Chapter 6
Coordination

The connotation of "coordinated development" of the iron and steel industry means consistent industrial policies, uniformed policy standards, operable policy implementation, a fair and competitive market environment and guides members in the iron and steel industry to a common platform to fully compete and healthily develop. Therefore, the book focuses on the coordination of the iron and steel industry from the perspective of industrial policy guidance and the establishment of a fair market environment. It mainly includes three aspects: first, the improvement of the industrial policy system and the establishment of a long-term mechanism for cutting overcapacity; second, to promote competitiveness as the core and promote the reorganization of iron and steel enterprises; focus on supporting the combination of dominant iron and steel enterprises and the reorganization of the enterprises with specific market-featured products to create world-class steel enterprise groups with international competitiveness; the third is to resolutely crackdown on the production and sales of substandard steel and counterfeit and illegal authorized products, so as to force the production capacity that does not meet the requirements of laws, regulations, industrial policies, and relevant standards to exit from the market. In this way, can we create a fair and competitive market environment, restore the market in good order, and promote healthy development of the iron and steel industry.

6.1 Symptom of Disordered Iron and Steel Industry

The year 2000 has witnessed the rapid development of China's economy and accelerating urbanization, thus drastically expanding market demand for iron and steel products and momentous development of iron and steel industry. For example, during the 10th Five-Year Plan period, China's economy was growing at an average annual rate of nearly 9.8%, and the urbanization rate was increased by 1.36% per year. The crude steel output was boosted by 2.75 times during the same period, with an average annual growth rate of 22%. During the 11th Five-Year Plan period, the average annual growth of China's economy reached almost 11.4%, and the urbanization rate was

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enhanced by 1.39% on an annual basis. During the same period, the crude steel output was increased by 1.81 times with an average annual growth rate of 12.6%. During those years, about 50 million tons of iron and steel production capacity was added every year. What is more notable is the fact that in 2012 the increased volume was 89.56 million tons and in 2013 the number even reached 120.97 million. The long-term extensive growth has spawned a large number of illegal production capacities that violates environmental protection, quality, safety, and land regulations and has seriously disrupted the market order. Moreover, the mechanisms for supervision and penalties as well as exit of backward production capacity were not well-established, the inefficient capacity and zombie enterprises were hard to be expelled based on the market selection, the industry lacked sufficient self-discipline, and the market competition was in chaos. All these have aggravated the vicious competition in the market.

A disordered market was manifested in three aspects specifically: First, the number of enterprises is huge; however, the degree of industrial concentration is low; and the homogeneous competition is becoming increasingly fierce. The decisive role of market in resources' allocation cannot be effectively exerted, which makes the reduction of production, salary, and staff, and even the suspension of production becomes the new features of the development of the iron and steel industry. For example, the suspended production capacity of China reached 93 million tons in 2015, with major large- and medium-sized iron and steel enterprises suffering a total loss of 64.534 billion yuan throughout the whole year, and particularly the main business loss amounted to 112.663 billion yuan, with a scale of losses of over 50%; the second is the common fact that enterprises in the iron and steel industry extensively used excessively low prices to seize market shares, as many say: "The enterprises are hard to live and even hard to die, because they are in a vicious price war and hold the last breath on low price. That is so common in the entire iron and steel industry and the biggest obstacle in the way of capacity reduction". For example, the cost of stainless steel scraps, the main raw material for ordinary stainless steel, is 16,000 yuan/ton, plus 1,500–2,000 yuan/ton as the processing cost, requiring at least 17,500–18,000 yuan/ton to produce finished products. But during a period of time, it has become a common phenomenon that the steel plants only ask for 17,000 yuan/ton. Third, in order to get huge profit, some enterprises produce, sell, and use the substandard steel in large quantity, or illegally use labels of other brands and counterfeit them in production and sales. The existence of the huge numbers of substandard steel in market aggravates overcapacity, and what is more serious is that the fake and poor quality steel products directly incur the effect of "bad money drives out good". For example, Henan Province has the annual re-bar sales of about 8 million tons from Anyang Steel; however, actually Anyang Steel only produces 1.5 million tons of re-bar each year.

6.2 Ways to a Coordinated Iron and Steel Industry

6.2.1 Guarantee of Policy System for Iron and Steel Industry

In the process of rapid development of China's iron and steel industry, fueled by the continuous technological progress and the gradually upgraded energy conservation and emission reduction standards, China's iron and steel industrial policy system has been unceasingly improved and developed, covering all aspects including eliminating backward and excessive production capacity, enterprises' merger and reorganization, industrial planning, standardized market access, environmental protection, energy-saving and resources guarantee, thus guiding the industry to develop in an ordered way and promoting the industrial transformation and upgrading. Among them, the elimination of backward and excessive production capacity is significant throughout the whole course of the industrial development and also becomes the epitome of the development of policies for the entire iron and steel industry. Especially, consistent improvement of comprehensive criteria and requirements on environmental protection, energy consumption, safety, quality, etc., has become an essential need for the development of enterprises in the industry and legitimate elimination and reduction has become the most effective and fair means to resolve the excessive capacity.

Under the new normal, China's economic growth has transformed from high speed to medium–high speed. With the transformation of economic structure, development impetus, and modes, the consumption intensity of steel per unit of GDP has decreased significantly; the consumption of steel has been over the peak value and started to reduce. The "double reduction" of production and consumption indicates that China's steel industry has entered a new era of development with reducing output. The serious overcapacity has increasingly become a prominent contradiction and the root of many problems in China's economic development. In December 2015, the Central Economic Work Conference proposed "cutting overcapacity, destocking, deleveraging, reducing corporate costs, and shoring up weak spots", ranking "cutting overcapacity" as the top of the five major tasks and especially emphasizing the decapacity of the steel industry as an important area and pilot to promote supply-side structural reform. *Opinions on Resolving Excessive Production Capacity of the Iron and Steel Industry to Realize Profitable Operation and Development* (No. 6 [2016] of the State Council) and eight supporting documents were released, together with special actions to curb illegal construction projects, eliminate backward production capacity, and carry out joint law enforcement, to form a relatively complete "1 + 8 + 3" industrial policy system, opening a new chapter in the healthy and orderly development of the iron and steel industry.

The supply-side structural reform is not based solely on equipment size as the basis for cutting overcapacity, but relies on strict enforcement on environmental protection, energy, quality, safety, and technology, defining the five bottom lines which are mandatory to force the capacity entities that do not comply with laws and industrial standards to exit from the market. That guides the iron and steel enterprises to gain development space from environmental protection, to get benefits from

energy saving, to seize market with superior quality and renowned brand, to guarantee their development with safety production, and to lay development foundation with advanced process and technology and leads the iron and steel enterprises to a healthy and sustainable path of development. The schematic diagram of policy system for cutting overcapacity in China's iron and steel industry [1] is shown in Fig. 6.1.

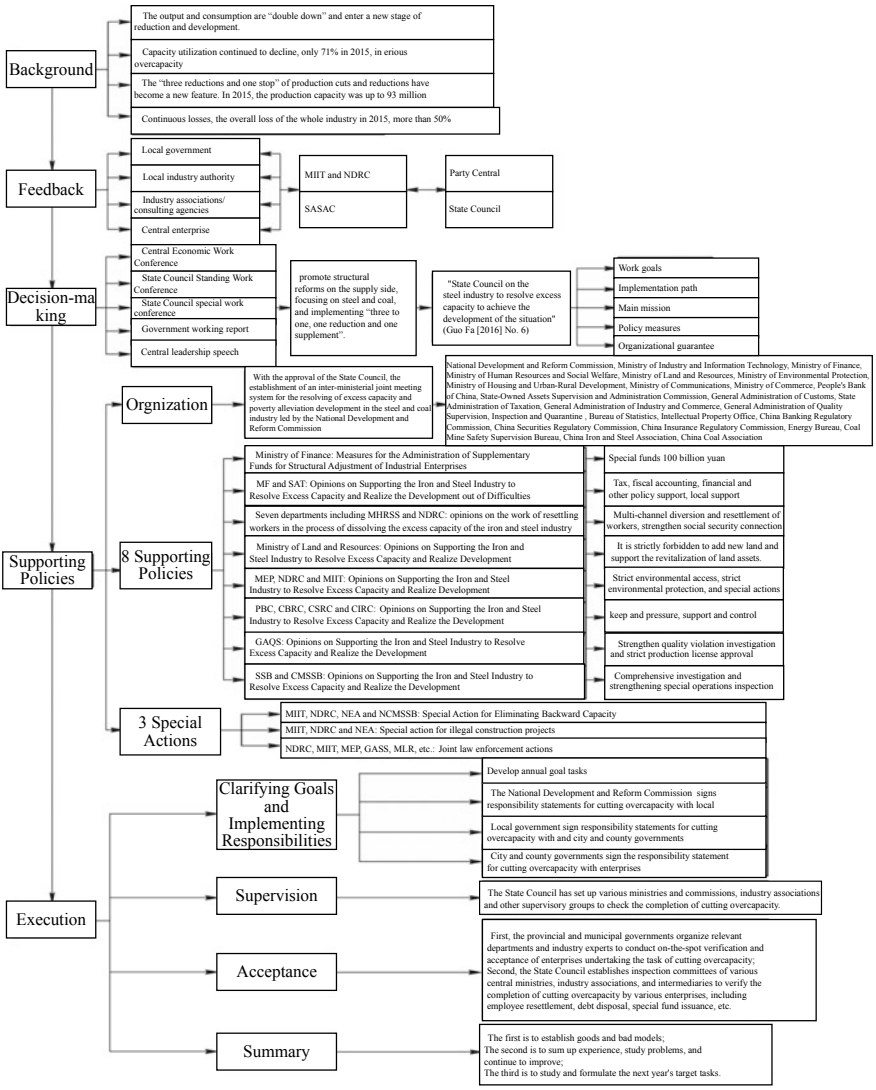

Fig. 6.1 Schematic diagram of policy system for cutting overcapacity in China's iron and steel industry

1. Problems in Policy System of Iron and Steel Industry

In the current policy system of iron and steel industry, there are four problems that are urged to be resolved.

First, the standards are not uniform. For example, the *Guidance Catalogue for Industrial Restructuring* (*2011*) (Revised in 2013) and the *Standard Conditions for Iron and Steel Industry* (Revised in 2015) are inconsistent with the nominal capacity of new converters and electric furnaces; inconformity also emerges in calculation of production capacity on the same specification between the *Notice on Issuing of Methods to Implement Capacity Replacement in Industries with Seriously Excessive Production Capacity by Ministry of Industry and Information Technology* and the *Notice on Issuing of Eliminating Illegal Projects in Iron and Steel, Electrolytic Aluminum and Shipbuilding Industries by National Development and Reform Commission and Ministry of Industry and Information Technology* as well as other inconsistencies.

The second is the relationship between the long-term mechanism and the special action plan. At present, there is no sufficient or complete long-term mechanism guiding healthy development of the iron and steel industry, but is led by a series of specific actions sush as backward capacity elimination, illegal projects cleanup, joint law enforcement, which resulted in huge cost on the one hand, and only can be deemed as short-term behavior instead of promoting the development of iron and steel industry in the long run and overall.

The third is the establishment of a fair and competitive market environment and the issue of giving play of energy efficiency. State-owned iron and steel enterprises have taken on more social responsibilities which especially are the historical burdens. That means they have played a more active role in taxation, environmental protection, staff resettlement, etc. While private steel enterprises have already supported the other half of China's iron and steel industry, although many have been blamed for poor environmental protection, low product quality and tax payment, etc., the private enterprises have paid more in financing and getting loan compared with the state-owned enterprises.

The fourth is the problem of multiple management authorities and overlapped function. In September 1956, the Ministry of Metallurgical Industry was established. It is the functional department under the State Council in charge of the national metallurgical industry. The functions of governmental authorities and enterprises are separated. With the principles of grasping macro issues while letting free the micro ones, the Ministry has simplified its structure and transformed its functions to manage the metallurgical industry in industrial planning, coordination, supervision, service, etc. In March 1998, the State Council's institutional reform program reorganized the Ministry of Metallurgical Industry into the State Bureau of Metallurgical Industry and became the administrative body under the administration of the State Economic and Trade Commission, responsible for the management of metallurgical industry. In 2001, nine state bureaus, including the State Bureau of Metallurgical Industry under the administration of the State Economic and Trade Commission, have been officially canceled in the reform of national authorities and organizations. The Bureau's administrative functions were incorporated into the State Economic

and Trade Commission, and those of the other state bureaus were incorporated into the relevant departments and bureaus under the State Economic and Trade Commission. In March 2003, the institutional reform plan of the State Council was approved in the first session of the Tenth National People's Congress; the Ministry of Foreign Trade and Economic Cooperation and the State Economic and Trade Commission were thus revoked; instead, the Ministry of Commerce was established. The State Bureau of Metallurgical Industry was revoked in this reform. The functions of the former Ministry of Metallurgy were dispersed to the State-Owned Assets Supervision and Administration Commission, the China Iron and Steel Industry Association, the Ministry of Industry and Information Technology, and the National Development and Reform Commission. At this point, the era of only one department managing the industry has become the history, and the industry has started to be managed by multiple authorities. Since then, under the background of rapid national economic growth, local governments and enterprises have been in a fever of the iron and steel industry due to its features such as being capital-intensive, labor-intensive, and linkage-intensive, initiating an irreversible chaos in the rapid industrial development. During this period of time, the major objectives including the iron and steel industrial restructuring, capacity regulation, merger and reorganization failed to be well carried out or completed. Until the release of No. 7 Document of the State Council in 2010, an inter-ministerial coordination group for the elimination of backward production capacity, which was jointly participated by 18 departments, was established. Provincial coordination groups were established in various places. The unified management, unified office, and unified administrative work mode once again achieved great efficacy as various tasks were completed smoothly. On the basis of the Inter-Ministerial Coordination Group for the Elimination of Backward Capacity in 2015, an Inter-Ministerial Coordination Group for Resolving Overcapacity has been established, which continues to play an important role in cutting overcapacity and promoting enterprises to be profitable.

2. Improvement of Policy System of Iron and Steel Industry

The essential of perfecting the iron and steel industry system and giving full play to the industrial policy and guidance is to establish a fair market environment under the premise of unifying the standards, improving the construction of industrial mechanism and system and continuing to insist unified management. In other words, we should establish a fair and competitive market environment by means of rigorous law enforcement in aspects such as environmental protection, energy consumption, quality, safety and taxation, taking advantages of differentiated financial policies (that means giving fair treatment to the state-owned enterprises and the private enterprises, while imposing differentiated policies on the "zombie" and illegal enterprises). This shall be done under the joint supervision of government and industrial administrative authorities so as to better utilize the decisive function of the market in resource allocation.

(1) Strictly Control New Production Capacity. Controlling new production capacity is the key to solving the disorderly development of China's iron and steel industry, and it is also an important measure to optimize the stock based on mergers and reorganizations, resource integration, adjustment, and upgrading. Two tasks have to be completed for controlling of new production capacities: One is reduction and replacement of production capacity, and the other is rigorously cracking down on illegal construction projects.

1) Revision of Capacity Replacement Scheme. *The Notice on Issuing of Methods to Implement Capacity Replacement in Industries with Seriously Excessive Production Capacity by Ministry of Industry and Information Technology* (No. 127 [2015] of Ministry of Industry and Information Technology) [2] clearly stipulates that equivalent or reduction replacement shall be carried out with replacement scheme for construction of industrial projects that suffering serious overcapacity; in the areas with sensitive environment such as Beijing-Tianjin-Hebei, Yangtze River Delta, and Pearl River Delta, reduction replacement shall be implemented. The document is valid until December 31, 2017, and revised timely in accordance with the industrial development. *The Adjustment and Upgrading Plan for Iron and Steel Industry* (*2016–2020*) requires that it is forbidden to have net increase in iron and steel making capacity nationwide; reduction replacement of production capacity has to be carried out for structural adjustment and modification projects; reduction replacement has to be done for the projects scheduled or under construction that have been approved by the national government and filed in local authorities. However, the proportion of the reduction was not clearly defined.

The following issues have to be noted in the revision of capacity replacement scheme:

The first is to unify the standards for capacity calculation. In June 2015, the National Development and Reform Commission and the Ministry of Industry and Information Technology issued the *Notice on Issuing of Eliminating Illegal Projects in Iron and Steel, Electrolytic Aluminum and Shipbuilding Industries by National Development and Reform Commission and Ministry of Industry and Information Technology* (No. 1494 [2015] of the National Development and Reform Commission and Ministry of Industry and Information Technology), put forward clear suggestions to dispose the illegal projects that were under construction or constructed as well as projects out of the scope of disposal, and presented assessed production capacity. There are several problems here. First, there is no specific equipment corresponding to the assessed production capacity. Even if the equipment data can be found in the documents filed in the provincial, municipal, and county authorities, it is still impossible to clearly define the capacity of each blast furnace or converter; second, part of iron or steel making production capacity of enterprises is missed in the assessment; the third issue

is that the production capacity assessment is way different from that stipulated in the "Sheet for Calculation of Production Capacity" in the *Notice on Issuing of Methods to Implement Capacity Replacement in Industries with Seriously Excessive Production Capacity by Ministry of Industry and Information Technology* (No. 127 [2015] of Ministry of Industry and Information Technology), puzzling the local government, enterprises, assessment organizations, and specialists and generating many different viewpoints; another situation is that the Ministry of Industry and Information Technology holds a different opinion with the National Development and Reform Commission, which incurs confusion in the scheme for production capacity replacement.

Therefore, the criteria to be implemented for the production capacity replacement scheme should be clarified. At the same time, the Sheet for Calculation of Production Capacity should be revised and improved. Another solution is to make holistic evaluation based on the Sheet for Calculation of Production Capacity, with comprehensive consideration of the upstream and downstream process flow and the selected process and technical route instead of solely consideration of the production capacity of a single blast furnace or converter.

The second is to further clarify the criteria defining the legitimate production capacity. *The Adjustment and Upgrading Plan for Iron and Steel Industry* (*2016–2020*) clearly stipulates that replacement of production capacity must not be applied to the production capacity abandoned before (including) 2015, the backward production capacity, the production capacity that is listed in the reduction task and the production capacity subsidized and supported by policy. But the problem is it is not clarified what kind of capacity can be used for replacement. First is the production capacity presented in Document No. 1494 legal and can it be replaced as long as it does not belong to the "four forbidden situations" stipulated in the *Adjustment and Upgrading Plan for Iron and Steel Industry* (*2016–2020*)? Secondly, Document No. 1494 also clarified how to treat the projects "not covered in the scope of disposal"; that is, for the projects completed and put into operation before 2005, the relevant regions shall study and handle the registration procedures by themselves. At that time, many local governments and enterprises failed to report this part of production capacity in time due to various reasons. The country began to conduct a general survey of the national iron and steel production capacity in the second half of 2016 in order to comprehensively understanding the iron and steel production capacity of China. If this part of production capacity is not in the "four forbidden situations", can it be used for replacement? Third are the three batches of more than 300 iron and steel enterprises that comply with the specified requirements announced by the Ministry of Industry and Information Technology as well as the enterprises whose access announcements have been revoked at the beginning of 2017 allowed for replacement if they are not within the "four forbidden situations"?

Therefore, the above situation should be further clarified so as to unify the standards and requirements.

The third is to break the regional restrictions on trading of production capacity. The core target for the replacement of production capacity is to improve the technology and equipment level of the entire iron and steel industry by means of modification, upgrading and reduction replacement, practically integrating cutting overcapacity with transformation and upgrading. To optimize the distribution of the iron and steel production capacity is a significant direction for the development of the industry, and the trading of the production capacity is an important means. However, the capacity replacement scheme has always been controversial, especially in inter-regional trading. The problem is a lack of holistic planning covering the whole nation. In other words, all local governments and authorities are assigned the tasks to cut overcapacity with different intensity based on regional capacity proportion, and the total production capacity of iron and steel in each region is not permitted to increase but only to decrease, thus restricting the capacity within areas where it is supposed to be transferred out and banning the desired capacity from being brought in.

Therefore, except for some areas where the environmental capacity is extremely sensitive, trading of production capacity should focus on whether the national capacity is reduced by capacity replacement, rather than setting a hard threshold only to stem the increasing of production capacity in the region.

The fourth is to establish a capacity replacement database. The lack of indicators for production capacity and the asymmetry of capacity replacement data result in uncertainties in practical outcomes of overcapacity eliminating in the replacement scheme and possibility of repeated elimination. Besides, there is no means to carry out precise and strict supervision, especially for plans of inter-regional capacity replacement; it is even harder to provide effective supervision. In this case, some enterprises may commit illegal operation.

Therefore, the national capacity trading platform should be given full play to and the capacity replacement database file should be completed to supervise the industry in a more accurate and effective way.

The fifth is to improve the evaluation part in the capacity replacement scheme. Choose a professional third-party organization to evaluate the capacity replacement scheme to find out whether the production capacity is legal, the replacement scheme is scientific and reasonable, and the replacement process is well-established. The government has selected a number of professional organizations through setting thresholds for the local government authorities or enterprises to choose them as the third-party evaluation organizations. If such organizations commit illegal behaviors in evaluation, they will be deprived of the qualification for evaluation and punished rigorously.

2) Rigorously Crackdown on Illegal Construction. In December 2016, the Standing Committee of the Political Bureau of the CPC Central Committee debriefed a report from the State Council on the investigation on Jiangsu Huada Iron and Steel Co., Ltd. and Hebei Anfeng Iron and Steel Co., Ltd. for their illegal operation as well as the handling work and stressed the cutting overcapacity in the iron and steel and the coal industries as significant contents in both deepening of supply-side structural reform and implementation of "cutting overcapacity, destocking, deleveraging, reducing corporate costs, and shoring up weak spots". The investigation revealed that Jiangsu Huada Iron and Steel Co., Ltd. was producing and selling the substandard steel, and Hebei Anfeng Iron and Steel Co., Ltd. was building iron and steel projects without prior approval. The Committee urged to thoroughly investigate and punish the two companies as well as the persons in charge and report the results to the public.

In order to enforce the disciplines of the party and the country and ensure effective implementation of policies from the Central Government, the Party Central Committee and the State Council decided to rigorously investigate and dispose these two cases and the persons in charge. First, the Provincial Governments of Jiangsu and Hebei provinces were instructed to make in-depth self-inspections and report to the State Council. Second, the 111 responsible persons in Jiangsu and 27 persons in Hebei, including the vice provincial governors, were investigated for dereliction of duties. Third, Jiangsu Province was instructed to thoroughly dispose the illegal operations in the whole province including sales of the substandard steel and the new production capacity; Hebei Province was instructed to dismantle, within a time limit, all outdated blast furnaces with capacity less than 1,000 m^3 and converters with capacity less than 100 tons belonging to Hebei Anfeng Iron and Steel Co., Ltd. Fourth, the investigation and punishment on Jiangsu Huada Iron and Steel Co., Ltd. and Hebei Anfeng Iron and Steel Co., Ltd. were reported to the public nationwide. Fifth, the State Council would organize special supervision and rectification on backward production capacity in the coal, iron and steel, cement, glass, and other industries. These two issues should be regarded as negative examples for warning and education, helping to ensure smooth progressing of the tasks of cutting overcapacity and elimination of backward production capacity.

In December 2016, the Office of Inter-Ministerial Meeting on Resolving Overcapacity and Profitable Development for National Iron and Steel and Coal Industry reported issues of Jiangsu Delong Nickel Industry Co., Ltd. illegally constructing iron and steel projects [3]. The investigation showed that in 2013, Jiangsu Delong Nickel Industry Co., Ltd. implemented an expansion project with annual capacity of 300,000 tons of nickel alloy and illegally built an 80-ton electric furnace, four 60-ton AOD furnaces, and related supporting facilities to produce stainless steel. Jiangsu Delong boldly broke the laws and regulations for its illegal construction under the background of the Party Central Committee and the State Council vigorously

promoting the supply-side structural reform, repeatedly giving orders to curb illegal production capacity, and all relevant parties focusing on resolving the overcapacity in the iron and steel industry. While completely dismantling the illegally constructed stainless steel smelting equipment, the relevant responsible persons were seriously held accountable.

The zero-tolerance attitude, the sustained high-pressure policies, and the strict accountability for illegal construction have completely eradicated some opportunistic local governments and enterprises and further unified people's thinking and built consensus. That has laid a solid foundation for improving the supply-side structural reform as well as healthy and orderly development of the iron and steel industry.

(2) Environmental Protection. The iron and steel industry features heavy emission which always draws common and intensified attention concerning environmental protection from the whole society. After years of unremitting efforts, the iron and steel enterprises have invested a lot of money in environmental protection and the entire industry has seen an obvious improvement in energy-saving and emission reduction. The total discharge of major pollutants has been effectively controlled, and the industry has stood at the starting line of green development. However, the total quantity of energy consumption and pollutant emission accompanied by the large production capacity accumulated because of the rapid development of the iron and steel industry remains too high. According to statistics, in terms of air pollutant emissions, sulfur dioxide emission from ferrous metal smelting and rolling industries accounts for 12% of total industrial sulfur dioxide emission, and nitrogen oxide emission accounts for 10% of total industrial emission, and fume (dust) emission accounts for 32% of the total. That means the iron and steel industry causes the most severe dust particle pollution in the air. In 2015, the emissions of sulfur dioxide, fume, and industrial dust from China's major iron and steel enterprises were 472,000 tons, 153,000 tons, and 297,000 tons, respectively. The revision and improvement of environmental protection policies and the development of innovative model of enforcement of environmental protection laws are not only important means to improve regional environmental quality and promote the city-industry integration involving iron and steel enterprises, but also significant measures to create a fair and competitive market environment and promote the transformation and upgrading of the iron and steel industry.

1) Strictly implement the new environmental impact assessment law (hereinafter termed as "the EIA Law") and the new pollutant discharge permit system to comprehensively improve the supervision on environmental protection. The first is the new environmental impact assessment law. The latest revised *Environmental Impact Assessment Law* was reviewed and approved at the 21st Meeting of the Standing Committee of the Twelfth National People's Congress on July 2, 2016, and officially implemented since September 1 of the same year. *The EIA Law* has been revised in nine aspects, of

which the emphasis is laid on more severe punishment for illegal construction without prior official approval; namely, a penalty of 1–5% of the total investment was imposed. At the same time, it has simplified the administrative review and approval of EIA for some projects and strengthened the EIA on planning. The new version of *Environmental Impact Assessment Law* stipulates that "entities commencing construction projects at their own without officially approved statements or report tables on environmental impacts of construction projects or fail to re-submit documents for approval or review on the statements or report tables as per Article 24 under this Law before commencement shall be ordered to stop construction by the competent department of environmental protection above county level. The involved entities shall be fined an amount of 1–5% of the construction project's total investment and ordered to restore the site. The management personnel holding direct responsibilities and other directly responsible persons shall be imposed with administrative sanctions". The revision changes the convention that all illegal construction projects, no matter large or small, are punished similarly within an identical range; instead, the specific construction status will be considered as the basis to intensify the punishment on large-scaled construction projects that commence the work without prior approval. Moreover, the involved parties may be ordered to restore the site other than to terminate construction and pay a fine. That will cause huge economic losses to those illegal construction projects that have already been commenced.

At the same time, the subjects of law enforcement that are responsible for illegal construction project without permission have been changed from the competent environmental protection departments which are entitled to review and approve the EIA Statements to those above the county level. That has stressed the territorial principle in market supervision and law enforcement and changed the situation that the local environmental protection departments have no enforcement power over the projects approved by the higher environmental protection departments. In addition, the revision imposes more severe punishment on the planning departments for their illegal behaviors as it specifies that "any persons in direct charge of the planning authorities who fail to organize or practice fraud in EIA or misconduct duty and thus make the EIA way inconsistent with the facts shall be imposed with disciplinary sanction according to the law by the higher authorities or the supervisory departments, so shall the others with direct liability". The new version of *Environmental Impact Assessment Law* also stipulates that the EIA administrative examination and approval are no longer a precondition for the approval of the feasibility study report or the project approval. The EIA approval and feasibility study report approval or project approval shall be carried out simultaneously, but still, they have to be completed before commencement of project. At the same time, it stipulates that "the EIA Statement and the Statement Form of the construction project shall be submitted by the construction unit in accordance with the provisions of the

State Council for approval by the environmental protection administrative department with the power of examination and approval". "China conducts administration of recordation of environmental impact registration form". This deepens the streamline administration and institute decentralization and optimizes the approval process as the examination and approval of water and soil conservation plan by the competent administrative department are no longer a precondition for EIA. The revision of *Environmental Impact Assessment Law* further embodies the reform philosophy in EIA approval of simplifying the preliminaries and strengthening the supervision during and after the approval. That helps to boost administrative efficiency and gives full play to the macro-control. The introduction of the new EIA regulations has built up a more creative and vital market environment as it has shortened the procedure and time for approval and saved time and financial costs for enterprises.

The second is the new pollutant discharge permit system. As the *Plan for Implementation of Permit System for Controlled Pollutant Discharge* (No. 81 [2016] of the State Council) required, the management of pollutant discharge permits has been official launched since 2017 in thermal power, papermaking, and iron and steel industries. Meanwhile, in order to promote the air pollutant control in Beijing-Tianjin-Hebei Region, the management of elevated pollutant discharge permits is piloted in some cities within the Region.

On December 28, 2016, specific work targets were set in the *Notice on Launching Management of Pollutant Discharge Permits in Thermal Power and Papermaking Industries and Elevated Pollutant Discharge Permits in Beijing-Tianjin-Hebei Region* (No. 189 [2016] of MEP, NDRC, and MWR) officially released by the Ministry of Environmental Protection. The notice requires to complete the application of pollutant discharge permits by enterprises in thermal power and papermaking industries as well as the relevant examination and approval work before June 30, 2017; hence, the permits shall be used as the basis for environmental supervision and enforcement. The "1 + 2" key cities (Beijing, Baoding, and Langfang) which are located in the major air pollutant spreading channel in the Beijing-Tianjin-Hebei Region shall be the pilot cities where application, approval, and issuing of the elevated pollutant discharge permits for enterprises in the iron and steel and the papermaking industries shall be completed before the same date. From July 1, 2017, the relevant enterprises in operation are entitled to discharge pollutant only with the permits and shall establish their own systems for self-supervision, information disclosure, recording, and periodical reports. The pollutant discharge permits shall be issued in the pilot cities to the iron and steel complexes that have at least two or more processes including coking, sintering, pelleting, ironmaking, steelmaking, and steel rolling. Hence, a new pollutant discharge permit system for the iron and steel industry has been presented officially. The system improves the supervision on the pollutant discharge nodes and the way of calculating the

discharge amount in all production procedures of the enterprises, instead of only to supervise the total amount of pollutant discharge as before, which is ambiguous, making the supervision on pollutant more professional and specific.

The new pollutant discharge permit system replaces a number of environmental protection functions and systems including "environmental statistics", "pollution charges", "total quantity control", "environmental monitoring", and "environmental standards", to realize "management with one permit". The environmental protection department will check the enterprises against all contents of the pollutant discharge permit. Any enterprises fail to meet the requirement and thus causing violation to the environmental laws will be punished continuously on a daily basis with production restriction or suspension, business termination, close-down, etc. The new pollutant discharge permit system is the core means to supervise and regulate the point source discharge control. It is important for improving the procedures of environmental supervision and regulation and the environmental supervision system, becoming an indispensable impetus to promote environmental protection.

2) Fully enforce the *Environmental Protection Tax Law* to raise the standard for environmental protection in the iron and steel industry. On December 25, 2016, the *Environmental Protection Tax Law* was voted to be promulgated at the 25th session of the Standing Committee of the 12th National People's Congress. *The Environmental Protection Tax Law*, as China's first specific law promulgated to promote ecological civilization construction, has come into effect since January 1, 2018. The nationwide enterprises discharging pollutants are required to fulfill their environmental tax liability without any difference, and the pollution discharge fees that had been implemented for nearly 40 years eventually became the history. From "fee" to "tax", environmental protection supervision is becoming more standard and fair. *The Environmental Protection Tax Law* stresses the principle of "to decrease tax by reducing discharge". That means the enterprises with less pollutant discharge are levied with lower tax. This new law also boosts the progress of the iron and steel enterprises' upgrading and reconstruction for better environmental profit since the iron and steel industry discharges large quantity of pollutants. Thus, the more environmentally friendly enterprises survive while the inferior ones are eliminated, and the phenomenon of "bad money drives out good money" will not happen. According to the *Environmental Protection Tax Law*, the enterprises, public institutions, and other production operators that directly discharge taxable pollutants into the environment shall be the taxpayers. The quantity of taxable pollutant discharge is the basis for taxation, in which the quantity of air and water pollutants is determined as per the pollution equivalent weight converted by the discharge amount, that of the solid pollutants are determined according to the discharge amount of solid wastes, and the noise shall be determined according to decibels exceeding the national standards. After the environmental

protection fee is transformed to tax, the collection department has been changed from the environmental protection departments to the tax authorities. Both of them cooperate with each other to establish a taxation mode featured with "declared by enterprises, levied by tax authorities, supervised by environmental protection departments and shared information". Besides, the environmental protection tax shall be part of the local tax and included to the general public budget to effectively curb local protectionism. As the Version 2.0 of the pollutant discharge fee, the environmental protection tax is not targeting at collecting fiscal revenue. Instead, it aims at building a better production and living environment for the people by reducing pollutant discharge from enterprises with the tax lever. As a major financial and taxation measure to promote ecological civilization construction, the environmental protection tax has improved China's "Green Tax" system. That means to provide taxation incentives to the iron and steel enterprises that actively practice green development while increasing the costs for environmental protection for those discharge pollutants illegally, thus to propel the iron and steel industry to upgrade and transform.

3) Vertical management and regularized supervision of environment protection shall be strictly carried out, and high-pressure situation of law enforcement for environmental protection shall be maintained continuously. 2016 was the year suffering from the most severe smog and witnessed the most rigorous iron and steel production restriction for environmental protection in history ever. The enterprises, especially for the urban steel plants, are experiencing an increasing impact from environmental protection. The environmental protection departments are conducting more regularized special supervisions. At present, the environmental protection cost of the key iron and steel enterprises in the statistics occupies almost 10% of the iron and steel production cost. The growing cost for pollutant discharge lays an increasing burden on the iron and steel industry that is in its "ice age" with low profit. That urges the iron and steel industry to upgrade and transform from a primitive way of development that sacrifices the environment for the benefit to an upgraded green industry mode. By doing this, the backward production capacity can be eliminated faster and the iron and steel industry will embrace an accelerating economic restructuring and transformation in the development mode. In such trend and with the breakthroughs of high-end technologies in the iron and steel industry over the recent years, revisions are supposed to be done on 8 prevailing standards which are officially enforced on October 1, 2012, on pollutant discharge including the *Emission Standard of Air Pollutants for Sintering and Pelletizing of Iron and the Steel Industry* and *Emission Standard of Air Pollutants for Iron Smelt Industry* (GB 28663–2012) in later the 13th Five-Year Plan period. That will bring the industry more rigorous standards for the air pollutant discharge such as particulate matters, sulfur dioxide, and nitrogen oxides as well as water pollutant discharge including COD and ammonia nitrogen from the key pollution nodes. As a general trend, green development requires less pollutant

discharge from fix sources in the iron and steel industry, a reduced total quantity of new pollutant discharge, synergy of the *Environmental Protection Tax Law* and the new pollutant discharge permit system in supervision and a profound policy guarantee with impeccable environmental protection laws and regulations. Fulfillment of all these requirements will boost the entire iron and steel industry to eliminate the backward production capacity and realize upgrade and transformation to green development.

Since 2017, the Ministry of Environmental Protection has been carrying on conducting activities for the Year of Environmental Protection Law Enforcement on the basis in the previous two years. The methodology shall be insisted on with the connotation of problem-oriented and multi-party coordination, strict supervision on both government and enterprises, and severe punishment on violators and standardized law enforcement. In 2017, the Ministry of Environmental Protection continued to complete inspection in the 15 provinces where the Central Environmental Inspection has not been done. Hence, the environmental protection inspection has covered all over China. Another important direction of work that needs to be followed in the future by the environmental protection departments is to be free from the outdated system and to strengthen the capability of law enforcement at the grassroot level. That means, in general, to gradually dissolve the entanglement of interests between the local governments and the environmental protection authorities that leads to unfair law enforcement, assisted by the reform in vertical management of environmental protection monitoring and supervision authorities below the provincial level. In the future, the Ministry of Environmental Protection will also improve the relevant laws and regulations to make them more practical and specific in their implementation. The Ministry of Environmental Protection will continue to put more efforts in law enforcement. That entails "zero tolerance" to violations to environmental protection laws and to maintain extremely strict to environmental supervision and law enforcement. By doing this, the environmental protection laws will be carried out pragmatically. *The Instruction on Elimination of Backward Production Capacity Legally with Comprehensive Standards* released recently gives full play to the new environmental protection law and supporting documents as very effective means to help eliminate the backward production capacity and further promote the supply-side structural reform.

(3) Taxation and Financial Credit. The taxation and financial credit policies not only reflect how an enterprise takes social responsibility, but also concern the survival and development of an enterprise. Moreover, they are significant means to build up a fair market where the good ones are promoted while the outdated are wiped out.

First, the irrational taxes, fees and fund policies of iron and steel industry have to be modified.

On the one hand, preferential policies for comprehensive utilization of resources shall have to be modified to practically encourage the iron and steel enterprises to develop a self-recycled way of comprehensive resource utilization. The current tax policy is based on the sales of products from comprehensive utilization of resources. Especially, the favorable corporation income tax can be reduced by 10% of the sales of products from comprehensive utilization of resources as specified. However, most of the comprehensive utilization products of the iron and steel enterprises, such as waste heat generation and recycling of industrial wastewater, are recycled internally instead of being sold in the market. Therefore, although the enterprises have invested a lot, still they cannot get benefits from the preferential policies. The recommendation is to carry out the taxation for comprehensive resource utilization as per the real situation and to optimize it with differentiated calculation mode. That means to convert the actual output of the comprehensive utilization products of the enterprises that are internally recycled and can be calculated with the current market price into sales revenue; for those recycled internally and unquantifiable, the actual production cost of the comprehensive resource utilization products can be taken as the sales revenue to calculate the amount of deduction in the current payable income tax.

Another work is to eradicate the irrational funds in the iron and steel industry. The iron and steel enterprises use the gas, waste heat, and residual pressure internally to generate power, which belongs to comprehensive resource utilization that can be exempted from major hydraulic construction funds, renewable energy development funds, etc., as per the previous policies. However, in 2010, the Ministry of Finance issued the *Interim Procedures for Collection, Utilization and Management of National Major Hydraulic Construction Funds*, starting to levy major hydraulic construction funds, renewable energy development funds, etc., which de-energized the iron and steel enterprises in the development of comprehensive resource utilization. It is suggested that the above-mentioned comprehensive utilization projects of resources for the iron and steel enterprises should continue to be exempted from major hydraulic construction funds and renewable energy development funds. Besides, the replacement of sales tax to value-added tax has to be accelerated, and the financing and insurance expenses of iron and steel enterprise shall be included within the range of input tax deduction. The iron and steel enterprises shoulder heavy financial burden due to their huge capital demands, high financing amount, and insurance expenses. However, contradictorily, the input taxes of their current interest and insurance expenses are not deducted; instead, all such costs have to be paid by the enterprises, which imposes heavy pressure of taxes and fees on them. Therefore, the recommendation is that the iron and steel enterprises shall be entitled to the deduction of input tax for financing and insurance expenses.

Second, the export rebate rate of the steel products with high added value shall be adjusted.

- Pickled Sheet
  The pickled hot-rolled sheets used as the finished products for special purposes or the raw material to be re-processed are featured with different properties and purposes to the normal hot-rolled plates, which makes them high-value-added products. Therefore, it is improper to apply the prevailing export tax rebate policy which equals the pickled sheets to the normal hot-rolled plates. It is recommended to lift the export rebate rate from 0 to 9% for pickled sheets with the following five tax identification numbers: 72082500, 72082610, 72082690, 72082710, and 72082790.
- Coated Steel Strip
  The coated steel strips narrower than 600 mm are widely used for specific purposes and essentially different from the ordinary hot-rolled narrow strip. Therefore, they are high-value-added products. It is recommended to lift the export rebate rate from 0 to 9% for coated steel strips with the 6 tax identification numbers including 7212.
- Steel Wire
  The iron and steel wire products come from the normal wire rod products after pulling, drawing, coating, and other processes and have much higher product added value than the regular wire rods. Therefore, it is recommended to encourage developing such products by increasing the export rebate rate from 0%–9% to 13% for iron and steel wire products with the 5 tax identification numbers including 7217.
- Stainless Steel
  Although China has long been supporting the development of stainless steel products, the low export rebate rate for the stainless steel bars and rods makes them weak in price competition in the international market. Therefore, it is recommended to lift the export rebate rate from 9 to 13% for stainless steel strips with the 6 tax identification numbers including 7220 and that from 5 to 13% for stainless steel bars, profiles, and wires with the 6 tax identification numbers including 7222 and 7223.
- Alloy Steel
  Alloy steel is the major special steel products for special purposes. They are high added value products which are manufactured with high technology especially for tool steel, oriented silicon steel, etc., and should be encouraged with preferential financing and tax policies. Hence, it is recommended to lift the export rebate rate from 0%–9% to 13% for alloy steel products with the 21 tax identification numbers including alloy steel sheets (72253000, 72259100, 72259200, 72259910, 72259990), alloy steel strips (72262000, 72269100, 72269199, 72269200, 72269910, 72269920, 72269990), alloy steel bars and sections (72271000, 72272000, 72279090, 72282000, 72286000, 72287010, 72287090), and alloy steel wires (7229200, 72299090).
- Tool Steel and Oriented Silicon Steel
  The export rebate rate for tool steel and oriented silicon steel with the 4 tax identification numbers should be raised from 13% to 15% including the

tool steel (72264010, 72269110) and the oriented silicon steel (72251100, 72261100).

Third, protective or suppressive measures shall be taken according to different conditions, and the credit policies have to be more differentiated. The Instruction on Supporting Industrial Restructuring and Resolving Overcapacity promulgated by China Banking Regulatory Commission in 2014 raised measures such as to clarify the differentiated credit standards, carry out green credit policy, support industrial restructuring and structural optimization. However, some authorities enforce the policies only to differentiate the overcapacity industries and the non-overcapacity industries while failing to differentiate the enterprises in the overcapacity industries. That, to some extent, weakens the policy effect. Therefore, the banks are recommended to strengthen the enforcement of the differentiated credit policies, upgrading the industrial structure while resolving the overcapacity:

On the one hand, it supports the investment for the transformation and upgrading projects of iron and steel enterprises with preferential loan rates. The iron and steel enterprises will be supported in the following projects: projects to improve the product quality and upgrade the products structure; projects to extent the industrial chain and for specialized production; environmental protection and energy conservation projects; intelligent projects; the major industrial technology innovation projects; overseas projects under the Belt and Road Initiative; merging and reorganization projects to optimize the industrial organizational structure.

On the other hand, it supports the development of the legal and superior enterprises. To clean up and rectify projects is an important work to resolve overcapacity and the basis to cooperate with other supporting policies, which have been well promoted. The relevant departments and institutes are suggested to take this as an important reference when enforcing the policies. Loan should be released with general market-based interest rates to the enterprises and projects getting legal approval and recording as well as those with strong innovative ability, comprehensive competitiveness, and good benefit. The projects and enterprises that fail to follow laws and regulation to get approval and recording as well as those with substandard pollutant discharge or commits fatal environmental pollution accidents shall be deprived of financial supports or released with loan with penalty interest rate.

Fourth, the iron and steel enterprises shall have the privilege of direct power purchase as larger consumers or be supported for integrative development of coal, power, and steel. The legal and advantage iron and steel enterprises, as large consumers, shall be better supported with more customized power supply in a larger proportion. The areas with abundant coal power shall give full play to the resource and power advantages for the integrative development of coal, power, and steel.

Fifth, transportation in the iron and steel industry shall be charged with preferential freight. Preferential freight or that for the shortest path shall be applied for the transportation of iron ores, steel products, cokes, etc.

Sixth, studies on adjusting and reducing taxes for large iron mines belonging to iron and steel enterprises. Tax reduction measures such as adjusting the collection conditions and standards of resource assessment tax and resource compensation tax have to be studied on and proposed for the large iron mines belonging to iron and steel enterprises to reduce repetitive taxing. Besides, the range of added value tax deduction needs to be widened to relieve the enterprises' burdens.

Seventh, the debt restructuring of the iron and steel enterprises shall be supported to optimize the financing mode. The iron and steel enterprises with heavy debts shall be encouraged to restructure the debt through debt-to-equity swap as a means to relieve the enterprises' burdens and by lessening the enterprises' burdens of repaying capital with interest to liberate the capital for equipment upgrading, technical modification, new product development, etc. Moreover, the enterprises shall be encouraged to optimize their financing solutions by means of transfer of trust capital, bills and stock rights, issuing enterprise bonds and funds and multiple other ways to relieve the financial burden from the increased loan as a result of over-dependence on banks.

Eighth, national construction bonds shall be applied to support the development of the iron and steel industry. The national construction bonds of 50 billion to 100 billion yuan are issued to better support the comprehensive resource utilization, energy conservation, environmental protection and research and development of new technology in iron and steel industry.

(4) Energy Saving. The growth of iron and steel production increases energy consumption on an annual basis. According to statistics, in 2015, the total energy consumption for China's ferrous metal smelting and rolling was about 700 million tons of standard coal, accounting for 27% of the total of the national industrial energy consumption; the total consumption of coals (including coking industry) was 700 million tons, which weighs 18% of the total national industrial coal consumption; totally 5.796 million kilo-Watt hours of electric power was consumed, taking up 12% of the total national industrial power consumption and 9% of the total national power consumption. Since energy is constraining the industry, we have to promote the construction of energy conservation system, especially the supervision and regulation of energy consumption, and use differentiated power and water prices as per the law. These have become the indispensable measures to save energy in the entire industry and create a fair market environment.

1) Establish Regulation and Law Systems for Green and Low-Carbon Development.

   The first is the establishment of the *Climate Change Law* and the supporting laws. Climate change is a significant challenge to the whole world as well as the biggest issue for the iron and steel industry in the twenty-first century

as it is the industry that discharges large quantity of carbon. At present, China is promoting the enacting of the *Climate Change Law* and a series of supporting laws and regulations. As a major carbon discharger, the iron and steel industry also makes regulations specifically for itself, such as the *Iron and Steel Industry's Action Plan to Cope with Climate Change* and the *Regulations for Carbon Trading in Iron and Steel Industry*. For example, after the promulgation of the *Energy Conservation Law* in 1998, a series of supporting regulations have been formulated, including the *Regulations for Energy Conservation of Major Energy-consuming Units*, the *Regulations for Power Conservation*, the *Regulations for Energy Conservation in Civil Buildings*, and the *Regulations for Certification of China's Energy Conservation Products*.

The second is to establish supporting regulations and laws for the green manufacturing system. To promote green development and economy is an important development strategy for industry. In 2016, the Ministry of Industry and Information Technology issued documents to build a green manufacturing system. The Ministry defined the main content of the green manufacturing system including green factories, green products, green park areas, and green supply chains. Besides, the Ministry has proposed to forge the green manufacturing system to be a benchmark of the manufacturing industry's green transformation and upgrade and a power to take the lead in the international competition. In the next few years, a series of well-targeted regulations are promulgated under such general guidelines to steer the enterprises to better development such as to provide implementation plans for the construction of green factories, green products, green park areas, and green supply chains.

2) Improve Construction of Standard Systems for Energy Conservation and Low-Carbon Development.

The energy conservation and low-carbon standards are the basis for the national energy conservation system and effectively support to resolve the overcapacity and promote energy conservation and discharge reduction. At present, China has promulgated more than 10 codes concerning the iron and steel industry including the energy-saving quota standard, the energy efficiency standard for energy-consuming equipment, and the energy-saving design standard, which are indispensable for resolving the overcapacity in the iron and steel industry. In the future, more codes will be established or revised to supplement the standard system covering energy conservation of production equipment, supervision, and management of energy conservation, energy measurement, energy administration and audit, etc. The improvement of energy conservation and low-carbon standard system will be more and more important in the future sustainable development of the iron and steel industry for the industrial restructuring and upgrade as well as legal resolving the overcapacity.

3) Accelerate Green Transformation of Traditional Industries and Its Demonstration and Promotion.

The intensifying energy-saving and low-carbon constraint urges a faster development of industrial restructuring, green transformation, and its demonstration and promotion for the traditional industries represented by the iron and steel industry. The specific implementations include industrial energy efficiency improvement action, transformation to a clean production process, transformation to efficient energy utilization and low-carbon development, and transformation of traditional industries with advanced and suitable technology. All these have been included in a series of documents promulgated during the 13th Five-Year Plan period. The above-mentioned contents of green transformation are put into practice with detailed plans to formulate the regulations including the Guide to Actions for Green Transformation and Upgrading of Iron and Steel Industry and List of Recommended Advanced technology Suitable for Energy Conservation and Low-Carbon technology.

4) Promote Construction of Supervision and Evaluation System and Mechanism.

For the time being, the Chinese government delegates its approval authority to local governments, streamlines its administration, and stresses assessment management. All these are also reflected in the trend of the development of energy policies. The recent energy assessment regulation is a good example. *The Measures to Appraise Energy Saving Efficiency for Investment Projects of Fixed Assets* has revised many contents of the previous Decree No. 6. The revision cancels the energy-saving assessment and appraisal by the National Development and Reform Commission which was one of the preconditions to approve a project and proposes to strengthen the supervision during and after the law enforcement including the dynamic supervision and regulation on national energy-saving appraisal, the management of information and credit of law and regulation violators nationwide, and the acceptance for implementation of appraisal comments on energy-saving work.

Since energy conservation is an important means to resolve the overcapacity issue in the iron and steel industry as per the laws, the assessment and management mechanism and the assessment management have to be improved continuously besides making more strict energy consumption standards considering the development tendency in the future.

5) Use Economic Means to Assist Resolving Overcapacity in Iron and Steel Industry.

In 2017, the National Development and Reform Commission and the Ministry of Industry and Information Technology jointly issued the *Notice on Operation of Price Means to Promote Structural Reform of Supply Side of Iron and Steel Industry*, emphasizing to use price measures such as differentiated power prices to help resolving the overcapacity issues in the iron and steel industry. The development trend tells us that to use diverse economic means to help resolving the iron and steel industry's overcapacity issue is an important means to establish and improve the market mechanism for energy-saving and discharge reduction. That means to build up mechanisms

for paid usage, budget management, investment and financing, etc., through improving the mechanism for trading of power utilization right, pollutant discharge right, and carbon discharge right.

6.2.2 Accelerate Merging and Reorganization of Iron and Steel Enterprises

Merger and reorganization are an importance means to effectively integrate the enterprises' resources, boost their development, and enhance their competitiveness as well as an important path to resolve the conflicts brought by the production overcapacity, optimize the industrial structure, and improve the development quality and profits.

The Party Central Committee and the State Council have attached great importance to the merger and reorganization in the iron and steel industry. They have, in response to the problems of inadequate service systems and mechanisms, difficult cross-regional and cross-ownership restructuring, hard financing and heavy burden, proposed the strategy of "more mergers and organization instead of bankruptcy and liquidation" as the guideline, under which to use market-based means to well cope with the enterprise debt and non-performing asset of banks, put into practice the financial and tax policy that the financing institutes to cancel the bad debts after verification and improve the financial and tax policies that support the financial institutes to better deal with the debt-repaid assets. Especially, they have raised the philosophy of "to innovate and develop some, to restructure and reorganize some, and to swipe out some" to promote the restructuring of the state-owned enterprises. These have eradicated mechanism obstacles for the iron and steel industry's debts restructuring and bankruptcy liquidation and boosted the restructuring among iron and steel enterprises and among the upstream and downstream in the industrial chain.

1. Current Situation of Iron and Steel Industry Concentration

From CR4 and CR10, we can find out that the concentration of China's iron and steel industry has been through a typical and complete "wave" (see Figs. 6.2 and 6.3). The increasing mergers and reorganizations since 2001 have witnessed the birth of some iron and steel group companies including Pancheng Steel, Panchang Steel, and Dongbei Special Steel until 2006. However, since China's crude steel output has been soaring up during this period of time, for example, the year-on-year growth in 2005 was 29.5%. The growth is always higher than that of CR4 and CR10 average scale during the same period, which results in a continuous decreasing of industrial concentration.

In 2007, the merger and reorganization of the iron and steel enterprises embraced a boom. Especially, breakthroughs have been made in the reorganization of cross-regional enterprises: Baosteel merged Bayi Steel and Shao Steel, Wuhan Steel merged Kunming Steel and Liuzhou Steel, Shougang Steel merged Shuicheng Steel, Changzhi Steel and Tonghua Steel, Panzhihua Steel merged Xichang New Steel,

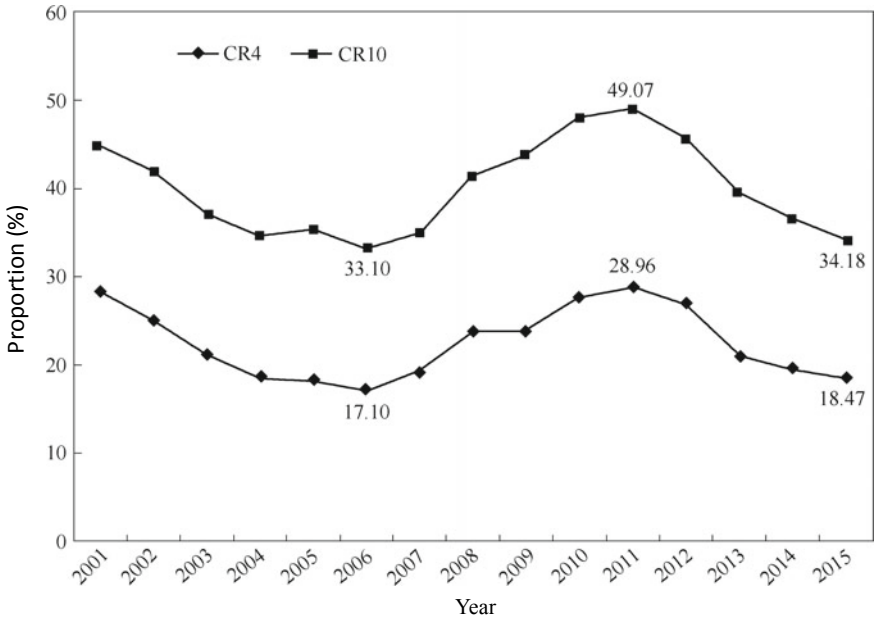

Fig. 6.2 Change of CR4 and CR10 percentage in China's iron and steel industry during 2001–2015

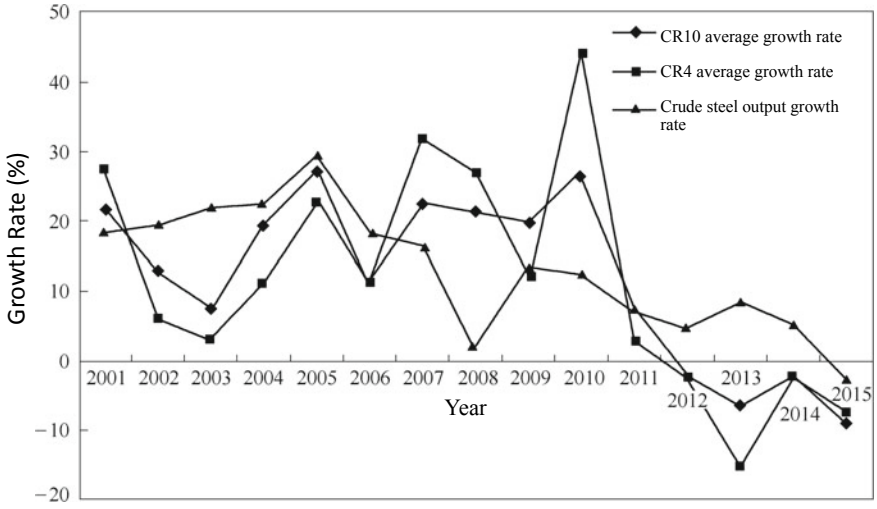

Fig. 6.3 Change of growth rate for output of China's CR4/CR10 and crude steel during 2001–2015

Anshan Steel merged Panzhihua Steel, Shagang Steel merged Yongxing Steel, Xixing Steel, etc. Besides, intra-regional iron and steel groups were massively emerging such as Shandong Steel Group, Hebei Steel Group and Bohai Steel group and until then China's iron and steel industry has been led by multiple iron and steel giants such as Baosteel, HBIS, Wuhan Steel, Anshan Steel, Shagang Steel and Shandong Steel. At the same time, the iron and steel industrial pattern is more clear: Baosteel serves for the east, south, and northwest China market, Wuhan Steel sets its roots in the middle and southwest China market, HBIS Steel bases on the north China market, Shandong Steel serves for the east China market, and Anshan Steel is for the northeast and southwest China market. Due to the steep expansion of the scales of the leading iron and steel enterprises, CR4 and CR10's average scales had been growing rapidly from 2007 to 2011, which in 2011 reached 49.60 million tons and 33.615 million tons, respectively, with a year-on-year growth also surpassing the growth of national crude steel output. In 2010, the growth of the average scale of CR4 reached 44.3% and that of CR10 reached 26.9%, which stably promoted the concentration of the iron and steel industry. In 2011, China's CR10 concentration of the iron and steel industry reached the peak—49.07%. Refer to Fig. 6.4.

After 2012, Baosteel, Wuhan Steel, Anshan Steel, and other large central enterprises ceased their steps toward reorganizations that increase production capacity, and some of them have even been divided. HBIS and Anyang Steel failed in reorganization in the mode of "progressive merger of stock rights" with the private iron and steel enterprises within the region and ended up with the private enterprises' quitting. These have drastically slowed down the merger and reorganization in China's iron and steel industry and opened the door to the "deep water zone" and "exploration stage" for China's reorganization practically. The good point is during this

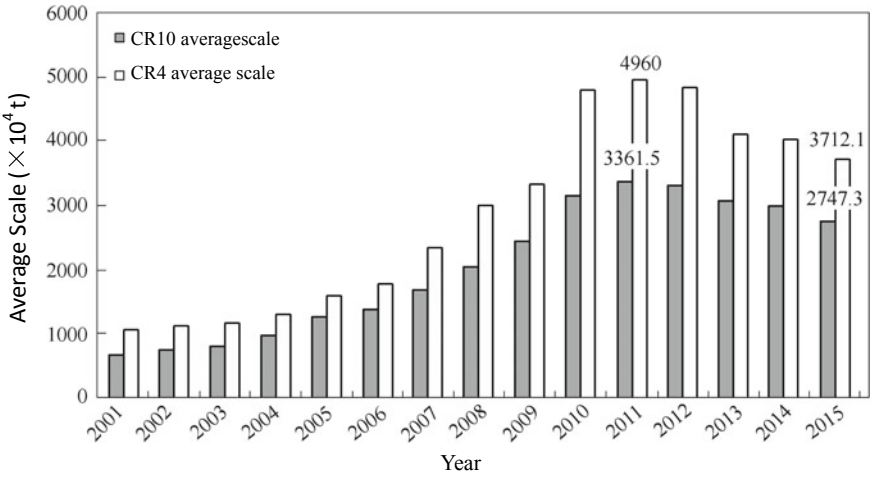

Fig. 6.4 Change of CR4 and CR10 average scales of China's iron and steel industry from 2001 to 2015

period of time, policies including *Instructions to Promote Merger and Reorganization of Major Industries and Enterprises* and *The State Council's Opinions on Further Improving a Market Environment for Merger and Reorganization of Enterprises,* and the plans for local iron and steel industrial restructuring have guided and promoted a favorable progress in the merger and reorganization in the regional iron and steel industry. For instance, Shandong Province has promulgated the *Plan for Implementation of Merger and Reorganization of Iron and Steel Enterprises in Shandong Province*, which proposed to establish 5 regional iron and steel groups including Zibo, Weifang, Laiwu, Linyi, and Binzhou. Until now, four regional iron and steel groups have been reorganized including Linyi Dexin Iron and Steel Group, Shandong Zouping Iron and Steel Group, Shandong Jingte Iron and Steel Co., Ltd., and Zibo Qixin Iron and Steel Group Co., Ltd. In 2014, Hubei Province promulgated *Plan for Iron and Steel Industrial Restructuring in Hubei Province* that proposed to combine and reorganize the 23 iron and steel enterprises in the province and set up another 5 iron and steel groups including Jinshenglan Steel, Lijin Steel, Danfu Steel, Xinxin Steel, and Jinzhou Qunli Steel. At present, Jinshenglan Steel and Lijin Steel Group have been merged and prepared for reorganization.

Besides, many large iron and steel enterprises accelerate their overseas allocation of resources and capacity and the establishment or improvement of their production and trade service systems in order to build themselves the most competitive group enterprises in the world that are capable to participate in international competition and cooperation in a wider range, more extensive area, and higher level. For example, in June 2014, Ma'anshan Steel acquired the high-speed rail component manufacturer SAS Valdunes, France, in the form of asset acquisition; in October 2014, Anshan Steel purchased, by means of increasing the capital and share, Lianzhong (Guangzhou) Stainless Steel Co., Ltd. under Taiwan E United Group, China, and held 60% of its stock rights; in November 2014, Hebei Steel bought out 51% of the stock rights of the world's largest iron and steel trader, Duferco International Trading Holding.

During this period of time, basically 31 iron and steel enterprises with an annual capacity of 10 million tons of products have been set up. The concentration of these enterprises tends to decrease continuously. In 2015, the 31 enterprises produced 487 million tons of crude steel which occupies 60.6% of the national total output. The average production scale is 15.73 million tons. The growth of CR4 and CR10 average scale slowed down continuously and tended to touch the bottom. Both of them were slower than the growth of the national crude steel output at the same period of the previous year. The concentration of the national iron and steel industry was experiencing a constant decrease. In 2015, the CR10 only accounted for 34.2%. See Fig. 6.5. But on the other hand, it also shows that large iron and steel enterprises have played an important role in resolving overcapacity and actively reducing the crude steel output.

The General Secretary has urged "to honor a very sincere and earnest promise". According to this, Hebei Steel Group officially acquired Smederevo Steel Plant, Serbia, on June 22, 2016, and made it a sample project of Sino-Central East European capacity cooperation; on August 27 of the same year, Wen'an Steel under Hebei Xin wu'an Iron and Steel Group signed a cooperation memo with China Metallurgical

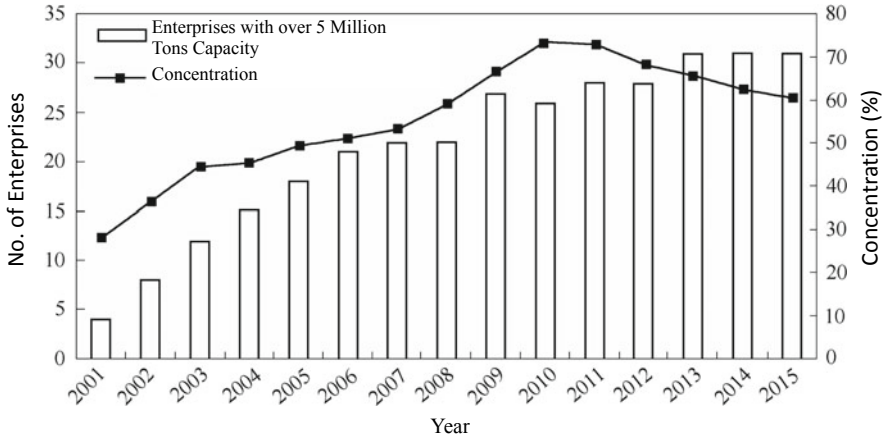

Fig. 6.5 Changes of number and concentration of China's iron and steel enterprises with a capacity of over 5 million tons from 2001 to 2015

Group Corporation (MCC) to invest in building an iron and steel project in Malaysia which became the first Chinese private iron and steel enterprise built in a country along the Belt and Road and praised by the Minister of Industry of Sarawak, Malaysia, as "another significant milestone in Sarawak's development history"; at the beginning of December, China Baowu Steel Group Co. Ltd. was officially founded in Shanghai, symbolizing the setting out of a new flagship of China's iron and steel industry.

In 2016, China had 21 enterprises whose crude steel output was over 10 million tons and a total output of 418 million tons of crude steel. Baowu Group contributed 63.8056 million tons of crude steel in that year, taking up 7.89% of China's total crude steel output, and became a super enterprise group with the largest iron and steel capacity in China and the second largest worldwide. It is precisely because of the establishment of Baowu Group that China's iron and steel industry concentration CR10 (Baowu Group, HBIS Group, Shagang Group, Ansteel, Shougang Group, Shandong Steel, Masteel Group, Jianlong Group, Valin Group, Bengang Group) and CR4 (Baowu Group, HBIS Group, Shagang Group, Ansteel) terminated their downward trend and were increased by 1.69% and 3.20% to reach 35.87% and 21.67%.

2. Policy Orientation for Merger and Reorganization of Iron and Steel Industry

   (1) First Comprehensive Policy Document for Iron and Steel Industry.
   In July 2005, the National Development and Reform Commission has promulgated the *Development Policy for Iron and Steel Industry* (No. 35 by NDRC) approved by the State Council through discussion in the executive meeting of the State Council. The policy clearly proposed to restructure the iron and steel industry through merger and reorganization, expand the backbone enterprise groups that have comparative advantages and improve the

concentration of the industry. By 2010, the number of iron and steel enterprises has decreased by a large margin. The top 10 iron and steel groups produce more than 50% of the national total output, and the percentage is supposed to be over 70% by 2020. The iron and steel enterprises are encouraged to be developed into groups and reorganized by means of combination, merger and reorganization, mutual stock holding, etc., to reduce the number of iron and steel production enterprises and thus realize the restructuring, optimization, and upgrading of the iron and steel industry. In particular, the documents made a point that to support and encourage the qualified large enterprise groups to conduct cross-regional merger and reorganization; by 2010, the industry shall form two giant enterprise groups with a capacity of 30 million tons and several other giants with a capacity of 10 million tons, which have international competitiveness.

China's policies have guided and promoted the large iron and steel enterprise groups to achieve substantial development and even breakthroughs in their cross-regional reorganization and merger. By 2010, all the five giant iron and steel groups had produced more than 30 million tons of products, respectively, including HBIS, Baosteel, Wuhan Steel, Anshan Steel, and Shagang Steel, in which HBIS Group had produced 52.86 million tons of products, Baosteel had produced 44.4951 tons of products, and Anshan Steel has produced 40.2816 tons of products. Wuhan Steel, HBIS, Shougang Steel, and Shagang Steel had all succeeded to double their crude steel output, in which HBIS Group achieved a growth rate of 177.4% and that of Wuhan Steel Group was 165.6%. Besides, 8 iron and steel enterprise groups had respectively produced more than 10 million tons of crude steel including Shougang Steel, Bohai Steel, New Wu'an Steel, Baosteel, Ma'anshan Steel, Shandong Steel, Anyang Steel, and Valin Steel. The production scale is beyond the expected target. See Fig. 6.6.

(2) First Special Policy for Merger and Reorganization.

In August 2010, the State Council issued the *Opinions on Promoting Merger and Reorganization of Enterprises* (No. 27 [2010] by the State Council), clearly stating to further implement the adjustment the revitalization plans for key industries, and strengthen and expand the superior enterprises. Automobile, iron and steel, cement, machinery manufacturing, electrolytic aluminum, rare earth, etc., are the key industries in which the superior enterprises have to be promoted in their combination, cross-regional merger and reorganization, overseas acquisition and investment and cooperation to improve the industrial concentration for large-scale and intensive operation. The backbone enterprises with independent intellectual property rights and world-renowned brands have to be fueled for their development, and a batch of large-scale enterprise groups with international competitiveness should be set up. By doing this, the industrial structure can be optimized and upgraded.

On the one hand, the objectives have to be clarified; on the other hand, the system obstacles in the way to merger and reorganization of enterprises have

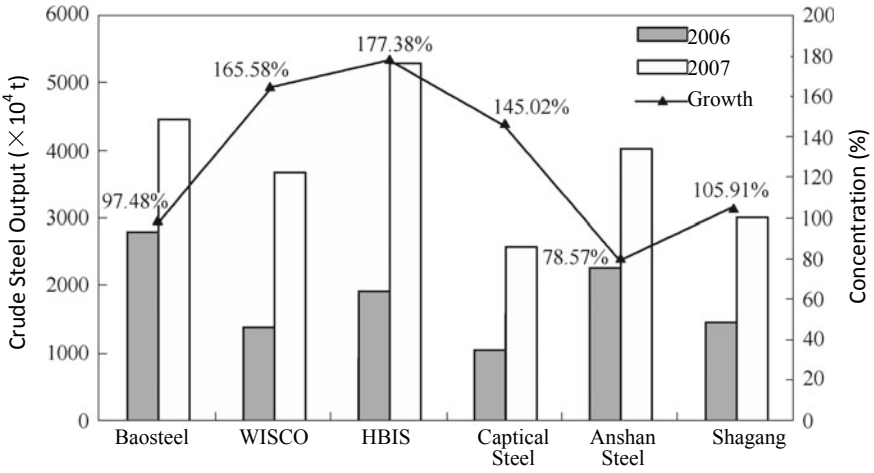

Fig. 6.6 Comparison of crude steel output of some large iron and steel enterprise groups in China from 2006 to 2010

to be wiped out. The eight supportive policies have to be put into practice including preferential taxation policy, more financial fund investment, more financial support, to support the enterprises in independent innovation and technological progress, to allow full play to the capital market's function of promotion, to improve the relevant land management policies, to well handle the credit and debt as well as staff resettlement issues, and to deepen the enterprise system reform and management innovation. Besides, to improve the management and service for merger and reorganization has to be stressed.

More importantly, led by the Ministry of Industry and Information Technology, a Enterprise Merger and Reorganization Work Coordination Team is built up, with participation of the National Development and Reform Commission, the Ministry of Finance, the Ministry of Human Resources and Social Security, the Ministry of Commerce, the People's Bank of China, the State-Owned Assets Supervision and Administration Commission, the State Administration of Taxation, the China Banking Regulatory Commission, China Securities Regulatory Commission, etc., to make overall plans and coordinate the merger and reorganization of enterprises, study and resolve major issues occurred during the enterprises' merger and reorganization, elaborate the relevant policies and the supporting measures, coordinate the relevant local governments and enterprises for good organization and implementation, and clarify *Table of Work Division for Merger and Reorganization of Enterprises*.

(3) First Special Policy for Overcapacity Cutting in Iron and Steel Industry.
In February 2016, the State Council released *Opinions on Resolving Overcapacity for Profitable Development of Enterprises* (No. 6 [2016] by the State Council) which clearly indicated to encourage the qualified enterprises

to conduct cross-industrial, cross-regional, and cross-ownership reductive merger and reorganization, and the enterprises in the major steel-producing provinces were in the priority list of merger and reorganization.

(4) First Special Policy for Merger and Reorganization for Iron and Steel Industry.

The Instruction on Promoting Iron and Steel Industry's Merger and Reorganization and Disposal of Zombie Enterprises released by the State Council in September 2016 was the top-level design for cutting overcapacity and structural optimization and adjustment of the iron and steel industry and another document that urged specific targets and requirements to merger and reorganization following the *State Council's Opinions on Promoting Merger and Reorganization of Enterprises*, the *Instructions to Promote Merger and Reorganization of Major Industries and Enterprises* (No. 16 [2013] by China Federation of Industrial Economics under the Ministry of Industry and Information Technology). Moreover, it is the first Special Policy for Merger and Reorganization of the Iron and Steel Industry. The policy was more targeted to highlighting the key points, implementation step by step, flexible adjustments as per local realities, differentiated solutions for different enterprises. It emphasized more on resolving the current problems and eliminating the root causes and establishing a long-term mechanism for selecting the superior and eliminating the inferior enterprises to actively yet prudently revolve the overcapacity and promote the industrial reorganization.

3. Analysis of Characteristics and Obstacles of Merger and Reorganization in Iron and Steel Industry

(1) Analysis of characteristics.

1) The work is mainly based on the government's promotion and with the help of the enterprises themselves.

For a long term since the reform and opening-up, all mergers and reorganizations were conducted by the government. Since the 16th National Congress of the Communist Party of China, the State-Owned Assets Supervision and Administration Commissions of all levels have manifested increasing importance in the mergers and reorganizations. The government's promotion presents the investors' will, which becomes the key for a successful combination and reorganization. Many cross-regional reorganizations and local combinations are promoted by the local State-Owned Assets Supervision and Administration Commissions. The reorganization between the state-owned enterprises is driven by the government in most cases. The cross-regional reorganizations are such as the alliance between Baosteel and Shanghai Metallurgical Holding Group Corporation to reorganize Xinjiang Bayi Steel and Zhejiang Ningbo Steel Plant, the reorganization of Wuhan Steel to Kunming Steel and the Shougang Steel holding shares of Shuigang Steel; the local mergers include the reorganization of Wuhan Steel to Echeng Steel, the reorganization of Panzhihua Steel to Chengdu Seamless Pipe

Plant, Chengdu Steel Plant and Changcheng Steel Plant, the reorganization of Ma'anshan Steel to Hefei Steel, the Hebei Steel set up from combination of Tangshan Steel and Handan Steel and the Shandong Steel established from the combination of Jinan Steel, Laiwu Steel, and Shandong Metallurgical Corporation.

At the same time, the combination and reorganization mainly based on enterprises are accelerating. The acquisitions conducted by enterprises themselves such as the acquisition and reorganization among private enterprises are usually through the capital market.

2) Combination of asset transfer and market operation.

The acquisition and reorganization among the state-owned enterprises over the recent years have presented two different ways to those between the state-owned giants and the local state-owned enterprises: the asset transfer and the market transactions, while those between the state-owned enterprises and the private enterprises are completed through a market-based mode.

The ever-deepening reform and improving market economic system have diversified financing means and expanded the stock market, which brought more flexible and diverse means to acquisition and reorganization of the state-owned enterprises. Administrative transfer is evolving into various other means for combination and reorganization. In addition, mergers and acquisitions through various capital transactions such as increase in capital and share, equity replacement, overall listing, and consolidation by merger are becoming more common.

The acquisition and reorganization between the state-owned giants and the local state-owned enterprises are completed through asset transfer such as the Shougang Steel holding shares of Shuicheng Steel and the reorganization between Jianlong Steel and the new Fushun Steel. Some acquisition and reorganization are carried out through directional increase in capital and share such as the acquisition of Kunming Steel by Wuhan Steel, the capital increase of Anshan Steel to Tiantie Cold-Rolled Sheet Plant, the reorganization of Baosteel to Xinjiang Bayi Steel, and the acquisition of Baosteel to Ningbo Steel Plant, as well as acquisition of equity replacement, such as Baosteel's acquisition of Ningbo Steel Plant. Cases of overall listing include the listing of Valin from the alliance of Xiangtan Steel, Lianyuan Steel, and Hengyang Steel Tube and the overall listing of Nanjing Steel's capital with its reorganization by Fosun International. Some are through mergers such as the merger between Tangshan Steel Group and Handan Steel and the mergers among Jinan Steel, Laiwu Steel, and Shandong Metallurgical Corporation.

Another form of reorganization is that the large enterprises found a joint venture company (new assets), such as Shougang Jingtang Ltd. Iron & Steel Co., Ltd., Guangdong Steel, Guangxi Steel and Chaoyang Anlin Iron and Steel Co., Ltd. under Anshan Steel Group from merger of

Anshan Steel and Linyuan Steel. Acquisitions in the form of increment of cash include Ma'anshan Steel's acquisition of Hefei Steel, Valin's acquisition of Wuxi Steel, Shagang Steel's acquisition of Huai'an Steel, Henan Yonggang Steel, Xinrui Special Steel and Jiangsu Yonggang Steel, Jinxi Steel's acquisition of Xinyi Steel, etc.

3) Attach equal importance to intra-regional reorganization and cross-regional reorganization.

In recent years, the large-scale superior iron and steel enterprises all over China are taking an active part in and dominate the acquisition and reorganization of local state-owned enterprises. In some cases, the large enterprises initiate the acquisition and reorganization of local state-owned enterprises; in other cases, some local state-owned enterprises also actively transfer the controlling interest to the large enterprises such as the reorganizations of Baosteel to Xinjiang Bayi Steel and Ningbo Steel Plant, Wuhan Steel to Echeng Steel, and that of Ma'anshan Steel to Hefei Steel. While the large enterprises are reorganizing the local state-owned enterprises by merger and acquisition, the intra-regional merger and reorganization of the state-owned enterprises, especially those in the same province, are striding forward. Cases of regional enterprise alliances such as the merger between Tangshan Steel and Handan Steel and that among Jinan Steel, Laiwu Steel, and Shandong Metallurgical Corporation are aiming at forging large and superior enterprises to take the lead in China's iron and steel industry. While for the state-owned enterprises which cannot be strengthened within the province, many provinces and cities conduct nationwide merger and reorganization and some of them take the first steps actively to transfer the controlling interest to the large state-owned enterprises for better development, for which a good example is Shougang Steel holding shares of Shuigang Steel.

4) Extend horizontal reorganization to vertical reorganization.

As the main form of the acquisition and reorganization of the state-owned enterprises in recent years, the enterprises' horizontal reorganization includes not only the merger and reorganization among the enterprises in the same industry, but also the reorganization and integration of the same or similar business segments within the enterprise or among enterprises.

The enterprises' vertical reorganization means to improve the industrial chain. After the horizontal reorganization of iron and steel enterprises to form a large enterprise group, the next step is to strengthen the competitiveness by tightening the grasp to resources and the market. That means to merge with the resource enterprises to set foot in the upstream and to extend to the downstream for closer cooperation with the customers. The reorganization and strategic cooperation alliance with the raw material supplier upstream and the customers' downstream

complete an industrial chain which goes across industries, regions and areas, being an effective way for vertical reorganization.

Iron ores and cokes are the lifeblood for iron and steel enterprises to ensure production and maintain their development. Therefore, they are the key contents for developing the raw material supply chain system. The recent years have witnessed active implementation of the Go Out policy by China's large enterprises by means of direct investment in the overseas market and acquiring the foreign iron ore companies or holding their shares. For example, Anshan Steel holds shares of Gindalbie Metals, Australia, and Valin holds shares of Fortescue Metals Group Ltd. Domestically, they exchange shares with the large coal (coke) suppliers or set up joint ventures to develop resources together. For example, Wuhan Steel joins its venture with Pingdingshan Coal Group, Wuhan Steel holds shares of Pingdingshan Coal Resource Development Co., Ltd., and Pingdingshan Coal holds shares of the coal chemical industry of Wuhan Steel. The sales industrial chain has been remolded to a long-term stable sales of iron and steel products to the customers. To establish a fixed long-term cooperative relationship with the downstream terminal customers is the best choice for iron and steel enterprises to maintain a favorable product demand and a stable marketing channel. For example, Baosteel holds shares in two of CSIC's major shipbuilding base construction projects, and Anshan Steel and Dalian Huarui Heavy Industry Group Co., Ltd. have joined their venture to build a ship plate distribution center. That has enhanced the integral and comprehensive competitiveness of the enterprises.

5) Combine the merger and reorganization with the enterprise's reform and restructuring.

In recent years, some state-owned enterprises have combined acquisitions and reorganizations with enterprise restructuring by actively attracting state-owned enterprises, foreign-funded enterprises, or private enterprises as strategic investors to accelerate the shareholding reform in groups' level.

Features of acquisition and reorganization of the state-owned enterprises show that on the one hand, the acquisition and reorganization of China's enterprises are much more market-based, which is reflected in the improvement of the market's function and the enterprises' dominance in the acquisition and reorganization; on the other hand, the acquisition and reorganization of Chinese enterprises are characterized with economic transformation period, which means that the function of market and enterprises has not been given full play to acquisition and reorganization and market-oriented acquisition and reogranization is required to be promoted further.

(2) Analysis of Obstacles.

1) Institutional Obstacles.

In China, the mode of "centralized ownership and level-to-level management" is applied in the state-owned property management system.

To be specific, all nominal state-owned enterprises are actually categorized into the central government enterprises, the provincial state-owned enterprises, and the municipal state-owned enterprises. The essence of such system is that the government manages the enterprises and the government manages the properties, human resources, and operations as an organic whole. The iron and steel enterprises are of diversified ownership including the state-owned enterprises, the private enterprises, the shareholding enterprises, the foreign-funded enterprises, etc. Under this system and mechanism, merger and reorganization of enterprises reallocate the benefit and power among governments and among the different reorganized bodies. Due to the differences among various interest demands and management systems, there are contradictions between the central and local governments and among different local governments in the distribution of fiscal and taxation and income from the state-owned assets. The complex benefit-based relationships have, to some extent, impeded asset restructuring. Therefore, it is very difficult to reorganize the assets. Moreover, such administrative division system is more likely to obstruct cross-regional merger and reorganization.

2) Obstacles of Investors' Intention.
Most of China's large iron and steel enterprises are state-owned enterprises. Therefore, the government's willingness to invest determines the success or failure of reorganization. The state-owned enterprises are under the management of governments in asset, human resources, and operation. Local governments are very powerful in deciding the senior executives of the reorganized enterprises, whereas the enterprises themselves are not allowed to make such decision. The government's performance appraisal indicators often restrict the reorganization of enterprises.

   Today, the reorganization of enterprises can thoroughly embody the investors' intention. However, the merger and reorganization of the iron and steel enterprises in China are not completely capital market-oriented, so they cannot fully reflect the enterprises' intention of reorganization. The investors' right of personnel administration cannot be guaranteed, making the enterprise reorganization lack of authoritativeness. The enterprises cannot well cooperate even though they are combined together, let alone integration after the reorganization and its synergy.

3) Obstacles from Regional Protectionism.
At present, local governments have become a major obstacle to the cross-regional reorganization of iron and steel enterprises. The local governments are more likely to be indulged in departmental selfishness, which imposes negative impacts on the reorganization. The iron and steel industry is divided into regions. Most of the local governments grant new projects for better political achievements and GDP, regrettably considering only short-term benefits. Iron and steel enterprises are big

taxpayers in almost every province. The regional protectionism stems the merger and reorganization.

The regional protectionism, however, stimulates the reorganization of enterprises within the region. There are less conflicts in reorganization of enterprises within the same province or of the same ownership system where the reorganization optimizes allocation of resources in the region; however, in order to solve the historical pending issues, the industrial reorganization is more likely to be restricted within a province instead of becoming alliances between giants. The regional protection forms barrier to foreign enterprises, which objectively protects the regional backward production capacity, but is not conductive to exert the synergistic effect of the reorganization.

4) Obstacles from Benefit Distribution.
The tax distribution system and the transfer payment system are the prevailing financial and taxation systems in China today. The tax distribution system means to categorize taxes into the central government revenue, the local government revenue, and the central and local government-shared revenue. In such a system, the benefit distribution among governments acts as a huge barrier for cross-provincial and cross-regional merger and reorganization of iron and steel enterprises.

When studying the issues related to merger and reorganization, local governments and enterprises are worried about the unified development plan after the merger and reorganization. If the enterprise business after merger and reorganization is not in the local area, it will affect the income and fiscal revenue of the region. Therefore, they are only willing to engage in loose corporation groups and are unwilling to engage in merger and reorganization with assets as the bond so that the substantive effects of reorganization cannot be fully achieved. Coordinating the local interests and overall interests and establishing the reasonable interest compensation and transfer payment mechanism are the key to promoting the reorganization between giants across cities, provinces, and regions.

5) Barriers to Supporting Policy Measures.
Due to historical reasons, many iron and steel enterprises, especially the state-owned large-scale iron and steel enterprises, have a large number of historical problems, such as the large number of personnel, the enterprises burdened with social, the plant-run large-scale collectives, and the heavy burdens of auxiliary companies. In response to these problems, the state has successively introduced some policies. At present, schools, hospitals, and public security bureaus run by state-owned enterprises are gradually being transferred to local governments. In 2002, the State Economic and Trade Commission and other eight ministries and commissions issued the *Implementation Measures on the Separation of the State-Owned Large and Medium-Sized Enterprises' Main and Subsidiary Separation, Subsidiary Industry Restructuring and Distributing Surplus Employees*, and the auxiliary industry restructuring work is

being smoothly implemented. On November 6, 2005, the State Council also approved the guidance opinions on the pilot reforms of the plant-run collectives in the northeast region and requested that it shall be actively and properly resolved on the premise of ensuring stability. Only by well handling, the separation of the main and the auxiliary businesses can the efficiency of the subject after reorganization be fully leveraged. However, the merger and reorganization of iron and steel enterprises are an important and pressing task so that the implementation of supporting policies constitutes a major issue.

To the major problems of reorganization, there have not been any comprehensive policies, including a series of coherent systems in finance, social security, laws, environmental protection, etc. For example, fiscal levy of government at all levels should be balanced to solve the issue of benefits distribution between the central and local governments and among local governments in this regard. The first thing that needs to be done is about the central and local finance and taxation policies, which will shift the value-added tax from production type to the consumption type, and the benefits between the central and local governments and among the local governments in the reorganization should be redistributed.

6) Lack of Internal Impetus for Restructuring.
At present, China's iron and steel industry is in a period of development, and most enterprises have relatively good returns. Self-development and expansion are the main means for enterprises to grow bigger and stronger so that the internal impetus of merger and reorganization is insufficient. The enterprises show much impetus only under the circumstances of fierce market competition, high operating pressure and difficulty for survival and development. Most enterprises would seek reorganization with large enterprises for financial support only when the market is stagnant or when in the crisis of lacking funds and broken capital chain. This kind of reorganization is a short-term expediency without long-term development goals, which will affect the effects of reorganization.

4. Development Concepts of Mergers and Reorganization in the Iron and Steel Industry

Through years of development, China's iron and steel industry has made tremendous progress and remarkable achievements. It has already achieved the "quantitative catching up" in terms of the scale, but has long been criticized due to the problems of "being big but not strong" like the weak independent innovation ability, uneven development, decentralized operation, disordered competition, and low benefit level. This indicates that it is even harder to achieve a "qualitative leap" from catching up to leading in competitiveness. In essence, the so-called big and strong are not contradictory but complementary to each other. As scale expansion is the basic law of the development of the iron and steel industry, being "big" is an advantage that

can be comprehensively promoted from the overall industrial perspective. This has been proved by practice; however, to break through the bottleneck of "being strong", targeted goals and measures must be made. Stronger enterprise will bring about stronger industry. To this end, a more efficient way is to make breakthroughs with a focus on the key enterprises. The core is to build a world-class cluster of iron and steel enterprises with strong international competitiveness and to form a coordinated development pattern featuring the super iron and steel enterprises groups as the leader, giant iron and steel enterprises groups as the key, and the regional iron and steel enterprises groups as the support. Meanwhile, a layout structure of "a network with one belt and several points" will be established to make concentrations in the coastal areas and industrial parks and extension to inland markets. Such efforts will promote the transformation and upgrading of the iron and steel industry and achieve sound and sustainable development.

Iron and steel enterprises should continue to be problem-oriented and solve the outstanding issues. In response to the problems like unsound service systems, institutions and mechanisms, difficult cross-region and cross-ownership reorganization, hard financing and heavy burdens, some enterprises, with the market-based means, have properly addressed the debts and non-performing assets, implemented the fiscal policies of bad debts canceling and verification, and improved financial institutions' supporting policies for increasing the disposal of debt-repaid assets by taking the strategic ideas of "more M&As and less bankruptcy liquidation" as the guidance, the strategic arrangement of "innovatively developing a batch, reorganizing a batch and pulling a batch out of the market" as the direction, the reorganization of regional iron and steel enterprises, combination of the strong ones and international cooperation as the emphasis as well as the supporting policy and risk prevention as the pillar. These have cleared up the barriers hindering the debt restructuring and bankruptcy liquidation in the iron and steel industry, boosted the structural optimization and industrial clustering, and promoted the efficient development with less quantity and more specialty. Iron and steel enterprises should also achieve the "double optimization" in organizational structure and industrial layout; "double reduction" in the number of enterprises and total emissions; "double improvement" in the quality and efficiency of enterprise development.

To promote the merging and reorganization in the iron and steel industry and achieve orderly development, we should adhere to the "six basic principles": First is to adhere to market-based reforms and provide good coordination and guidance. The decisive role of market in resource allocation should be leveraged, and administrative intervention should be cut down. Coordination and guidance of the government should be strengthened to continuously promote administration streamlining and power delegation and create a good external environment. Second is to adhere to the main body of the enterprise and implement their responsibilities. The responsibility of the main body should be strengthened. With a scientific and rational incentive and restraint mechanism, the initiative and creativity of the leaders, innovative talents and management personnel at all levels in the enterprise will be fully mobilized. Third is to strengthen policy bottoming and ensure social stability. Strengthening bottoming ability of policies will help to achieve a reliable disposal of enterprises exit. The

role of the party organizations, trade unions, and workers' congress of the enterprise should be fully leveraged to do a good job in ideological work in an in-depth manner so that employee relocation will be properly addressed and social stability will be maintained. Fourth is to conduct overall planning, key implementation, and hierarchical advancement. By fully considering the industrial characteristics and realities of the enterprise, top-level design should be strengthened with overall planning. Enterprises should establish an evaluation system for major projects, in which a batch of projects will be cultivated after being planned and a project will only be pushed forward under mature conditions. The fifth is to adapt to local conditions, make tailored measures for enterprises, and provide special support. Enterprises should strengthen the experience summary, project demonstration, and promotion and set up a "closed-loop" special working group for key projects, namely to take one-to-one responsible and support for each project, to press ahead one project by putting it into real operation, and to drive forward a batch of projects to take the lead. Sixth is to intensify market supervision and build a fair environment. The working methods will be transformed from mainly depending on the administrative measures to a comprehensive utilization of laws and regulations, economic means and necessary administrative measures. The defined standards should be shifted from mainly depending on the equipment scale and process technical standards to the comprehensive standards in environmental protection, energy consumption, water consumption, quality, safety, technology, and others. A market-based, legalized, and normalized work promotion mechanism will be established by consolidating supervision and law enforcement so as to build a level-playing market environment and promote the orderly competition, mutual promotion, and common improvement of both the state-owned and private iron and steel enterprises.

5. Suggestions for Merger and Reorganization in Iron and Steel Industry

   (1) Maintaining existing strategies and deepening merger and reorganization. Taking building a strong world-class iron and steel enterprise with Chinese characteristics as the core, the mergers and acquisitions of the enterprises shall be supported, guided, and encouraged in an orientation of forming a highly concentrated and efficient industrial organization with fine division of labor. On the one hand, we should promote strong alliances centering on the advantageous products. With the goal of forming the world-class competitiveness and innovation capability in automotive sheets, electrical steel, home appliance plates, shipbuilding plates, pipeline steel, oil well pipes, and other products, iron and steel enterprises should be given support in divesting ineffective and inefficient production capacity and participating into mergers and reorganization with high-quality assets so as to create a world-class iron and steel enterprise with Chinese characteristics. On the other hand, we should focus on supporting the reorganization of iron and steel enterprises in the region. In the process of cutting overcapacity, due to the tight time schedule and heavy tasks, some local governments adopted the method of apportioning to let enterprises cut down their capacity according to specific proportion. Such practice may cause the mismatching

between the process and capacity of all enterprises in the region, which would greatly increase the production cost and substantially undermine the guidance for enterprises' competitiveness. Accelerating the regional reorganization should have government guidance to become an internal impetus of the enterprises. Therefore, an industrial pattern dominated by superior and strong enterprises along with the coordinated development of small- and medium-sized enterprises (being professional, specialized, and innovative) can be formed to optimize the market-based environment and accelerate the transformation and upgrading. At the same time, focus will be put on supporting the strong alliance of large iron and steel enterprise groups and the "international capacity cooperation". We should give full play to the leading role of large iron and steel enterprise groups in independent innovation, layout optimization, standardized management, resource integration, and the leading role of the iron and steel industry in the "Belt and Road" Initiative and international capacity cooperation to create a batch of world-class iron and steel enterprises with strong international competitiveness and Chinese characteristics as well as several backbone iron and steel enterprises with specialized division of labor. The ultimate goal is to comprehensively and continuously meet the needs of national economic and social development.

(2) Making top-level design and clarifying development goals. In order to achieve the development goals of mergers and reorganizations, follow the rules of market-based operation, and give full play to the government's policy guidance and management services, merger and reorganization of China's iron and steel industry needs to be designed from the top level from three perspectives, namely building international competitiveness, regional advantages, specialized integration. Meanwhile, development goals targeting at the scale and quantity of various types of enterprises should be proposed. In response to the clear favorable policies in such fields as the coordination mechanism for state-owned property transactions, standardized operations, direct power supply of large customers, resource security, logistics system optimization, technological structure adjustment, merger and acquisition tax, inefficient asset withdrawal mechanism, land use and employee resettlement, we need to guide and encourage local authorities and enterprises to actively push forward under the unified deployment of the state.

(3) Preparing merger and reorganization plan in categories. According to the national arrangement on merger and reorganization, the plans of which should be prepared respectively according to the categories, including the plans prepared by the large-scale enterprise group of the central government enterprise or state-owned system, the competent local department with regional advantages, and the agencies entrusted by the Ministry of Industry and Information Technology. We should actively guide the regions and companies to determine the target enterprises of mergers and reorganization according to their own development strategy plans and the requirements

of national industrial policies, and the plans of mergers and reorganizations should be formulated in a scientific manner with meticulous design, investigation, and discussion combining the conditions of the macroeconomy, industry, and enterprises. In choosing the target enterprise, it should be conducive to realizing the complementary advantages of resources and maximizing the synergy effect of resources.

(4) Strengthening integration after reorganization. Enterprises should attach great importance to the integration of various factors and resources after reorganization and strengthen the integration of personnel, culture, and management. Taking the merger and reorganization as an opportunity, enterprises shall deepen the reform of the management system and actively carry out the transformation of the corporate system and the shareholding system to further improve the corporate governance structure. In combination with realities, business process reengineering can be conducted in personnel, finance, procurement, sales, production, R&D, and other links to optimize the allocation of production factors such as land, capital, technology, and talents as well as innovate management models and achieve complementary advantages and deep integration.

(5) Implementing policy measures. All local authorities and enterprises shall conscientiously implement the *Opinions of the State Council on Promoting Mergers and Acquisitions of Enterprises*, the plans in categories, and the measures promoting mergers and reorganization in the areas of finance, taxation, financial services, credits and debts, staff placement, land and mineral resources allocation to support enterprises in this regard. All local departments in industrialization and informatization, development and reform, finance, human resources, social security, land and resources, commerce, state-owned assets, industry and commerce, and others should study and introduce specific measures to promote mergers and reorganization of enterprises by combining the actual conditions of the region. Priority should be given to supporting enterprises conducting mergers and reorganization to make technological transformation, encourage enterprises to strengthen and innovate management, and enhance their comprehensive competitiveness.

(6) Creating a good environment. Adhere to market-based operations, fully respect the willingness of enterprises, fully mobilize the enthusiasm of enterprises, and guide and encourage enterprises to voluntarily carry out mergers and reorganization. Clean up, revise, and abolish all policies, regulations, and practices that are not conducive to enterprises' mergers and reorganization. In particular, the local regulations restricting mergers and reorganization by non-local enterprises should be resolutely eliminated. Actively explore inter-regional interest sharing mechanism for cross-regional merges and reorganization. Under the premise of not violating the relevant national policies and regulations, a fiscal and taxation benefit-sharing agreement can be sign among regions after the merger and reorganization according to the scale of assets and profitability of the enterprise so as to properly solve the

problem of the attribution of statistical data such as the added value after mergers and reorganization and realize results sharing.

(7) Doing a good job in management services. It is recommended that local governments and relevant departments should urge enterprises to strictly implement the relevant laws and regulations as well as the national industrial policies concerning mergers and reorganization, standardize operational procedures, strengthen information disclosure, prevent and control insider trading, and prevent moral hazard. Encourage foreign-funded enterprise to participate in the restructuring, mergers and reorganization of domestic enterprises via equity participation, M&A, and other means. Meanwhile, security review on domestic enterprises made by foreign-funded enterprise should be strengthened to safeguard national security. For enterprises' mergers and reorganization that meet the statutory reporting standards for concentration of undertakings, it is necessary to conduct anti-monopoly review on such concentration. All regions should strengthen the guidance for mergers and reorganization of enterprises, study and formulate opinions to promote the enterprises' mergers and reorganization in the region, and combine this issue with enterprise restructuring, management innovation, technological transformation, and elimination of backwardness. Channels for exchanging information should be broadened to establish a public service platform which can promote enterprises' mergers and reorganization. We should make the intermediary services for mergers and reorganization more professional and standardized and focus on introducing and cultivating specialized talents who are familiar with M&A business, especially the cross-border M&A business so as to actively provide intermediary services in market information, strategic consulting, legal adviser, financial consultant, land valuation, assets evaluation, property rights transactions, financing intermediaries, independent audits, enterprise management, etc. Experience of typical examples should be summarized and advocated with strengthened publicity and guidance.

Enterprises should implement mergers and reorganizations in a planned manner, thoroughly study the possible contradictions and problems that may occur in mergers and reorganization, and attach great importance to the risks of market, finance, staff resettlement, cross-border M&A, and others in this process. We should also strengthen risk management, identify risk factors, assess risk intensity, properly formulate corresponding response plans and measures, and build a sound risk management system.

6.2.3 *Resolutely and Continuously Crack Down on "Substandard Steel"*

Enterprises producing MF furnace "substandard steel" generally do not have the secondary refining and inspection process. Such billets (ingots) and steel products have poor quality performance and obvious safety hazards. Although a few enterprises are equipped with refining equipment, the equipment is rarely used for the sake of cost, but for examination. Generally, these enterprises apply for and obtain licenses of hot-rolled steel bar production in the name of independent steel rolling enterprises, but actually they engage in productions of melted scraps, continuous casting billets, and steel products. At the same time, there are no invoices for procurement and sales in their operation and such enterprises produce substandard steel by means of OEM and counterfeiting. These violations of laws and regulations involving tax evasion and illegal profit-making not only seriously disturb the market order but also exacerbate vicious competition, resulting in the phenomenon of "bad money driving out good money" so that they must be thoroughly eradicated and banned.

As early as in December 1999, the former National Economic and Trade Commission issued the *Catalogue of Eliminating Backward Production Capacity, Processes and Products* (*Second Batch*), which clearly stipulated that the industrial frequency furnace for the production of substandard steel or ingots should be eliminated before the end of 2000. After that, substandard steel produced by MF furnace is listed as one to be eliminated in the *Steel Industry Development Policy*, *Guidance Catalogue for Elimination of Backward Production Processes, Equipment and Products in Some Industrial Industries*, and *Industrial Structure Adjustment Guidance Catalogue*, etc.

Due to the hidden production of substandard steel, the driving of market interests, and the "tolerance" of the local government for economic development, it has not been completely eliminated in a long time or even went out of control with sprawling production. In addition, the incompleteness and ambiguity of the relevant policies also give these enterprises the opportunity to exploit the loopholes. For example, the policy only stipulates that the MF furnace cannot produce substandard steel, plain carbon steel, stainless steel and construction steel, but not covers other steel grades (such as low alloy steel and high-quality carbon structural steel). At the same time, due to the huge smelting capacity of MF furnace, issues related to employee resettlement, credits, and debts are also very prominent. It is difficult for local governments, especially counties and towns, to resolutely dismantle them and put it into practice.

On September 12, 2016, the Office of the Inter-Ministerial Meeting of the National Iron and Steel Industry to Resolve the Excessive Production Capacity and the Pursue Development issued the *Notice on Illegal Production and Sales of Small Steel Plants in Xinyi, Jiangsu Province,* requiring that the provincial government should to attach great importance to its negative impact incident, investigate the causes and seriously hold those involved accountable. At the same time, all relevant regions are required to conduct a comprehensive general survey on the illegal construction of steel projects and the illegal production and sales of substandard steel products in

their respective jurisdictions. This has opened the prelude of severely cracking down on the "substandard steel" produced by MF furnace.

In February 2017, China Iron and Steel Association, Chinese Society for Metals, China Foundry Association, China Special Steel Enterprises Association, Stainless Steel Council of China Special Steel Enterprise Association, Central Iron and Steel Research Institute, University of Science and Technology Beijing, China Metallurgical Industry Planning and Research Institute, China Metallurgical Information Standardization Institute, and other units as well as some iron and steel enterprises organized experts in the industry to put forward "the opinions on supporting the fight against 'substandard steel' and defining the scope of use of power frequency and medium frequency induction furnaces". This means that induction furnaces used as smelting equipment to produce all kinds of casting products in the foundry industry, the medium (power) frequency furnace that meets the following requirements in the production of special alloy materials, and the medium (power) frequency furnace only for melting ferrochrome, nickel–iron, and other alloys in production of stainless steel and high alloy steel are not in the list of shutting down. All medium (power) frequency furnaces' production lines that do not fall within the scope of the above three categories, regardless of their scale and the age of the production equipment and whether they are provided with liquid steel refining methods, continuous casting and rolling equipment, dust removal equipment, and other environmental protection facilities, are in the scope of "substandard steel" to be banned according to the laws. Equipment and facilities such as the main smelting equipment, transformers, dust hoods, operating platforms, and tracks shall be completely dismantled. Among them, enterprises that have been listed in the announcement list in accordance with *Iron and Steel Industry Standard Conditions* and *Foundry Pig Iron Enterprise Certification Standards* need to be immediately disqualified; the enterprises that have obtained the license to produce and sell billets (ingots) and steel products need to be revoked immediately with the license.

In April 2017, *Opinions on Well Resolving the Excessive Production Capacity of the Iron and Steel and Coal Industry in 2017 to Realize the Development of the Difficulties* of the Inter-Ministerial Meeting on Resolving Overcapacity and Profitable Development for National Iron and Steel and Coal Industry (NDRC [2017] No. 691) [4] clearly pointed out the illegal production capacity of "substandard steel" shall be resolutely and completely banned and eliminated. The standards defining "substandard steel" shall be implemented with reference to the *Opinions on Supporting the Crackdown on "Substandard Steel" and Defining the Application Range of Power Frequency and Medium Frequency Induction Furnace*s (China Iron and Steel Association [2017] No. 23). All local authorities and relevant central government enterprises shall completely dismantle the main equipment of medium (power) frequency induction furnace, transformers, dust hoods, operating platforms, and tracks used for the production of "substandard steel" by the end of June 2017 according to the law; enterprises that have dismantled the equipment shall be publicized on the Web sites of local governments to accept social supervision. The cut-off "substandard steel" capacity cannot be listed in the task of cutting overcapacity in each region in 2017 and cannot be supported by the central special fund policy. The employees

involved should be resettled well by the local governments. The Inter-Ministerial Joint Meeting should organize inspection and acceptance and strengthen supervision to ensure complete removal as required and strictly prevent "shutdown instead of close", off-site transfer, and resurgence.

As of May 2017, the State Council has organized four rounds of special inspections for "substandard steel" and began the centralized spot check and acceptance in early August. The National Development and Reform Commission clearly stated at the mobilization meeting before the acceptance that if problems with bad social impacts like existing "substandard steel" enterprises which are not on the reported list, there are enterprises still producing "substandard steel" against the law, the related equipment of the enterprises used for producing "substandard steel" have not been dismantled, new capacity violating laws are increased are found, and joint investigation team will be set up to check the project compliance, capacity replacement, product quality, land use permit, environmental protection, construction permit, safe production, registration, bank credit, taxation, export, and others. If it is true, it will be reported to the State Council and the local governments at all levels, their departments and related enterprises will be strictly held accountable in accordance with the laws and regulations. In addition to the incident of Jiangsu Huada Company, defaults of relevant personnel in Beichen District Government of Tianjin, the District Industry and Information Technology Commission, Dazhangzhuang Town and Xiditou Town, and security incident of Yanshan Hongxin Metal Regeneration Co., Ltd. in Wenshan, Hunan Province, are typical negative examples. Eight responsible organizations and 20 responsible persons are held accountable in a serious manner. This has exerted great deterrent effect and brought about tangible results on the banning of "substandard steel". As of August 2017, more than 600 "substandard steel" enterprises with MF furnaces were banned according to laws, involving a production capacity of over 100 million tons.

Along with the effectiveness of cutting overcapacity in the iron and steel industry and the phased victory of eliminating "substandard steel" according to laws, China's iron and steel industry has achieved significant improvements in capacity utilization, production and operation efficiency, organizational layout optimization, and other areas. However, the substantial efficiency growth of the iron and steel industry may make those enterprises producing "substandard steel" take risks to resume the production. Therefore, continuous efforts shall be made in the establishment of a sound long-term mechanism, sustained high-pressure strikes, etc.

Firstly, we should further deepen the awareness. We will effectively strengthen the "awareness in four aspects" to ensure that the central government's decision-making arrangements are truly implemented. In the task of banning the "substandard steel", there should be no retreats, no conditions, and no discounts regardless of any costs.

Secondly, we should strengthen investigations to prevent resurgence. Always maintain a high degree of sensitivity and fully understand the complexity and arduousness on cracking down on the "substandard steel" to ensure the full coverage of its banning in accordance with the law. Investigations and inspection should be strengthened to prevent the resurgence.

Thirdly, we should enhance the supervision of related equipment and strictly prevent the off-site transfer of backward production capacity. For those which have not been fully dismantled, they must be completely dismantled as soon as possible in accordance with the "four thoroughness" requirements and be abandoned. Equipment such as MF furnaces and transformers which has been dismantled should have registration and be tracked in the future. Off-site transfer of backward production capacity is strictly prohibited.

Fourthly, we should establish a long-term mechanism and strengthen follow-up supervision. It is recommended to establish a long-term mechanism for the banning and elimination of the "substandard steel" and earnestly conduct the follow-up supervision of those enterprises to strictly prevent the resurgent and new increased production capacity. In particular, public opinion supervision shall be made good use with smooth channels for reporting by the masses. By intensifying the verification and feedback of the report information, enterprises producing "substandard steel" will have nowhere to hide. At the same time, supervision and investigation of steel products' circulation and application need to be reinforced so that no dead ends and exploited loopholes will exist on the entire industrial chain. In addition, relevant government departments should further strengthen the study and grasp of industrial policies and strictly restrict the introduction and landing of backward production capacity projects in attracting investment.

6.3 Industrial Practices of Coordination

Building a fair and orderly market environment and reshaping and consolidating market guidance are the orientation of national industrial policy and the common pursuit of the enterprises. By taking systematic learning, in-depth study, and thorough analysis of the industrial policies, China Metallurgical Industry Planning and Research Institute assumes the task of providing better service to the government, industry, and enterprises. With experience and active explorations accumulated in promoting the supply-side structural reforms of the iron and steel industry as well as its sound development, the institute helps to give clear development strategies, road maps, timetables and task books for industry authorities, local governments and enterprises in mergers, reorganizations, and orderly development. Such efforts help enterprises, and the industry adapts to grasp and guide the trend of sustainable development.

The practices of the institute in promoting the coordinated development of the industry are detailed in Table 6.1.

Table 6.1 Practices of China Metallurgical Industry Planning and Research Institute in promoting coordinated development

No.	Type	Main content	Typical cases
1	Tasks of ministries and commissions	Merger and reorganization status, problem analysis, solutions, supporting policies, development proposals, etc.	*Thoughts and Suggestions on Implementing Mergers and Reorganizations and Building World-Class Iron and Steel Enterprises with Chinese Characteristics*, *A Study on the Overall Thinking of Mergers and Reorganizations in China's Iron and Steel Industry*, *Comprehensive Research and Result Analysis of the Restructuring Path of China's Iron and Steel Enterprises*
2	Projects of local governments	Restructuring plan, supporting policies, key tasks, organizational framework, etc.	*Overall Plan for Merger and Reorganization and Layout Optimization of Iron and Steel Industry in Hebei Province*, *Optimization Plan for Merger and Reorganization in Liaoning Province*, *Iron and Steel Industry Adjustment Plan of Hubei Province*, *Iron and Steel Industrial Structure Adjustment Plan of Zibo City, Shandong*, *Development Plan for the Joint Restructuring, Transformation and Upgrading of Sichuan Local Metallurgical Groups*, *Development Plan for Iron and Steel Industry Adjustment and Upgrade of Yancheng*, *High-quality Steel Industry Development Plan of Handan*
3	Projects of enterprise	Propose concepts of capacity restructuring, debt restructuring, making trials, key breakthroughs, etc.	*Report on Speeding up the Cutting Overcapacity of Steel in Northeast China with Yingkou Steel as a Breakthrough, Working Plan for Providing Consulting Services for Rizhao Steel*

(continued)

Table 6.1 (continued)

No.	Type	Main content	Typical cases
4	Special studies	System building, extension of meaning, key tasks, development initiatives, etc., and strive to build a new order for orderly development worldwide	*Suggestions on Building a Fair Competition Environment in the Iron and Steel Industry and Cultivating Strong Iron and Steel Enterprises, Strengthening Synergy for Reorganization of Baosteel and Wuhan Steel and Building the World's Iron and Steel Flagship, Building a World-Class Steel Enterprise Cluster to Promote the Second Catching-up of China's Iron and Steel Industry, China's Contribution and Initiatives in Resolving Global Steel Overcapacity, Discussion on the Implementation of Debt-to-Equity in Some Iron and Steel Enterprises*

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