

JFE Steel to Optimize Domestic Production Operations through Structural Reforms

JFE Steel Corporation announced today that in response to fundamental changes taking place in both the Japanese and international steel businesses, the company has decided to transition to an operating configuration based on seven blast furnaces, down from eight at present, and to review production operations by focusing resources more strategically on key products for enhanced competitiveness.

The reforms to be carried out as well as the expected effects and the related stakeholder considerations, strategies, etc. are outlined herein.

1. Main structural reforms

- Domestic operations will be consolidated from eight blast furnaces to seven and crude steel production capacity will be reduced by around 4 million tons, or about 13%. This will enable JFE Steel to enhance the overall competitiveness of its blast-furnace integrated steelworks and maximize manufacturing capacity at each steelworks and other works. In turn, this will support the company's sales and product strategies and ultimately earnings in priority fields including automobiles, energy, and materials for construction and infrastructure.
- By FY2023(ending March 2024) or thereabouts, upstream processes including iron making and steelmaking and hot rolling equipment in the East Japan Works (Keihin) will be shut down, and the East Japan Works' production of steel sheet, with the exclusion of some products (pickled steel sheet and special steel), will be consolidated in Chiba. The main facilities to be shut down in Keihin are the blast furnace, shaft furnace, sintering machine, coke ovens, converter, electric arc furnace, continuous casting machines, hot rolling equipment (excluding pickling line and skinpass mill: see attachment for details).

Also, as previously announced, some cold-rolling and surface-treated steel sheet lines will be shut down at the end of FY2019.

- Chiba will continue to function as an integrated blast-furnace production base in East Japan to manufacture primarily automotive steel sheet, which is one of our priority fields, as well as stainless steel and iron powder. In conjunction, blast furnace will be refitted by 2023 or thereabouts.

Also, as previously announced, facilities manufacturing steel sheet for cans will be shut down by FY2022.

- Facilities in Keihin will continue to serve as the East Japan Works' center for manufacturing steel plate mainly used in construction and steel pipe products, for which the West Japan Works and other areas will supply semi-finished products. The Kurashiki No. 7 continuous casting machine, scheduled to start up at the end of FY2020, will supply the steel plate mill with high-quality, low-cost semi-finished products, helping to enhance competitiveness.
- Operational efficiency and productivity will be upgraded with advanced IT and data science, and the company's organization and systems, including head office departments, will be streamlined on a company-wide basis.

- To facilitate reforms swiftly and efficiently, a Special Initiatives Headquarters will be established on April 1. The Headquarters will be headed by JFE Steel President Yoshihisa Kitano as its head.

2. Expected effects

- The reduction of fixed costs and other expenditures due to the shutdowns are expected to boost annual profit by around 60 billion yen. This figure includes the effects of previously announced shutdowns of facilities for producing steel sheet for cans in the Chiba district and cold-rolling and surface-treated steel sheet facilities in the Keihin district.
- By shutting down these selected facilities, outlays envisioned for the renewal of aging equipment will be reduced by some 200 billion yen over the next 10 years.

3. Recognition of impairment losses

In accordance with these structural reforms, JFE Steel will recognize impairment losses totaling around 220 billion yen in its FY2019 accounts, comprising 130 billion for Chiba district operations and 90 billion yen for Keihin district operations.

4. Stakeholder considerations

- Going forward, JFE Steel will provide detailed explanations of these initiatives to all stakeholders, including customers, business partners, employees, local communities and governments, shareholders and investors.
- Employment for some 1,200 people working at facilities scheduled to be shut down will be secured through redeployment and other means.
- JFE Steel will also work in good faith with JFE group companies and partners (involving some 2,000 employees) that are likely to be affected by the shutdowns.
- Related parties, including local communities and government, will be closely consulted regarding the repurposing of Keihin district facilities scheduled for shutdown.

5. Related growth strategies

In connection with these structural reforms, JFE Steel will implement the following strategies to strengthen the company's sustainable growth and financial soundness.

- JFE Steel will invest strategically in its domestic steelworks and other works, including West Japan Works, as our mainstay steelworks, and the refitting of the No. 6 blast furnace in Chiba. This follows previous efforts to enhance competitiveness, including constructing the No. 3 sintering machine and No. 3 coke oven in Fukuyama, constructing the No. 7 continuous casting machine and refitting the No. 4 blast furnace in Kurashiki, and expanding electrical steel sheet manufacturing facilities.
- Earnings bases overseas will be enhanced as a crucial component of the company's strategy to grow corporate value. So far, JFE Steel has succeeded in capturing demand in promising overseas markets through, for example, production of automotive steel sheet in China, Thailand, Indonesia and Mexico using substrates from Japan. To further boost overseas earnings, JFE Steel will strengthen the value of alliance partners and operating companies in overseas growth markets. These include the long-term strategic alliance with JSW Steel in India, the specialty bar steel joint venture with the BaoWu Steel Group in China, and the joint

venture in Myanmar to produce steel sheet products for construction. In addition, the new Global Business Development Center to be established on April 1, as previously announced, will focus on maximizing earnings from existing overseas businesses and developing new growth opportunities.

Going forward, JFE Steel will make every effort to strengthen the competitiveness of its domestic manufacturing bases as well as expand the earnings power of its overseas businesses to further enhance the company's corporate value over the long term.

Background

JFE Steel is facing an unprecedented and extremely challenging operating environment, particularly a slump in steel demand among manufacturing industries, due to U.S.-China trade tensions, rising raw-material prices driven by China's increased output of crude steel, and rising prices for various commodities and services including auxiliary raw materials, other materials used in production, and logistics. In FY2019, for the first time since JFE Steel's founding, it faces the critical prospect of zero profit. Additionally, over the medium to long term, demand in the Japanese market is expected to decline amid population decline and other factors, while overseas markets will present increasingly intense competition due to expanding steel-production capacity in developing economies and the growth of Chinese exports due to falling domestic demand in that country. So far, JFE Steel has been strengthening its domestic steel works and manufacturing locations as well as overall manufacturing capabilities, as spelled out in the company's medium-term business plan. Going forward, continuous large-scale investment to renew aging facilities and equipment will be needed over the long term.

JFE Steel, in view of the structural changes taking place in its operating environment, aims to become a leaner, stronger company through more strategic allocation of corporate resources. This will involve selectively concentrating resources on products and business areas where the company has competitive advantages to maintain and enhance its competitiveness in international markets. To that end, the company has decided to shut down one of the blast furnaces in its East Japan Works, for which fixed costs are high, and implement structural reforms to optimize its remaining production operations in Japan.

For more information about this release, please contact:
JFE Steel Corporation: <https://www.jfe-steel.co.jp/cgi-bin/contact.cgi>

Attachment 1: Main Facilities Scheduled for Shutdown (* indicates already disclosed)

District	Facility	Details	Original Startup	Shutdown Timing
Keihin	No. 2 Blast Furnace	Furnace volume: 5,000m ³	March 2004	By FY2023
	Shaft Furnace	Furnace volume: 172m ³	August 2008	
	No. 1 Sintering Machine	Grate area: 450m ²	October 1976	
	No. 1 Coke Oven	124 chambers	November 1976	
	No. 2 Coke Oven	74 chambers	July 1979	
	Raw material facilities	Facilities for loading, inventory intake/ distribution, etc.		
	Converters	2 x 328t/ch	November 1976	
	No1. Electric Arc Furnace	1 x 50t/ch	April 1979	
	No. 1 Continuous Casting Machine	2-strand (slab)	November 1976	
	No. 3 Continuous Casting Machine	2-strand (slab)	March 1979	
	No. 5 Continuous Casting Machine	6-strand (billet)	December 1982	
	Hot Rolling Facilities (excl. pickling line and skinpass mill)	Thickness: 1.2– 25.4mm Width: 600–2,300mm	March 1979	
	Chiba	*No. 1 Tandem Cold Mill	Thickness: 0.12– 1.65mm Width: 600–1,305mm	April 1961
*No. 3 CGL		Thickness: 0.27– 2.3mm Width: 610–1,250mm	April 1983	
*No. 2 Tandem Mill		Thickness: 0.1–0.6mm Width: 600–1,100mm	May 1963	By FY2022
*No. 2 CAL		Thickness: 0.17– 0.6mm Width: 600–1,250mm	July 1980	Within FY2019
*No. 4 CAL		Thickness: 0.15– 0.4mm Width: 600–1,067mm	March 1990	By FY2022
	*TFL	Thickness: 0.1–0.6mm Width: 457–1,067mm	June 1983	
	*No. 2 ETL	Thickness: 0.1–0.6mm Width: 600–1,067mm	November 1972	Within FY2019