

LATEST DEVELOPMENTS IN STEELMAKING CAPACITY

2021



The OECD Steel Committee delegates discussed a draft of the report at the Steel Committee meeting on 22 March 2021 and have approved it for declassification following comments from delegates which are reflected in this document. The report and the underlying data on steelmaking capacity for all steel producing economies will be made available on the Steel Committee website: oe.cd/steelcapacity

Note to Delegations:

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projects. In Italy, Arvedi shut down an EAF facility with capacity of 2.0 mmt and they built a new EAF facility in September 2020. However, the capacity level of new one is still unknown (Metal Expert, 2020_[30]). In addition, ArcelorMittal Italia plans to install two EAFs by 2025 in Taranto, although the capacity of these new EAFs is still unknown. (Metal Expert, 2020_[57]). In Austria, Voestalpine is constructing a new EAF plant with capacity of 0.21 mmt, which is scheduled to start operations in 2021 (voestalpine, 2020_[58]). In the United Kingdom, there is a plan to develop an EAF on the South Tees Development Corporation (STDC) site as soon as 2022. However, the capacity level and the steelmaking technology that will be used are still unknown (Metal Expert, 2020_[59]).

Regarding the closure of capacity, ArcelorMittal Poland decided to permanently shut down its Krakow works in October 2020, which had a capacity level of 2.6 mmt (ArcelorMittal, 2020_[60]) (Metal Expert, 2020_[61]). They noted several factors that made the Krakow works' operations economically unviable, such as the lack of emergency trade measures and high energy costs, in addition to the impact of the Covid-19 pandemic (ArcelorMittal, 2020_[60]).

3.5. Latin America

In Latin America, projects in Bolivia are facing delays. The construction of a new EAF facility with a capacity of 0.2 mmt by Las Lomas is facing delays in Buena Vista, Santa Cruz province, and its completion date was postponed from 2020 to 2021 (Metal Expert, 2020_[62]). In addition, Empresa Siderurgica del Mutun stopped the construction of a new EAF plant with a capacity of 0.19 mmt in El Mutún, Santa Cruz in the summer of 2020 due to a problem of forged data on the construction process and issues related to over-spending (Metal Expert, 2020_[63]). This project was supported by China's Sinosteel Equipment, which would help with the construction of the facilities, conduct trial runs and provide operational assistance (Sinosteel Equipment, 2016_[64]).

In Brazil, Grupo Simec plans to upgrade its existing EAF capacity from 0.52 mmt to 0.8 mmt. As of December 2020, there was still uncertainty regarding when the upgrade would be started (Kallanish, 2020_[65]) (Metal Expert, 2020_[66]). On the other hand, Gerdau permanently shut down its Usiba works in 2020, which had a capacity of 0.5 mmt (Brazilian Competition Authority, 2020_[67]).

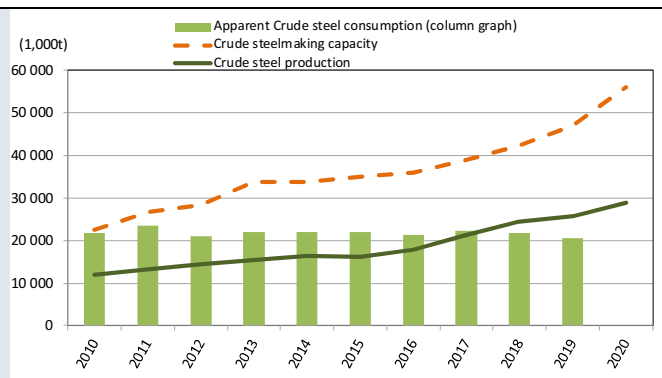
Elsewhere in the region, Peru's Aceros Arequipa has started to construct a new 1.2 mmt EAF which will replace its current 0.85 mmt EAF. The start-up of this project was rescheduled from 2020 to spring 2021 (Metal Expert, 2020_[68]) (Kallanish, 2021_[69]).

Taking into account the projects that are underway, steelmaking capacity in Latin America would increase by 0.7 mmt (+0.9%) in the period 2021-23, to a level of 78.8 mmt in 2023, if those projects are realised and in the absence of closures.

3.6. Middle East

Steelmaking capacity is increasing rapidly in the Middle East. The strong growth is expected to continue over the next few years mainly due to capacity expansions in Iran. Steelmaking capacity could increase by an additional 16.4 mmt (+18.9%) by 2023 compared with the level of 2020 if all the projects that are underway come on stream and in the absence of closures. However, capacity gains will be higher if any of the projects that are currently in the planning stages actually materialise.

Looking at developments in Iran, only two projects started their operations in the second half of 2020 due to problems related to the Covid-19 pandemic. Kish South Kaveh Steel began operations at a new 1.2 mmt EAF in September 2020 (Metal Expert, 2020_[70]). As a result, its capacity doubled, with the intention of strengthening its export potential (Metal



Source: OECD, Steel Statistical Yearbook 2020 (World Steel Association, 2020^[1])

Figure 5. Trade of semi-finished and finished steel products in Iran



Note: The 2019 steel trade figures do not appear to be complete yet, and are therefore not shown in this figure.

Source: Steel Statistical Yearbook 2020 (World Steel Association, 2020^[1])

In 2014, the Ministry of Industry, Mine and Trade (MIMT) of Iran announced a comprehensive plan for the development of the steel industry. According to this plan, the country intends to increase steelmaking capacity and steel production to 55 mmt (crude steel) by 2025 (financialtribune, 2020^[81]). More specifically, the plan foresees the following levels for Iran by 2025:

- To produce 55 mmt⁴
- To consume 35 mmt domestically
- To export the remaining 20 mmt abroad

Crude steel production reached 29 mmt in 2020⁵, thus it would have to increase by 26 mmt over the next five years to reach the levels noted in the plan.

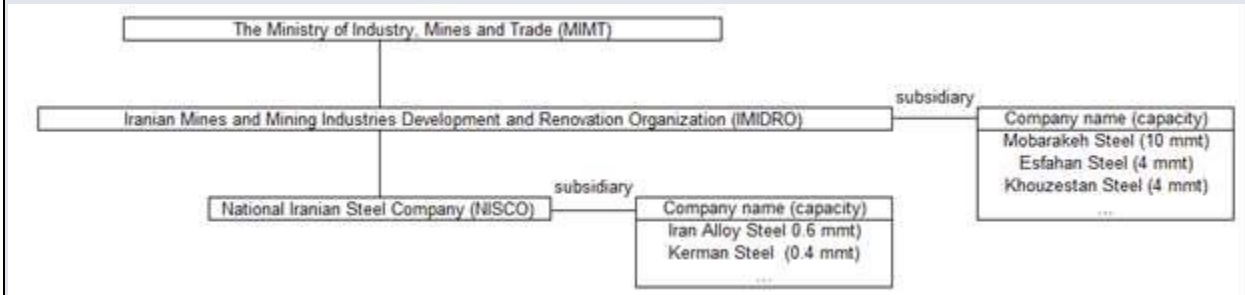
⁴ At the same time, this plan shows 55 million tonnes capacity target. Normally, effective production capacity would be lower than nominal capacity, which raises some questions as to the figures projected.

⁵ The Secretariat will update the steel production data in February.

Until 2001, the National Iranian Steel Company (NISCO) had been the only company specialised and active in the field of managing and steering the activities of the country's steel mills, as well as in the field of implementing mining and steel making projects (Iraninternationalmagazine, 2020^[82]). In 2000, the Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO) was established, and NISCO, as one of its major subsidiaries, was assigned to implement, supervise and commission several steel expansion projects. These included Iran Alloy Steel Co. (Yazd), Azerbaijan Steel Co, Khorasan Steel Co, Maybood Steel Co, Zagroos Steel Co, Ahwaz Pipe & Tube Rolling Mill, and Iranian National Steel Industries Group. Since then, all the aforementioned companies have been privatised, but still some steel projects were assigned to NISCO (Iraninternationalmagazine, 2020^[82]).

Currently, MIMT is in charge of industries, mines and trade. IMIDRO is one of the affiliated organisations and NISCO remains its subsidiary. Some other major Iranian companies, i.e. Mobarakeh Steel, Esfahan Steel and Khouzestan Steel, are also subsidiaries of IMIDRO, while NISCO also has some subsidiary companies.

Figure 6. Relationship of steel organisations and companies under MIMT



Source: IMIDRO company website

The World Steel Association calculates IMIDRO's production by combining the production of Mobarakeh Steel, Esfahan Steel, Khouzestan Steel and NISCO (worldSteel, 2020^[83])

Changing steel trade trend for Iran by export partner country

In terms of bilateral flows, Iran's steel exports have increased for some years. By destination economy, exports to Indonesia and Iraq have increased significantly since the second half of 2018, while at the same time, exports to the United Arab Emirates and Chinese Taipei have decreased significantly in the same period (See Figure 7 below).

Figure 7. Steel exports from Iran

REGION	ECONOMIES	LOCATION	COMPANY	OWNER(ECONOMIES) except themselves	EQUIPMENT	CAPACITY	STATUS	START	SOURCES
Asia	Viet Nam	Ho Chi Minh City	Nam Thuan Investment Development	-	BOF	300	operating	2020	World Steel Capacities
Asia	Pakistan	Dhabeji	Amrel's Steels	-	IF	200	operating	2020	World Steel Capacities
Asia	Pakistan	Karachi	Agha Steel Industries	-	EAF	600	operating	2020	Danieli PR Company HP
Asia	Pakistan	Faisalabad	Ittehad Steel	-	IF	600	underway	?	Metal Expert
Asia	Pakistan	Karachi	Faizan Steel Mills	-	IF	80	underway	2021	Metal Expert
Asia	Pakistan	Karachi	Naveena Steel Mills	-	IF	270	operating	2020	Metal Expert
Asia	Pakistan	Khyber Pakhtunkhwa	Al-Haj Asia Star Mills	Al-Haj Group (Pakistan) / HeBei Xin Gang Steel Group (China)	IF	480	operating	2020	Metal Expert
Asia	Pakistan	?	Indus Consortium Mining & Steel Industry	-	BOF	1 000	plan	?	World Steel Capacities
CIS	Azerbaijan	Ganja	Baku Steel Company	-	EAF	?	underway	2022	Company HP
CIS	Georgia	Rustavi	Georgian Steel	-	EAF	250	operating	2020	World Steel Capacities
CIS	Russia	Ussolye-Sibirskoye	Ussolye Metallurgical Plant	-	Steelmaking	?	underway	2021	Metal Expert
CIS	Russia	Kamensk-Shahtinskiy	Don-Metal	-	EAF	160	plan	?	Metal Expert, ComMetal Exports from Russia
CIS	Russia	Hrombur	Hrombur	-	EAF	500	plan	?	Metal Expert
CIS	Russia	Ishimbai	Ishstal plant	-	EAF	300	plan	?	World Steel Capacities
CIS	Russia		Don-Metal	-	EAF	160	plan	?	Metal Expert
CIS	Russia		United Metallurgical Company (OMK)	-	EAF	1 800	plan	2024	Metal Expert
CIS	Russia	Balakovo	Novostal-M	-	EAF	1 200	plan	2024	World Steel Capacities
CIS	Russia	Lipetsk	NLMK	-	BOF	1 500	operating	2020	Company HP Company HP
CIS	Ukraine	Zaporizhzhya	Metinvest	-	BOF	3 200	plan	2022	World Steel Capacities Platts
CIS	Ukraine	Donetsk	Donetsksteel	-	EAF	1 800	plan	?	Platts, Metal Expert
Europe	Austria	Kapfenberg	Böhler Edeltahl GmbH	-	EAF	205	underway	2021	CHP
Europe	Italy	Cremona	Arvedi	-	EAF	2 000	operating	2020	World Steel Capacities

	Nominal crude steelmaking capacity					
	2010	2016	2017	2018	2019	2020
Asia	1435.3	1629.1	1612.9	1585.2	1617.6	1646.3
Non-OECD Asia	1227.3	1417.1	1402.9	1375.2	1407.5	1436.3
Bangladesh	3.2	5.6	5.6	6.1	6.1	7.0
Bhutan	0.0	0.0	0.0	0.0	0.0	0.0
Cambodia	0.0	0.0	0.0	0.0	0.0	0.0
China (People's Republic of)	1056.0	1188.6	1160.1	1124.2	1149.5	1157.1
Chinese Taipei	26.9	29.4	29.4	29.4	29.4	29.4
Hong Kong, China	0.0	0.0	0.0	0.0	0.0	0.0
India	84.4	120.5	124.2	127.0	128.7	143.5
Indonesia	10.3	12.5	14.5	15.5	17.8	19.6
Japan	132.0	129.9	128.5	128.5	128.5	128.5
Korea	76.0	82.2	81.6	81.6	81.6	81.6
Democratic People's Republic of Korea	11.2	11.2	11.2	11.2	11.2	11.2
Lao PDR	0.2	0.2	0.2	0.2	0.2	0.2
Malaysia	12.9	14.2	15.7	19.2	19.2	19.2
Mongolia	0.1	0.1	0.1	0.1	0.1	0.1
Myanmar	0.1	0.3	0.3	0.3	0.3	0.3
Nepal	0.3	0.3	0.3	0.3	0.3	0.3
Pakistan	3.1	6.9	7.1	7.1	7.1	8.7
Philippines	1.8	1.8	1.8	1.8	1.8	1.8
Singapore	0.8	0.8	0.8	0.8	0.8	0.8
Sri Lanka	0.2	0.2	0.2	0.2	0.2	0.2
Thailand	9.7	11.4	11.4	11.4	11.4	11.4
Viet Nam	6.3	13.1	20.1	20.5	23.5	25.8
ASEAN-6	41.8	53.8	64.3	69.2	74.4	78.5

CIS	139.6	142.3	142.3	141.9	143.4	143.6
Armenia	0.0	0.2	0.2	0.2	0.2	0.2
Azerbaijan	0.9	1.6	1.6	1.6	1.6	1.6
Belarus	2.8	3.0	3.0	3.0	3.0	3.0
Georgia	0.1	0.2	0.2	0.1	0.1	0.4
Kazakhstan	7.1	7.7	7.7	7.7	7.7	7.7
Moldova	1.0	1.0	1.0	1.0	1.0	1.0
Russia	77.7	87.1	87.2	86.7	88.3	89.8
Turkmenistan	0.2	0.2	0.2	0.2	0.2	0.2
Ukraine	48.8	40.2	40.2	40.2	40.2	38.7
Uzbekistan	1.1	1.1	1.1	1.1	1.1	1.1

	Nominal crude steelmaking capacity					
	2010	2016	2017	2018	2019	2020
Latin America	72.7	77.4	78.1	78.0	78.0	77.5
South America	70.0	75.7	76.4	76.3	76.3	75.8
Non OECD Latin America	68.7	73.4	74.1	74.0	74.0	73.5
Argentina	6.7	6.7	7.3	7.3	7.3	7.3
Brazil	51.2	56.3	56.3	55.7	55.7	55.2
Bolivia	0.0	0.0	0.0	0.0	0.0	0.0
Chile	2.0	2.0	2.0	2.0	2.0	2.0
Colombia	2.0	2.0	2.0	2.0	2.0	2.0
Costa Rica	0.0	0.0	0.0	0.0	0.0	0.0
Cuba	0.7	0.7	0.7	0.7	0.7	0.7
Dominican Republic	0.4	0.4	0.4	0.4	0.4	0.4
Ecuador	0.6	0.9	0.9	1.3	1.3	1.3
El Salvador	0.2	0.2	0.2	0.2	0.2	0.2
Guatemala	0.5	0.5	0.5	0.5	0.5	0.5
Panama	0.0	0.0	0.0	0.0	0.0	0.0
Paraguay	0.1	0.1	0.1	0.3	0.3	0.3
Peru	1.6	2.0	2.0	2.0	2.0	2.0
Trinidad and Tobago	1.0	0.0	0.0	0.0	0.0	0.0
Uruguay	0.1	0.1	0.1	0.1	0.1	0.1
Venezuela	5.6	5.6	5.6	5.6	5.6	5.6

Middle East	38.5	68.0	71.2	74.8	79.5	86.7
Non OECD Middle East	37.9	67.4	70.6	74.2	78.9	86.1
Afghanistan	0.0	0.0	0.0	0.0	0.0	0.0
Bahrain	0.0	1.0	1.0	1.0	1.0	1.0
Iran	22.5	35.9	38.9	42.5	47.1	52.8
Iraq	0.2	2.6	2.6	2.6	2.6	2.9
Israel	0.6	0.6	0.6	0.6	0.6	0.6
Jordan	0.6	1.2	1.2	1.2	1.2	1.2
Kuwait	1.4	1.4	1.4	1.4	1.4	1.4
Lebanon	0.2	0.2	0.2	0.2	0.2	0.2
Oman	0.5	3.0	3.0	3.0	3.0	4.2
Qatar	2.8	3.2	3.2	3.2	3.2	3.2
Saudi Arabia	6.7	11.6	11.6	11.6	11.6	11.6
Syrian Arab Republic	0.1	2.4	2.6	2.6	2.6	2.6
United Arab Emirates	2.8	4.8	4.8	4.8	4.8	4.8
Yemen	0.1	0.3	0.3	0.3	0.3	0.3