furnace gas emission rate (%)	0.17	0.23	0.43	0.1	0.29
Converted gas recycled (million m <sup>3</sup> )	705.42	742.84	799.35	935.34	794.67
Waste hear stream recycled (million GJ)	17.8937	17.9039	17.9652	18.0229	17.1022



### Case

### Ansteel Lianzhong promotes technological transformation for energy conservation

Ansteel Lianzhong continued to increase investment in a series of technological transformation and energy management projects. In 2020, the comprehensive energy consumption of Ansteel Lianzhong was reduced by 16.68kgce/t year on year, and its comprehensive energy consumption per RMB 10,000 of output value was decreased by 0.0117tce/RMB 10,000.

By replacing the three old water pumps in the hot rolling plant with energy-saving water pumps that can reduce power consumption by 14%, Ansteel Lianzhong saved 1.6278 million kWh of electricity in 2020.

Through the steel roaster transformation project, which used the compound double heat storage roasting device equipped with the second-generation energy-saving compound double heat storage combustion technology, the company reduced energy consumption by 35%, and saved 3,351 tons of liquefied petroleum gas in 2020.

Ansteel Lianzhong also began the evaporative cooling of the walking beam of the hot-rolling heating furnace and the flue waste heat recycling project to make full use of the heat in the heating furnace to produce steam for use in the cold-rolling process. After completion, the project can save 89,000 tons of steam each year.



**Case**

**Anshan Iron and Steel Group reduces fossil fuel consumption and optimizes energy structure**

Through measures such as saving coal gas, adjusting structure, and promoting power generation, Anshan Iron and Steel Group has established a green and low-carbon energy consumption system, which has minimized the consumption of fossil fuels.



**Technological and equipment upgrades**

- The heat pump system of the cold rolling plant has been operating in good condition since it was put into operation in November 2018, saving more than 4,000 tons of standard coal each year.
- Angang Steel Company Limited has optimized the heating technique and equipment for blast furnace slag flushing water to recycle the heat in the slag flushing water. It recycled 813,492 GJ during the heating period, reducing coal consumption by 28,000 tons.
- The technological upgrade of the 177 production line has reduced the gas consumption per ton of steel produced from 1.96GJ/per ton of steel to 1.85GJ/per ton of steel.



**Energy structure optimization**

- Using coal gas efficiently, the 180MW combined cycle power plant (CCPP) increases clean energy power generation and reduces solid fuel consumption. In 2020, Anshan Iron and Steel Group's own production of electricity reached 1367 GWh, the highest level in history.
- In 2020, Bayuquan Steel Subsidiary produced 9.901 million kWh of electricity from wind power.
- Anshan Iron and Steel Group has pressed ahead with the "replacement of coal with gas" project to minimize steam coal consumption. In 2020, steam coal consumption of the company's headquarters was reduced by 440,000 tons, a decrease of 45% year on year, leading to a drop in energy costs by about RMB 300 million.



**Exhaust Emission Management**

Ansteel Group strengthened exhaust emission management, and reduced air pollutant emissions through process optimization and equipment transformation. We resolutely implemented the major national decisions and plans made by the state government, and continued to carry out ultra-low emission transformation projects to improve atmospheric protection. In 2020, our sulfur dioxide emissions fell 4.19% year on year, and nitrogen oxide emissions 0.32% year on year.

Placing dust removal devices next to coke oven machines at the coking plant, and conducting desulfurization and denitrification of coke oven flue gas to further reducing both fugitive and planned dust emissions.

Anshan Iron and Steel Group completed the ultra-low emission transformation of coal-fired boilers and the addition of activated carbon in the sintering plant in the west zone of the Central Iron-making Factory. The construction of coal stockyard roof enclosures at the Lingshan stockyard under the management of the Resources Storage and Transportation Operation Center of Anshan Iron and Steel Group was also completed, which has eliminated the dust pollution from the stockyard where fugitive emissions satisfied ultra-low emission standards.

Pangang Group Vanadium carried out key projects such as the ultra-low emission transformation of gas-fired power generating boilers No. 1, 2, 3, 4, 9 and 10, and the dust removal system renovation project for vanadium extraction converters in the steelworks. The concentration of dust particles of Pangang Group Vanadium met national ultra-low emission standards, with monthly recycled gas reaching 5,481,000 m<sup>3</sup>.

In 2020, Anshan Iron and Steel Group implemented **36** ultra-low emission transformation projects, lowering emissions of particulate matter, sulfur dioxide and nitrogen oxide by **38.5%**, **41.1%**, and **10.8%** respectively compared with 2015.

In 2020, Pangang Group carried out a number of ultra-low emission transformation projects, lowering emissions of sulfur dioxide, nitrogen oxide, as well as flue gas and dust by **72%**, **27%**, and **34%** respectively compared with 2015.



**Case**

**The Coking Department of Bayuquan Steel Subsidiary upgrades environmental facilities to reduce air pollutant emissions**

In order to protect the environment, the Coking Department of Bayuquan Steel Subsidiary spent plenty of funds on improving environmental facilities.

- The department added a fine desulfurization device with a processing capacity of 150,000m<sup>3</sup>/h, which has reduced the sulfur content in coal gas to less than 20mg/m<sup>3</sup>. The sulfur content is also extracted and collected, which greatly reduces the emission of sulfur compounds.
- The department renovated spare material strips in the raw material yard. By building 36 coal storage silos with a total capacity of 252,000 tons, it has avoided fugitive dust.
- The department added an SDS desulfurization device and a low-to-medium temperature SCR denitrification device behind the coke oven flue gas duct. The new devices have lowered sulfur dioxide in the flue gas to below 30mg/m<sup>3</sup>, NOx emissions to below 150mg/m<sup>3</sup>, and particulate matter to below 10mg/m<sup>3</sup>. Emissions of these pollutants have all reached ultra-low levels.



The clean coke oven

## Water Resource Management

Through extensive application of new technologies and processes, Ansteel Group strengthens water consumption and drainage management, handles water pollution effectively, recycles and reuses water, improves the utilization of water resources, and protects the water environment. In 2020, Ansteel Group's COD emissions fell by 0.67% year on year.



### Case

#### Anshan Iron and Steel Group continues to improve the utilization of water resources.

Adhering to the principle of "give priority to saving water, achieve harmony between development and water conservation, carry out systemic governance, and ensure that both government and market play their respective roles" in water management, in 2020, Anshan Iron and Steel Group further improved water use efficiency by reusing wastewater, reducing water consumption through intensive water use, and carrying out systematic water resource management.

- Ansteel recycled and reused rainwater rationally based on water balance analysis. The ratio of reclaimed water that was turned into new water increased by 7.5% year on year, and exterior drainage from Xidagou during non-flood seasons was basically reduced to zero.
- Ansteel continued to strengthen the management of the concentration multiple of circulating water and realized a water circulation rate of more than 98.5%. Our water intake per ton of steel produced was 3.33m<sup>3</sup>, maintaining the top level of the industry.
- We optimized the water supply and clean recirculating water networks, cut the total length of water pipes by 12,000 m, and reduced water loss caused by leakage.
- We continued to optimize the structure of water resources and reduced ground-water withdrawals by 23.7% year on year.



The Xidagou Wastewater Treatment System of Angang Steel Energy Management and Control Center

Water recycling rates of Anshan Iron and Steel Group and Pangang Group (2016-2020)

	2016	2017	2018	2019	2020
Anshan Iron and Steel Group	97.70%	98.00%	98.30%	98.50%	98.60%
Pangang Group	95.06%	95.60%	95.62%	95.00%	95.22%

Note: The water recycling rates of Anshan Iron and Steel Group are provided by the headquarters of Ansteel.



### Case

#### The Central Iron-making Factory of Anshan Iron and Steel Group carries out water-saving management of blast furnaces

The Central Iron-making Factory of Anshan Iron and Steel Group carries out water-saving management of blast furnaces through multiple measures, creating considerable economic and social benefits.

Through the implementation of the method for realizing zero discharge of overflow water, we realized zero discharge of overflow water from the No.2 and No.3 blast furnaces in the west area of the plant and reduced the annual exterior drainage by 1.176 million m<sup>3</sup>, creating a benefit of RMB 1.0584 million.

By continuously improving the blast furnace slag washing process and system, we significantly increased the efficiency of the slag washing equipment and controlled the overflow of slag washing water. The water discharge rate of the slag washing system was lowered by about 100m<sup>3</sup>/h, creating a benefit of RMB 756,000.

By improving the screen of the rotary drum on the No. 4 blast furnace, we significantly lowered the water content of slag and reduced the amount of water needed to replenish the slag washing system. It helps save 144,550 m<sup>3</sup> of water and creates a benefit of RMB 130,000 per year.



### Case

#### Water balance management in the production of clusters formed by large metallurgical mining enterprises

To realize long-term sustainable development of large mining companies, separate management and upgrade should be replaced by unified business management. Taking water use of Anshan Iron and Steel Group and mining production as a whole, we have established a three-dimensional management model that integrates water balance of a cluster formed by six beneficiation plants with water consumption in the process of mining production as the focus. The model helps realize real-time optimization of the allocation of production water and efficient use of water resources, thus improving the economic and ecological benefits of production water.

Facilitating Regional Development

Building a Beautiful Ansteel

Achieving Win-Win Development

Improving People's Well-being

Coordination

Green

Openness

Sharing



## Solid Waste Management

By researching and developing new solid waste treatment technologies, and entrusting third-party companies to treat or resell solid waste, Ansteel Group has realized the recycling of solid waste, reduced solid waste from the source, and improved resource utilization. At the same time, aiming to reduce environmental impacts, the Company continued to improve the standardized management of hazardous waste towards the goal of not generating any hazardous waste.



### Case Carrying out the steel slag recycling project

In order to deal with steel slag at the headquarters of Ansteel Group and protect the environment, Ansteel Green Resources Technology Co., Ltd. carried out a steel slag recycling project to reduce the pollution caused by steel slag storage and extensive treatment, and achieve “zero discharge” of steel slag.

**Building the steel slag pretreatment line:** Realizing the stable treatment of steel slag and the separation of slag and steel, and creating conditions for subsequent magnetic separation and tailings utilization.

**Building a steel slag processing line:** Pretreated steel slag will be screened, crushed, magnetically separated, and purified; after the process, steel contained in the slag will be returned to steelmaking, the powder to sintering, and the tailings will go to deep processing and utilization.

**Deep processing and utilization of tailings:** The tailings can be used to replace cement in equivalent amounts in making bricks and desulfurizers, or building the surface layer of the road base.



### Case Pangang Group Vanadium and Titanium Resources Co., Ltd. tackles problems in by-product utilization

At present, the production capacity of vanadium extraction using sodium sulfate accounts for about 70% of the whole industry. This process will produce a large amount of by-products from vanadium extraction with sodium sulfate as the main component, which is difficult to recycle and dispose of. Pangang Group Vanadium and Titanium Resources Co., Ltd. cooperated with research institutes such as the Institute of Process Engineering (IPE) of Chinese Academy of Sciences (CAS), and developed a key technique for preparing sodium bicarbonate and ammonium sulfate from sodium sulfate in 2020. The sodium bicarbonate produced by this process can all be recycled for use in the vanadium slag sodium modification roasting process, while the ammonium sulfate can be recycled in the precipitation process or sold. At the end of 2020, the company built a pilot platform for the preparation of sodium bicarbonate and ammonium sulfate from sodium sulfate, and also completed the pilot study. The research results all passed technical feasibility assessments. After the new technique is industrialized, the utilization of sodium sulfate is expected to reach higher than 95%, which will effectively reduce environmental costs.



### Case Reduction and recycling of waste and by-products

Vanadium and titanium companies have produced a large amount of titanium gypsum (industrial sludge) through titanium dioxide production using the sulfuric acid method. In the long run, they will run out of space to store a large amount of titanium gypsum, which will also cause huge environmental costs. Therefore, Pangang Group Vanadium and Titanium Resources Co., Ltd. has carried out research on the reduction of waste acid to solve this problem from the source. In 2020, the company invested RMB 31.46 million in the construction of 2 titanium gypsum drying lines and relative equipment. The dried titanium gypsum after pressure filtration can be used as a cement retarder and building material, and can also be used as a soil conditioner for land reclamation, base material in expressway construction, underground backfill material, etc. At the same time, the company carried out related trials using wet titanium gypsum as a raw material for the production of red bricks. By launching the titanium gypsum recycling project, the company can process about 420,000 tons of hydrous titanium gypsum every year, and sell about 300,000 tons of cement retarder containing free water, which will effectively reduce the costs and environmental impact from titanium gypsum storage and management.



### Case Optimizing the treatment process to reduce the discharge of sludge

Faced with increasingly stringent environmental standards, Ansteel Lianzhong was faced with difficulties in sludge treatment, especially the high costs involved. Therefore, the company launched the “sludge reduction” project. Through measures such as field debugging, process adjustment, repair of abnormal equipment leaks, strict control of the concentration of acid from the production line and abnormal discharges, etc., the company reduced about 300 tons of dewatered sludge every month, reducing sludge to the greatest extent while ensuring the normal water quality after the treatment of sludge.



## Protecting the Environment

Ansteel Group conducts mine development and environmental protection simultaneously following the principle of “concurrent production, governance, and restoration.” By carrying out mine greening and reclamation projects as well as dust control, the Company has promoted the coordinated progress of mining and environmental protection. In 2020, Ansteel greened and reclaimed approximately 116 hectares of land. Ansteel Mining’s key technology and application of low ore loss and green mining of underground iron ores won the second prize of the Golden Bridge Awards of the China Technology Market Association.



### Case

#### Anshan Iron and Steel Group is committed to building eco-friendly iron and steel works

Following the Overall Planning and Design of Forest-style Green and Eco-friendly Plants for the building of eco-friendly iron and steel works, Anshan Iron and Steel Group completed the greening of areas inside and outside the gate at Lishan Bridge, the greening of the main iron making plant, the main steelmaking plant and the cold rolling plant, and the planting of protection forests at the Lingshan stockyard. In 2020, the company planted 28,978 trees, 568,751 shrubs, 140,600 vines, and 8,550 square meters of lawn.



### Releasing the mine ecological restoration plan

- We released the *Ansteel Group Mine Ecological Restoration Three-Year Plan 2020-2022*, according to which we will plant 3.4 million trees and carry out systematic ecological restoration of 9 mines and 434 hectares of land in Liaoning Province towards the goal of making the mining eco-friendlier and more scientific, the comprehensive utilization of resources more efficient, and the mining communities more harmonious.

### Promoting greening and reclamation of land in mining areas

- We implemented regulations on tree planting activities in mines, and introduced management methods for tree protection activities for jointly building a beautiful Anshan.

### Strengthening regular dust control

- We conduct dust suppression by means of multi-tube ore extraction, ore pool field and dust suppressant spraying.
- We carry out wet operations, and sprinkle water on the roads of mining sites and rock dumps before mining.
- We enclosed stockyards and coal yards to continuously strengthen dust control.



### Case

#### Pangang Group is committed to building eco-friendly mines

In 2020, Pangang Group invested RMB 10 million in the greening of more than 154.85 acres of landfills in Jianshan and Xiaojiawan. Drought-resistant tree species such as *Jatropha curcas*, sisal, pigeonpea, dense oil branches, oleander, bougainvillea, and *Acacia confusa* were planted in abandoned mining farms and tailings dams. The land was then covered with appropriate soil, and fertilizers were applied to the roots of the seedlings. At the same time, methods such as intermediate planting and high-density planting were adopted for the greening project to create green mines with lucid waters and lush mountains.



Soil restoration experiments



Sunflowers blooming in the mining area



A bumper harvest of rice grown on saline-alkali land improved with iron tailings



# Openness

## Achieving Win-Win Development

Opening-up is the path China must take to achieve prosperity and development, and also the path enterprises must take to unleash vitality. Ansteel Group fully applies the new development philosophy, and always upholds honesty, integrity, and fair cooperation. We regard doing business in good faith as the foundation of our operations, and strive to foster a healthy business atmosphere of integrity. We endeavor to build a responsible brand, seek common development with high-quality customers, and regard meeting customer needs as a direction of our high-quality development. We work to create a better future with our customers by offering them high-quality products and services, and seek international cooperation with an open mind in an effort to build a global steel industry ecosystem where value is created and benefits are shared by all stakeholders.



## Operating in Accordance With Law and in Good Faith

Ansteel Group strictly abides by laws and regulations, adheres to compliance operations, and deepens anti-corruption efforts to build a fair market environment of integrity. In 2020, Angang Group International Trade Corporation Ltd. was awarded the titles of "China AAA Grade Credit Enterprise" and "National Demonstration Unit of Credit Management".

In 2020, Ansteel Group implemented the instructions made by the Fourth Plenary Session of the Central Commission for Discipline Inspection (CCDI) on increasing the efforts to combat corruption in state-owned enterprises, and held meetings on improving Party conduct and upholding integrity and fighting corruption. The Company imposed tight constraints, maintained a tough stance and a long-term deterrence, and tightened up on accountability for overseeing discipline compliance to enhance the long-term mechanism where officials "don't dare to, are unable to and have no desire to commit acts of corruption". We strictly implemented the main responsibility and the responsibility for overseeing discipline compliance of officials and strengthened accountability to effectively purify the corporate political ecology.

### Taking targeted measures for different enterprises

Taking targeted measures to crack down on "minor corruption" at the primary level, giving instructions to Anshan Iron and Steel Group on carrying out the "Thunder Operation", and building a team to fight against theft to safeguard state-owned assets; assisting Pangang Group with the "Clean Breeze Project" to deal with corruption and working style issues.

### Upholding integrity through warnings and education

Circulating typical cases, and shooting an educational film about Yuan Xuefeng's case named *Derailment*, and a short film named *Live on Steel*; organizing employees to visit Ansteel's anti-corruption exhibition hall and watch educational films to ensure that they don't dare to commit acts of corruption.

### Implementing hierarchical and classified risk management

Studying General Secretary Xi Jinping's speeches on the prevention and defusion of major risks, thoroughly implementing the decisions and plans made by the Party Central Committee and the State Council on preventing and defusing major risks, and giving full play to the role of the board of directors in leading and supervising the Company's comprehensive risk management; following the principle of hierarchical and classified risk management in establishing the "three defense lines" for risk management, and strengthening management and control of major risks, key units, and key business areas to ensure stable production and operations.



In 2020, more than **15,800** staff members holding key and important positions were included in the scope of supervision for the first time.

**300** cases were investigated throughout the year.

## Building a Responsible Brand

Quality is the lifeblood of a company. It embodies a company's core competitiveness and lays the foundation for its brand. We continue to enhance our quality management to create products of higher quality. With the big picture in mind, we orient ourselves towards customers' needs with a high sense of responsibility. Always being customer-centric, we make great efforts to strengthen customer communication, improve the quality of our services, and meet customers' diversified and personalized needs, striving to build Ansteel into a "flagship" in the iron and steel sector and consolidate the foundation of our brand.

## Improving Product Quality

Ansteel Group continues to improve the quality management system. In addition to establishing a product quality risk prevention and control mechanism to tighten the management of quality indicators, we strive for higher quality and efficiency by enhancing the staff's quality awareness and strengthening quality supervision and assessment.

In 2020, the coverage rate of our quality management system reached 100%. Pangang Group and Anshan Iron and Steel Group saved RMB 27 million and RMB 30 million of costs respectively through their quality improvement efforts. Pangang Group applied for approval of six of its products to be listed as provincial-level high-quality products. Besides, nine of the group's products won the Golden Cup Award, three teams were named "national excellent" QC teams, and four teams were named trustworthy teams.

Anshan Iron and Steel Group organized the Six Sigma quality management methods training for over 100 participants; Pangang Group organized quality management training for 120 participants; Ansteel Zhongyuan Industry Company organized the 2020 Comprehensive Quality Management Knowledge Competition for Employees Nationwide, which was participated by 886 employees.

We formulated and revised procedural documents and regulations related to quality issues, strengthened JLG (refinement, quantification, execution rigidity) management, enhanced the tracking and analysis of quality objections and unplanned products, improved the accountability system, and widened product application.

Ansteel Mining carried out research on key quality topics to solve prominent quality problems from their source and make up for its shortcomings in quality management. Being firmly problem-oriented, Ansteel Group Engineering Technology Corporation increased the intensity and frequency of quality inspections, carried out intensive rectification of quality problems and institutionalized the investigation of hazards, significantly reducing quality defects.



External audits by professional quality and measurement agencies and laboratories guaranteed steady operation of our certification system. Anshan Iron and Steel Group obtained over 40 domestic and foreign certifications covering automotive steel, ultra-high-strength offshore steel, Indian BIS, and so on and the four highest measurement standards of Pangang Group passed provincial assessment and authorization.

During the "Quality Month" event, we widely solicited suggestions based on the reality of production and operation, and organized quality-themed activities, such as the quality management knowledge competition and commendations for quality-trustworthy teams and outstanding quality staff. The event encouraged all the staff to take the initiative to take part in technological innovation activities and share quality results.



Checking the quality of a steel coil carefully

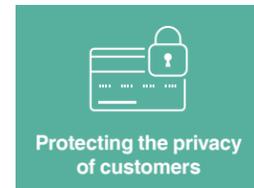


## Improving Customer Service

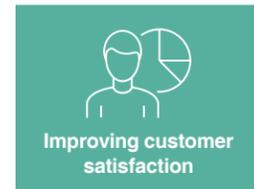
Adhering to the customer-centric and market-oriented approach, Ansteel Group seeks changes according to the needs of customers and strengthens the building of the marketing information system, the technical service team, the logistics and distribution system, and after-sales service. Insisting on creating quality products and offering excellent services, we provide customers with a full range of convenient services related to business, technology, products, information, logistics, manufacturing, etc., and have accelerated our transformation towards a comprehensive service provider that provides more satisfactory services and products for customers.



We strengthened our customer awareness, managed customer information efficiently, and provided customers with classified and differentiated services. Based on our improved customer files, we managed to respond to customer needs quickly. Besides, we identified persons that should be held accountable, clarified persons in charge, and optimized information transmission. In line with the principle of providing intensive, lighter, and smart customer service, we make full use of our information system for classified management of customers and strengthened our capability to provide differentiated services in accordance with the five elements of quality, cost, development, delivery, and speed (QCDDS). By implementing the large customer management system, we continued to meet large customers' personalized needs and boosted the value of large customers to the Company.



In compliance with the *Security Management Measures and the Market and Customer Management Measures*, we conducted systematic, tiered and professional management of customer files. By stipulating confidentiality provisions and signing non-disclosure agreements with customers, we advanced the construction of our customer management information system. We also supervised and guided the confidentiality management of computer and information systems, as well as communication and office automation facilities, thus ensuring customer information security effectively.



We implemented the *Customer Satisfaction Measurement Procedure* continuously, carried out regular customer satisfaction surveys and evaluations, and solicited opinions of customers and the market on the quality of our products and services. Our work reached all key industries and customer categories, laying a solid foundation for quality improvement and brand building. To realize the goal of improving customer satisfaction, we applied all kinds of management tools with improving the quality and efficiency of complaint handling as the focus, and improved our response to customer complaints. In 2020, Anshan Iron and Steel Group's customer satisfaction rate was 94.64%.



The "Ansteel – Always With You" customer exchange meeting

Anshan Iron and Steel Group received **2,000** complaints from customers, all of which were properly handled, guaranteeing a complaint handling rate of **100%**.

### Case Better after-sales service based on cross-departmental collaboration

The Department of Iron and Steel Products of Pangang Group establishes two customer service centers – the Pangang Vanadium Customer Service Center and the Xichang Steel and Vanadium Customer Service Center, which are supported by the five customer service sub-center located respectively in Chengdu, Chongqing, South China, East China, and Yunnan-Guizhou region. The customer service centers and sub-centers are responsible for the daily management of customer service work of the Department of Iron and Steel Products of Pangang Group and provide full-process services for customers before, during and after the sale of products, meeting customers' needs in a timely manner.

### Case Developing the BJ890 seamless steel tube to meet customer needs

The technical requirements for manufacturing steel tubes for the key bearing and supporting components of crawler cranes are very high, and only a few large domestic steelmakers have the ability to produce such steel tubes. The seamless steel tube R&D team of the Long Material Research Department of Ansteel Iron and Steel Research Institute accurately grasped the market and customer needs, and conducted multiple rounds of technical exchanges with SANY Group, a leading enterprise of high-end equipment manufacturing industry. After conduct research on the composition and process design, and implementing the industrial trial production plan, the R&D team successfully developed the seamless steel tube for BJ890 crane booms, and put the new product into trial production. A production-marketing-research integrated team was also established to cooperate with the customer's evaluation procedure. As a result, the product has passed SANY Group's rigorous inspection and evaluation, and entered the equipment manufacturer's list of qualified suppliers.



Carrying out quality inspection and information verification on rebar products



Meticulous iron casting



Checking the quality of steel plate surface



## Expanding Areas of Cooperation

Upholding the cooperation principle of “openness and fairness, complementary advantages, mutual support, and resource sharing”, Ansteel Group cooperates with all parties in areas such as material research and development, transportation and logistics, green manufacturing, and new energy applications, etc., and builds an open community of collaborative innovation to enhance the core competitiveness of the Company and promote the cooperation to a new level with new results.

## Deepening Industry Exchange and Cooperation

Ansteel Group vigorously expands cooperation, and has signed strategic cooperation agreements with a range of companies, including Xuzhou Construction Machinery Group Co., Ltd. (XCMG), Dalian Huarui Heavy Industry Group Co., Ltd. (DHHI), BYD Company, China International Marine Containers (Group) Ltd. (CIMC), Haier Group Corporation, China State Shipbuilding Corporation Limited (CSSC), Huawei, China Three Gorges Corporation (CTG), and so forth. Ansteel has also established several joint laboratories, such as the Hisense-Ansteel Home Appliance Steels Technology Laboratory, and invited experts from related advisory committees to give special reports and conduct technical exchanges. The Company has also provided guiding opinions and suggestions for the formulation of the 14th Five-Year Science and Technology Plan, resource development, technical improvement, the development of emerging industries, etc.



### Case

#### Taking responsibility for promoting industry exchanges and technological development

In 2020, Anshan Iron and Steel Group attended 20 academic conferences, such as the 22nd CSM Annual Steelmaking Conference, held a seminar on the application of key technologies in intelligent manufacturing, and jointly held conferences with local societies for metals such as “2020 Conference on Intelligent Coking, Low-cost and Ultra-low Emission Control Technology in Coking Industry”. The company also held events such as the “Innovation • Vitality • Development” Technology Forum and the “Keep Moving Forward • Live the Day to the Fullest” Highland Barley Forum. It kept up with the development of the steel industry, and discussed technological development with the participants, providing professional and comprehensive technical support for the industry.



Signing a strategic cooperation agreement with XCMG



### Case

#### Strengthening cooperation by attending the CIFTIS

Ansteel Group attended the 2020 China International Fair for Trade in Services with a trade delegation headed by the main leaders of the Company and sub-groups sent by subsidiaries such as Anshan Iron and Steel Group, Pangang Group, Angang Group International Trade Corporation Ltd., and Ansteel Zhongyuan Industry Company. In addition to displaying products and services offline, we also launched 2D and 3D booths on the cloud platform of CIFTIS, where we mainly displayed industrial solutions to products, technical services, supply chain innovation and applications, etc. The fair allowed us to fully display the strengths and brand image of Ansteel Group.



Attending the 2020 CIFTIS as a member of the central SOE trade delegations



Ansteel Group, as a member of the central SOE trade delegations to the 2020 CIFTIS, has not only set up its own trading delegation, but also actively encouraged its subsidiaries to attend the fair and negotiate deals. Ansteel has made positive contributions to the success of the 2020 CIFTIS.

—CIFTIS Organizing Committee

## Innovating in the School-Enterprise Cooperation Model

Ansteel Group has signed strategic cooperation agreements with the University of Science and Technology Beijing (USTB) and Shanghai University, and established the Ansteel Group-Northeastern University Advanced Materials Engineering Research Institute and the Pangang Group-USTB Vanadium and Titanium Research Institute. Ansteel has also joined the Shi Changxu Innovation Center for Advanced Materials, and signed the “Ansteel Open Fund” R&D Agreement with the Institute of Metal Research of the Chinese Academy of Sciences to achieve breakthroughs in core technologies for key fields and create a good external platform and ecology for technological innovation. In 2020, Ansteel Group signed with universities and research institutes 65 contracts for collaborative technology development, which involved a total of RMB 56.38 million in funds; Anshan Iron and Steel Group signed 18 technology development contracts with external parties, including the project of “Research and Development of High-Aluminum Steel Continuous Casting Mold Slag” with Northeastern University.



### Case

#### Joining the Shi Changxu Innovation Center for Advanced Materials

In 2020, Ansteel attended the first Shi Changxu Forum on Advanced Materials, and signed the “Ansteel Open Fund” R&D Agreement with the Institute of Metal Research of the Chinese Academy of Sciences. According to the agreement, Ansteel Group will invest RMB 5 million in scientific research per year in response to the actual needs of the country and itself, and will launch a number of targeted research topics focusing on original and cutting-edge new materials research, research on major basic scientific issues that restrict national development and common key technologies, interdisciplinary research basic in basic sciences, etc. We also selected the best member units of the innovation center to lead key research projects. We aim to directly apply achievements in scientific research to the production of Ansteel Group, and establish scientific research teams based on mutual trust and a long-term model for stable cooperation.



Signing the “Ansteel Open Fund” R&D Agreement

## Promoting Supply Chain Development

Supply chain optimization is the key to corporate development. Therefore, Ansteel Group has always been committed to building a high-quality procurement ecosystem that covers upstream and downstream companies in the steel industry chain, and strived to build a transparent, fair and just supply chain. The Company has been working with partners to fulfill social responsibility, and create a high-quality, high-efficiency, and high-value responsible supply chain. In 2020, Ansteel Group's responsible procurement rate was 100%.

## Improving Supplier Management System

Upholding the supplier management principle characterized by "strict review, classification and grading, appropriate quantity, dynamic monitoring, quantitative evaluation, and timely replacement," Ansteel Group is committed to promoting the sustainable development of the supply chain, and has improved the standard for supplier qualification review and conducted on-site reviews of suppliers. Our review of suppliers covers a number of aspects, including workplace safety, environmental protection, pollution prevention and control, business ecosystem construction, labor rights protection, etc.

In 2020, Anshan Iron and Steel Group reviewed 2,030 qualified suppliers, an increase of 134 suppliers over the previous year, and recommended 14 strategic suppliers; the company also canceled the qualifications of 620 sub-suppliers to supply materials, and the qualifications of 43 suppliers to supply all varieties of goods.

### Clarifying supplier qualification

We require suppliers to have legal qualifications for conducting production and operations, good business reputation and performance; require special product suppliers to have the required qualification certificates, the corresponding quality assurance systems, and the ability to continuously improve product quality. In addition to national standards, we also have our own requirements for suppliers' product quality, safety, environmental protection and other production and operation qualifications.

### Establishing supplier evaluation system

We cooperate with user units in conducting dynamic monitoring of suppliers through quarterly and annual evaluations and on-site reviews, and fully reflect process monitoring and quantitative evaluation. Once we discover that a supplier has serious breaches of contract, trust, law, and the code of conduct on honesty, we will immediately terminate the cooperation with them.



### Case Improving supplier management by formulating regulations

In 2020, Ansteel Zhongyuan Industry Company issued the *Regulations for Dealing With Non-Compliant Suppliers (Trial)*, which explicitly stipulates 27 violations of suppliers who are participating in the bidding process or in a cooperative relationship, and determines the implementation standards and procedures for handling suppliers with breaches of the regulations, as well as their permissions. According to the regulations, Ansteel Zhongyuan Industry Company conducts both static and dynamic evaluations of suppliers to promote orderly competition among them and further strengthen supplier management.



## Establishing a Transparent Procurement System

Ansteel Group upholds the procurement supply chain concept of "transparency, cost reduction, safety and efficiency", and has developed specific procurement rules for the Company, subsidiaries, and unit enterprises which highlights "regulatory compliance, transparent procurement, clear interface, equal rights implying equal responsibility, centralized operation, business collaboration, cost-effectiveness, and financial security". The Company has also built an open competitive pricing mechanism as well as a safe and convenient procurement model. In 2020, Pangang Group's centralized procurement and public procurement accounted for 87.69% of all completed procurement.

### Ensuring fair competition through public bidding

It is required that all projects that comply with the national laws and regulations on tendering and bidding and the *Ansteel Group Tendering and Bidding Management Measures* shall be put out to tender for procurement.

### Conducting strict procurement management and supervision

We incorporate all data generated from procurement and public bidding into the discipline supervision system and the audit system to achieve real-time control of the procurement process and results.

### Informatizing procurement processes

We realize the efficient integration of the procurement system with the e-commerce platform and the e-bidding platform to promote the coordination of procurement processes and make them more transparent.

### Disclosing bidding and procurement information

By releasing announcements of all invitations to tender on media platforms such as chinabidding.com.cn and bidchance.com, we ensure the transparency of information, and provide all potential bidders with access to the information they need and submit their bids, thereby creating a fair, just and open procurement environment.



**Case** Upgrading the “Internet Plus” Industrial Products Procurement Platform of Ansteel

By promoting the deep integration of the internet and the real economy, Ansteel Group has applied internet thinking to the innovation-driven development of the procurement supply chain, and continued to develop the Industrial Products Procurement Platform. Relying on the advantages of e-commerce in pricing, logistics, response speed, etc., as well as the expertise of Angang Steel’s technical experts and the procurement big data, the platform has introduced high-quality suppliers and products of suitable categories, and implemented internet-based value procurement and intensive procurement of steel products. In 2020, the Industrial Products Procurement Platform had more than 800,000 kinds of industrial products, with the annual total transaction value reaching RMB 470 million.

In 2020, Ansteel Group comprehensively upgraded the procurement platform, and built an open supply chain management service platform. According to estimates, the upgraded procurement platform managed to increase procurement efficiency by more than 45% and reduce overall procurement costs by more than 18%, which has not only “sped up” supply chain management, but also greatly enhanced transparent procurement.

**Building a Responsible Supply Chain**

Ansteel Group builds partnerships with companies that possess advantages in technology, resources, and equipment, and increases interdependence with them through the building of multi-dimensional systems in production, technology, service, and labor, as well as a reasonable resource and benefit distribution model. The Company advocates the values of mutual benefit and win-win cooperation in the ecosystem, improves the safety and environmental management capabilities of the supply chain, and optimizes its integrity system. We grow together with suppliers by strengthening cooperation with them, provide high-quality products and services to society, and pursue the optimization of the overall benefits within the ecosystem.



**Case** Deepening the exchange of supply chain development experience

At the 25th Supply Chain Innovation and Application Online Forum, Hou Haiyun, deputy chief engineer of Anshan Iron and Steel Group, gave a speech under the theme of “Building a Modern Supply Chain System and Fostering New Advantages of Corporate Value.” Centering around the construction of a collaborative, smart, standard and green supply chain by Anshan Iron and Steel Group and the “five unifications” (unified standard system, unified logistics service, unified procurement management, unified information collection, unified system platform), he shared with participants how Anshan Iron and Steel Group has played a leading role in influencing the connection, interaction, and collaboration between the upstream and downstream enterprises of the supply chain, as well as the steelmaker’s experience in creating new advantages of corporate value through the modern supply chain construction, achieving the improvement of environmental, social and economic benefits, and exhorting partners to fulfill their social responsibilities.



**Case** Jointly developing scientific and technological innovation projects with upstream and downstream industries

To meet Anshan Iron and Steel Group’s demand for better iron ore pellets, Ansteel Mining and its bentonite suppliers launched the “high-quality composite organic bentonite for iron ore pelletizing” project, which succeeded in reducing the average unit consumption of bentonite to less than 7 kg/ton, and dropped the total consumption by more than 35% during the industrial test; under the premise that other raw materials remain unchanged, the iron ore pellets grade can be increased by more than 0.2%. The quality indicators of raw pellets and finished pellets all meet the relevant standards. The project can generate both economic and social benefits, thereby boosting the development of the steel industry chain.





# Sharing

## Improving People's Well-being

Upholding the people-oriented philosophy, Ansteel carries forward the spirit of the Ansteel Constitution, and shares the fruits of development with employees and the community. We attach significance to workplace safety, and promote the implementation of relevant measures to ensure the safety of employees. We support employee growth, and strive to enhance the vitality of the Company by creating a healthy and positive working environment. We actively participate in community building to ensure and improve people's well-being while seeking development; we give back to the community, promote the harmonious development of society, and contribute to common prosperity by sharing the fruits of development with the people.



<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>4</b> QUALITY EDUCATION 	<b>5</b> GENDER EQUALITY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 
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## Ensuring Workplace Safety

Safety is the cornerstone of the healthy and rapid development of all businesses. Ansteel Group has firmly established the concept of safe development, and always puts life above everything else. We firmly believe that development should not be at the expense of human lives and always do our utmost to prevent major and extremely serious accidents. We improve the institutional system to strengthen the implementation of responsibilities; focus on identifying and resolving problems, and have launched a campaign to enhance workplace safety; dynamically adjust the focus of our work, and implement specific measures around a theme every quarter; fix shortcomings and address weaknesses to continuously improve workplace safety management.

### In 2020

Ansteel Group prevented all major and extremely serious workplace safety accidents, and reduced general accidents by **15.79%** year on year.

Anshan Iron and Steel Group spent RMB **126** million on workplace safety.

Pangang Group spent RMB **376** million on workplace safety.

## Improving the Safety System

Ansteel Group has continuously improved the institutional system and responsibility system for safety management, and has amended the *Ansteel Group Corporation Limited Workplace Safety and Fire Accident Management Measures*, the *Ansteel Group Corporation Limited Related Party Safety Management Measures*, and the *Ansteel Group Corporation Limited Accountability System for Workplace Safety*. We have strengthened the management accountability of related parties for accidents, formulated the control list of related parties, and further ensured that the duties of leaders at all levels for workplace safety are performed and that the supervision and management responsibility of subsidiaries are assumed. We ensure that officials take responsibility for workplace safety in performing their duties, and implement the “five clearances and five eliminations” work method supplemented with well-developed operation processes and a supervision mechanism. We strengthen on-site safety management, and have set up the project to build a safety management information system at Ansteel Group’s headquarters to effectively improve overall safety management.



### Case Enhancing security protection

**Anshan Iron and Steel Group** has invested more than RMB 60 million in workplace production. It invested in 263 projects for strengthening safety, tackled safety hazards, improved the work environment, and enhanced intrinsic safety of operation sites. In some production lines and manufacturing processes of the Hot-rolled Strip Mill and the Business Unit of Medium and Heavy Plates under Ansteel New Steel Rolling Co., Ltd., the “electronic operating board” was applied to support workplace safety with technological means.

**Pangang Group** made a checklist of responsibilities of corporate leaders with the frequencies and requirements for the fulfillment of responsibilities clarified. It also made checklists of responsibilities of the company itself, responsibilities of each position, risks that should be managed and controlled, and items in daily security work. Pangang Group also eliminated safety hazards of gas pipelines, completed the installation and commissioning of the SIS system for major hazards of active gas tanks, enhanced its capabilities to prevent and control major risks, and strengthened labor protection.



### Case Standardized management of workplace safety

Ansteel Group actively seeks certification to workplace safety management systems and promotes standardized management of workplace safety:

**Anshan Iron and Steel Group** revised eight and formulated three safety management provisions in national laws and regulations as well as industry norms and standards, optimized the structure of the Safety Management Division of the Safety and Environmental Protection Department, and separated safety management responsibilities from safety supervision duties. The company created a safety management mechanism with “business departments taking charge and safety supervision departments carrying out comprehensive supervision.” A safety and environmental protection supervision team comprising smelting and hazardous chemical experts was set up to make on-site safety inspections more professional.

**Pangang Group** establishes a hierarchical workplace safety management system. Company-level, sub-branch-level and factory-level workplace safety management committees are set up with an office set up under each committee to support its safety work. Under each of the three tiers of committees, there is a dedicated safety management department. Besides, each operation area (workshop) has a safety management leading group, which is comprised of full-time safety management personnel to consolidate the foundation of workplace safety management. In Pangang Group, there are 627 full-time safety management staff and 296 registered safety engineers in total, fully meeting the needs for safety management and control. Among the subsidiaries (units) and independent legal entities under Pangang Group, 57 units have obtained workplace safety standardization certificates, including 42 second-level certificates and 15 third-level certificates.

## Promoting the Safety Culture

Ansteel Group has been organizing the Work Safety Month campaign over the years. By convening safety management exchange meetings and offering training on the identification of major safety risks and improvement of management and control capabilities, we have strengthened corporate leaders’ ability to take responsibility for workplace safety in performing their duties and prevent and defuse major risks. Moreover, we have strengthened employees’ awareness of workplace safety by combining on-site with online training.

### Publicizing safety knowledge

Anshan Iron and Steel Group held the “Ankang Cup” employee safety knowledge contest, as well as painting, calligraphy, photography contests and exhibitions on workplace safety. Through bulletins, slogans, the five minutes before work, and new media, Pangang Group produced educational videos on workplace safety, disseminated typical cases, and conducted online safety knowledge quiz and competitions.

### Organizing skills training

Anshan Iron and Steel Group held a training class on “performing the main responsibility for safety and promoting the intrinsic safety of the company,” where training in coal gas and high-voltage electricity were offered to improve the management and operation skills of technical personnel. Pangang Group launched two training programs for key persons in charge and safety management personnel on safety knowledge and management capabilities, and one training program for registered safety engineers.

### Organizing safety-themed educational activities

Ansteel Group conducted an educational activity with the theme of “Young Employees Playing a Leading Role in Improving Workplace Safety”, which focused on the “six areas requiring concerted efforts” and joined forces to improve safety.

### Anshan Iron and Steel Group

Anshan Iron and Steel Group carried out training on workplace safety regulations, safety skills training and emergency response and rescue training, which involved **75,537** participants in total; provided initial certificate application and review training for **7,419** trainees engaged in special types of work.

### Pangang Group

Pangang Group organized various training classes where workplace safety experts from Sichuan Province were invited to give training on the safety management of hazardous chemicals, and experts from the Panzhihua Fire and Rescue Detachment were invited to offer training to **53** full-time and part-time fire safety personnel of the company; conducted **12** company-level compulsory fire brigade training sessions for a total of **132** trainees; conducted **27** driving safety training sessions, and trained more than **600** full-time drivers and managers.



## Cultivating Dynamic Teams

Human resources are a valuable resource for corporate development. Ansteel Group has constantly improved the employment management system to cultivate teams of high-performing personnel, and also established a scientific, institutionalized and standardized employee training system. The subsidiaries have also developed their own employee development plans, taken multiple measures to conduct staff training to fully tap the potential of employees, and provided diversified promotion channels for employees to unleash their vitality.

## Employee Rights and Interests

Ansteel Group strictly abides by relevant laws and regulations, pays social security for employees, safeguards employees' legal rights and interests as well as their personal privacy, and builds harmonious labor relations with them. In 2020, Ansteel Group had 105,762 employees.



### Case Anshan Iron and Steel Group in the "Safety Improvement Year"

Anshan Iron and Steel Group clarified the annual objectives and indicators for enhancing workplace safety level by level, signed responsibility statements with personnel at each level, and detailed the implementation plans and measures to ensure that duties could be performed at all levels. The company also regulated the duties of managers at all levels, and required safety all directors, supervisors and administration staff to wear their own armbands, thereby enhancing their sense of responsibility.

The company conducted safety management performance assessments and regular inspections with a focus on the supervision and assessment of the performance of managers at all levels, such as how they implement the accountability system for workplace safety in their daily work. The company also investigated and resolved problems existing in safety management, and intensified efforts to ensure that those who fail to uphold safety standards are held accountable in accordance with rules and regulations.

## Protecting Occupational Health

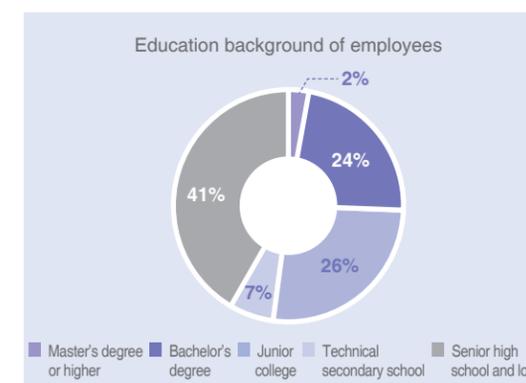
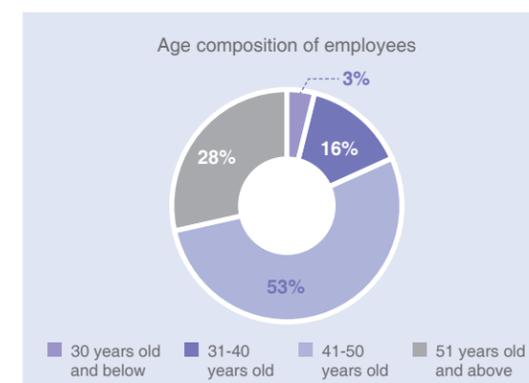
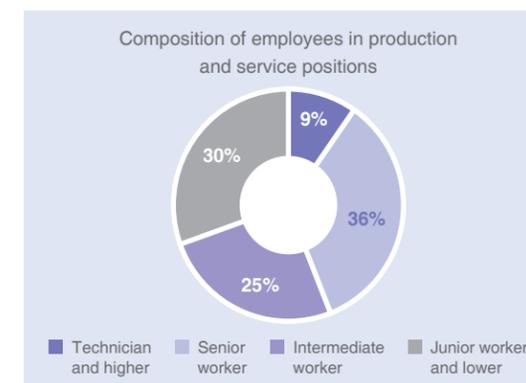
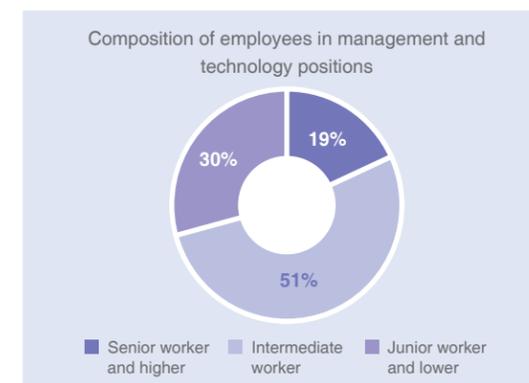
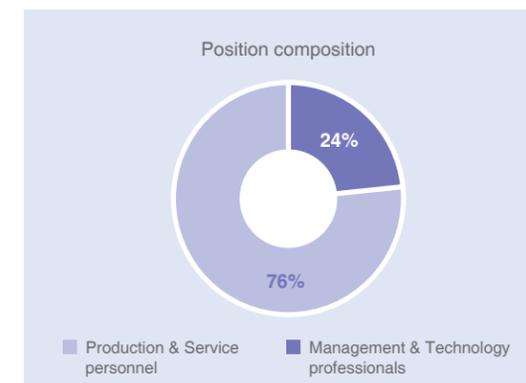
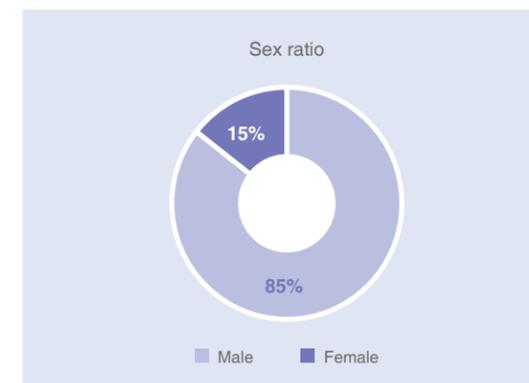
Ansteel Group attaches great importance to employees' occupational health, and strictly implements the *Occupational Health Management Measures of Ansteel Group* and the *Occupational Health Inspection and Testing Plan*. In 2020, we achieved two "100%" goals in occupational health examinations and occupational hazard factors detection. We also launched a campaign known as "implement the concept of sharing and care for front-line employees" to improve the working environment for all employees.

**None** of the employees at Pangang were diagnosed with occupational diseases.

**7,151** employees received occupational hygiene training.

Several subsidiaries, including Pangang Vanadium, Ansteel Mining, Anshan Iron and Steel Group, and Ansteel Group Engineering Technology Corporation, obtained the **Occupational Health and Safety Management Systems (OHSMS) certification**.

In 2020



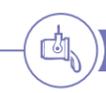


## Talent Development

Ansteel Group has developed the employee growth platform and the employee training management system, and introduced talent development management methods such as the hierarchical, targeted employee training program and school-enterprise joint training programs. We focus on identifying and resolving problems in meeting the needs for corporate development, strive to broaden the horizons of administrative staff. In order to diversify training channels and strengthen the capabilities to conduct independent training, we have expanded the “online + offline” training model to educational enhancement, professional knowledge and skills, special training and special skills enhancement, etc., thereby cultivating more talents for the Company’s production and operations, as well as its reform and development. We focus on the improvement of job skills and professional abilities while promoting the “integration of practical operation and inspection” and “joint operations of major types of work,” so as to strengthen the training of compound types of work and personnel who have been transferred to new posts.

### In 2020

Ansteel invested RMB **103.25** million in employee training and education, and launched **7,368** training programs for more than **220,000** trainees in total. The total training time reached **5.5** million hours, and the average training time for each trainee was **55** hours.



### Case Launching the vocational skills improvement campaign in Anshan

In 2020, Ansteel Group continued to launch the campaign to improve the vocational skills of staff. We comprehensively publicized relevant national policies, encouraged employees to actively participate in vocational skills evaluation, and also implemented a new apprenticeship system. For the training of newly recruited employees within three years and transferred employees holding technical positions, we implemented the “enterprise-school joint, work-training integrated” training model in cooperation with internal and external training institutions, and also provided the trainees with allowances. We apply for allowances for employees who have obtained certificates of qualification for employment or vocational skills level certificates. In 2020, we applied for more than RMB 14.39 million in allowances. In addition, we have improved the communication between technical staff and highly skilled personnel to broaden talent development channels.



#### Implementing equal employment

We sign labor contracts with employees in accordance with the law, oppose employment discrimination, and ensure equality between men and women and among different ethnic groups. We treat employees equally regardless of race, gender and religious belief, and prohibit any forms of forced labor and child labor.



#### Improving the remuneration system

We implement the *Ansteel Group Remuneration Management Measures*, optimize the remuneration system, pay employees in full on time, and establish the differentiated remuneration distribution mechanism and the employee remuneration increase mechanism.



#### Improving employee benefits

We develop the employee insurance system according to the insurance policies and conditions in different regions, and purchase endowment insurance, medical insurance, unemployment insurance, employment injury insurance, supplementary medical insurance, supplementary work injury insurance and housing provident fund for all employees, and pay the premiums in full. In 2020, we paid social security for all employees, and also launched supplementary pension schemes for eligible subsidiaries.



#### Protecting time-off benefits

We protect the time-off benefits of employees, and provide them with paid annual leave, marriage leave, maternity leave, breastfeeding leave, etc.



#### Deepening democratic management

We improve the democratic management system based on the workers’ congress, encourage employees to make reasonable suggestions, and carry forward the spirit of the “Ansteel Constitution.” We also conduct the real-name “online questioning” activities, listen to the voices of employees, and uphold their right to stay informed about, participate in, express views on, and oversee corporate operations.



Trainees of the “Post-80s” young cadre training class singing in a red song chorus



## Vocational Development

Ansteel Group keeps improving career development channels for employees, and has built an innovative post management system upon three elements: post, ability, and performance, which focuses on four dimensions: post category, post level, post rank and salary scale. We have also established 10 job levels based on the management sequence, including engineering, R&D, sales, skills, etc., so as to broaden the development channels of personnel through multiple means, and promote the “horizontal exchange and vertical promotion” in Ansteel Group. We have formed an “H” type talent development channel that has realized the interconnection between corresponding levels of the professional and technical talent sequence and the management talent sequence.



### Case Providing customized training programs for young employees

Pangang Group has launched the “one employee, one mentor, one road map, one table” staff training plan for newly recruited employees and young cadres, which covers training programs lasting 3 to 5 years that aim to help employees fix their shortcomings, strengthen their foundation, and improve their abilities. According to the plan, each new employee will receive work, life and study instructions from an experienced employee. The company also develops specific personal training plans for new employees, and selects appropriate courses to support their development.



Tao Gongming

National Model Worker, Outstanding Communist Party Member awarded by the SASAC, and Recipient of the State Council Special Allowance



Gu Ancheng

National Highly Skilled Worker



Liu Tie

Holder of the National May 1st Labor Medal



Qu Xiaodong

National Model Worker

## Employee Care

Adhering to the principle of “being employee-centric, putting strugglers first,” Ansteel Group protects employees’ legal rights and interests, deepens democratic management, and builds harmonious and stable labor relations. We organize diversified cultural, sports and entertainment activities to enrich employees’ spare time and show our care for them, thus enhancing their sense of gain and happiness, and deepen their recognition of the Company.

## Caring for Employees

Ansteel Group launches well-organized summer vacation activities for employees, holds birthday celebrations for them, sends them greetings and gifts during the scorching summer and cold winter, and organizes quality service competitions among staff canteens, so as to create an employee service brand. Besides, an information-based assistance system has been established to enhance mutual assistance among the staff.



Drinks sent to employees during summer

### In 2020

- Donated RMB 6 million to assist needy employees from affiliated enterprises of the Company.
- Visited 43,385 employees with difficulties and retired employees, distributed RMB 18.0065 million in relief funds.
- Disbursed RMB 12.23 million in medical relief funds, benefiting 2,702 people in total.
- Provided targeted assistance to 50 national-level and 436 company-level needy employees, relieved difficulties for 316 of them and eliminated all difficulties for 114 of them.



### Case Diversifying online channels for shared human resources services

In compliance with the principle that human resources service should be standardized and efficient, serve employees, and support business development, Ansteel Group builds a shared human resources service to provide considerate, convenient, professional and efficient human resources service for all employees and create a diversified service model combining online and offline resources. In 2020, we established a call center for shared human resources service, which added the online voice consultation service. Employees in Anshan can call for service at 6731999, to learn about relevant policies and regulations and business procedures, and report problems they met while accepting service. The call center helps the Company further understand the needs of employees and improve service efficiency.



**Case** Bringing warmth to employees with love

By launching the special service action of "pursuing the idea of shared benefits and caring for the front-line employees," Pangang Group Mining solicited opinions and suggestions from employees through visits, seminars, the internet, phone calls, WeChat groups, etc., and identified issues attracting the most attention among front-line employees as projects of the employee care action.

In 2020, Pangang Group Mining invested RMB 5.16 million in the renovation of 4 canteens and 9 small rooms for teams, optimizing the dining environment, logistics facilities and sanitation.

**Improving Work-Life Balance**

Ansteel Group organizes various cultural and sports activities for employees, and strives to ensure their work-life balance. In order to meet the need of employees for a better life, and enhance their sense of happiness, the affiliates of Ansteel also organize various employee activities, such as reading clubs, calligraphy, art and photography exhibitions, poetry recitation, basketball games, and brisk walks. We publish the typical cases of female employees and female groups in a new column named "Dreams of Female Employees, Live the Day to the Fullest" on *Ansteel Daily*, and have also created a column named "Uphold the Spirit of Model Workers and Create Brand-New Achievements" to circulate stories of model workers. In 2020, Ansteel organized more than 120 cultural and sports activities of various types with 38,000 participants.



A badminton game during the cultural festival



Organizing a balloon volleyball game for young employees

**Supporting Public Welfare**

Ansteel Group has always been committed to giving back to the community and working together with all stakeholders to improve public welfare. We pay attention to social needs, and draw on our own strengths to bring as much benefit as possible to the people and resolve as many difficulties as possible for them. We support the development of local communities, and carry out volunteer services to share a better life with the people.

**Offering Community Service**

Ansteel Group supports local infrastructure construction, and closely cooperates with the Anshan Municipal Government in connecting and extending industry chains. We fully leverage our advantages, and actively integrate into the "One Body, Two Wings" strategy of Anshan as well as its construction of six major industrial parks. Through the two-way mixed ownership reform and the connection of upstream and downstream industry chains, we have achieved integrated development with local enterprises, and contributed to the high-quality development of the regional economy. We support the economic and social development in poor areas, increase support for public service resources in those areas, and build local infrastructure. We focus on community communication and participation, and allow stakeholders to get a better understanding of the Ansteel quality and Ansteel culture by inviting them to visit us and join research and study activities. We organize volunteer activities to better serve community construction and development.



Building residences for elderly people suffering hardships



Voluntary blood donation by employees of Ansteel



A volunteer from Ansteel offers community service



Children visits the Company's testing laboratory

## Getting Involved in Charity and Philanthropy

Ansteel Group actively performs its social responsibility, supports local pandemic prevention and control, and helps people in hardships. We have cooperated with the youth volunteers association in building a youth volunteer platform, and carried out several charity activities, such as the spring tree-planting activity to “commemorate the 101st anniversary of the May Fourth Movement,” and the “Carrying Forward the Lei Feng Spirit by Learning From Guo Mingyi” book donation activity. In 2020, the number of young volunteers of Ansteel Group reached 6,775, and we organized 730 volunteer activities, which involved a total of 7,000 volunteers.

In 2020, Ansteel Mining launched the campaign known as “Carrying Forward the Lei Feng Spirit by Learning From Guo Mingyi and Becoming a High-Caliber Mining Company Employee”, and set up the Guo Mingyi Loving team composed of more than 9,000 employees. The team members actively participated in volunteer activities, such as blood donation, hematopoietic stem cell donation, the Red Cross rescue team, donation to schools, social volunteer service teams, etc. In 2020, the Guo Mingyi Loving team donated RMB 685,361 to support the fight against the pandemic.



### Case

#### The “Carrying Forward the Lei Feng Spirit by Learning From Guo Mingyi” book donation activities

Ansteel Group encourages employees and their family members to donate books to schools, and uses various channels to expand the influence of the book donating activities. In 2020, our employees donated more than 12,000 children’s books, Chinese and foreign classics, and reference books to 7 primary and secondary schools. While supporting poverty alleviation, we also carried forward the Lei Feng Spirit, and were praised by those schools and the local governments.



The book donation



### Case

#### Pangang Group organizes volunteer activities under the “Run” campaign

Pangang Group joins Ansteel’s “Carrying Forward the Lei Feng Spirit by Learning From Guo Mingyi” campaign, and continues to conduct volunteer activities under its “Run” campaign. In 2020, Pangang Group carried out three volunteer activities named “A Loving Children’s Day,” “Building Dreams for the Future,” and “Warm Winter.” Volunteers from Pangang Group gave gifts to 39 teenagers from low-income families before Children’s Day and the National Poverty Relief Day, and took them to the red base and science education base for visits. In the winter of 2020, they gave gifts to 85 left-behind children and 39 people receiving paired assistance. They worked hard to solve the difficulties faced by the children, bringing care and warmth to them.



The “Warm Winter” volunteer activity of the “Run” campaign

## Outlook 2021

We will forge ahead in the new area, and embark on a new journey. In 2021, we will follow the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, stay confident, and bring together the energy of all employees in pursuing progress. We will harness reform and innovation as the key source of our development, apply systems thinking, and improve our performance of social responsibility with more contributions to economic and social development and a complete social responsibility management system. We will leap forward in pursuing high-quality development, and celebrate the centenary of the CPC with new achievements.

**We will implement the strategy for invigorating the Company through science and technology, and build an innovation-driven Ansteel.** We will increase motivation for pursuing innovation-driven development with a focus on achieving breakthroughs in core technologies for key fields and in the development of key products by vigorously strengthening the construction of innovation platforms, and creating a sound innovation ecology. We will strengthen innovation in technology, model, and management, and establish a new model of intelligent manufacturing to promote digital upgrading and empower the steel industry with the new generation of information technology.

**We will promote balanced business development between regions, and build a harmonious Ansteel.** We will focus on the mission of “playing the strategic supporting role of the state-owned sector,” promote mergers and reorganizations, and form an operating mechanism with each performing its own functions and duties in a coordinated manner. We will seize the opportunities brought by transformation and upgrading, market expansion and regional development, optimize the industrial structure, and integrate into the national strategies of western development and revitalizing northeast China, as well as the building of the Belt and Road, thereby creating a broader space for corporate development.

**We will prioritize ecological conservation, and boost the green development of Ansteel.** We will promote the “clean, green and low-carbon” development of the steel industry, and research into the formulation of action plans for achieving the goals of “peaking carbon dioxide emissions” and “achieving carbon neutrality.” We will continue to follow the principle of “adjusting measures to local conditions and focusing on key points” in building a new pattern of ecological restoration. We promote the development of green mines with technology, realize the double circulation of resource utilization and ecological conservation through innovation, and improve quality and performance through pollution control and recycling.

**We will improve brand building, and build an Ansteel of integrity and trustworthiness.** We will do our best to maintain the open, fair and just market order, guarantee the quality of products and services, and accelerate the transformation to a service-oriented steel company. We will always be “customer-centric” while improving the awareness and capability of offering high-quality services. We will enhance Ansteel’s influence by promoting the modernization of the industrial chain, and exploring new models for industry exchanges and international cooperation, which allow all parties to draw on each other’s strengths and share resources.

**We will strive to improve people’s well-being, and build an Ansteel of happiness.** We will always shoulder the mission of being a central SOE, and make every effort to ensure workplace safety. We will always put people first, and ensure that development is for the employees and by the employees. We will implement the strategy of strengthening the Company through human resources in an effort to provide sufficient human resources for the development of the Company. We will improve employee care to enhance the cohesion within the Company, and devote ourselves to charity and poverty alleviation to give back to society.

Looking forward to the future, we will endeavor to achieve the goal of “becoming the most influential steel company in the world”, stay true to our original aspiration of “remembering the responsibility of the eldest son of the Republic and dedicating ourselves to serving the country,” and uphold the mission of “producing better material, and creating more wonderful life.” We will work to ensure a good start during the 14th Five-Year Plan period, and build a brand new Ansteel featured by high-quality development that is also a cornerstone of national security, a vanguard of the steel industry, a model of openness and sharing, and a fine example of SOE reform.



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## Feedback Form

### Dear readers,

This is the eleventh sustainability report of Ansteel Group released to the public. We would like to solicit your opinions and suggestions so as to help us make constant improvement in our fulfillment of social responsibility and achieve sustainable development. We would highly appreciate it if you could spare some time to share your thoughts with us on the following issues:

1. Do you think this report reflects the significant impact that Ansteel Group has exerted on the economy, society and environment? (Please tick your option.)

Yes  Fairly  No

2. Does this report make an exact and comprehensive analysis of the relationship between Ansteel Group and other stakeholders? (Please tick your option.)

Yes  Fairly  No

3. Are the information, data and indexes disclosed in this report clear, accurate and complete? (Please tick your option.)

Yes  Fairly  No

4. Are the content layout and format design in this report helpful to your reading? (Please tick your option.)

Yes  Fairly  No

What makes the most satisfactory part of this report?

Is there any necessary information omitted in this report?

What are your opinions about our report on sustainable development to be released in the future?

### Your Information

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