

# **Korean Steel Market**

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Mar 25~26, 2019  
86<sup>th</sup> Session of the Steel Committee

**Korea Iron and Steel Association**

## GDP

- ◆ ('19<sup>e</sup>) With the expansion of government fiscal policy, GDP is expected to grow by 2.6%, mostly driven by consumption and export

## Private Consumption

- ◆ ('19<sup>e</sup>) Empowered by government policy, private consumption will show steady growth trend, but compared to '18, decreased growth rate is expected, due to slowdown in growth of household income

## Equipment Investment

- ◆ ('19<sup>e</sup>) Due to recovery in global semiconductor consumption, equipment investment is expected to show positive growth rate, focused in IT manufacturing industry

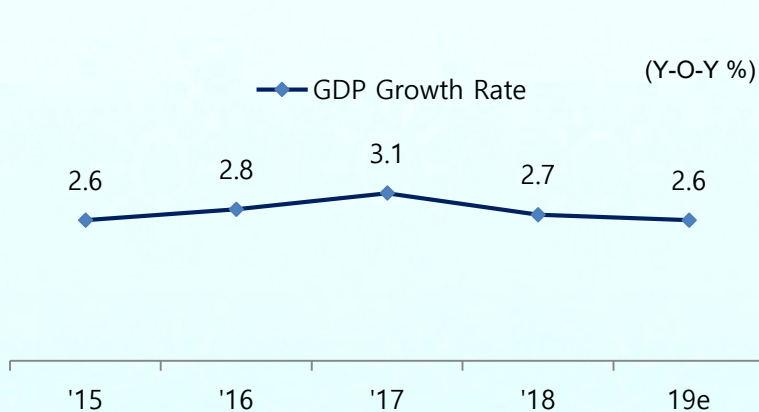
## Construction Investment

- ◆ ('19<sup>e</sup>) Expected to show continuous negative growth rate due to slump in new construction orders

## Exports

- ◆ ('19<sup>e</sup>) Forecasted to show slight decrease in growth compared to '18, due to slowdown in world economic growth and global trade disputes

## Economic Indicators in Korea



\* Source : Bank of Korea

	2016	2017	2018	2019(e)			2020(e)
				1H	2H	TOTAL	
<b>GDP</b>	2.8	3.1	2.7	2.5	2.8	2.6	2.6
<b>Private Consumption</b>	2.5	2.6	2.8	2.5	2.7	2.6	2.6
<b>Equipment Investment</b>	-2.3	14.6	-1.7	-2.1	6.3	2.0	2.3
<b>Construction Investment</b>	10.7	7.6	-4.0	-6.1	-0.5	-3.2	-2.0
<b>Exports</b>	2.2	3.8	3.9	2.4	3.8	3.1	3.0
<b>Imports</b>	3.6	7.4	1.7	0.6	4.0	2.3	2.5

\* Source : Bank of Korea



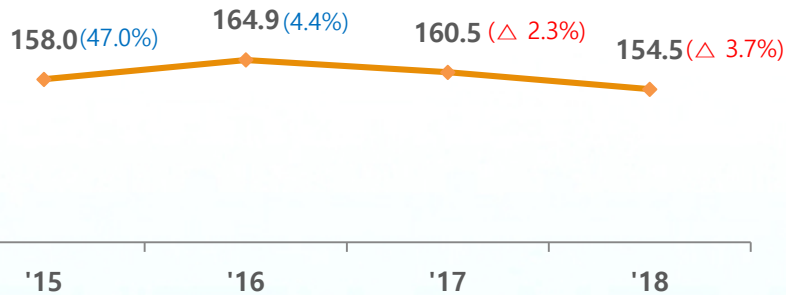
# Steel-Consuming Industries



## Construction

◆ ('18) Construction Investment has been decreased by 3.7%

(Unit: trillion ₩)



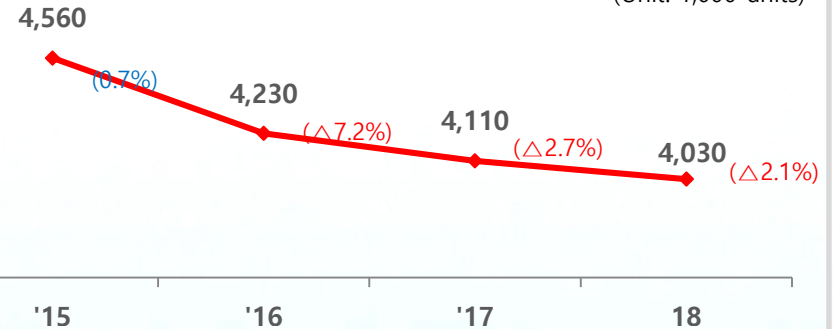
(Source : Construction Association of Korea)



## Automobile

◆ ('18) Auto production has been decreased by 2.1%

(Unit: 1,000 units)



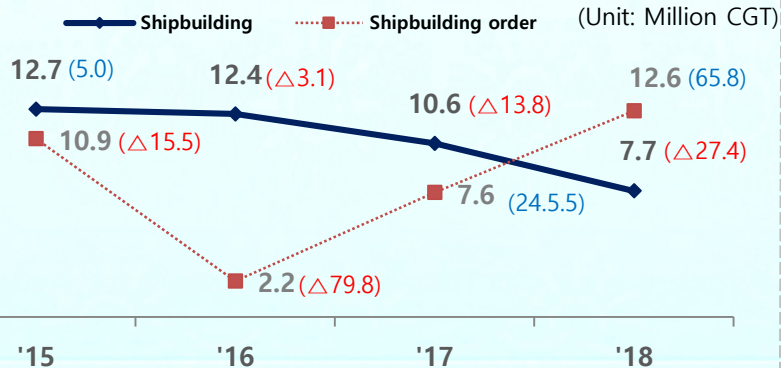
(Source : Korea Automobile Association)



## Shipbuilding

◆ ('18) Shipbuilding has been decreased by 27.4%

(Unit: Million CGT)



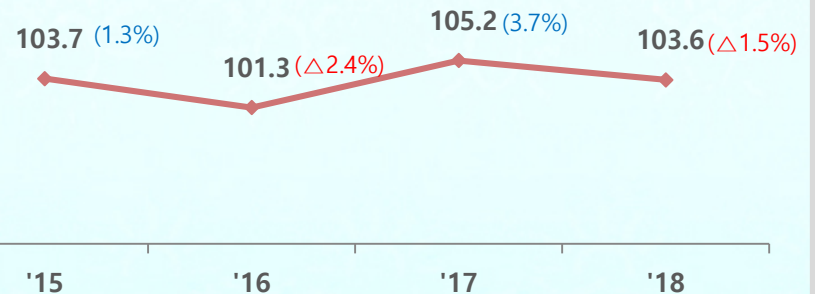
(Source : Clarkson)



## Machinery

◆ ('18) Machinery production has been decreased by 1.5%

(Unit: trillion KRW)



(Source : Korea Association of Machinery Industry)



## Steel Consumption

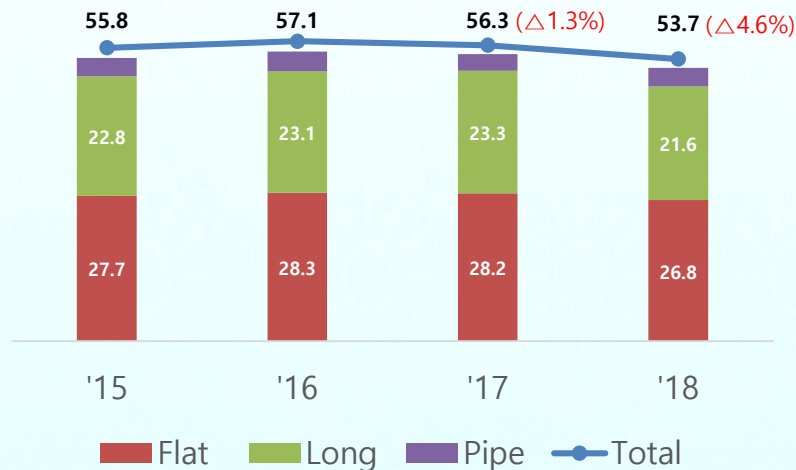
- ◆ Steel consumption has been decreased to about 54 million tons in 2018 due to slowdown in construction sector and decreased shipbuilding

## Steel Production

- ◆ Steel production has been decreased by 2.4%, recording 75.2 million tons in 2018

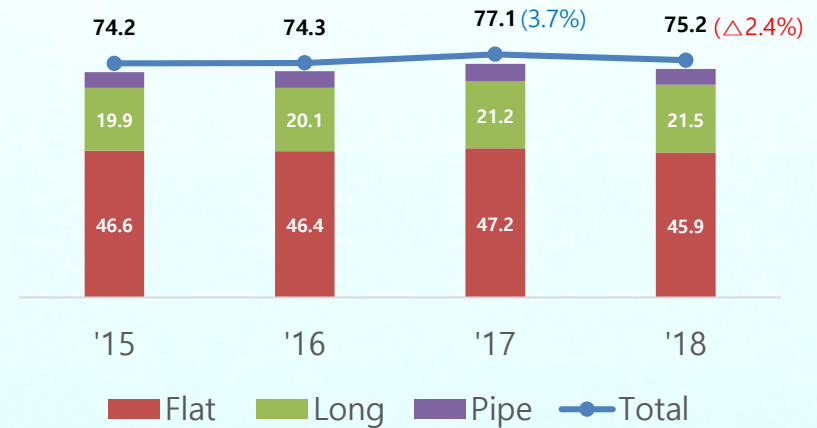
### Consumption

(million MT)



### Production

(million MT)



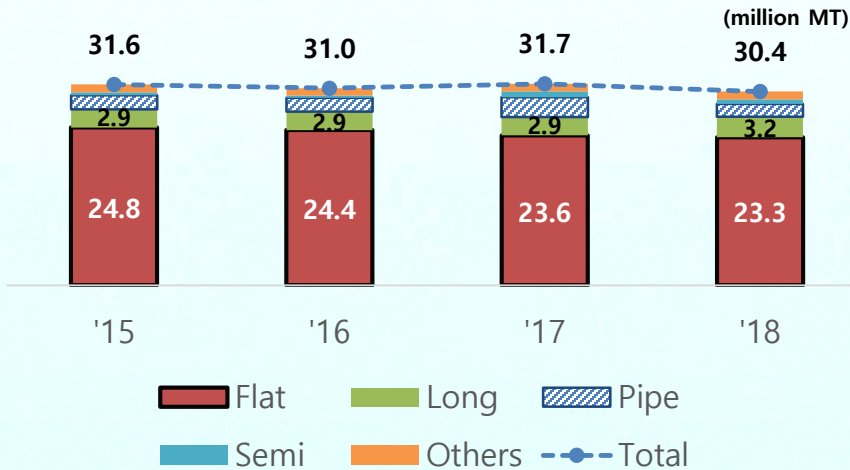


## Steel Exports

- ◆ ('17) Despite decrease of exports to major markets, exports showed a similar trend to the recent years due to increased supply for factories invested by Korean steel makers
- ◆ ('18) Due to trade protectionism, Korean steel exports decreased by 3.9%, and especially to the United States (-28.3%), due to U.S. section 232 measure

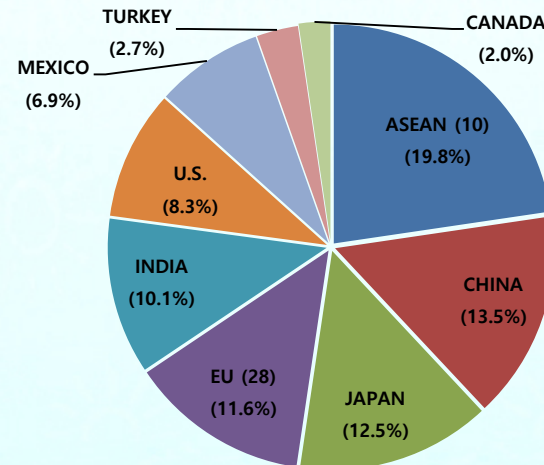
\* Change in exports to major markets : U.S.(-28.3%), Japan(-7.4%), ASEAN (-3.9%), China(-3.8%)

### Exports by product category (2015~2018)



\* Source : Korea Iron & Steel Association

### Korea's Steel Exports by Country in 2018



\* Source : Korea Iron & Steel Association

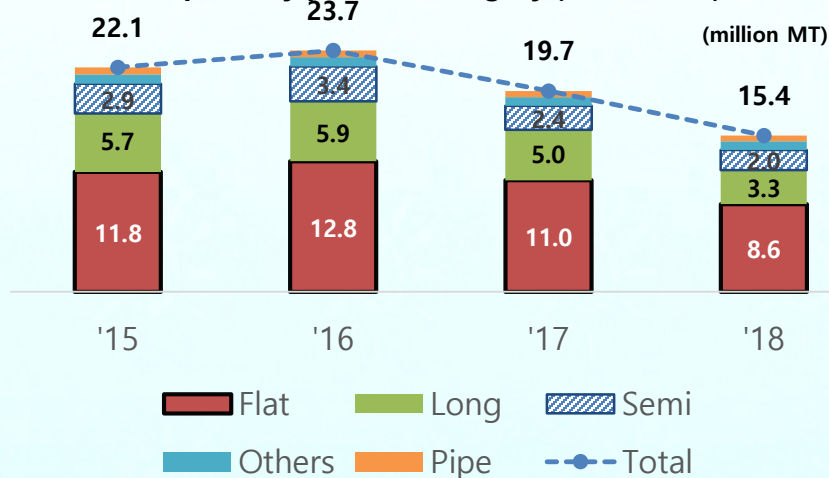


## Steel Imports

- ◆ ('17) Decreased by 16.8% due to slump in shipbuilding industry and domestic effort to reduce imports
- ◆ ('18) Decreased by 22.2% due to decrease in imports from major markets such as China and Japan

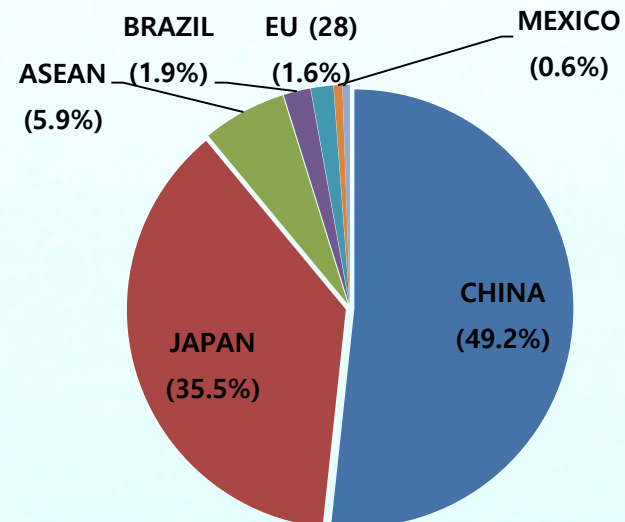
\* China and Japan, which account for 84.7% of the total imports, decreased by 34.5% and 8.7% respectively, compared to the previous year.

### Imports by product category (2015~2018)



\* Source : Korea Iron & Steel Association

### Korea's Steel Imports by Country in 2018



\* Source : Korea Iron & Steel Association

## ■ Korea Emission Trading Scheme (KETS)

<b>Overall GHG reduction target</b>	By 2030 : 37% below BAU(536MtCO <sub>2</sub> eq)
<b>Type od ETS</b>	Mandatory with voluntary opt-in (599 business entities)
<b>Cap and trajectory</b>	Phase I ('15~'17) : 1,687MtCO <sub>2</sub> eq, including a reserve of 89MtCO <sub>2</sub> eq for market stabilization measures, early action and new entrants 2015 : 573MtCO <sub>2</sub> eq, 2016 : 562MtCO <sub>2</sub> eq, 2017 : 551MtCO <sub>2</sub> eq Phase II ('18~'20) : 1,796MtCO <sub>2</sub> eq, including a reserve of 153MtCO <sub>2</sub> eq for market stabilization measures and new entrants 2018 : 547.7MtCO <sub>2</sub> eq, 2019 : 547.7MtCO <sub>2</sub> eq, 2020 : 547.7MtCO <sub>2</sub> eq
<b>Carbon Price</b>	KRW26,500(USD23.32), market price of 15 March 2019
<b>Emission covered by the ETS</b>	68%
<b>GHG covered</b>	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub>
<b>Sectors covered and thresholds</b>	23 sub-sectors from steel , cement, petro-chemistry, refinery, power, buildings, waste and aviation sectors Inclusion thresholds : Company ≥125,000tCO <sub>2</sub> /year, facility ≥25,000tCO <sub>2</sub> /year
<b>Allocation</b>	Phase I ('15~'17) : 100% free allocation, no auctioning phase II('18~'20) : 97% free allocation, 3% auctioned Phase III('21~'25) : less than 90% free allocation, more than 10% auctioned
<b>Enforcement</b>	The penalty shall not exceed three times the average market price of allowances of the given compliance year or KRW 100,000/ton(USD89)

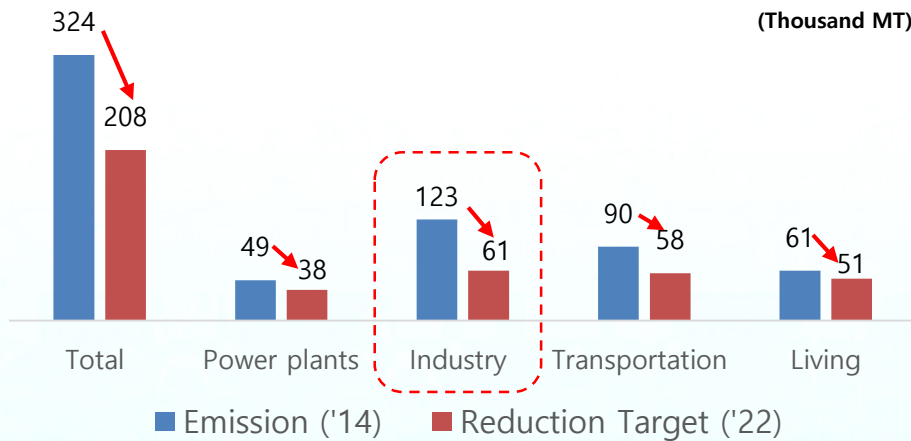
\* Source :Ministry of Environment, ICAP



## Objective

To improve quality of air, GOK aims to reduce 35.8% of fine dust emission by '22 in power plants, industry, transportation and living sectors

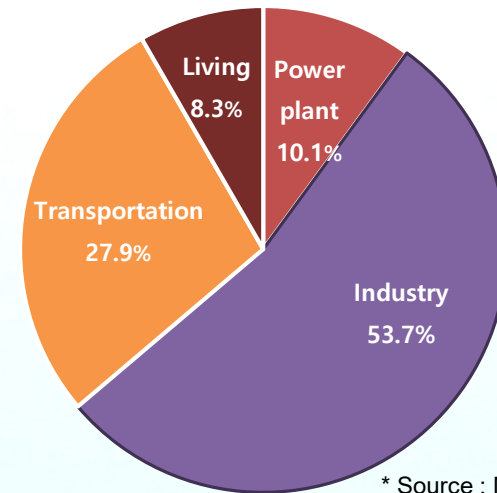
### Emission in 2014 and the Target by 2022



\* Source : Ministry of Environment

### Reduction Portion by Sector

(Total Reduction : 116 thousand tons)



\* Source : Ministry of Environment

## Reduction Mechanism in Industry sector & Efforts of Steel Industry

- ◆ GOK has adopted a new emission charge for nitrogen oxides (NOx) starting from Jan 2020
  - Emission charge : 2,130 KRW (\$1.9) / 1kg of NOx
- ◆ Korean steel companies are planning to invest 844 million U\$ to establish additional air pollution prevention facilities



**THANK YOU**