

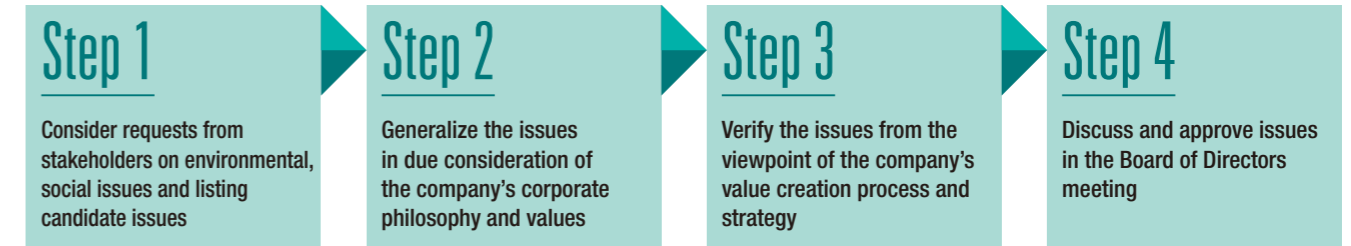
The Base That Supports Sustainable Growth— ESG Initiatives

Nippon Steel's ESG materiality

Nippon Steel recognizes that ESG initiatives are one of the priority issues and form the base that supports the very existence and growth of the company. Among these initiatives we have identified our materiality in due consideration of requests from stakeholders, the corporate philosophy and values, as well as growth strategy.

We will express our ESG materiality in and out of the company, steadily promote its execution and follow-up by checking the Key Performance Indicators (KPI) to assess outcome, and strive to contribute to sustainable social development, as well as maintenance and improvement of our corporate value.

Process to identify materiality



Materiality KPIs and status of major initiatives

Materiality		Key Performance Indicator (KPI)	Major Initiatives and Achievements in FY2018	Page on Sustainability Report	
1. Safety, environment, and disaster prevention					
(1) Safety and health		<ul style="list-style-type: none"> Accident frequency rate of 0.10 or less Zero fatal accident 	<ul style="list-style-type: none"> Prevention and risk reduction of accidents, based on safety risk evaluation Promotion of safer equipment and human error preventive measures (use of IT in safety measures) 	<ul style="list-style-type: none"> Accident frequency rate: 0.10 Number of fatal accidents: 3 	
(2) Environment	1) Promotion of countermeasures to prevent global warming	<ul style="list-style-type: none"> Three ecos to reduce CO₂ emissions 	<ul style="list-style-type: none"> Promotion of Eco Process (enhancement of energy efficiency) 	<ul style="list-style-type: none"> Down 2.293mn tons-CO₂ from BAU (JISF result in FY2017) 	
		<ul style="list-style-type: none"> Implementation of "Eco Process" 	<ul style="list-style-type: none"> Effective use of byproduct gas (coke oven gas, blast furnace gas etc.) and waste gas 	<ul style="list-style-type: none"> Use of byproduct gas: 100% Use of waste gas in steam generation: 76% In-house generated energy use in in-house power generation: 81% 	
		<ul style="list-style-type: none"> Enhancement of "Eco Products" 	<ul style="list-style-type: none"> Promotion of adopting advanced energy-saving technology 	<ul style="list-style-type: none"> Investment cost for energy-saving: ¥6.0bn 	
	2) Contribution to construction of a circular economy	<ul style="list-style-type: none"> Contribute with "Eco Solutions" 	<ul style="list-style-type: none"> Supply of high-performance steel products to help reduce CO₂ emissions through use of their end products 	<ul style="list-style-type: none"> Adoption of high-efficiency power generation equipment and oxygen plant; regeneration burner in reheating furnace 	<ul style="list-style-type: none"> 102 CDQ cumulative units (contributing to 19.69mn tons-CO₂ reduction, FY2017)
		<ul style="list-style-type: none"> Realization of zero emissions within the company 	<ul style="list-style-type: none"> Transfer and dissemination of the world-leading energy-saving technology to help CO₂ emission reduction globally 	<ul style="list-style-type: none"> NSafe™ -AutoConcept for next-generation vehicle structure (car body design solution to enable about 30% reduction in weight) 	<ul style="list-style-type: none"> Growing cumulative CDQ delivery record by Nippon Steel Engineering in the group
		<ul style="list-style-type: none"> Recycling of waste generated in society 	<ul style="list-style-type: none"> Reduction in final disposal amount (down 70% vs. FY2000; less than 260,000 tons/year in FY2020) 	<ul style="list-style-type: none"> Promotion of recycling of byproducts (slag, dust, sludge, etc.) in and out of the company 	<ul style="list-style-type: none"> Aggressive promotion of recycling treatment, according to the Chemical Recycling Act
3) Promotion of environmental risk management	<ul style="list-style-type: none"> Air environment preservation Water environment preservation 	<ul style="list-style-type: none"> NOx and SOx; Keep low-level emissions 	<ul style="list-style-type: none"> Installation of equipment that reduces SOx and NOx emissions; shifting to low-sulfur fuel; adoption of low NOx regenerating burners 	<ul style="list-style-type: none"> SOx: 13mn Nm³ NOx: 24mn Nm³ 	
		<ul style="list-style-type: none"> Maintaining of lower discharge levels than voluntary targets in chemical substances VOC (volatile organic compounds): 1,098 tons/year (down 30% vs. FY2000) Benzene: 168 tons/year (voluntary target, along with the government target) 	<ul style="list-style-type: none"> Continual efforts based on the voluntary reduction plan 	<ul style="list-style-type: none"> VOC: 615 tons/year Benzene: 76 tons/year 	
(3) Disaster prevention		<ul style="list-style-type: none"> Elimination of disaster risks and group-wide sharing of effective measures 	<ul style="list-style-type: none"> Zero serious disaster-related accident 	<ul style="list-style-type: none"> Prevention of recurrence via corporate-wide implementation of measures against risks emerged from the accidents Risk assessment to detect new disaster risks; execution of measures from hard/soft aspects to reduce risk and control residual risk Self-monitoring (auditing) by those in charge of disaster prevention in steelworks; and management by the head office management through interviews 	<ul style="list-style-type: none"> Serious disaster-related accidents: 2
2. Quality					
(1) Quality control and guarantee		<ul style="list-style-type: none"> Systemization and automation aimed at more credibility in testing and inspection 	<ul style="list-style-type: none"> Automatic input of inspection results from testing/analytical devices and measurement devices 	<ul style="list-style-type: none"> R&D expenditures: ¥72bn (consolidated) Number of patents: app. 32,000 (15,000 in Japan and 17,000 overseas) 	
(2) R&D and intellectual property management		<ul style="list-style-type: none"> Strategic R&D, aimed at sustainable growth Protection and use of intellectual property 	<ul style="list-style-type: none"> Foundation of the Intelligent Algorithm Research Center (April 2018) Internationalization of patent quality; proactive use of overseas-registered patents 	<ul style="list-style-type: none"> The 65th "Okochi Memorial Production Prize," 51st "Ichimura Prize in Industry for Distinguished Achievement" and "Ichimura Prize in Industry against Global Warming for Distinguished Achievement," and 45th "Iwatani Naoji Memorial Award," etc. 	
(3) Solution that result in customer satisfaction		<ul style="list-style-type: none"> Number of awards from customers, government, and institutions 	<ul style="list-style-type: none"> Start-up of new upstream process facilities in the Wakayama Works and the Yawata Works Standardization of operational skills of veteran workers and active use of experts 	<ul style="list-style-type: none"> Number of awards from customers, government, and institutions: 14 	
3. Production					
(1) Stable production and supply		<ul style="list-style-type: none"> Initiatives for more stable production and supply (hardware and software) 	<ul style="list-style-type: none"> Tree planting activities by new employees in steelworks Funding for green space development and maintenance 	<ul style="list-style-type: none"> Greenery space: 830ha Expenses for green space development and maintenance: ¥1.3bn 	
4. Securing and fostering of personnel					
(1) Respect for human rights, diversity & inclusion		<ul style="list-style-type: none"> Number of women as managers (2x by 2020 and 3x by 2025 vs. 2014) 	<ul style="list-style-type: none"> Proactively accepting plant visits by shareholders, investors, and junior high/elementary school students 	<ul style="list-style-type: none"> Number of female managers: 97 (as of April 1, 2019) Ratio of women in hired staff: 34% in staff, 17% in operation and maintenance, and 23% in overall hired staff (average of FY2017-2019) Hours of training and education: 1.5 million hours/year (56 hours/person, year) 	
(2) Utilization and fostering of personnel		<ul style="list-style-type: none"> Promotion of measures to develop human resources 	<ul style="list-style-type: none"> Support of music activities via presentation of Nippon Steel Music Awards and operation of the Kioi Hall 	<ul style="list-style-type: none"> Number of plant visitors: app. 135,000 	
(3) Health enhancement		<ul style="list-style-type: none"> Enhancement of health promotion measures for wellness of employees, and encouragement of employees' own efforts for wellness improvement 	<ul style="list-style-type: none"> Medical check-up of breast cancer and cervix cancer for female employees 	<ul style="list-style-type: none"> — 	
5. Harmony with local communities and society					
(1) Environmental preservation/creation activities in communities		<ul style="list-style-type: none"> Green space development to contribute to the local environment 	<ul style="list-style-type: none"> Proactively accepting plant visits by shareholders, investors, and junior high/elementary school students 	<ul style="list-style-type: none"> Number of plant visitors: app. 135,000 	
(2) Activities mainly in the support of education, sports, and arts		<ul style="list-style-type: none"> Ongoing promotion of hosting plant visits Continual execution of corporate philanthropy in the support of music via Nippon Steel Arts Foundation 	<ul style="list-style-type: none"> Support of music activities via presentation of Nippon Steel Music Awards and operation of the Kioi Hall 	<ul style="list-style-type: none"> — 	
6. Corporate value enhancement and profit distribution					
(1) Securing of profit and enhancement of corporate value		<ul style="list-style-type: none"> ROS of 10% (2020 Mid-Term Management Plan) ROE of 10% (2020 Mid-Term Management Plan) 	<ul style="list-style-type: none"> Details in the section "Financial Strategy" in the Integrated Report 	<ul style="list-style-type: none"> ROS of 5.5% ROE of 7.9% Base bonus amount: ¥1.53mn Salary revision: ¥5,200 (¥1,500 in wage revision + ¥3,700 in periodic wage increase) Tax payment (consol.): ¥80.8bn Dividend per share: ¥80/year 	
(2) Profit distribution	1) Payment of salary to employees of the company and related/subcontracting companies	<ul style="list-style-type: none"> Bonus payment amount Revised amount of salary 			
	2) Appropriate tax payment	<ul style="list-style-type: none"> Tax payment (consol.) 			
	3) Dividend payment to shareholders	<ul style="list-style-type: none"> Dividend payment according to the dividend policy of about 30% in consolidated payout ratio (2020 Mid-Term Management Plan) 			
Thorough implementation of compliance					
Adhering to laws and regulations as a base of all activities			<ul style="list-style-type: none"> Details in the section "Corporate Governance" in the Integrated Report 	<ul style="list-style-type: none"> Integrated Report pp. 51-58 	