TYO : 5401 OTC : NPSCY(ADR)



# FY2020 3Q Earnings Summary

Feb. 5<sup>th</sup>, 2021

NIPPON STEEL CORPORATION

Notes on this presentation material

Unless otherwise noted, all volume figures are presented in metric tons Unless otherwise noted, all financial figures are on consolidated basis



### Agenda



### 1. FY2020 3Q Earnings Summary and FY2020 Forecast

- 2. Business Environment (COVID-19 Impacts & Our Actions)
- **3. Measures to Improve Business Performance and CFs**
- 4. Medium-Long Term Restructuring
- 5. Supplementary Material for Financial Results

Appendix 1. "Challenge Zero" Innovations
Appendix 2. Structural Measures (Update of Announcement on Feb. 7<sup>th</sup>, 2020)
Appendix 3. Progress of Management Strategy Measures
Appendix 4. Related Indicators



### FY2020 3Q Earnings Summary and FY2020 Forecast

				l					
	FY2019	20.1H	20.1H -> 20.2H(f)	3Q	4Q(f)	20.2H (f)	FY2019⇒ FY2020(f)	FY2020 (f)	vs. prev. FY2020(f) as of Nov. 6 <sup>th</sup>
Non-consol. crude steel production (MMT)	<b>41.85</b> *1	14.64	Approx. +3.96	8.47	Approx. 10.10	Approx. 18.60	Approx. -8.65	Approx. 33.20	Approx. +0.50
Non-consol. steel shipment (MMT)	38.70 *1	14.46	Approx. +2.34	7.93	Approx. 8.90	Approx. 16.80	Approx. -7.50	Approx. 31.20	Approx. +0.20
Consol. Business profit (loss) (Bn. JPY)	(284.4) 76.5 excl. impairment loss	(106.5)	Approx. +243.0	73.3	63.2	Approx. 136.5	(vs. before impairment loss etc.) -46.5	Approx. 30.0	Approx. +90.0
Net profit (loss) (Bn. JPY) *2	(431.5)	(191.1)	Approx. +262.2	67.3	3.8	Approx. 71.1	Approx. +311.5	Approx. (120.0)	Approx. +50.0

\*1 Nippon Steel + Ex-Nippon Steel Nisshin

\*2 Profit (loss) attributable to owners of the parent

Volume Forecast > Steel demand rapidly decrease in FY20.1H due to COVID-19 impacts, but is recovering beyond expectation in FY20.2H. 3 BFs out of 5, which had been temporarily suspended, were restarted operation, and Non-consol. crude steel production in FY20.4Q is expected to be over 10MMT/Q for first time in a year.

Profit Forecast > Consolidated business profit is expected to be surplus of 30.0 bn. JPY in FY2020, +90.0 bn. JPY higher than the previous forecast as of Nov. 6<sup>th</sup>, 2020. (Forecast as of Aug. 4<sup>th</sup> (120.0) bn. JPY -> as of Nov. 6<sup>th</sup> (60.0)bn. JPY) -> new forecast 30.0 bn. JPY)

Cost reduction of more than 50 bn. JPY in variable cost and 220 bn. JPY in fixed cost is planned in FY2020 to realize non-consolidated operating profit.



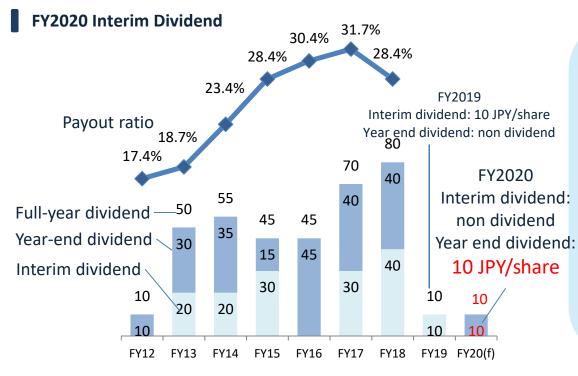
Consolidated Business Profit Variance											
	FY2020 1H (106.5)	F	Y2019* 76.5	Prev. FY2020 (f) Approx. (60.0)							
	↓ FY2O2O 2H (f) <sub>Approx.</sub> 136.5		↓ ⁄2020 (f) prox. 30.0	↓ FY2020 (f) Approx. 30.0							
Business profit variance	Approx. +243.0	Арр	rox46.5	Approx. <b>+90.0</b>							
Volume	+80.0	-	-249.0	+5.0							
Steel prices, product mix, raw materials	+28.0		- 12.0	+33.0							
Group companies, non-steel business	+58.0		- 82.0	+25.0							
Cost reduction, depreciation cost	+29.0		+270.0	+10.0							
Others	+48.0		+26.0	+17.0							
DEP <b>Fixed cost reduc</b> Cost increase du	basis) reduction ction ue to volume decline caking advantage	+120.0 +220.0		o prev. plan as of Nov. 6 <sup>th</sup> )							

### FY2020 Net Profit Forecast and Year End Dividend

#### FY2020 Net Profit Forecast

Net Profit (loss)*	(431.5)	(191.1)	67.3	71.1	(120.0)	
Additional Line Items	(121.7)	(42.2)	8.0	(32.8)	(75.0)	
Consolidated Business Profit	(284.4)	(106.5)	73.3	136.5	30.0	
(bn. JPY)	FY2019	1H	3Q	2H(f)	FY2020 (f)	
					-1	

\* Profit (loss) attributable to owners of the parent



FY2020 Additional Line Items 2Q: (42.2) bn. JPY Losses on inactive facilities (Kyushu Works Yawata Area (Kokura) upstream facilities, etc.) 3Q: 8.0 bn. JPY Gain on sale of business (I/N Tek & Kote) 4Q: (40.8) bn. JPY Loss on sale of business (VSB) Losses on inactive facilities, etc.

Due to a decrease in production and shipment volume due to the impact of COVID-19, etc., the net loss is expected to be 120 billion JPY. However, taking into consideration the recent recovery and the improving outlook in business performance, we plan to pay an year-end dividend of 10 JPY per share.



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(COVID-19 Impacts & Our Actions)

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### **BFs Status**

3 BFs out of 5 that had been temporarily suspended due to banking, etc. were restarted to meet the recovery of demand \*Banking is a measure to temporarily stop BF production but make it possible to restart production at a later date by stopping the air blast flow.

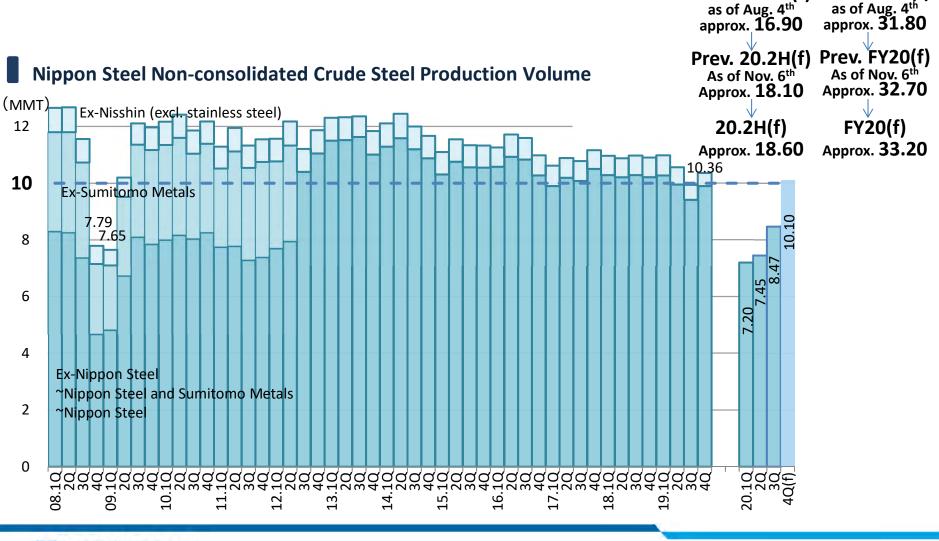
Steelworks	Area	Volu	me m <sup>3</sup>	2019.4Q	2020.1Q	2Q	3Q	4Q		2021~
Muroran		2BF	2,902	Suspensio	n since Ju <mark>l. 8</mark>	3 <sup>th</sup> ~Refurbis	hment -> <mark>No</mark>	v. 22 <sup>nd</sup> Restar	ted	
	Kashima	1BF	5,370		Banking sin	ce Apr. 15 <sup>th</sup> -	> Jan. 19 <sup>th</sup> Re	estarted		
East	Kasiiiiia	3BF	5,370							
Nippon	Kimitsu	2BF	4,500		Banking sin	ce Jun. 14 <sup>th</sup> -	> Nov. 24 <sup>th</sup> R	estarted		
	KITIILSU	4BF	5,555							
Nagoya		1BF	5,443							
		3BF	4,300							
Kansai	Waka-	1BF	3,700		B	Banking since	Apr. 25 <sup>th</sup> · · ·	•••On going		Shutdown at the end of 2022 1H (Planned)
Kansar	yama	2BF	3,700						Ň	
Setouchi	Kure	1BF	2,650							tdown at the end of
	Kure	2BF	2,080		Banking sind	e Feb. 25 <sup>th</sup> , 2	2019 · · · · ·	·····On goir	ig 202	1 1H (Planned)
	Yawata	4BF	5,000							
Kyushu	(Kokura)	2BF	2,150		Banking	sinc <mark>e Jul. 18</mark>	<sup>th</sup> -> Already	been shut do	wn at the	end of Sep, 2020
,	Oita	1BF	5,775							
		2BF	5.775		(		<u> </u>		<u> </u>	
		1) 15 B	Fs			2) Jul 8 <sup>th</sup> ~ N	ov. 22 <sup>nd</sup>		19 <sup>th</sup> ~	4) 2022 1H~
	64,270m3				9 BFs 43,5	<mark>68m3</mark>		BFs 40m3	11 BFs 53,690m3	
								50,3		33,030113
						Ţ		<b>^</b>		<u>_</u>
				1 > 2 > 2	0/		2) -> 3)	+29%	3) ->	4) -5%
				1) -> 2) -32	270		1) -> 3)			4) -16%



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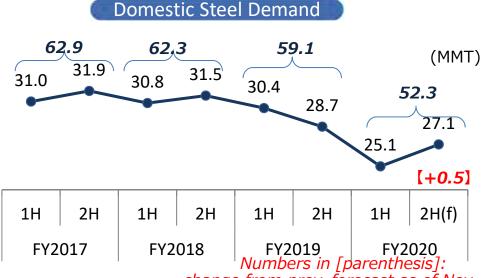
### Non-Consolidated Crude Steel Production Volume

We have adopted prompt reduction of production such as BF banking for response to sharp decrease of steel demand due to COVID-19 impacts in FY20.1H, followed by restart of some BFs for response to demand recovery in 2H. Non-consolidated crude steel production in FY20.4Q is expected to be over 10.00 MMT for the first time in a year. Prev. 20.2H(f) Prev. FY20(f)



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### **Domestic Steel Demand Trend**



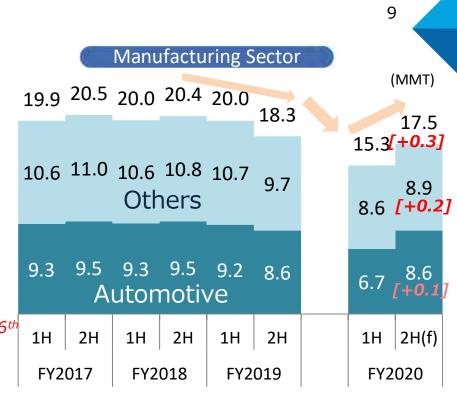
change from prev. forecast as of Nov. 6<sup>th</sup>

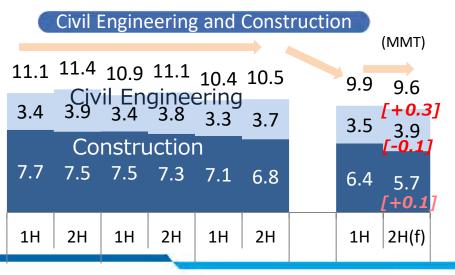
#### Manufacturing Sector

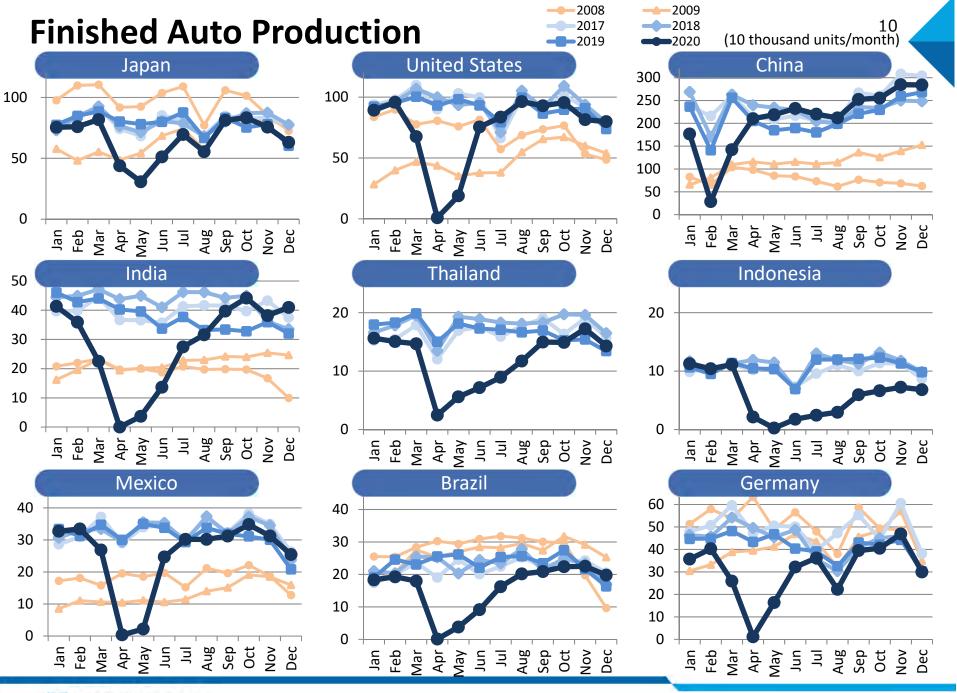
Demand had been declining since FY2019 mainly in indirect exports, and the decline gathered speed due to COVID-19 impacts in FY20.1H. It is expected to recover toward the 2H mainly in automotive sector except for shipbuilding sector.

#### **Civil Engineering and Construction**

Construction stagnation due to COVID-19 impacts is limited. In the FY2020.2H, demand is expected to increase in civil engineering sector. On the other hand, demand in construction sector is expected to decrease in 2H.

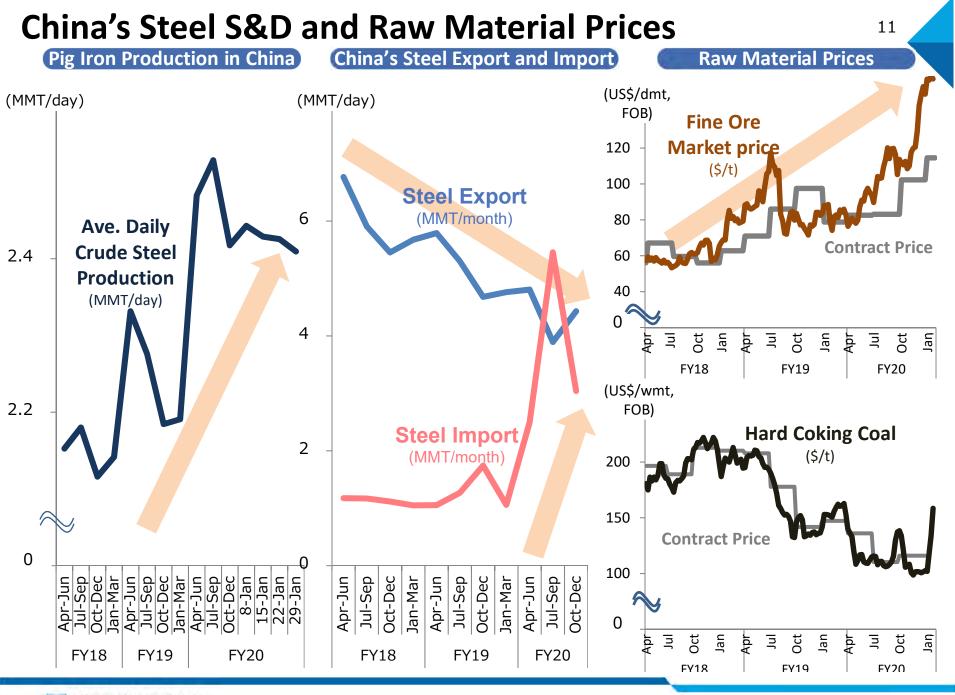






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#### 12 **HRC Prices** The United States China **ASEAN** Japan (kJPY/t) (CNY/t) (\$/t) (\$/t) 140 6,000 1,200 800 120 \_700 5,000 1,000 100 600 4,000 800 500 80 600 3,000 400 60 300 2,000 400 40 200 1,000 200 20 100 0 0 0 0 Jan Jan Jul Oct Jan luC Oct Jan Jul Oct Apr Jul Oct Jan luC Oct Jan Jul Oct Jan Jul Oct Jan Jul Oct Apr Apr Apr Apr Apr Apr Apr FY20 FY19 FY20 FY19 FY20 FY19 FY20 FY19

### Agenda

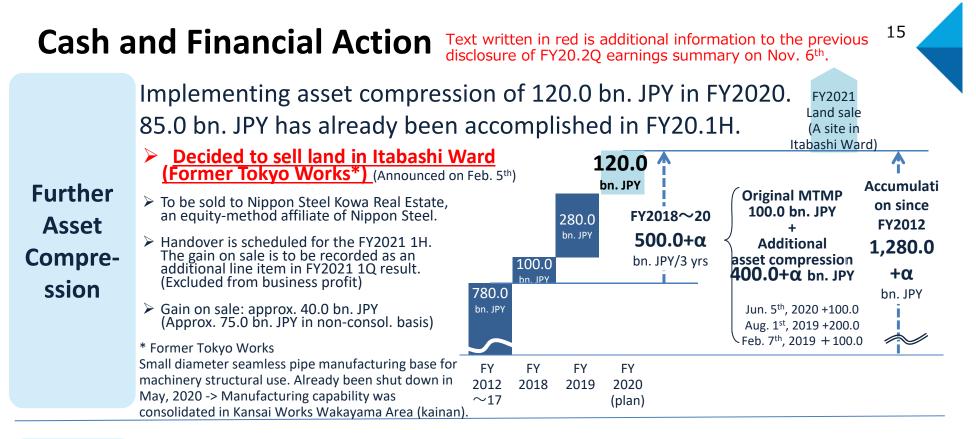


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Efforts to Re	eturn to Profit in Non-consolidated Operating P/L <sup>14</sup> More than 50 bn. JPY/Y in FY2020						
Variable Cost Reduction	On top of operational improvement and capital investment planned in the medium- term management plan to reduce variable cost, additional improvement measures, operation optimization accompanying facility structural measures, etc. are planned.						
Fixed Cost Reduction	Approx. 220 bn. JPY/Y in FY2020 (Incl. a part of the effect of facility structural measures 33 bn. JPY/Y) Depreciation cost: 120 bn. JPY approx. 60 JPY/Y due to impairment loss, approx. 50 JPY/Y (non-consol.) due to change in depreciation method from declining balance to straight –line Other fixed cost (cash basis): 100 bn. JPY: Selective input of maintenance cost, thorough management of facility inspection with advanced IT, enhancement of maintenance efficiency in reorganized steelworks, etc.						
Additional Cost Reduction To Offset Cost Increase due to Low Production	<ul> <li>Variable cost demerits under low production:</li> <li>Almost offset with the following actions</li> <li>1) Efforts to minimize the disadvantages</li> <li>2) Additional variable cost reduction taking advantage of production cutback (expansion of utilization of cheap raw materials, etc.)</li> <li>3) Additional fixed cost reduction (temporary off-days for employees, employment adjustment grants, reduction of more than 50 bn. JPY/Y and fixed cost reduction of approx. 220 bn. JPY/Y.</li> </ul>						
Thorough Execution of production       Placing great importance on profitability in accepting order and production.         Placing great importance on profitability in accepting order and production.       Implementing flexible adjustment of production volume.         Steadily responding to demand recovery through stable production.       Steadily responding to demand recovery through stable production.							
Long-terr Contractual Prices Improv	<b>Steel</b> than main raw materials", and "appropriate sales price reflecting values of						
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	Examining more efficient CAPEX based on long-term refurbishing plan. Selection and concentration of CAPEX on sectors and regions that will promisingly contribute to profit in the future.
Further	promisingly contribute to profit in the future. Total CAPEX for 3 years (2018-2020) will be 300 bn. JPY less than the
	original MTMP.
Reduction	Original MTMP: <b>1.7</b> trillion JPY/3 years -> May 8 <sup>th</sup> ,2020: <b>1.5</b> trillion JPY/3 years
neudelion	-> Aug. 4 <sup>th</sup> , 2020: <b>1.4</b> trillion JPY/3 years
	(There is a time lag between decision making and cash-out)



(Adjustment page)



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### Medium-Long Term Measures to Improve Profitability

	disclosure of FY20.2Q earnings summary on Nov. 6 <sup>th</sup> . Shutdown of inferior facilities and concentrated production with superior facilities					
Production Facility Structural	Implementing structural measures announced on Feb. 7 <sup>th</sup> , 2020, aiming for earlier realization of 100 bn. JPY/year profit contribution. (35 bn. JPY/Y in FY2020)					
Measures and	Considering additional structural measures and earlier schedule of restructuring as needed.					
Reinforcement of	Improvement of production efficiency through concentrated and selective investment on more competitive facilities					
Competitiveness	Decided to refurbish #3 BF in Nagoya Works (Announced on Jun. 5 <sup>th</sup> .)					
	Outline of structural measures $\Rightarrow$ refer to pp.47-50					

Lower dependence on low-profit products and expansion of world-class high-value added products East Nippon Works Kimitsu Area #6CGL (Continuous Galvanizing Line) started operation (Announced on Jan. 18<sup>th</sup>, 2021) **Reinforcement of** Makes it possible to manufacture ultra-high-tensile steel sheets with a tension of 1.5 GPa class responding to growing needs for ultra-high-tensile steel sheets that reduce the **Globally**weight and improve toughness of automobiles. Capacity is 0.40MMT/Y competitive Investments for electrical steel sheets capacity & guality improvement  $\geq$ **Strategic** (Announced on Nov. 6<sup>th</sup>. 2020) **Products** Decided to make a series of investments in Yawata and Hirohata to increase manufacturing capacity of electrical steel sheet for 40% and improve the product quality, responding to increasing demand and quality requirement for electrical steel sheet in vehicle motors and power plant transformers etc. Total amount for the series of investments: 104.0 bn. JPY. FY2023 1H: Full operation



## Medium-Long Term Measures to Improve Profitability Text written in red is additional information to the previous

disclosure of FY20.20 earnings summary on Nov. 6<sup>th</sup>.

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	uisclosure of Frzu.zQ earnings summary on Nov. o".
	We have been implementing expansion of businesses in demand-growing regions and sectors where our technology and products are preferred, and withdrawal from unprofitable businesses where great synergy with domestic businesses is no longer expected.
Coloction and	<ul> <li>Decided to construct an EAF in AM/NS Calvert. (Announced on Dec. 22<sup>nd</sup>, 2020)</li> <li>We, together with ArcelorMittal, intend to concentrate our resources on AM/NS Calvert, which has one of the most distinguished equipment capabilities in the United States.</li> <li>We plan to further strengthen the supply capability of full range of products including the state-of-the-art steel products.</li> <li>Acquiring knowledge on EAF leads to increases in our choices on global business strategy.</li> <li>Capacity: 1.50MMT/Y Total amount of investment: approx. 775 million USD</li> </ul>
Selection and	Start of operation: FY2023 1H (planned)     Construction of EAF in AM/NS Carvert
Concentration	-> refer to p.21
in Overseas	<b>Decided to sell partnership interest in I/N Tek and I/N Kote. (Announced on Dec. 10<sup>th</sup>, 2020)</b>
Business	• On Dec. 19 <sup>th</sup> , 2020, ArcelorMittal sold its US business (AMUSA), excluding AM/NS Calvert, to
Strategy	Cleveland-Cliffs. Along with this, on the same day, Nippon Steel sold its stakes in I/N Tek and I/N Kote, which are the joint ventures in the USA between Nippon Steel and ArcelorMittal for cold rolled galvanized steel sheet manufacturing.
	<ul> <li>Selection and concentration of overseas tinplate business</li> <li>STP (Siam Tinplate): became a subsidiary (Announced on Dec. 24<sup>th</sup>, 2020)</li> </ul>
	Started operation in 1992 in Thailand as tinplate production base for cans.
	Nippon Steel's stake: 15.6% (equity method affiliate) -> approx. 90% (consol. subsidiary)
	• PATIN (Guangzhou Pacific Tinplate): Withdrawal (Announced on Jan. 27 <sup>th</sup> , 2021)
	Started operation in 1997 in Huangpu District, Guangzhou City, China for tinplate
	production base for beverage cans and powdered milk cans.
	Nippon Steel sold its stake 25% to Guangzhou HI-tech Investment Group, the business
	partner of PATIN.
	Overseas tinplate business is concentrated to WINSteel (WISCO-NIPPON STEEL Tinplate)

## Medium-Long Term Measures to Improve Profitability Text written in red is additional information to the previous

disclosure of FY20.2Q earnings summary on Nov. 6<sup>th</sup>.

Selection and Concentration in Overseas Business Strategy	<ul> <li>Reinforcement of OCTG business (Announced on Feb. 3<sup>rd</sup>) Decided to undertake a rights issue for Vallourec (€ 35 million).</li> <li>Support the strengthening and stabilization of Vallourec's financial performance, and continue to work on the development and commercialization of VAM<sup>®</sup> and improvement of customer service, aiming to strengthen the profitability of the steel pipe business.</li> <li>Transfer of all stakes for VSB (an integrated joint venture of seamless pipes in Brazil) to Vallourec</li> <li>Based on lower demand for carbon OCTG pipes produced by VSB for Nippon Steel, it is not economically viable for Nippon Steel to maintain its allocated capacity at VSB, and has decided to transfer all of the shares of VSB, to Vallourec.</li> </ul>
	-> refer to pp.22
Actions for Tackling the Climate Change Through Innovation	<ul> <li>We have been taking efforts to tackle climate change issues through development of three ecological and innovative technologies while responding to global steel demand growth.</li> <li>Zero Carbon Steel</li> <li>At the cross-departmental "Zero Carbon Steel Committee" in which all representative director and vice presidents participate, our scenario for decarbonization (2030 target, 2050 vision), research and development on low CO2 technology, etc. have been under consideration since April, 2020. our specific scenario will be announced within FY2020.</li> <li>Climate MOU with Rio Tinto (Announced on Dec. 16<sup>th</sup>, 2020)</li> <li>Both company Jointly explore, develop and demonstrate technologies to transition to a low-carbon emission steel value chain</li> </ul>
	Climate MOU with Rio Tinto -> refer to p.24
Digital Transformation	<ul> <li>We have also been promoting value creation through production process reforms and business process reforms through active utilization of data and digital technologies</li> <li>Started demonstration of private network system aiming for development of local 5G network system in manufacturing site. (Announced on Aug. 12<sup>th</sup>)</li> <li>Establishment of basis for operation monitoring in steelworks utilizing NEC's AI technology (Announced on Dec. 3<sup>rd</sup>)</li> <li>Digital Transformation in Manufacturing Process -&gt; refer to pp.25-26</li> </ul>
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### **Construction of EAF in AM/NS Calvert**

**Favorable business** 

environment in the

USA to utilize EAF

>Stable supply of low cost

cf. 70% of steel product in

the US is from EAFs

electricity, and ample

supply of various raw

material for EAF

#### Further enhancement of competitiveness of AM/NS Calvert

 To address stricter import restrictions on semi-finished steel products
 To secure orders and reduce slab inventory by shortening lead time to

procure slabs

To increase hot-charge of slabs to hot strip mill

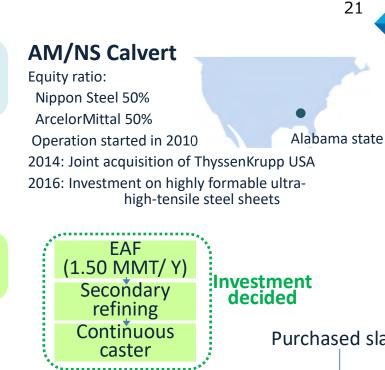
### Decided to construct an EAF in AM/NS Calvert

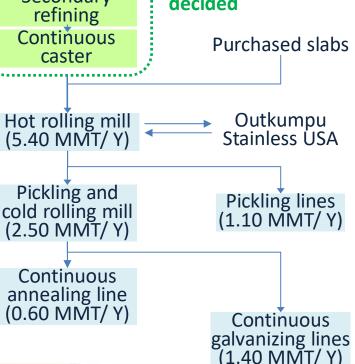
Agreement with ArcelorMittal: Dec. 22<sup>nd</sup>, 2020 Total amount of investment: 775 million USD Capacity: 1.50MMT/Y, Operation: from FY2023 1H (planned)

Nippon Steel, together with ArcelorMittal, intends to concentrate their resources on AM/NS Calvert, which has one of the most distinguished equipment capabilities in the United States, and further to strengthen its supply capability of full range of products including the state-ofthe-art steel products.

Integrated production of steel sheets with EAF, including production of Gen 3 advanced high-tensile steel sheets (980Mpa and above), IF steel sheets (for automobile outer panel excellent in deep drawing), etc, is planned

Secure new option in global business strategy





### **Reinforcement of OCTG Business**

#### **Underwriting rights issue** from Vallourec

To Underwrite rights issue (equal allotment of stock acquisition rights to all shareholders)

Amount: €35mil.

(The total amount of rights issue from Vallourec: €300mil.)

#### **Business withdrawal from VSB**

Shares to be transferred: All shares owned by Nippon Steel group (15%) To: Vallourec

Date: around the end of Mar. 2021

\* Nippon Steel's allocated capacity at VSB (0.30MMT/Y) will be gradually reduced and will be zero in 2022

#### **Outline of VSB**

> Vallourec Soluções Tubulares do Brasil S.A. (Located in Brazil/ Minas Gerais state)

>A joint venture of Nippon Steel, Sumitomo Corporation, and Vallourec

### >Equity ratio Nippon Steel: 15.0% Sumitomo Corp.: 0.4%

> Integrated mill with BFs which produces seamless pipes

> Capacity: 1.10MMT/Y

\* VSB was established in 2016 by integration of the former VSB (established in 2010 with investment from 40.4% Nippon Steel, 3.6% Sumitomo Corporation, 56.0% Vallourec) and VBR (a wholly owned subsidiary of Vallourec)

Vallourec: 84.6% Medium-long term market Support financial performance change (decrease of carbon grade OCTG demand for Nippon Steel), of Vallourec economic rationality, etc. Decided to transfer all shares of VSB, which produces carbon OCTG Supply chain R&D pipes Maintenance Maintenance and Further improvement of reinforcement of and development of reinforcement product mix with higher-grade VAM<sup>®</sup> joint with Vallourec of VAM OCTG pipes mainly produced in network Kansai Works

**Further reinforcement of Nippon Steel's OCTG business** 



### **Our Challenges toward Zero Carbon Steelmaking**

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# Planning to publish our individual company scenario for decarbonization (2030 target, 2050 vision) within FY2020



All representative director and executive vice presidents participate.

A cross-departmental committee consisting of managers from corporate planning div., environment div, engineering div., R&D div, accounting & financing div., raw materials div., sales div., etc.

At "Zero Carbon Steel Committee", our medium-long term action for decarbonization has been under consideration since April 2020.

Our individual company scenario to be released later in FY2020 includes...

- Maximum utilization of existing low-carbon technology
- Development and early introduction of the innovative steelmaking process "COURSE50" that partially utilizes hydrogen reduction, which is a technology we have been researching and developing ahead of competitors in the world.
- R&D for 100% hydrogen reduction
- Carbon neutralization measures by CCUS
  - \* Carbon dioxide Capture, Utilization, and Storage
- Pursuit of all possibilities for low carbon

We are going to formulate our decarbonization strategy with the government policy of 2050 carbon neutral in mind, while comprehensively considering how the burden and roles for R&D and infrastructure development should be shared socially, such as carbon-free hydrogen, zero-emission electricity procurement, CCS technology, etc.



### **Climate MOU with Rio Tinto**

Nippon Steel and Rio Tinto have signed climate MOU to jointly explore, develop and demonstrate technologies to transition to a low-carbon emission steel value chain on Dec. 16<sup>th</sup>, 2020.

The purpose of this partnership is to explore a breadth of technologies for decarbonization of the entire steel value chain from iron ore mining to steelmaking including integrating Nippon Steel's steelmaking technology and Rio Tinto's iron ore processing technology to establish an innovative steel manufacturing process with low carbon emissions.

#### **Rio Tinto**

Rio Tinto is a leading global mining and metal company, and the world's largest iron ore supplier. It is Nippon Steel's largest supplier of iron ore.

Main products are; iron ore, aluminum, copper, diamond, uranium, gold, industrial minerals (borax, titanium oxide, salt, etc.) The head office is in UK. Main mines are in Australia and North America.

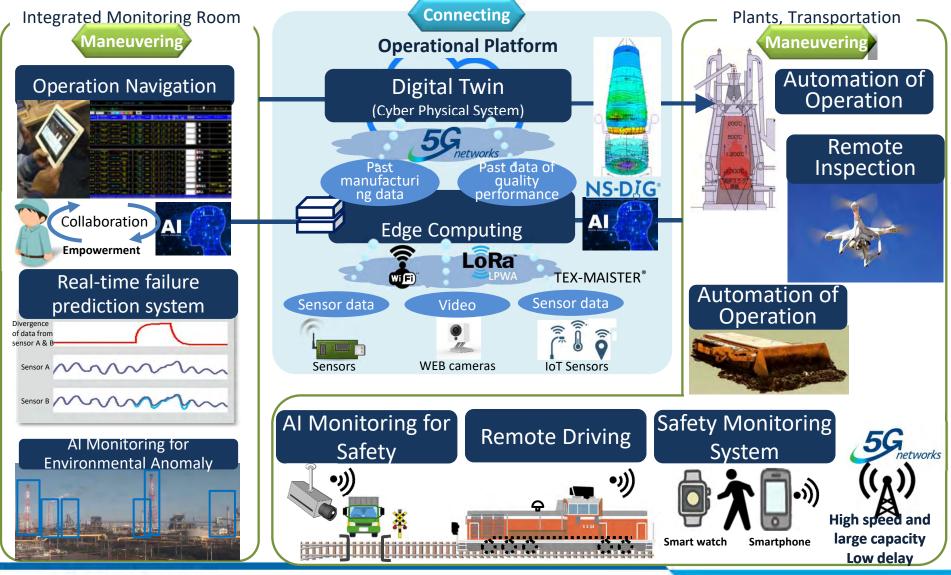


The partners have agreed to a partnership model in line with the long-term and complex nature of the transition to carbon neutrality for the steel industry. This model allows the partners to take a long-term view to enable the pursuit of new and promising technologies as the global steel transition evolves.



### **Digital Transformation in Manufacturing Process**

Connecting: Creating a system that can share and utilize huge on-site data company-wide Maneuvering: Creating an improvement cycle for productivity by utilizing connected data



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### Real-time Failure Prediction System with an AI Technology

Nippon Steel is planning to establish operation monitoring system in steelworks with NEC's System Invariant Analysis Technology, which is one of its advanced AI technologies.

Long-term demonstration test of online monitoring system for operation status started at East Nippon Works Kimitsu Area hot strip mill in Jan 2021.

AI automatically learns and models data of vibration, temperature, pressure, etc collected from over 2,000 sensors.

Nippon Steel Data Center **NEC Advanced Analytics** NEC the WISE Operation Data - Invariant Analysis **NS-DIG®** Collect real-time Visualize facility status and data every 100 ms alerts abnormal behavior PIC Operation Monitoring and Maintenance Management Steelworks and mills PLC : Programmable Logic Controller

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Al learns the "normal behaviors" of facilities while under operation.
 It is possible to discover unknown troubles that have never occurred.
 Al automatically detects "unusual behavior" of facilities with real-time data collected every 100 ms.
 Makes it possible to prevent emergency stops of operation and product quality deterioration due to troubles.
 It has been verified that it is possible to detect signs in advance for troubles that are difficult to solve, which took 10 days to investigate the cause Prevent troubles and streamline facility inspection and operation monitoring



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### **Objectives of Tender Offer for Tokyo Rope Mfg.**



- $\geq$ which is promoted as the key business for its growth strategy
- Lower stock price indices than those for peer companies  $\geq$

directors' supervisory function to question the responsibility of the

- >Prolonged term of office, lack of independence and diversity at the board of directors
- $\triangleright$ Lack of functional top management nomination process

Its corporate value can be recovered if its true technological and brand power are exerted after the restructuring of its management and governance systems.

# Increase NSC's commitment as a shareholder by acquiring additional shares of Tokyo Rope and contribute to the recovery and improvement of Tokyo Rope's corporate value.

Total amount of purchase: approx. 2.4 bn. JPY Ownership ratio after the tender offer: 19.9% (not expected to be an equity method affiliate)



 $\geq$ 

### Started the Tender Offer for Shares of Tokyo Rope Mfg.

### **Major Purchase Conditions for the Tender Offer**

Tender Offer Period: Friday, Jan. 22<sup>nd</sup>, 2021 to Monday, Mar. 8<sup>th</sup>, 2021 (30 business days Purchase Price: 1,500 JPY/ share Number of shares to be purchased: Max. 1,625,500 shares, min. not applicable Total Amount of purchase : 2,438,250,000 JPY

### Overview of Possible Measures NSC Will be Able to Provide to Support Tokyo Rope under a New Management System

Provision of knowhow for optimization of inventory management, reduction in production cost, and improvement of production efficiency through shared use of a supply chain management system

Cost reduction, quality improvement, and stable productivity through operational tie-ups

Promotion of development of high-value added products and highly functional products through joint product development among NSC, Tokyo Rope, and customers, and strengthening of the competitiveness of Tokyo Rope through such measures

Reinforcement of domestic and overseas sales by utilizing NSC group's information gathering capabilities and network Careful examination of the profitability of the CFCC business and strengthening of overseas business risk management, by utilizing NSC's management knowhow



日本製鉄

SteeLin

Link





### **2020** Award for Excellence in Corporate Disclosure

Nippon Steel has been selected to receive the "2020 Award for Excellence in Corporate Disclosure (26th)" in the Steel/Non Ferrous Metal Industry Category, sponsored by the Securities Analysts Association of Japan ("SAAJ").

In the "management's involvement in investor relations" area, Nippon Steel was ranked first place in the industry category and was recognized that the top management strived to earnestly communicate to the financial markets and its message became more clearly



2020 Award for Excellence in Corporate Disclosure

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- Industries -

A The Securities Analysts Association of Japan

conveyed. Concerning the "voluntary disclosure of information" area, we were highly evaluated for the enhancement of IR briefing materials on topics of interest, in addition to holding a special briefing on sustainability and plant tours.

We intend to further enhance timely, appropriate, and fair information disclosure and constructive dialogue, and meet the expectations of all stakeholders, in order to achieve sustainable growth and mid- to long-term improvement in our corporate value.



### Agenda



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Appendix 1. "Challenge Zero" Innovations Appendix 2. Structural Measures (Update of Announcement on Feb. 7<sup>th</sup>, 2020) Appendix 3. Progress of Management Strategy Measures Appendix 4. Related Indicators



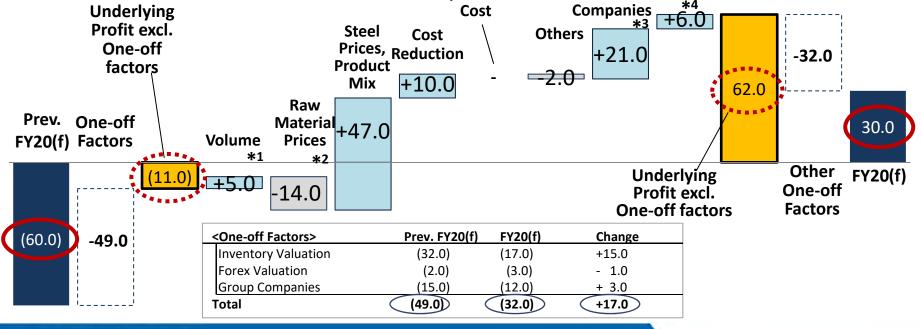
### Business Profit Variance Analysis [Prev. FY20(f) vs. FY20(f)]

	(bn. JPY)	Prev. FY20(f) as of Nov. 6 <sup>th</sup> [A]	FY20(f) [B]	change [A→B]
B	usiness Profit	(60.0)	30.0	+90.0
<	Underlying Profit >	<(11.0)>	<62.0>	<+73.0>
	Steel	(80.0)	0.0	+80.0
	Non-Steel	31.0	37.0	+6.0
	Adjustment	(11.0)	(7.0)	+4.0

\*1 Crude steel production: approx. +0.50MMT (approx. 32.70→approx. 33.20)
Steel shipment: approx. +0.20MMT (approx. 31.00→ approx. 31.20)
\*2 Incl. Carry over +13.0 (5.0→18.0)
\*3 <Improve> Mines, domestic and overseas re-rollers, etc.
<Deteriorate> EAFs, etc.
\*4 Engineering +6.0, Chemicals & Materials -,

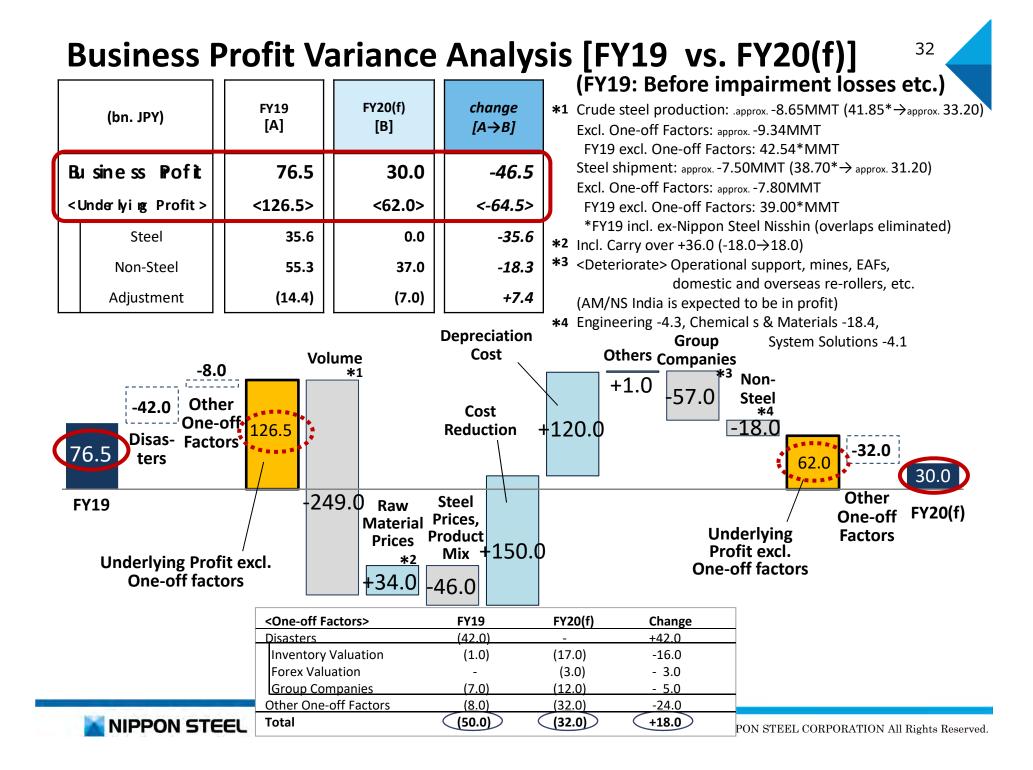
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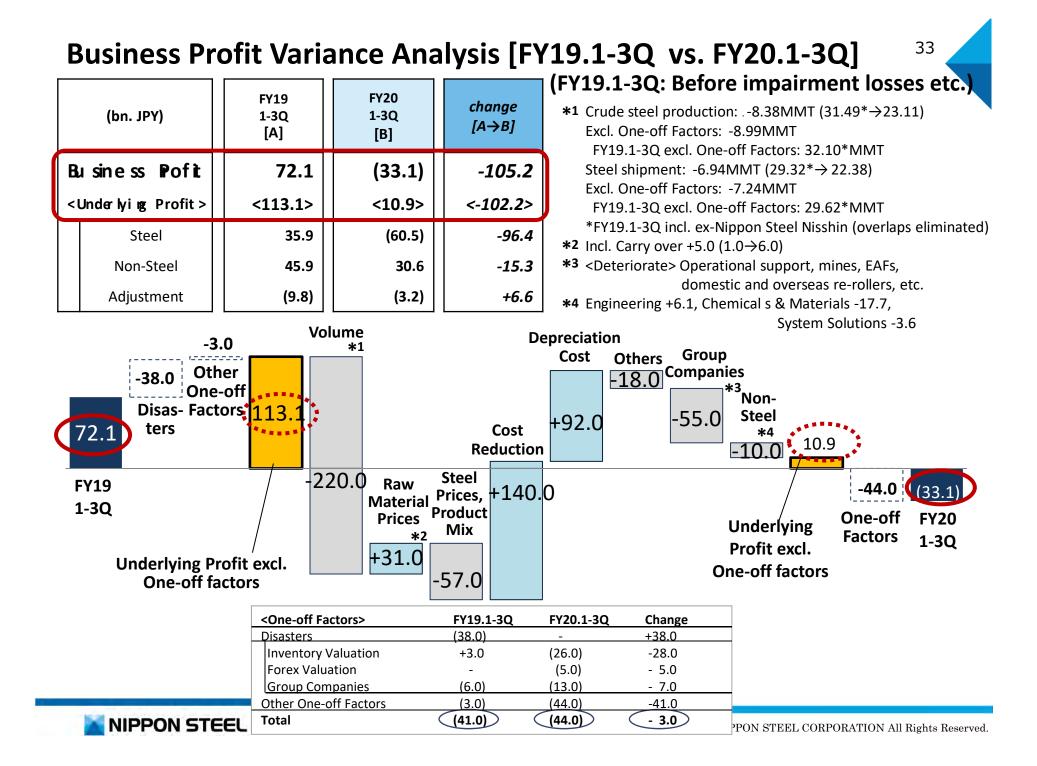
System Solutions -Non-Group Steel Depreciation \*4 Cost **Companies** +6.0\*3 Steel Others Cost Prices, Reduction +21.0 -32.0 Product



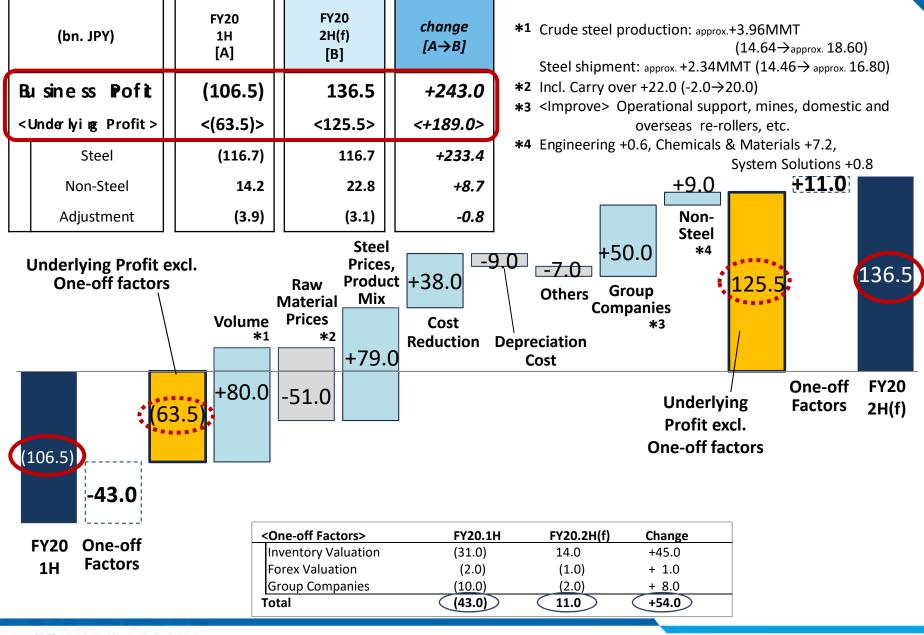
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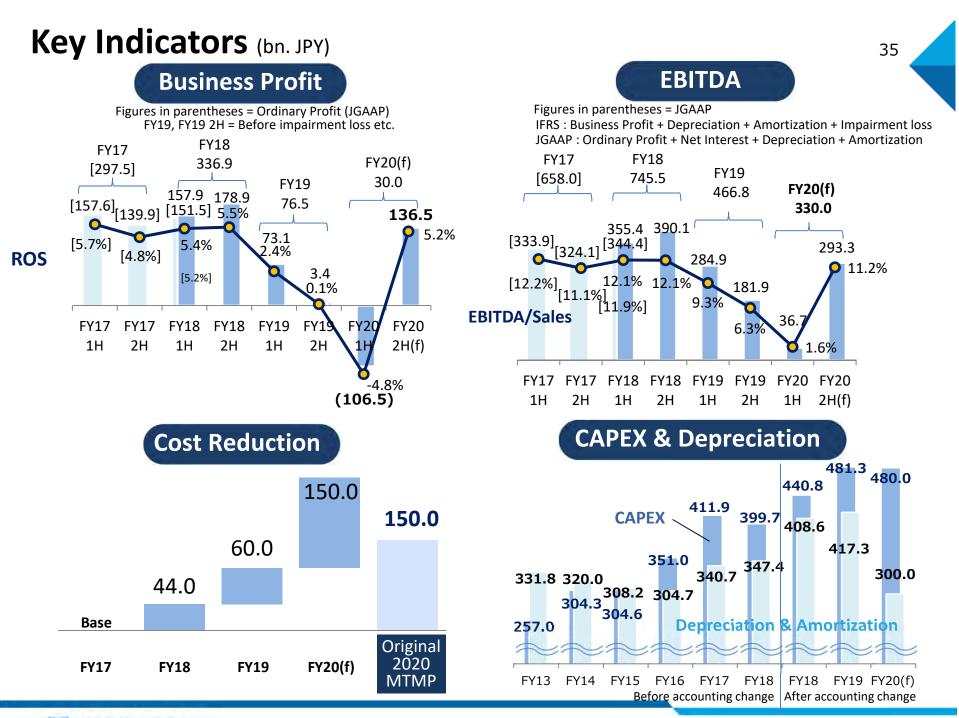


### Business Profit Variance Analysis [FY20.1H vs. FY20.2H(f)]



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### **Non-Steel Businesses**

#### Figures in parentheses = JGAAP basis (Sales, Ordinary profit) (Bn. JPY) 457.3 422.3 413.8 407.0 407.8 352.2 Revenue FY18:61.1 FY19:55.3 FY20(f): 37.0 **Business** 33.2 31.5 Profit 27.9 23.8 22.8 14.2 FY18 FY18 FY19 FY19 FY20 FY20 2H 2H(f) 1H 2H 1H1H Change in Business Profit (FY19vs. FY20(f)) Despite the deteriorated project mix, **Engineering &** profit is expected to increase due to thorough project management, cost reduction, and Construction increase in electricity retail business. Profit is expected to decline due to decrease **Chemicals** in sales of needle coke and decline of its price & Materials caused by COVID-19 pandemic, etc. Profit in 2H is expected to be on par with FY19.2H due to a recovery trend of sales System which have declined due to the COVID-19 Solutions impact, but FY20(f) profit is still lower than FY19 due to the profit decline in 1H.

Reve	nue	& B	us	ines	s Pr	ofit (3 r	Non-steel bu	isinesses total)					(Bn. JPY)
igures in pa	renthes	es = JGA	AP t	oasis (Sa	ales , Or	linary profit	:) (Bn. JPY)	Engineering &	20	2019		2020	
		457.	3					Construction	1-3Q	FY	1-3Q	FY(f)	FY20(f)
	413.8			422.3	3 407	7.0 352.1	407.8	Revenue	239.4	340.4	242.5	330.0	-10.4
evenue	FY18	3 : 61.1		FY19	9 : 55.3		(f): 37.0	<b>Business Profit</b>	8.3	10.7	14.4	15.0	+4.3
usiness								Chemicals	20	19	20	20	FY19→
rofit	27.9	33.2	2	31.5	23.	8	22.8	& Materials	1-3Q	FY	1-3Q	FY(f)	FY20(f)
_						14.2		Revenue	169.3	215.7	127.5	175.0	-40.7
Change	FY18 1H	FY18 2H	_	FY19 1H	FY1 2H	1H	FY20 2H(f)	Business Profit	17.3	18.4	(0.4)	0.0	-18.4
Change					•		,,,	System	20	19	20	20	FY19→
Engineeri Construc		Despite the deteriorated project mix, profit is expected to increase due to thorough project management, cost reduction, and				rease due	to thorough	Solutions	1-3Q	FY	1-3Q	FY(f)	FY20(f)
construc		increa	se ir	n elect	ricity re	tail busine	SS.	Revenue	198.9	273.2	183.7	255.0	-18.2
<b>Chemicals</b> & Materials Profit is expected to decline due to decrease in sales of needle coke and decline of its price caused by COVID-19 pandemic, etc.				Business Profit	20.2	26.1	16.6	22.0	-4.1				
System	Profit in 2H is expected to be on par with EY19.2H due to a recovery trend of sales												



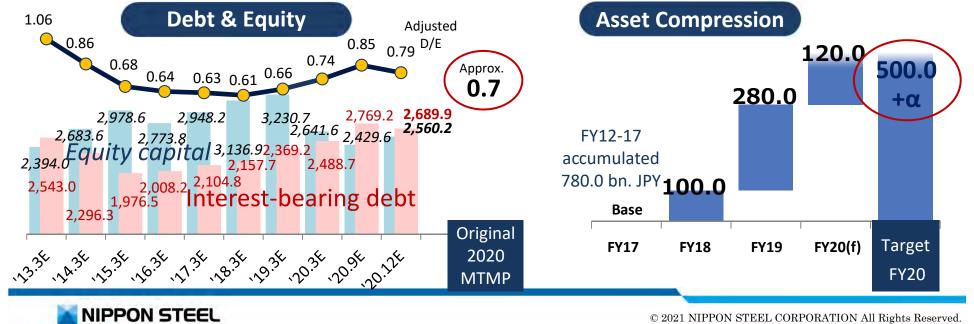
## **Balance Sheet**

		(Bn. JPY)	End of Mar. 2020	End of Dec. 2020
	С	urrent Assets	2,784.9	2,534.6
		Inventories	1,532.1	1,373.2
	F	ixed Assets	4,659.9	4,738.1
		Tangible fixed assets	2,812.5	2,903.2
		Investments accounted for using the equity method	878.2	794.6
		Investment in securities	418.5	526.3
Α	SS:	sets	7,444.9	7,272.7

		(Bn. JPY)	End of Mar. 2020	End of Dec. 2020	
	Li	abilities	4,448.3	4,355.8	
		Interest-bearing debt	2,488.7	2,689.9	
	N	et Assets	2,996.6	0         Dec. 2020           3         4,355.8           7         2,689.9           6         2,916.9           6         2,560.2           9         165.2           0         356.6	
		Equity capital	2,641.6	2,560.2	
		Unrealized gains on available-for-sale securities *	111.9	165.2	
		Non-controlling interest in consolidated subsidiaries	355.0	356.6	
Li	ab	ilities & net assets	7,444.9	7,272.7	

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\* Fair value of financial assets measured at fair value through other comprehensive income



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# **Appendix 1. "Challenge Zero" Innovations**

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## **3 Ecos and Innovative R&D**



### Eco Process The way we manufacture is eco-friendly

Nippon Steel uses world-leading resources and energy efficiency to manufacture steel products and aims to develop eco-friendly steelmaking processes by further improving efficiency

# Eco Products<sup>®</sup> What we produce is eco-friendly

We produce and offer eco-friendly "products" using our world-leading technological capabilities, thus conserving resources and energy and thereby contributing towards building a sustainable society.

# Eco Solution Sharing our eco-solutions

We contribute to the reduction of CO2 emissions and other environmental burdens on a global scale by diffusing our Group's world-class environmental and energy-saving technologies in Japan and overseas.

Innovative Technology: COURSE50 Super Innovative Technology: Hydrogen Steel Making Process, CCS, CCU, etc.

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eco

PRODUCTS

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SOLUTIO

# "Challenge Zero" Innovations

We support the "Challenge Zero" declaration announced by the Japan Federation of Economic Organizations in June 2020 to realize carbon-free society, and through this we have announced 10 concrete innovation initiatives.

(As of Dec. 24<sup>th</sup>, 2020, 174 companies/organizations have participated and reported a total of 369 case studies. Only 4 companies including our company have reported 10 or more cases.)

**Our Innovation Initiatives Contributing to Realization of Carbon-Free Society** 

	Emission	tion	/ Resilience
Development of Hydrogen Steelmaking Process for Zero Emission	•		
Development of CO <sub>2</sub> emission reduction technology using hydrogen in BF steelmaking		•	
Development of low-cost CO <sub>2</sub> separation technology	•		
Contributing the hydrogen infrastructure formation by spreading usage of the specialized steel for hydrogen station	•		
Development and dissemination of Eco Products <sup>TM</sup> that contribute to reductions in $CO_2$ emissions at the point of product use (NSafe <sup>TM</sup> -AutoConcept; electrical steel sheet)		•	
Enhanced efficiency in recycling of waste plastics		•	
Establishment of dimethyl carbonate (DMC) production method using CO <sub>2</sub> as raw material	•		
Zero emission hydrogen production technology by artificial photosynthesis	•		
CO <sub>2</sub> uptake and carbon storage as blue carbon by utilizing steel slag	•		
Provision of solutions for "National Resilience" aimed at adaptation to climate change			•

Net Zero Emission Technology: Technology to stop, absorb, or utilize greenhouse gases.

<u>Transition Technology</u>: Technology which is necessary in the process of realizing carbon-free society, such as innovative energy-saving technology that contributes to the significant reduction of greenhouse gases in the world including emerging countries

Adaptation / Resilience Technology: Technology that contributes to adaptation (preparation for mitigation of climate change impacts) and resilience etc.

Details of each innovations  $\Rightarrow$  refer to pp. 41-46



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Challenge Zero 40

Transi-

Adaptation

Net Zero



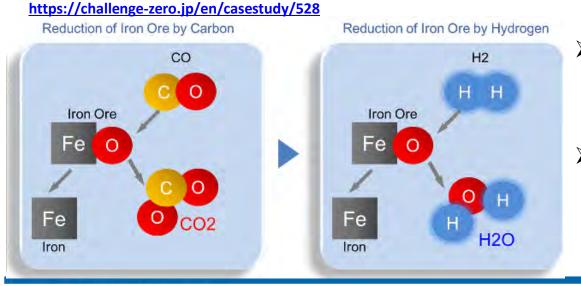
URL: <a href="https://challenge-zero.jp/en/">https://challenge-zero.jp/en/</a>

A new framework of Japan Business Federation published in June 2020 that supports innovations of companies/organizations in collaboration with the Japanese government toward the realization of a "carbon-free society", which the international climate change framework "Paris Agreement" defines as a long-term goal. As of Dec. 24<sup>th</sup>, 2020, 174 companies/organizations have participated and reported a total of 369 case studies.

We support "Challenge Zero" program, and have released 10 innovative challenges toward realization of a "carbon-free society". (There are only 4 companies that have released more than 10 challenges)

Our Innovative challenges

## 1) Development of Hydrogen Steelmaking Process for Zero Emission

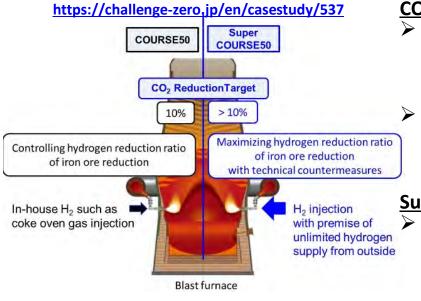


- We are challenging to develop hydrogen reduction ironmaking technology, in which iron ore is reduced by hydrogen instead of coking coal.
- It is necessary to establish a technology to supply a large amount of hydrogen gas and heat to the reactor stably because reduction by hydrogen is an endothermic reaction.

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We are challenging 30% reduction of  $CO_2$  emissions through following 2 challenges

#### 2) Development of CO<sub>2</sub> emission reduction technology using hydrogen in BF steelmaking



#### COURSE50

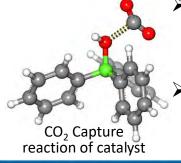
- As a transition technology until the establishment of 100% hydrogen reduction steelmaking, we are developing technology to replace a part of carbon reduction with hydrogen reduction in BFs.
- We have developed a technology to reduce CO<sub>2</sub> emissions from BFs by 10% using 3D mathematical model of BF and test BF with a volume of 12m<sup>3</sup> (about 1/500th the scale of an actual BF) constructed at our East Nippon Works Kimitsu Area

#### Super COURSE50

As a next step, assuming that a large amount of hydrogen can be supplied, we are developing technology to use a large amount of hydrogen-based gas outside the steelworks to dramatically increase the reduction by hydrogen and reduce  $CO_2$  emission from BFs, over the target set in COURSE50.

### 3) Development of low-cost CO<sub>2</sub> separation technology

https://challenge-zero.jp/en/casestudy/533



- The <u>chemical absorption method</u> is a process in which CO<sub>2</sub> is absorbed by special absorption liquid and then separated/collected as the liquid is heated. The majority of CO<sub>2</sub> capture cost arises from the energy required for absorbent regeneration, i.e. the release of CO<sub>2</sub> from the absorbent.
  - In our preceding investigations, we have successfully developed high-performance aqueous absorbents that could reduce the energy consumption for CO<sub>2</sub> separation to <u>2.3 GJ/t-CO<sub>2</sub></u>. On the basis of these investigations, we continue our research to further reduce the energy consumption to 1.6 GJ/t-CO<sub>2</sub>, the theoretical minimum.

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#### "Challenge Zero" Program of Japan Business Federation 43 and Our Innovations Toward Carbon-Free Society 4) Contributing the hydrogen infrastructure formation by spreading usage of the specialized

HYDREXEL steel for hydrogen station https://challenge-zero.jp/en/casestudy/530



Conventional steel New material Type 316(L) HYDREXEL™

- ➤ HYDREXEL<sup>TM</sup> is free from hydrogen brittleness even in the high pressure hydrogen environment to bring the longer lifetime and higher safeness of hydrogen stations, indispensable infrastructure for hydrogen society.
- It also brings enlargement of inner tube diameter realizing larger flow and higher speed pumping of hydrogen, and contribution to construction of compact hydrogen stations and cost reduction of construction and maintenance.
- We are now developing welding procedure to spread usage of HYDREXEL<sup>™</sup>.

#### 5) Development and dissemination of Eco ProductsTM that contribute to reductions in CO<sub>2</sub> emissions at the point of product use (NSafe $^{TM}$ -AutoConcept; electrical steel sheet)



https://challenge-zero.jp/en/casestudy/532

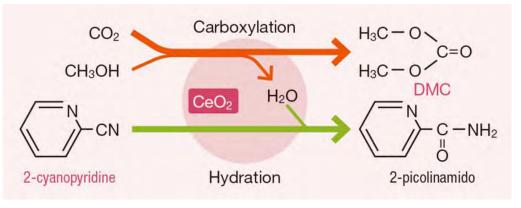
- $\geq$ We provide steel products and services which help users' products be lightweight, high-performance, and durable thus minimize  $CO_2$  emissions over their entire life cycle.
- $\geq$ Prime examples include our NSafe<sup>TM</sup>-AutoConcept, which uses high-strength steel and other advanced materials and their processing technology solutions, and our highly-efficient nonoriented electrical steel sheet, which enhances energy efficiency.
- These Eco Products<sup>™</sup> have the potential for further  $\triangleright$ enhancement of their properties and we will take up various R&D challenges

6) Enhanced efficiency in recycling of waste plastics https://challenge-zero.jp/en/casestudy/536



- For over 20 years, we have strived to carry out and expand chemical recycling of waste plastics, using a coke oven process, with the aim of reducing emissions of global greenhouse gases (<u>totally 3.07</u> <u>million tons of CO<sub>2</sub> reduction</u>).
- In response to further requests from society, we are taking up the challenge to make high-density waste plastic moldings in order to moderate the operating impact of coke ovens when handling waste plastics in vast volume.

#### 7) Establishment of dimethyl carbonate (DMC) production method using CO<sub>2</sub> as raw material



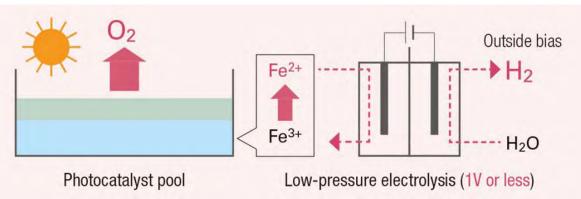
https://challenge-zero.jp/en/casestudy/534

- We have been developing new DMC (Dimethyl Carbonate) process directly producing from CO<sub>2</sub> with Tohoku University and chemical companies. DMC is widely used for source of high-performance engineering plastics and Li batteries electrolyte, etc.
- We have established process not only effectively using CO<sub>2</sub> but also safe and with low cost. By replacing current DMC production with this technology, we aim to reduce about 1 million tons of CO<sub>2</sub> emission.

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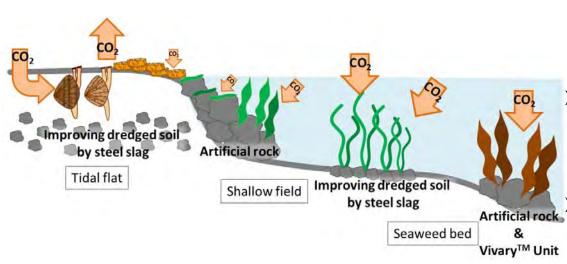
#### 8) Zero emission hydrogen production technology by artificial photosynthesis





- We are challenging to develop an artificial photosynthesis technology to produce hydrogen directly from water using sunlight as an energy source and photocatalysts.
- We have developed a new photocatalyst and confirmed the world's top efficiency.
- We are now challenging to develop more efficient photocatalyst.

# 9) CO<sub>2</sub> uptake and carbon storage as blue carbon by utilizing steel slag

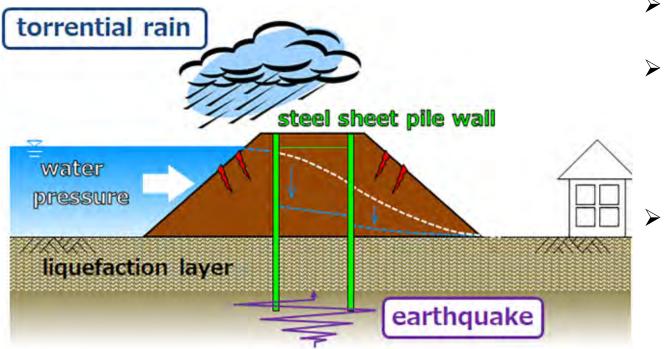


 $\ensuremath{\ast} 1$  Blue Carbon: CO2 uptake and carbon storage by coastal ecosystem

- We have developed coastal environment improvement technologies that utilize steel slag, a by-product of the steelmaking process. Steel slag provides iron needed for seaweeds to flourish.
  - Focusing on the function of the coastal environment as a blue carbon ecosystem, we are challenging to improve our technology to contribute to CO<sub>2</sub> reduction.
    - We are also challenging to establish an evaluation system of the carbon stock capacity of coastal ecosystems using large aquarium laboratories in our R&D center.

### **10)** Provision of solutions for "National Resilience"

#### aimed at adaptation to climate change Ex) Reinforcement of Reservoir embankment



https://challenge-zero.jp/en/casestudy/531

- In recent years natural disasters have intensified in Japan.
- Our group is striving to enhance our technologies and products, which can contribute to National Resilience, and make proposals to clients and design consulting firms.
  - We have been making steady achievements, including the adoption of our technologies and products.

We aim at contributing to the progress of society through pursuit of world-leading technology development and manufacturing strength, and activities that match the United Nations' Sustainable Development Goals (SDGs), in particular the Goal 9 of building infrastructure for industrialization and innovation.



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#### Structural Measures to Realize Lean and Optimal Directions Fromound Legends: Measures already Further Legends: **Production Framework Further measures** announced

	Underlined items are updates from the plan announced	for first time on Feb. 7 <sup>th</sup> , 2020
Purpose	Relevant Steelworks and Facilities	Time of Closure
(1) Strengthening	1) Setouchi Works Kure Area/ Shutdown of upstream facilities	
of competitiveness	(BF, sintering, and steelmaking)	By around the end of FY2021 1H
in upstream	/ all other facilities (incl. hot strip mill and pickling line)	By around the end of FY2023 1H
integrated	2) Kansai Works Wakayama Area/ Shutdown of #1 BF, #5-1 sin	tering
production	machine, #4/5 coke ovens, and part of #3 continuous of	Caster By around FY2022 1H
	3) Kyushu Works Yawata Area (Kokura)/ Shutdown of upstream facilities	The end of FY2020 1H (done)
(2) Upstream facility reformation	4) Setouchi Works Hirohata Area/ Shutdown of a melting furnace, installation of EAF	By around FY2023 1H
		usly: By around the end of FY2019 continued (Shutdown cancelled)
(3) Efficiency enhancement of the steel sheet production system	6) Setouchi Works Hanshin Area (Sakai)/ Shutdown of continuo ing line, electro-galvanizing line, and #1 continuous aluminizing line	• •
(4) Strengthening of the tinplate business	7) Setouchi Works Hirohata Area/ Shutdown of tinplate mill	By around the end of FY2020
(5) Strengthening of the	8) Nagoya Works/ Shutdown of steel plate mill	Previously: By FY2022 2H
steel plate business		⇒ By around FY2021 2H
(6) Withdrawal from	9) Kansai Works Osaka Area/ Shutdown of titanium round bar	line By around the end of FY2022
unprofitable titanium business	10) Kyushu Works Oita Area (Hikari)/ Shutdown of titanium ERW line	By around the end of FY2021 1H
(7) Strengthening of		y: By around the end of Dec-2020
the stainless steel	/ Shutdown of hot strip mill	<u>⇒ Oct-2020 (done)</u>
business	/ Shutdown of precision product lines Already been sh	ut down at the end of FY2020 1H
(8) Strengthening of	12) East Nippon Works Kashima Area/ Shutdown of UO pipe mil	Oct-2019 (done)
the pipe & tube business	13) East Nippon Works Kimitsu Area (Tokyo)/ Shutdown of small-dia	ameter seamless pipe mill May-2020 (done)
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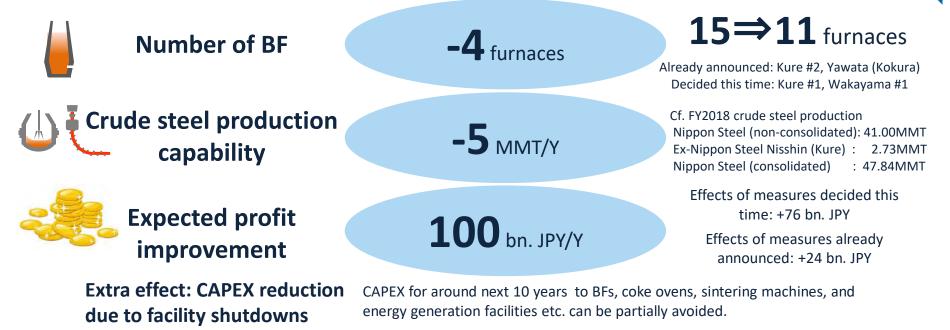
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# Effects of Measures Decided So Far and Future Efforts

#### Effect of measures decided so far

Before After



#### **Future efforts**

In addition to the series of structural measures decided on Feb. 7<sup>th</sup>, 2020 as the first step, **Nippon Steel is pursuing further measures as next steps to build more competitive, leaner, and optimal production** framework.

- > Nippon Steel will implement selection and concentration of CAPEX
- Assessing domestic and overseas S&D balance and Nippon Steel's expected profit under such circumstance, Nippon Steel will implement further measures in accordance with business environment changes.

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# **Production Facility Structural Measure**

In addition to striving to realize effects of the structural measures (announced on February 7, 2020) ahead of schedule, we will pursue further optimal production framework and implement additional measures as necessary.

#### **Breakdown of Cost Reduction**

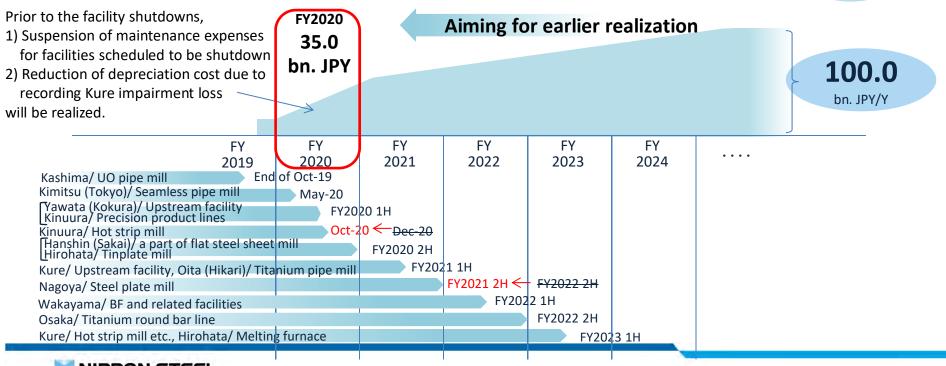
Maintenance cost: Suppressing input prior to shutdown while maintaining facility soundness until shutdown Labor cost: Reduction by suppressing new employment. (No early discharge) Depreciation cost: Reduction due to facility shutdown

Variable cost: Cost reduction by transferring production from facilities shutdown to highly competitive facilities



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#### **Cost Reduction Curve (Rough Estimation)**



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(Adjustment page)



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## Progress: Selection and Concentration of Facilities, Products, and Businesses

\*BF = Blast Furnace

Legend : New measure 🛠 Plan ★ Done 🛠 Cancelled

#### Early transition to domestic optimal production system and strengthening of competitiveness

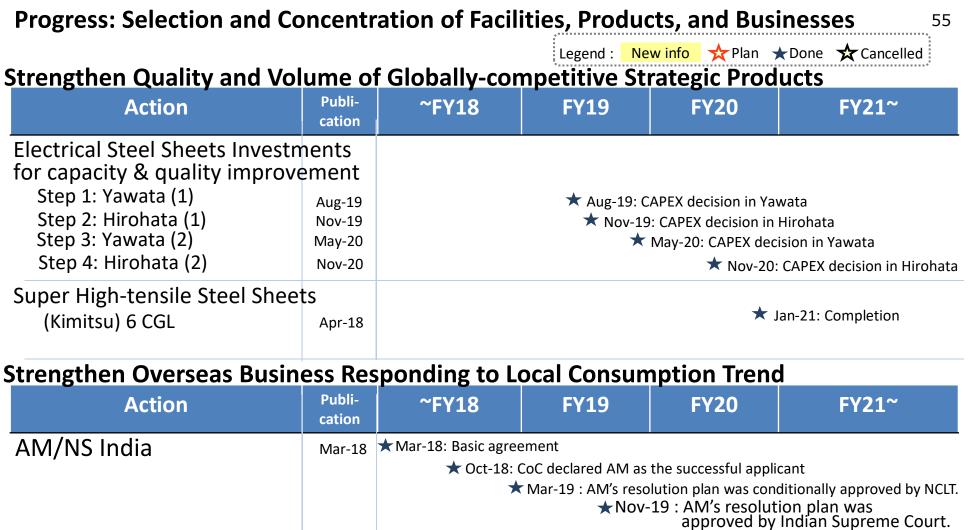
Action	Publication	~FY19	FY20	FY21	FY22	FY23~		
(Kure) Close Upstream Process and Hot- rolling Line	Feb-20	End of FY21 1H: Upstream closur End of FY2 Others clo						
(Wakayama) Close BF and Related Facilities	Feb-20				🛧 End c	of FY22 1H: Closure		
(Yawata) Optimize Upstream (Tobata) - Start new continuous casting facility (Tobata) - Close continuous casting facility (Kokura) - Close upstream process - Move up the schedule	Mar-16 Feb-20	★ May-19 : Completi	ion	🛠 End of F	e operation Y20 : Closure <del>Y20 : Closure</del>			
(Nagoya) Close Steel Plate Mill	Feb-20				F	(22 2H : Closure		
Move up the schedule	Nov-20	End of FY21: Closure						
(Hanshin Sakai) Close a part of Flat Steel Sheet Mill	Feb-20	End of FY20: Closure						
(Oita) Close Titanium Pipe Mill (Osaka) Close Titanium Round Bar Line	Feb-20			🔆 En	d of FY21 1H:	Closure Closure		
(NIPPON STEEL Stainless Steel Kinuura) Close Hot Strip Mill -> Moved up the schedule and Precision Product Lines	Feb-20 Nov-20 Feb-20		🖌 Oct	<del>End of Dec-2</del> -20 : Closur -20 : Closure	e			
(Hirohata) Close Tinplate Mill	Nov-19			<u>,</u>	FY21 2H : C	losure		
Move up the schedule	Feb-20			End of F	Y20: Closure			
(Kimitsu) Close Small-diameter Seamless Pipe & Tube Mill	Mar-18				transfer its akayama W			
(Kashima) Close UO Pipe Mill	May-19	★ Oct-:		l & transfe to Kimitsu	erred its pro Works	duction		

# Progress: Selection and Concentration of Facilities, Products, and Businesses

Legend : New measure 🛠 Plan ★ Done 🛠 Cancelled

#### Early transition to domestic optimal production system and strengthening of competitiveness

Action	Publication	~FY19	FY20	FY21	FY22	FY23~			
(Wakayama) BF Switch	Mar-18	★ Mid Feb-19 : Switch from 5BF to New 2BF							
(HOKKAI IRON & COKE CORP. in Muroran) Reline 2BF	Nov-18	★ Nov-20: Completion							
(Nagoya) Reline 2BF	Jun-20				🗙 FY22.	1H: Completion			
Coke Oven Construction (Kashima) 2E Coke Oven Coke Oven Refurbishment	Sep-15	★ May-18 :	Completio	n					
(Kimitsu) 5 Coke Oven (Hokkai) 5 Coke Oven (Nagoya) 3 Coke Oven	Apr-16 Jun-17 Nov-18	<ul> <li>★ Feb-19 : Completion</li> <li>★ Sep-19 : Completion</li> <li>(Completed refurbishment for all coke ovens in Hokkai)</li> <li>★ FY21.1H: Completion</li> </ul>							
(Yawata) New Continuous Casting Facility	Mar-16	★ May-19	: Completi	on					
(Hirohata) Scrap Melting Process	Nov-19				🔆 FY22 :	IH: EAF Completion ★ FY23 1H: Meltin furnace closure			
(NIPPON STEEL Structural Shapes) Close Steelmaking Mill Cancellation	Mar-18 Feb-20	End of FY19: Close steelmaking facility and transference its production to Wakayama Works Cancelled the shutdown of the steelmaking facility							
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★ Dec-19: Joint acquisition completed

★ Mar-20: Loan agreement with JBIC

★Jul-20: Acquisition of OSPIL\*

AM/NS Carvert New EAF Nov-20

**FY23.1H:** Completion

\*OSPIL: Odisha Slurry Pipeline Infrastructure Limited

Company managing the Odisha state slurry pipeline which AM/NS India uses to transport fine ore from a beneficiation plant to a pelletization plant owned by AM/NS India



#### Progress: Selection and Concentration of Facilities, Products, and Businesses

Legend : New info 🛠 Plan 🛧 Done 🛠 Cancelled

# Withdrawal from or realignment of businesses that have already completed their roles, or businesses that no longer have any synergies with Nippon Steel

Action	~FY18	FY19	FY20	FY21~
Sale of Partnership Interest in Bahru Stainless (Stainless steel sheet business in Malaysia)	★ D	ec-18: Sold		
Dissolution of ZNW (Special cold rolled steel sheet business in China)		★ De	ec-19: Stopped p	roduction
Sale of Partnership Interest in NAT (Stainless steel pipe business in the US)		*	-eb-20: Sold	
Dissolution of N-EGALV (Electrogalvanized steel sheet business in Malaysia)			★ Jun-20: Si	copped productio
Sale of Partnership Interests in I/N Tek and Kote (Cold rolled and galvanized steel sheet business in the US)			★ <mark>De</mark>	c-20: Sold
Sale of Partnership Interest in PATIN (Tinplate business in China)			★ <mark>De</mark>	c-20: Sold
Sale of Partnership Interest in VSB (Seamless pipe business in Brazil)			7	Mar-21: To be sold
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### Progress: Actions for Tackling the Climate Change Through Innovation

Legend : New Info 👘 🛧 Plan 🛧 Done 🛠 Cancelled

Action	~FY18	FY19	FY20~								
Eco-Process	★ Nov-	★ Nov-18: Issue of international standard (ISO 20915) regarding life cycle inventory calculation methodology for steel products									
Eco-Products®	High-Tensile Steel Sheet Electrical Steel Sheet Others	★ Aug-19: ★ Nov ★ Sep-19: <u>E</u> ( ★ Dec	<ul> <li>"NSafe<sup>®</sup>-AutoConcept" "Our Mission, Designing the Future of Automobiles "</li> <li>Jan-21: Operation of 6CGL in Kimitsu Area started</li> <li>Electrical steel sheets CAPEX (Yawata #1) determined</li> <li>-19: Electrical steel sheets CAPEX (Hirohata) determined</li> <li>May-20: Electrical steel sheets CAPEX (Yawata #2) determined</li> <li>Nov-20: Electrical steel sheets CAPEX (Hirohata #2) determined</li> <li>Severly®Unit won the Excellence Award in EcoPro 2019</li> <li>Japanese preeminent environmental exhibition)</li> <li>c-19: 9 H-beams products were awarded EcoLeaf environmental label</li> <li>Mar-20: Mega NSHyper Beam ™ was awarded EcoLeaf</li> <li>Cot-20: 3 tinplate products were awarded EcoLeaf</li> <li>Feb-20: Nsafe™-Hull was awarded Okochi Memorial Production Prize</li> </ul>								
Eco-Solution		eved a cumulative	total of 50 CDQ* orders in China (73 as of the end of FY18) total of 100 CDQ* orders overseas d of FY18, 20.74 MMT-CO2 / year of CO2 emission reduction)								
Aiming for Carbon free and Circular Society	-	★Oct-19:	essed our support for recommendations of TCFD Integrated report and sustainability report were published c-19: Held the 1 <sup>st</sup> sustainability briefing ★Jun-20 : Expressed support for "Challenge Zero" program of Japan Business Federation, and released 10 innovative challenges ★Jul-20 : Was selected for "FTSE4Good Index Series" & "FTSE Blossom Japan Index", Leading Indices for ESG Investment 3 years in a row								



#### Progress: Digital Transformation, Responses to Work Style Change 58

Legend : New info 🛧 Plan 🛧 Done 🛠 Cancelled

### **Enhancement of Digital Transformation**

Action	~FY18	FY19	FY20~						
Reorganization to Enhance Digital Transformation Utilizing Advanced	<ul> <li>★ Apr-16: NSSOI</li> <li>★ Oct-17: NSSO</li> <li>★ Apr-18: Nev</li> <li>★ Sep-18:</li> </ul>	<ul> <li>Newly-created "Advanced Application Technology Planning Dep."</li> <li>NSSOL newly-created "IoX Solution Business promotion Dep."</li> <li>NSSOL newly-created "AI Research &amp; Development Center"</li> <li>18: Newly-created Intelligent Algorithm Research Center</li> <li>▲ Apr-20: Newly-created "Digital Innovation Div."</li> <li>ep-18: Company-wide Safety Support Project (Installment of smart devices to manufacturing front-lines)</li> <li>▲ Apr-19: Introduction of NS-DIG<sup>TM</sup></li> </ul>							
IT in Steelmaking	,	★ Jun-20: Implementation of AI image recognition system							
Process		۲	Apr-20: Full-scale system for WFH prepared						
			Dec-20: Demonstration for establishment of basis for operation monitoring in steelworks utilizing NEC's AI technology started in Kimitsu						
Local 5G Private Network	★ Aug-20: Started FS of local 5G network system demonstration provided by NSSOL in Muroran Works								

#### **Responses to Work Style Change**

Action	~FY18	FY19	FY20~					
24 Hour Nursery	★ Apr-19 : The 5 <sup>th</sup> 24 hour in-house nursery in Hirohata Area (Oita, Kimitsu, Yawata, Nagoya, <u>Hirohata</u> )							
			🔆 Sep-21 : The 6 <sup>th</sup> 24 hour in-house nursery in Kashima Area to open					
Work System		🛧 Apr-19: Trial int	d accompany leave system started croduction of WFH system (official introduction in November) retirement age 65 years old policy decision Apr-20: Transfer exemption system started					
System Improvement to support WFH		★ Sep-19	<ul> <li>Apr-20: Implementation of Microsoft Teams (Company-wide)</li> <li>Development of general-purpose workflow system</li> <li> planning to end using "hanko" stamp and implement electronic seal authentication system</li> </ul>					





(Adjustment page)



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# Agenda

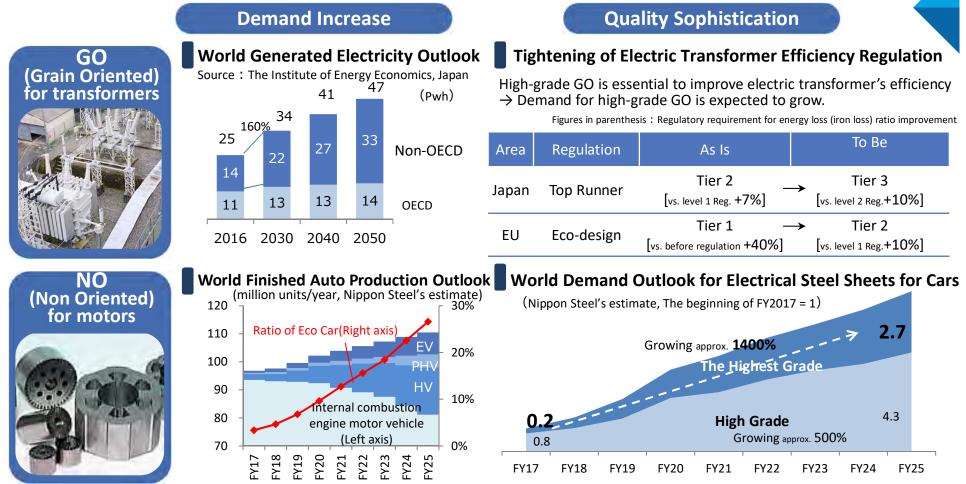


- 1. FY2020 3Q Earnings Summary and FY2020 Forecast
- 2. Business Environment (COVID-19 Impacts & Our Actions)
- 3. Measures to Improve Business Performance and CFs
- 4. Medium-Long Term Restructuring
- 5. Supplementary Material for Financial Results

Appendix 1. "Challenge Zero" Innovations Appendix 2. Structural Measures (Update of Announcement on Feb. 7<sup>th</sup>, 2020) Appendix 3. Progress of Management Strategy Measures Appendix 4. Related Indicators



## Electrical Steel Sheets – Investments for Capacity & Quality Improvement - 61



Although global demand for transformers and eco-cars has temporarily declined due to the effects of COVID-19, environmental regulations for transformers and automobiles are being tightened around the world, and the demands for high-efficiency transformers and eco-cars are expected to grow dramatically.

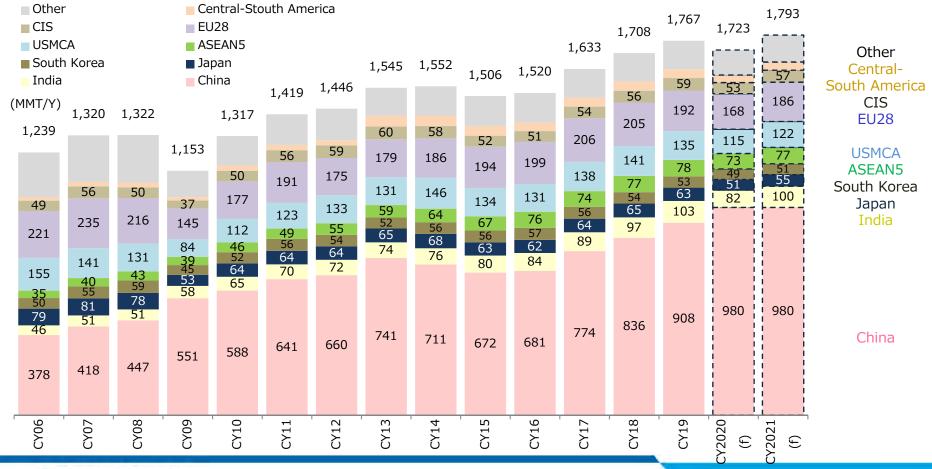
We have decided a series of investments of more than 100.0 bn. JPY at Kyushu Works Yawata Area and Setouchi Works Hirohata Area responding to an increasing demand for more sophisticated electrical steel sheets ; Grain Oriented electrical steel sheets (GO) for transformers etc. and Non Oriented electrical steel sheets (NO) for eco-cars.



# World Steel Demand

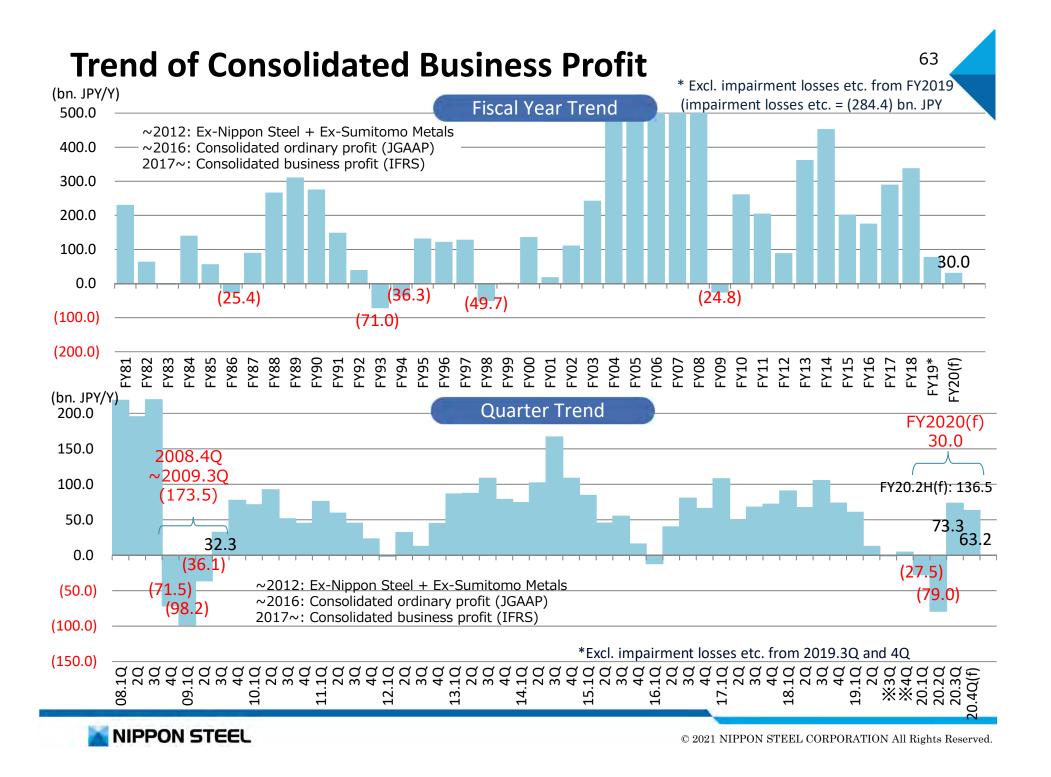
	(MMT/Y)	World	Japan	China	South Korea	ASEAN5	India	USMCA	EU28
	CY2019	1,767	63	908	53	78	103	135	158
Ϊ	CY2020 (f)*	1,723	51	980	49	73	82	115	134
	vs. as of Jun.	+69	-0	+64	+2	-3	-1	+7	+1
	CY2019->20	-44	-12	+73	-4	-5	-21	-21	-24
	Change	- <b>2.5</b> %	-19.6%	+8.0%	-8.1%	-6.0%	-20.2%	-15.3%	-15.1%

\* Source: World Steel Association as of Oct, 2020 Prev. forecast: as of Jun, 2020



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## **Raw Material Prices**

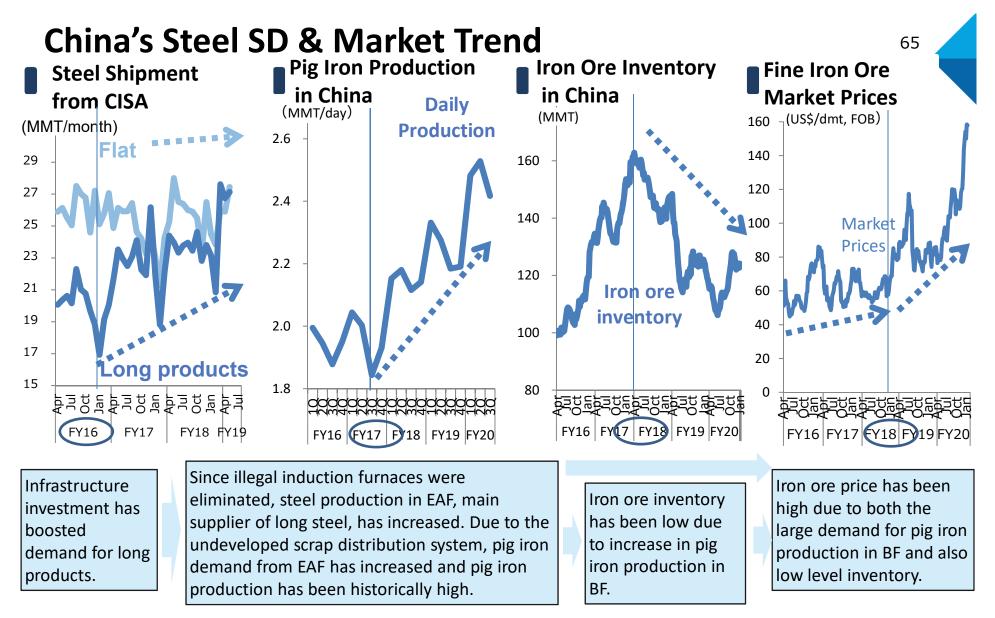
Fine Iron Ore

Hard Coking Coal



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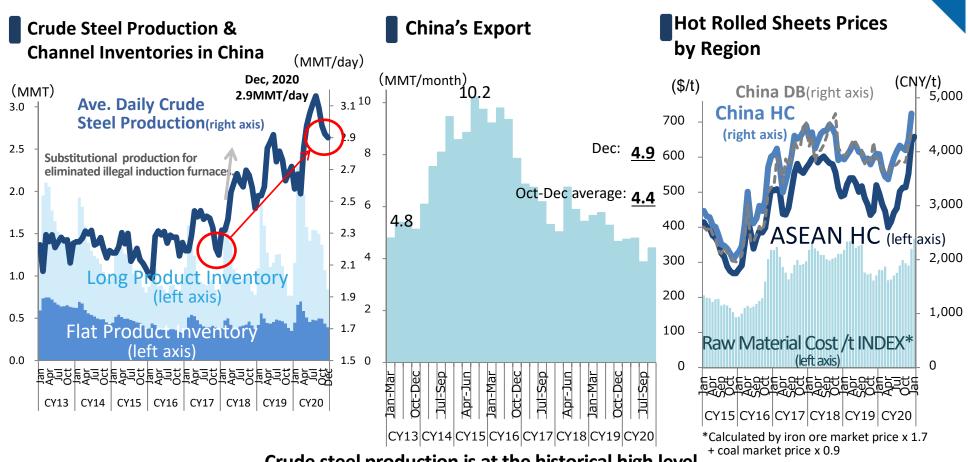


The long products' SD situation stays firm, while flat product market, in which we export mainly, bear a weak tone. The polarization between long & flat prices is anticipated to expand as infrastructure investments gain more momentum.

Source: Steel Home, CISA, Nippon Steel's estimate etc.

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# **China's Steel SD & Market Trend**



Crude steel production is at the historical high level.

Inventory temporarily increased due to the Chinese New Year's holiday and the impact of COVID-19,

but it is currently declining and exports remain at a low level.

#### Supported by Chinese gov.'s stimulus measures, SD is balanced.

Need to keep monitoring impacts from trade war, stimulus measures, impact of COVID-19, and how they affect SD situation.

Source: Japan Steel Association, Steel Home, CISA, MYSTEEL, Nippon Steel etc.



## **FY2020** Earnings Summery

								change				
(bn. JPY)	1H	2Н	FY2019	1H	3Q	2H(f)	prev. FY2020( <u>f</u> ) *5	FY2020 (f)	FY19 2H →FY20 2H(f)	FY20.1H →FY20.2H(ƒ)	FY19 →FY20(f)	*5 Prev. FY20(f) →FY20(f)
Sales	3,047.1	2,874.3	5,921.5	2,241.9	1,207.8	2,608.1	4,800.0	4,850.0	-266.2	+366.2	-1,071.5	+50.0
Business Profit <sub>*1</sub>	73.1	3.4	76.5	(106.5)	73.3	136.5	(60.0)	30.0	+133.1	+243.0	-46.5	+90.0
Additional Line Items	0.0	(121.7)	(121.7)	(42.2)	8.0	(32.8)		(75.0)	+88.9	+9.4	+46.7	
Net Profit *2	38.7	(470.2)	(431.5)	(191.1)	67.3	71.1	(170.0)	(120.0)	+541.3	+262.2	+311.5	+50.0
ROS *1	2.4%	0.1%	1.3%	-4.8%	6.1%	5.2%	-1.3%	0.6%	+5.1%	+10.0%	-0.7%	+1.9%
Earning per Share (JPY/ share)	42	(511)	(469)	(208)	73	78	(185)	(130)	+588	+285	+339	+55
EBITDA <sub>*3</sub>	284.9	181.9	466.8	36.7	146.7	293.3	240.0	330.0	+111.4	+256.6	-136.8	+90.0
EBITDA/Sales	9.3%	6.3%	7.9%	1.6%	12.1%	11. <b>2</b> %	5.0%	6.8%	+4.9%	+9.6%	-1.1%	+1.8%
EBITDA/t *4 (Thousand JPY/t)	11.7	8.0	9.9	2.2	15.2	14.0	6.5	8.7	+6.0	+11.8	-1.2	+2.2

\*1 Business profit and ROS are those before impairment losses etc.

\*2 Profit attributable to owners of the parent

\*3 Business profit + depreciation cost + impairment loss

\*4 EBITDA/ consolidated crude steel production

\*5 Forecast as of Nov. 6th



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# **Operational Highlights**

Forecasts are rough figures .

	FY19	(incl. Nis	shin)			FY20			Change					
(MMT)	1H	2H		1H	3Q	2H(f)	prev.(f) *1	(f)	FY19 2H → FY20 2H(f)	FY20 1H → FY20 2H(f)	FY19 → FY20(f)	Prev. FY20(f) → *1 FY20(f)		
Non-Consolidated Pig-iron Production	21.93	20.64	42.57	14.82	8.32	18.40	32.70	33.20	-2.24	+3.58	-9.37	+0.50		
Consolidated Crude Steel Production	24.27	22.79	47.05	16.78	9.64	21.00	37.20	37.80	-1.79	+4.22	-9.25	+0.60		
Non-Consolidated Crude Steel Production	21.55	20.30	41.85	14.64	8.47	18.60	32.70	33.20	-1.70	+3.96	-8.65	+0.50		
Non-Consolidated Steel Shipments	19.86	18.84	38.70	14.46	7.93	16.80	31.00	31.20	-2.04	+2.34	-7.50	+0.20		
Seamless Pipe Shipments	0.49	0.48	0.97	0.34	0.13	0.29	0.62	0.63	-0.19	-0.05	-0.34	+0.01		
Average Steel Selling Price (k JPY/ton)	88.6	88.0	88.3	83.6	86.9	88	84	86	+0.0	+4	-2	+2		
Steel Export Ratio (Value basis (%))	38.0	37.9	37.9	38.2	33.0	35	36	36	-2.9	-3	-2	+0		
Forex (USD•JPY)	109	109	109	107	105	105	106	106	Appreciated Yen <b>-4</b>	Appreciated <sup>Yen</sup> -2	Appreciated Yen <b>-3</b>	Deppreciated Yen <b>+0</b>		

\*1 Forecasts as of Nov. 6th, 2020



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# **Key Indicators of Demand**

FY19								FY20				Cha	inge	
[ Domestic ]		1H	2Н		1H	3(	Q	2H(f)	prev. (f) *1	(f)	FY19 2H → FY20 2H(f)	FY20 1H → FY20 2H(f)	FY19 → FY20(f)	Prev. FY20(f) → <b>*1</b> FY20(f)
Housing Starts (mil. hous	ses)	0.47	0.42	0.88	0.4	1 0	.21	0.38	0.75	0.79	-0.04	-0.04	-0.0	9 +0.04
Non-residential Construction Starts (mil.		25.83	22.15	47.98	23.3	7 10	.57	20.10	40.80	43.50	-2.05	-3.27	-4.4	8 +2.70
Public Works Orders (bn. J	PY)	5,304	6,043	11,346	5,654	4 2,7	713	5,970	11,570	11,620	-73	+316	+27	4 +50
Finished Auto Productior (mil. un		4.82	4.67	9.49	3.3	3 2	.37	4.70	8.10	8.00	+0.03	+1.37	-1.4	9 -0.10
Export of Finished Auto (mil. un	its)	2.40	2.34	4.74	1.54	4 1	.18	2.40	3.80	3.90	+0.06	+0.86	-0.8	4 +0.10
Overseas Auto Productio (8 Japanese car makers) (mil. un		9.10	8.20	17.30	6.5	0 4	.73							
Large & Middle Sized Shovel Production <sub>(thousand un</sub>	its)	45	33	78	3:	2	20	40	60	70	+7	' +8	-	8 +10
Metal Machine Tool Production (thousand to		187	154	341	11:	2	60	130	240	240	-24	+18	-10	1 -
Keel-laid New Ships (mil. gross tons)		6.26	6.23	12.49	4.8	1 1	.70	3.30	8.40	8.10	-2.93	-1.51	-4.3	9 -0.30
Rig Count CY1		CY13	CY14	CY15	CY16	CY17	CY18	CY19	CY20	Lat	est	Peak		Bottom
<b>USA</b> 1,9		1,761	I 1,862	977	510	875	1,032	2 <b>94</b> 4	4 436	373	(Jan.15 <sup>th</sup> )	<b>2,031</b> (S	ep-08) 2	<b>44</b> (Aug-20)
Deep well (≧15,000ft)	324	326	354	205	126	222	230	227	7 104	84	(Jan.15 <sup>th</sup> )	<b>413</b> (N	lov-11)	<b>55</b> (Sep-20)
World Total Excl. N. America, Russia & China	1,234	1,296	6 1,337	1,167	955	948	988	3 1,098	8 825	665	(Dec-20)	1,382 (	<sup>Jul-14)</sup> 6	56 (Oct-20)

Source: Baker Hughes, Smith international, Nippon Steel's estimate \*

**\*1** Forecasts as of Nov. 2020



# **Domestic Steel Consumption by Industrial Sector**

		FY19				FY20			Change					
(MMT)	1H	2H		1H	3Q	2H(f)	Prev.(f) *1	(f)	FY19 2H → FY20 2H(f)	FY20 1H → FY20 2H(f)	FY19 → FY20(f)	Prev. FY20(f) → *1 FY20(f)		
Domestic Crude Steel Production	50.66	47.76	98.43	37.09	21.99	45.50		82.60	-2.26	+8.41	-15.83			
Domestic Steel Consumption (A + B)	30.39	28.75	59.14	25.14	13.90	27.15	51.70	52.30	-1.60	+2.01	-6.84	+0.60		
% for manufacturing sector	65.7	63.9	64.8	60.8	64.3	64.6	62.7	62.8	+0.7	+3.9	-2.1	+0.0		
Ordinary Steel Consumption (A)	23.77	22.93	46.69	20.00	10.95	21.50	41.30	41.50	-1.43	+1.50	-5.19	+0.20		
Construction	10.03	10.05	20.07	9.53	4.79	9.30	18.50	18.80	-0.75	-0.23	-1.27	+0.30		
Manufacturing	13.74	12.88	26.62	10.47	6.16	12.20	22.70	22.70	-0.68	+1.73	-3.92	+0.00		
Shipbuilding	2.08	1.98	4.06	1.64	0.57	1.10	2.80	2.70	-0.88	-0.54	-1.36	-0.10		
Automotive	5.53	5.16	10.69	3.92	2.73	5.40	9.50	9.30	+0.24	+1.48	-1.39	-0.20		
Industrial Machine	2.52	2.16	4.68	1.92	1.10	2.20	4.00	4.10	+0.04	+0.28	-0.58	+0.10		
Electronic Machine	1.49	1.46	2.95	1.28	0.73	1.40	2.60	2.70	-0.06	+0.12	-0.25	+0.10		
Special Steel Consumption (B)	6.63	5.82	12.45	5.13	2.95	5.70	10.50	10.80	-0.12	+0.57	-1.65	+0.30		

Source : Nippon Steel's estimation **\*1** Forecasts as of Nov. 2020





Numbers in [parentheses] : Prev. IMF's Outlook as of Oct. 2020	

		CY08	CY09	CY10	CY11	CY12	CY13	CY14	CY15	CY16	CY17	CY18	CY19	CY2	0	<b>CY2</b> (f)	
N	/orld Total	3.0	-0.1	5.4	4.3	3.5	3.5	3.6	3.5	3.4	3.8	3.6	2.8	[-4.4]	-3.5	[5.2]	5.5
	Developed Countries	0.2	-3.3	3.1	1.7	1.2	1.4	2.1	2.3	1.7	2.5	2.2	1.7	[-5.8]	-4.9	[3.9]	4.3
	USA	-0.1	-2.5	2.6	1.6	2.2	1.8	2.5	2.9	1.6	2.4	2.9	2.2	[-4.3]	-3.4	[3.1]	5.1
	EU27	0.4	-4.5	2.1	1.6	-0.9	-0.3	1.4	2.1	1.9	2.5	1.9	1.3	[-8.3]	-7.2	[5.2]	4.2
	Japan	-1.1	-5.4	4.2	-0.1	1.5	2.0	0.4	1.2	0.6	1.9	0.3	0.7	[-5.3]	-5.1	[2.3]	3.1
	Developing Countries	5.7	2.8	7.4	6.4	5.4	5.1	4.7	4.3	4.6	4.8	4.5	3.7	[-3.3]	-2.4	[6.0]	6.3
	China	9.7	9.4	10.6	9.5	7.9	7.8	7.3	6.9	6.7	6.8	6.6	6.1	[1.9]	2.3	[8.2]	8.1
	India	3.9	8.5	10.3	6.6	5.5	6.4	7.4	8.0	8.2	7.2	6.8	4.2	[-10.3]	-8.0	[8.8]	11.5
	Russia	5.2	-7.8	4.5	5.1	3.7	1.8	0.7	-2.3	0.3	1.6	2.3	1.3	[-4.1]	-3.6	[2.8]	3.0
	Brazil	5.1	-0.1	7.5	4.0	1.9	3.0	0.5	-3.6	-3.3	1.1	1.3	1.1	[-5.8]	-4.5	[2.8]	3.6

(GDP growth rate)

Source : IMF



# **World Crude Steel Production**

	CY18	CY19		CY20								
(MMT)	[A]	[B]	Jan - Mar	Apr - Jun	Jul - Sep	Oct.	Nov.	Dec.	Oct Dec.	[C]	Change [A] →[B]	Change [B] →[C]
World <b>*</b> Total	1,788.9	1,844.1	442.1	434.3	472.4	161.5	156.9	160.9	479.2	1,828.0	+55.2	-16.1
[YoY]	[+4.5%]	[+3.1%]	[-1.3%]	[-9.6%]	[+1.8%]	[+6.7%]	[+5.7%]	[+5.8%]	[+6.1%]	[-0.9%]		
Japan	104.3	99.3	24.1	18.1	19.0	7.2	7.3	7.5	22.0	83.2	-5.0	-16.1
[YoY]	[-0.3%]	[-4.8%]	[-3.4%]	[-30.6%]	[-22.7%]	[-11.7%]	[-5.9%]	[-3.3%]	[-7.0%]	[-16.2%]		
Korea	72.5	71.4	16.9	15.6	17.1	5.9	5.8	6.0	17.6	67.1	-1.1	-4.3
[YoY]	[+2.0%]	[-1.5%]	[-4.8%]	[-14.7%]	[-3.3%]	[-1.7%]	[-2.4%]	[+1.2%]	[-1.0%]	[-6.0%]		
USA	86.6	87.8	21.7	14.7	17.3	6.2	6.3	6.4	19.0	72.7	+1.2	-15.1
EU28	167.7	157.4	38.4	30.7	31.7	13.1	13.1	11.8	37.9	138.8	-10.3	-18.6
Russia	72.1	71.7	18.2	17.2	19.9	6.0	5.9	6.1	18.1	73.4	-0.4	+1.7
Brazil	35.4	32.6	8.1	6.3	7.9	2.8	3.0	2.9	8.6	31.0	-2.8	-1.6
India	109.3	111.4	26.8	17.3	26.7	9.5	9.4	9.8	28.8	99.6	+2.1	-11.8
China	922.8	995.8	233.7	268.9	280.8	92.2	87.7	91.3	271.1	1,054.4	+73.0	+58.7
[YoY]	[+6.0%]	[+7.9%]	[+1.4%]	[+3.0%]	[+9.4%]	[+12.7%]	[+8.0%]	[+7.7%]	[+9.5%]	[+5.9%]		

Source : World Steel Association

\* Total of 64 countries



## **Domestic Crude Steel Production**

All Japan (MMT) FY20(f) FY15 FY16 FY17 FY18 FY19 FY07 **FY08 FY09 FY10** FY11 FY12 **FY13 FY14** 104.23 98.42 Approx. 121.51 105.50 96.45 110.79 106.46 107.30 111.52 109.84 105.17 104.84 102.89 82.60 (MMT) (MMT) FY20 4Q(f) 30.00 20.00 Approx. 23.50 26.56 26 25.70 .55 24.11 SMI(Left axis) 25.00 \*1 25.65 24.97 FY20 3Q NSC, NIPPON STEEL (Left axis) 21.99 \*2 23.65 15.00  $\cap$ 20.00 18.12 7 18.98 10.9 10.8/ 15.00 10.76 10.55 10.58 10.00 10.56 10.28 0.31 10.19 9.90 10.08 3.07 0 0 0 0 C 0 10.00 2.28 7.95 7.70 5.00 4.82 5.00 FY20(f) 46.73 41.48 39.15 45.37 42.92 43.55 45.67 44.96 42.17 42.62 40.67 41.00 39.54 Approx. Total Production of Crude Steel (NSC (non-consolidated)+SMI 33.20 0.00 0.00  $G_{A}$ ᡁᡐᠿᡡᠿᢩᠺᠺᠿᢗ᠕ᠿᠺᢙᢕ (କ୍ରକ୍ରର) ᢙᢙᢙᢙ ᢗᢦᠿᢙ ઝેબેબ F707

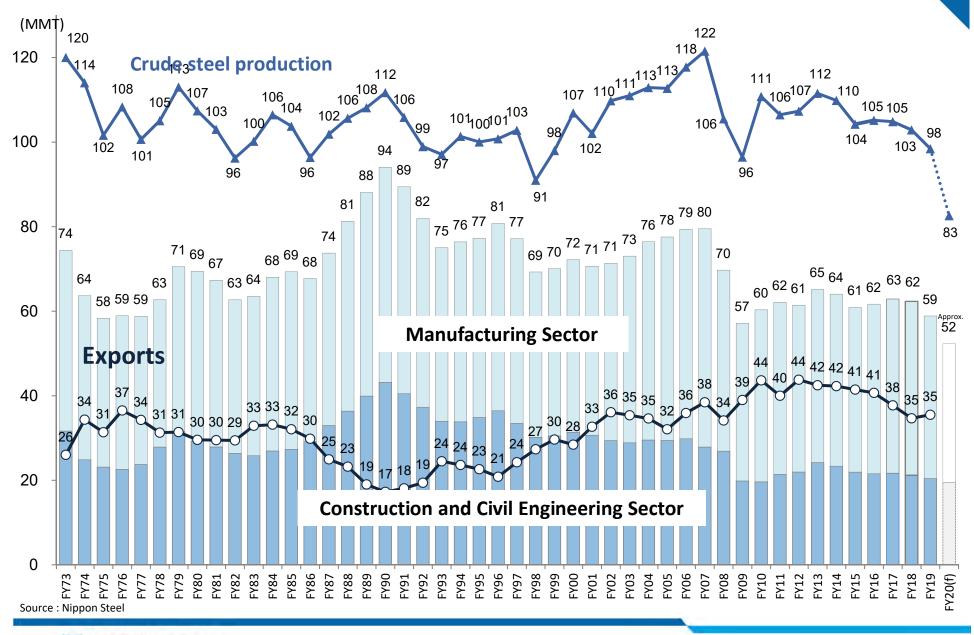
\*1 Includes Sumitomo Metals(Kokura), Sumitomo Metals(Naoetsu) and Sumikin Iron & Steel Co.
 \*2 Includes NIPPON STEEL & SUMIKIN KOUTETSU WAKAYAMA CORP (~FY2017)

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**\*3** Forecast released by METI in Oct.2020

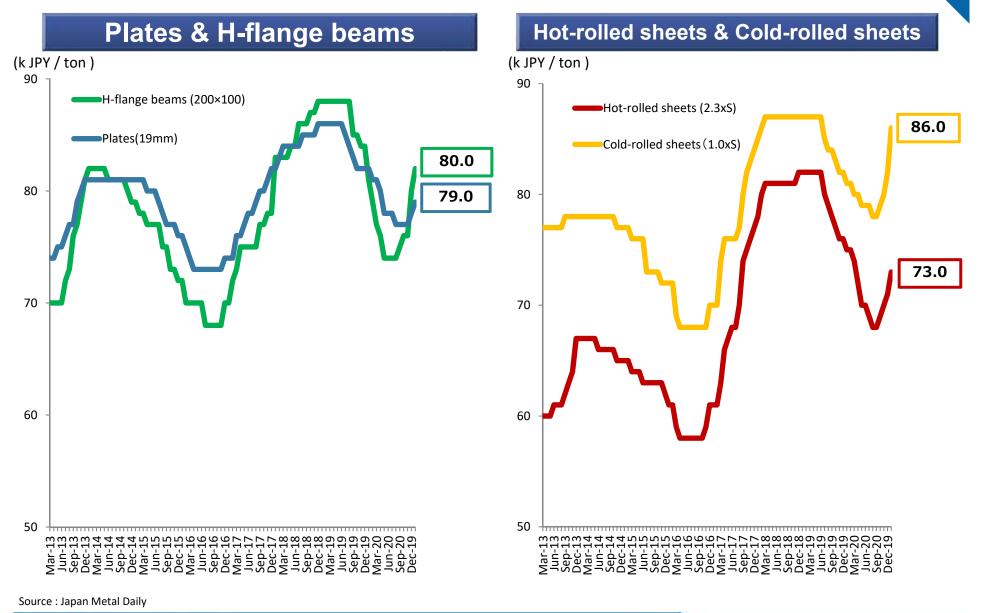
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## **Domestic Steel Consumption Trend**



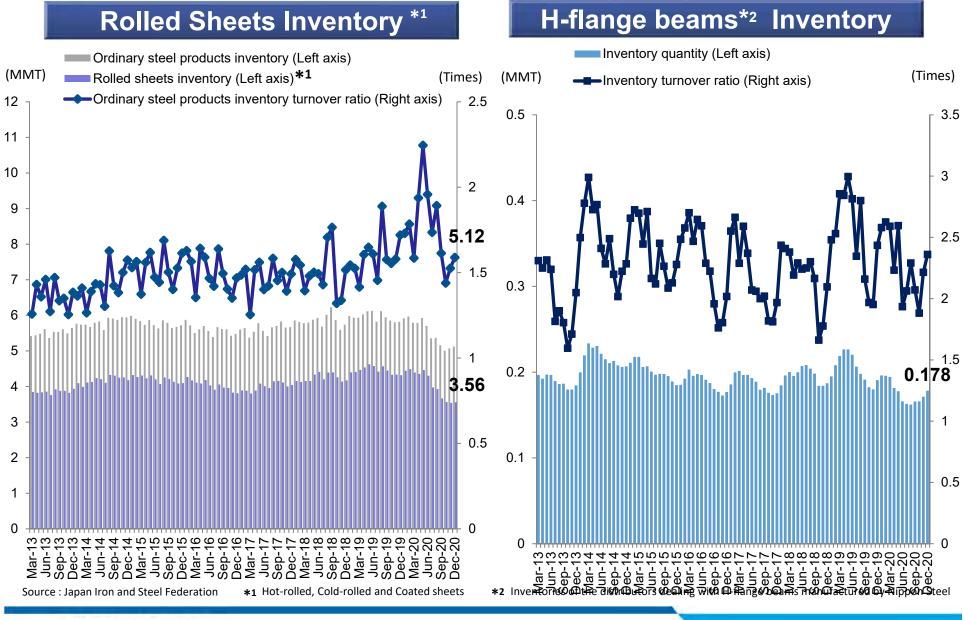
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## **Domestic Steel Products Prices**



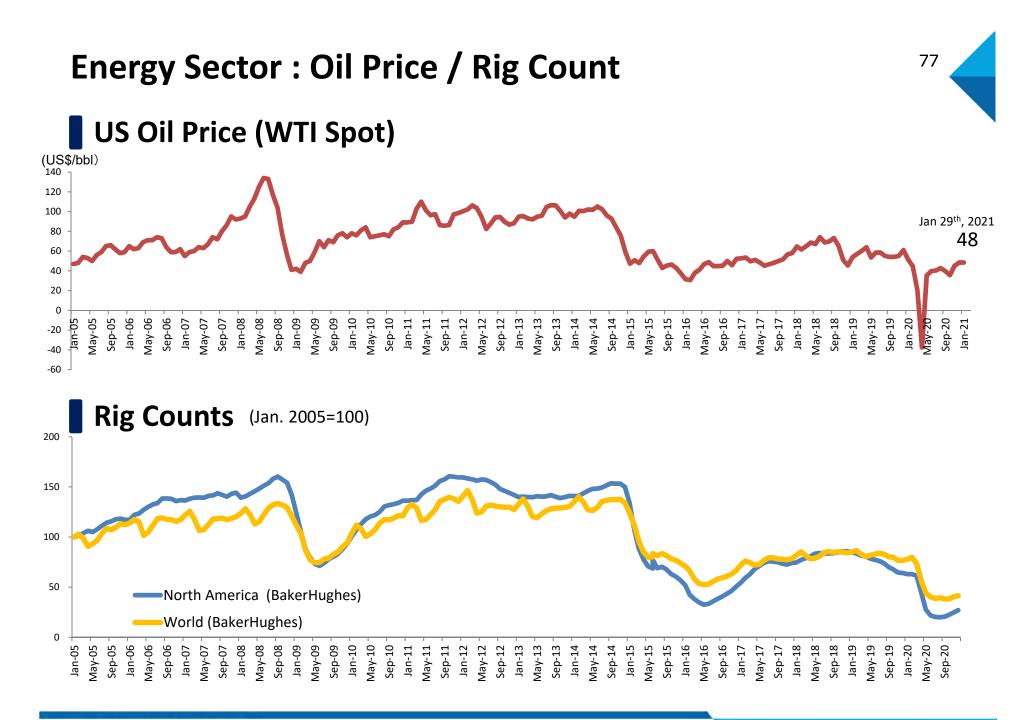
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## **Domestic Steel Inventory**



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