



**2022**

**GFSEC PROGRESS  
REPORT**

**PREPARED BY THE OECD  
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**20 December 2022**

## **2022 GFSEC Progress Report**

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## Executive summary

The steel industry provides essential inputs for modern economies to function and creates millions of jobs throughout the steel supply chain. However, the global economic slowdown, geopolitical tensions, high energy prices, and other factors are now leading to a sharp downturn in steel markets. **Excess capacity** is now increasing globally, negatively impacting the health of the industry and its ability to enable economic growth and prosperity. Excess capacity affects steel prices and steel companies' profitability, slows the needed green transition, and creates trade tensions around the world. Moreover, it can force efficient steel plants to close and lay-off workers in the process.

To resolve the global excess capacity problem and to preserve the long-term viability of the industry, the **Global Forum on Steel Excess Capacity (GSFEC)**, created in 2016 under the auspices of the G20, aims to enhance communication, information sharing and co-operation among members, and to take effective steps to address the challenge of excess capacity.

A main achievement of the Forum was the agreement by all 33 founding members on **six guiding principles and specific policy recommendations, agreed to in Berlin in 2017**, for governments to reduce excess capacity and to contribute to a more stable and sustainable steel sector. The transparency, co-operation and voluntary implementation of the Berlin principles and policy recommendations contributed to capacity reductions and led to improvements in global steel market conditions. In addition, the GSFEC attracts strong support from steel industry associations, which have informed the debate and supported the process over the years.

This report outlines **progress** made by the **GSFEC**, underscoring the relevance of its work for GSFEC members and stakeholders, and highlights key developments currently taking place in the steel industry. Subsequently, it elaborates on the different work streams that took place in 2022. First of all, the information sharing exercise highlighted the impact that excess capacity has on members' steel sector and their consequent policy responses. The summary document on the information sharing exercise emphasised a pressing need for the continuous sharing of information on capacity figures and policies that tackle excess capacity. Next, the report on steel decarbonisation and excess capacity points out that excess capacity is currently hindering a smooth and green transition of the steel sector. Insufficient progress made in the steel sector will hamper countries' trajectories to meet the Paris Agreement objectives. Finally, the report refers to the main conclusions of the stakeholder event on connecting the dots regarding steel decarbonisation. During this event, multiple stakeholders voiced the negative impact of excess capacity on their business activities, ranging from contributing to business uncertainty, creating barriers to investments as well as increasing trade tensions.

GSFEC members maintain a strong interest to **continue the multilateral dialogue** on tackling steel excess capacity, as well as adhering to their corresponding commitments pursuant to the Berlin principles and policy recommendations. The GSFEC welcomes co-operation with steel-producing economies from around the world to foster better conditions for their steel industries and stakeholders. To facilitate these discussions, the report includes a section on the importance of reaching out to non-actively participating jurisdictions.

## 1. Introduction

1. The situation in global steel markets has deteriorated, with the budding recovery that started in 2021 from the COVID-related recession of 2020 quickly reversing course in early 2022. The war in Ukraine, energy and commodity price increases, the impacts of inflation and monetary tightening on consumer and business spending on steel-intensive goods, as well as growing economic uncertainties across a number of economies are contributing to a significant downturn in global steel demand. At the same time, disruptions to the availability of steelmaking raw material supplies, in addition to surging energy costs, are depressing production and profitability prospects for steel companies in many economies.
2. With the gap between global steel capacity and demand now expected to have surged to 550 million tonnes in 2022, from 475 million tonnes in 2021, oversupply pressures are already emerging on international markets as “too much capacity chases too little demand”. The problem is being exacerbated by the estimated 29.5 million tonnes of net new steelmaking capacity that came on stream in 2022. The result of these oversupply pressures are seen in the sharp decline of steel prices observed during 2022.
3. Excess capacity remains a significant challenge for the global steel industry. The structural imbalance affects steel prices, steel companies’ profitability margins, as well as the global playing field. Excess capacity also weighs on the prerequisites for an efficient low-carbon transition, such as investments, innovation, or competition. Tackling excess capacity is therefore crucial not only for more stable steel market conditions, where steel companies operate on a fair and level playing field, but also to foster the needed decarbonisation of the sector.
4. The work of the Global Forum on Steel Excess Capacity (GFSEC) contributes to healthier market conditions for the steel industry. Significant progress has been achieved by the GFSEC, not only in the development and implementation of policy principles and recommendations, but also in establishing a robust and rich exchange of information by Forum members. The tools developed by the GFSEC can help countries reduce their overcapacity, phase out support measures that contribute to excess capacity, and ensure that their framework conditions and institutional settings promote market forces in the sector.
5. This progress report intends to inform the public about the global steel market situation, particularly as it relates to excess capacity, and to provide an update of the Forum’s activities during 2022. The next section overviews the pressures facing global steel markets and presents global steelmaking capacity trends based on the work of the GFSEC. Section 3 illustrate the value that the GFSEC has brought to its members since 2016. It also highlights the results of the information sharing and

other activities conducted in 2022 to further contribute to the GFSEC's objectives. The Berlin principles and policy recommendations are summarised in Box 4 and Box 5 provided in the Annex.



## 2. The global steel market situation

### 2.1. Global steel markets under significant pressure

6. The Hangzhou Declaration of 4-5 September 2016 states in paragraph 31 that ‘subsidies and other types of support from government or government-sponsored institutions can cause market distortions and contribute to global excess capacity.’ The Declaration notes that excess capacity and other structural problems caused a negative impact on trade and workers, and that these problems are exacerbated by a weak global economic recovery and depressed market demand.
7. Steel industries around the world currently find themselves in a complex economic situation, entering a period of weak steel demand conditions comparable to those observed during the last steel crisis of 2015-16. The market downturn has already begun, weakened by political instabilities, energy and commodity price increases, the impacts of inflation and monetary tightening on consumer and business spending on steel-intensive goods. Global economic prospects are rapidly deteriorating which will have direct effects on steel consumption (see Box 1).
8. Steel consumption in China, which accounted for almost 52% of world steel consumption in 2021, contracted by 6.1% in the first half of 2022, driven by a deep and prolonged property market crisis but also reflecting COVID-related lockdowns. Steel consumption in the rest of the world contracted by 3.2% in the wake of surging energy prices and weakening output growth in downstream sectors. The latest forecasts by the World Steel Association, released in October 2022, show world steel consumption declining by 2.3% in 2022, before stabilising and rising modestly by 1% in 2023.<sup>1</sup>
9. As a result, steel prices have fallen sharply during 2022, in spite of a brief uptick right after the war in Ukraine began. Steel prices have fallen sharply in the first half of 2022, more than steelmaking raw material prices. This is squeezing profit margins which only experienced a year of reprieve during the 2021 recovery from the pandemic. Global steel production declined by 3.9% in the first ten months of 2022, but with wide differences across regions. Some countries where steelmaking capacity is increasing rapidly, for example in the Middle East and South Asia, have recorded significant production growth during 2022.
10. With global steel excess capacity not yet fully addressed, and the downturn in steel demand potentially accelerating as a result of a worsening global macroeconomic environment, there is a significant risk that economic weakness may trigger a crisis for the steel industry in the near term. Indeed, similarities can be drawn between the current phase and the crisis of 2015/16. At that time, steelmaking capacity had been expanding rapidly for a number of years, driven mostly by China. In 2014, following several years of positive steel demand growth, global steel consumption began to stagnate, before falling by 3.1% in 2015.

China and other emerging economies also experienced demand declines. With steelmaking capacity continuing to expand, while demand conditions deteriorated sharply, the gap between global capacity and demand widened to its highest level ever in 2015, i.e. 793 million metric tonnes. Trade tensions then increased, leading to a period of falling steel trade from 2016 to 2020.

### Box 1. Macroeconomic conditions have deteriorated rapidly.

Projections for world economic growth have been downgraded significantly during the course of this year. The ripple effects of the war in Ukraine on energy and other commodity prices, high inflation and its negative impacts on real incomes and spending, and shutdowns in China due to the country's zero-COVID policy are some factors contributing to a global economic slowdown in 2022-23. Downside risks to the outlook remain high; a protracted war in Ukraine would have deeper global effects, including rising geopolitical tensions, further interruptions in energy flows and commodity supplies, yet higher inflation, and a need for more restrictive monetary policy than currently expected, potentially contributing to financial market instability.

In November 2022, the OECD forecast a sharp deceleration in world GDP growth from 5.0% in 2021 to 3.1% in 2022, slowing further to 2.2% in 2023 (OECD, 2022). The 2023 forecast was reduced by 0.6 of a percentage point compared to the June forecast. More recently, in January 2023, the World Bank lowered its global economic growth forecast to 1.7% for 2023, roughly half the rate of growth projected six months earlier (World Bank, 2023).

Source: OECD (2022), OECD Economic Outlook, Volume 2022 Issue 2, No. 112, OECD Publishing, Paris, <https://doi.org/10.1787/f6da2159-en>.

Source: World Bank 2023. Global Economic Prospects, January 2023. Washington, DC: World Bank. doi:10.1586/978-1-4648-1906-3.

11. The pattern of events following such market slowdowns is usually similar from crisis to crisis. Inefficient steelmaking capacity that is subsidised by governments is often only viable when steel demand and prices are high. When market demand begins to slow, production should be brought in line with demand to prevent prices from collapsing. However, this would push up unit costs. To cover fixed costs the inefficient steel company, whose fixed costs are higher than those of the efficient producer, will have to maintain a level of production above market demand, a reaction that runs counter to the interest of a healthy industry. Instead of bringing production in line with demand, the gap between demand and supply is widened and the surplus sold at



conditions which accelerate the decline of prices and negatively influences the financial health of steel producers.

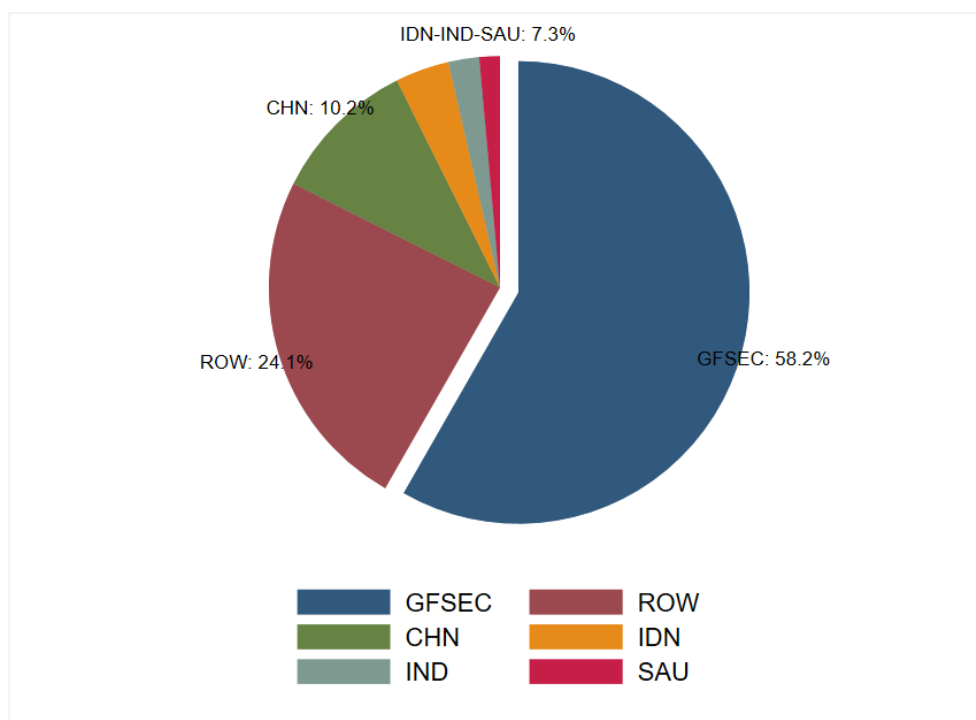
12. With domestic markets saturated with steel, the incentive is to export the surplus to foreign markets where prices may be higher. This, in turn, can lead to a proliferation of trade-restrictive measures to shield domestic producers, often leading to a diversion of steel shipments towards third markets. As a result, steel prices fall worldwide, profitability starts to deteriorate everywhere, trade actions escalate, and the process culminates into a steel crisis.
13. When reaching this point, structural adjustment is necessary to break the pattern. If markets worked properly, consistently loss-making, inefficient plants would exit and excess capacity would diminish. However, some governments intervene, either with further subsidisation and/or market protecting measures, for various reasons such as maintaining tax revenues, limiting the social impacts of closures, or for strategic reasons related to maintaining a large or growing steel production base. Even companies operating under market-based conditions may keep on investing in anticipation of future demand growth; such over-optimistic expectations have been prevalent during many steel crises in the past.
14. The result, ultimately, is that much inefficient excess capacity is kept in place, prolonging the financial hardships facing steel producers around the world, and limiting their ability to invest in necessary maintenance and efficiency improvements, research and development for better innovation outcomes, and, importantly in the current context, to invest in new technologies to lower carbon emissions from the production process.
15. In short, capacity which is not viable without subsidies or other government support that grants special advantages to the recipient company should be allowed to exit the market and governments should refrain from supporting new capacity additions that are not market-driven. Doing so reduces excess capacity and helps prevent the re-emergence of an excess capacity crisis in the future, providing long-term stability to steel industries around the world.
16. By adhering to the Berlin principles and policy recommendations, steel producers operating under market forces in many active GFSEC economies continue to ensure that capacity developments do not overshoot demand. In the period from 2016 until 2021, active GFSEC members took almost 11 mmt of capacity out of the market, while steel demand increased by 16 mmt despite the significant demand contraction in 2019/2020, mostly related to the COVID pandemic. Capacity additions have been for the most part offset by closures, and future investments are largely focussed on replacement capacity as well as the production of more environmentally friendly steel.
17. Economies that do not participate in the GFSEC often experience the opposite capacity trends. In 2022, capacity in China is slightly above the

level of 2019, when it left the GFSEC, and appears to now be stabilising at a level of 1.15 billion tonnes (i.e. 47% of the world total). India and several Southeast Asian economies are installing capacity at a very rapid pace, often using technologies that are carbon intensive.

## 2.2. Global excess steel capacity has increased

18. With the gap between global steel capacity and demand now expected to have risen to 550 million tonnes in 2022, from 475 million tonnes in 2021, oversupply pressures are already emerging on international markets as “too much capacity chases too little demand”. The problem is being exacerbated as 29.5 million tonnes of net new steelmaking capacity comes on stream in 2022, mainly in the Middle East but some also in other regions. The result of these oversupply pressures are seen in the sharp decline of steel prices observed during 2022.
19. Depending on the extent of the global economic slowdown in 2023, and possible recession, global steel consumption could perform worse than expected, with a possible contraction as in 2015. Indeed, indicators of underlying steel demand based on the so-called “steel weighted industrial production” index are pointing to demand sluggishness in 2022-23 nearly as weak as that observed during 2015-16.<sup>2</sup> The sharp steel demand slowdown and/or potential contraction, combined with sustained capacity growth over the next few years (see Box 2), would lead to a significant increase in the gap between global steel capacity and demand, raising questions about the possibility of another excess capacity crisis similar to what the industry suffered in 2015/16.
20. For active members of the GFSEC, which together account for 58.2% of global steel imports (Figure 1), the implications of a potential and significant increase in excess capacity over the next year or two would be felt mainly through the trade channel. Such a scenario could entail an eventual glut of steel searching for demand in international markets, trade disturbances, lower steel prices, employment losses, and weaker profitability for the important steel sectors of GFSEC members, which are already facing adjustment challenges to meet, e.g., climate change goals and remain viable. In such a scenario, countries may be expected to resort to trade actions in the form of countervailing duty, anti-dumping and/or safeguard actions. While these measures will aim in many instances to redress unfair trade, the market may remain fundamentally distorted if corrective actions on excess capacity are not taken.

**Figure 1.** GFSEC members account for most of the world's steel imports



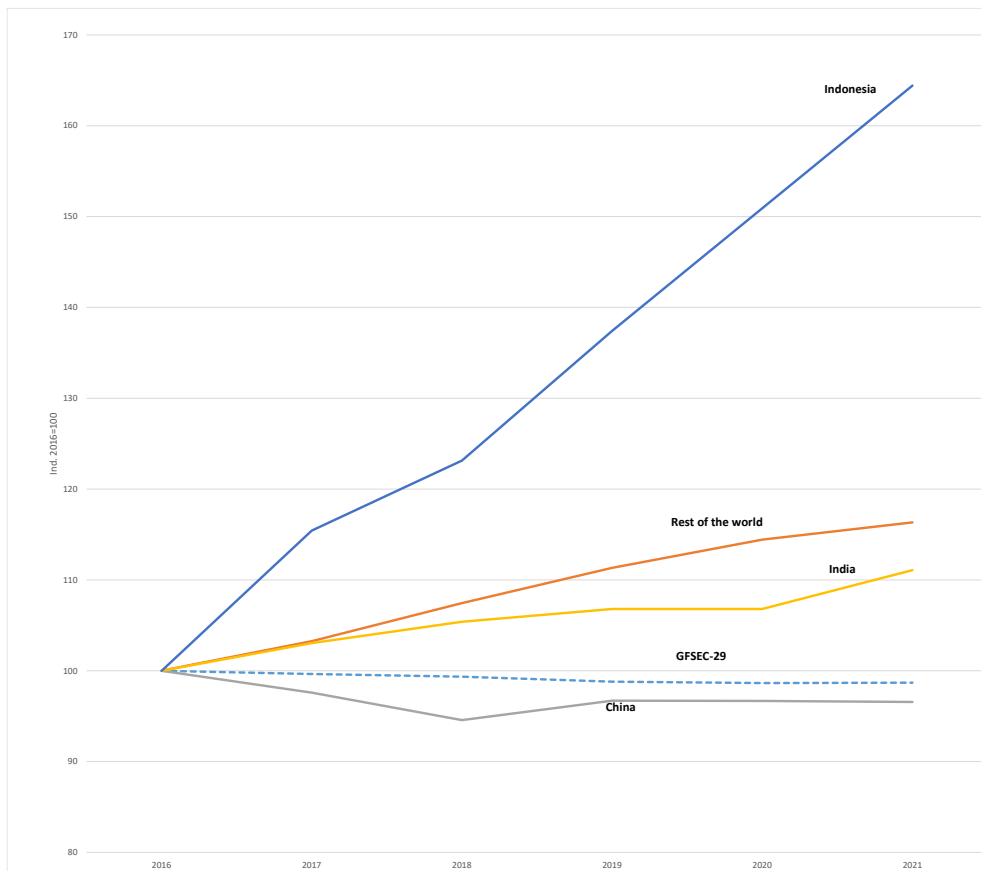
Source: OECD based on data from ISSB.

### 2.3. Capacity trends in GFSEC member and non-member economies

21. Governments participating actively in the Forum are, by and large, adhering to the policy recommendations of the GFSEC, creating opportunities for reducing global overcapacity. Capacity developments in their economies have been very modest, with many members experiencing stable or significant downward adjustments in the period since 2014, while several others have recorded moderate increases in response to growing demand and other market-driven developments in their economies. However, declines in GFSEC capacity have been more than offset by surging capacity growth in non-participating jurisdictions, notably since the years 2018-2019.
22. Indeed, the work of the Forum in 2022 has consequently highlighted growing concerns about developments taking place in non-participating jurisdictions. Government aids to traditional steel production especially in parts of Asia and the Middle East, regions that are driving global capacity expansions at rates that exceed current and future demand developments, are creating further structural imbalances in an industry whose survival is already at risk. This underscores the need for enhanced cooperation with all steel-producing jurisdictions to address a common problem that affects all segments of the steel industry regardless of the industry's location or stage of production.
23. The total combined capacity reported by the 29 active GFSEC members has been on a downward trend since the start of the GFSEC (see Table

- 1). In 2021, the aggregate capacity of active GFSEC members stood at an estimated 809.6 mmt, with four members experiencing increases in capacity that were partially offset by declines or stable capacity in the other member economies. Since 2016, active GFSEC members have taken out almost 11 mmt of capacity from the market, and, by adhering to the Berlin principles and policy recommendations, many are contributing to greater market balance during difficult years of global steel excess capacity.
24. At the same time, steelmaking capacity in other jurisdictions continues to increase rapidly. India, for example, has embarked on a very strong capacity growth trajectory, recording an increase of more than 13 mmt of capacity over the last five years, i.e. growth of 11.1%. Last year alone, Indian capacity increased by 5.1 mmt, the largest increase of any steel-producing jurisdiction that year, bringing its capacity to a level of 133.9 mmt in 2021.
25. Indonesia is experiencing the fastest capacity growth rate, though from a lower level than India (see Figure 2). Indonesian capacity grew by 64.4%, or 8.4 mmt, during the last five years. In 2021, Indonesian capacity rose by 1.8 mmt to a level of 21.3 mmt. Other economies in the region are posting similar, if not faster, growth. Viet Nam's capacity nearly doubled over the last five years, bringing the level to 26 mmt in 2021, a trend that will likely bring the country into the ranks of the top ten steel producers in the near term. Malaysian steelmaking capacity increased by 5 mmt over the last five years to a level of 19.2 mmt, close to that of Indonesia.
26. China's steelmaking capacity has stabilised recently at a high level of approximately 1.15 billion tonnes (47% of the world's total), following a period of decline during the years it participated in the GFSEC and implemented some supply-side reforms. Chinese capacity will increase in 2022 to a level higher compared to 2019, when it left the GFSEC. Changes in capacity may reflect the timing of new additions and the associated closures governed by the replacement policy can take place in different years. Overall, however, the general trend in China seems to be one of stabilisation of capacity.
27. In the "rest of the world", capacity has been trending upwards in a continuous fashion, growing at an average annual rate of around 3.5% over the past five years. Economies such as Iran, Viet Nam, and Malaysia account for most of the expansion. In 2021, capacity in the "rest of the world" accounted for 12% of the global aggregate.

**Figure 2.** Growth in capacity since 2016: active GFSEC members and other jurisdictions



*Source:* Information sharing exercise in 2022 for active GFSEC members, and OECD figures for other jurisdictions. For the latest OECD figures, see <https://www.oecd.org/sti/ind/latest-developments-in-steelmaking-capacity-2022.pdf>.

**Table 1. Crude steelmaking capacity in GFSEC member economies and other jurisdictions: 2014-2021**

(1000s metric tonnes)

By GFSEC member	2016	2017	2018	2019	2020	2021	Change (mmt) 2016-2021	Change (%) 2016-2021
<b>GFSEC-29 (active members)</b>	<b>820,310</b>	<b>817,360</b>	<b>814,955</b>	<b>810,491</b>	<b>809,213</b>	<b>809,580</b>	<b>-10,730</b>	<b>-1.3%</b>
European Union, of which*:	213,659	212,104	211,692	209,192	206,592	206,612	-7,047	-3.3%
Germany	50,081	49,921	50,041	50,041	50,041	50,061	-20	0.0%
Italy	36,206	36,456	36,456	36,456	36,456	36,456	250	0.7%
Spain	19,610	18,860	18,860	18,860	18,860	18,860	-750	-3.8%
France	20,986	20,511	20,711	18,211	18,211	18,211	-2,775	-13.2%
Poland	12,260	12,560	12,710	12,710	10,110	10,110	-2,150	-17.5%
Belgium	8,900	8,900	8,900	8,900	8,900	8,900	0	0.0%
Netherlands	7,000	7,000	6,813	6,813	6,813	6,813	-187	-2.7%
Austria	8,595	8,595	8,595	8,595	8,595	8,595	0	0.0%
Sweden	5,950	5,950	5,950	5,950	5,950	5,950	0	0.0%
Slovak Republic	5,520	4,860	4,860	4,860	4,860	4,860	-660	-12.0%
Greece	4,760	4,760	4,760	4,760	4,760	4,760	0	0.0%
Finland	4,530	4,530	4,530	4,530	4,530	4,530	0	0.0%
Luxembourg	2,400	2,400	2,400	2,400	2,400	2,400	0	0.0%
Hungary	2,050	2,050	2,050	2,050	2,050	2,050	0	0.0%
United States	120,624	120,624	120,184	119,934	121,374	127,217	6,593	5.5%



Japan	134,447	132,411	131,055	131,205	129,685	123,795	-10,652	-7.9%
Russian Federation	85,755	85,855	85,395	86,897	87,207	87,707	1,952	2.3%
Korea	80,775	80,775	80,175	78,345	78,345	77,612	-3,163	-3.9%
Türkiye	51,506	51,181	51,884	50,698	53,358	53,985	2,479	4.8%
Brazil	51,450	51,450	51,450	51,450	50,950	50,950	-500	-1.0%
Mexico	29,505	29,505	29,505	29,155	29,155	29,155	-350	-1.2%
Canada	17,467	17,467	17,467	17,467	17,739	17,739	272	1.6%
United Kingdom	11,202	11,202	11,202	11,202	11,202	11,202	0	0.0%
South Africa	9,530	9,746	9,906	9,906	8,566	8,566**	-964	-10.1%
Argentina	6,650	7,300	7,300	7,300	7,300	7,300	650	9.8%
Australia	5,570	5,570	5,570	5,570	5,570	5,570	0	0.0%
Switzerland	1,370	1,370	1,370	1,370	1,370	1,370	0	0.0%
Norway	800	800	800	800	800	800	0	0.0%
China	1,187,371	1,158,811	1,122,921	1,148,262	1,147,857	1,146,492	-40,879	-3.4%
India	120,527	124,190	127,019	128,719	128,719	133,866	13,339	11.1%
Indonesia	12,962	14,962	15,962	17,812	19,562	21,312	8,350	64.4%
Saudi Arabia	11,565	11,565	11,603	11,603	11,603	11,603	38	0.3%
<b>Rest of the world</b>	<b>259,468</b>	<b>272,168</b>	<b>283,218</b>	<b>293,438</b>	<b>301,638</b>	<b>306,628</b>	<b>47,160</b>	<b>18.2%</b>
<b>Grand total</b>	<b>2,412,202</b>	<b>2,399,055</b>	<b>2,375,677</b>	<b>2,410,324</b>	<b>2,418,591</b>	<b>2,429,480</b>	<b>17,278</b>	<b>0.7%</b>

*Notes:* \* The European Union's figure refers to the total capacity of all the European Union Member States. \*\* Based on OECD data indicating no additions or closures in 2021. Please note that the capacity data for GFSEC members in this table come from submissions by the members in the context of the GFSEC information sharing exercise. The capacity data for non-participating G20 economies are the latest OECD steelmaking capacity figures (as of December 2022) based on the OECD's plant-level database.

*Sources:* GFSEC information sharing 2022 and OECD figures for other jurisdictions (for the latest OECD figures, see <https://www.oecd.org/sti/ind/latest-developments-in-steelmaking-capacity-2022.pdf>)

28. The results of the OECD's monitoring of steel investment projects indicate that a total of 43 planned investments, with a combined capacity of 46.9 mmt, may take place in the medium to long term in active GFSEC member economies. Most of these investments are replacement projects, and nearly all involve EAF furnaces or, in some cases, green steel projects.
29. An examination of investment project data for non-active GFSEC economies points to several disconcerting trends, particularly in light of uncertain steel demand prospects in many of these countries. For example, India has 80 projects in the pipeline or planned, amounting to an additional 198.5 mmt in the period until 2030 and in some cases slightly beyond. These data are in line with the National Steel Policy published by the Ministry of Steel in 2017, which envisioned India reaching 300 mmt of capacity by 2030-31. Indonesia has nine projects planned with a total capacity of 31.3 mmt, also heavily centered on the emission-intensive BF/BOF route. China has 59.2 mmt of underway and planned capacity investments, though many of these could be related to the replacement policy, so the net additions realised over time may be lower than this amount. Viet Nam plans to increase capacity by 17.3 mmt, the Philippines by 22.9 mmt and Malaysia by 13.9 mmt. The latter includes a 10 mmt investment project currently underway by Sarawak

Iron and Steel with a completion date set for 2024. Such large projects raise concerns about the lack of demand to meet such supply expansions. For these reasons, it will be important for the GFSEC to continue efforts to engage with countries that have left the Forum, as well as others, to ensure a more viable long-run future for the steel industry.

## **Box 2. Significant capacity growth, especially in Asia**

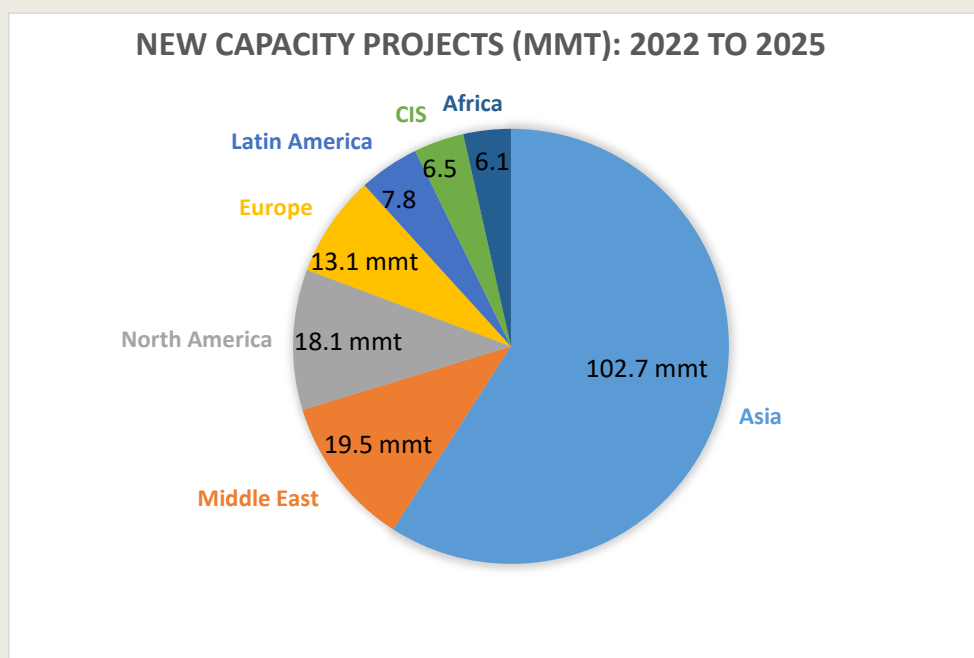
While steel consumption prospects are weakening, around 174 million tonnes of new capacity are already under construction or are planned, in particular in Asia, for the 2022-25 period. If realized, capacity could grow by an additional 5.9% during 2022-25.

In the Middle East, there are a large number of new capacity projects taking place in Iran, and several planned in Saudi Arabia and Oman.

In Southeast Asia, heavy investment activity is taking place in Malaysia, Indonesia and Viet Nam, much of it driven by Chinese investments (e.g. Delong Steel – Dexin, Moralawi Industrial Park and Malaysia-China Kuantan Industrial Park). Some of these investments may be coupled with broader government plans, such as the Belt and Road Initiative. Such an investment model could lead to further carbon-intensive capacity growth in Southeast Asia.

In South Asia, there are many projects in India, and many underway in Pakistan. China also continues to build capacity and its steel inventory despite its problematic overcapacity, calling for further efforts to address the situation. Moreover, most of ongoing steelmaking projects in China are carbon (coal) intensive.

Figure 3. New capacity projects (MMT) between 2022 and 2025



Source: OECD

#### 2.4. Steel decarbonisation progress in the context of excess capacity

30. Addressing structural global excess capacity is crucial for steel companies to be able to sustain the green transformation. In view of the steel industry's decarbonisation challenge, it is thus important to monitor steel capacity projects involving near-zero emissions. As of mid-2022, there were around 40 innovative near-zero emission steelmaking projects worldwide. This project pipeline covers announced projects involving a facility plant based on an innovative near zero emission production route (hydrogen-based direct reduced iron/electric arc furnace, carbon capture utilisation and storage, or others such as direct iron ore electrolysis).
31. GFSEC discussions have shown the importance of examining the link between excess capacity and its impact on decarbonisation efforts. The persisting situation of excess capacity and the resulting lower profitability margins for steel companies hinder the creation of an ecosystem that is needed to facilitate the green transition. Excess capacity implies more production of steel than is needed to satisfy demand, which results in a waste of scarce natural resources and excess emissions of CO<sub>2</sub>. These excess amounts of CO<sub>2</sub> hamper countries' decarbonisation targets. The IEA for instance calculated that, compared

to 2020 levels, direct emissions from steel production must fall by at least 30 percent by 2030, and 90 percent by 2050, to be on track to meet the 2050 net-zero targets.<sup>3</sup> Next, the structural imbalance caused by global excess capacity affects steel prices, steel companies' profitability margins, as well as the global playing field. Excess capacity weighs on various features needed for an efficient low-carbon transition, such as investments, innovation, or competition.

32. In order to understand the magnitude and the impact of the global excess capacity situation, having access to reliable data remains paramount. Consequently, it will be of interest for the GFSEC members to continue monitoring the progress the steel sector is making to decarbonise its value chain.
33. A first step in that process has been taken by the Facilitator in 2022. Its report on 'assessing steel decarbonisation progress'<sup>4</sup> maps different indicators to keep record of the state of play on steel decarbonisation. These indicators cover various dimensions, such as capacity, production, technologies, industrial projects, trade or policy aspects. The first results indicate that the steel sector is not yet on track to meet the targets of the Paris Agreement. There is for instance a mismatch between corporate commitments and country-level pledges. As of end-2021, companies with net-zero targets accounted for 30% of global steel production, but additional commitments are needed. Indeed, beyond these pledges, near zero emission steel production has not yet taken off sufficiently. While there is potential to ramp up steel decarbonisation efforts through the use of new technologies, the report shows that the level of industrial maturity remains fairly low. This would require countries and companies to significantly scale up their decarbonisation technologies by 2050. Further policy guidance will be quintessential to provide for the right framework conditions that are needed to facilitate the green transition.
34. However, countries cannot tackle the excess capacity situation and climate change individually. Both relate to truly global challenges, which call for a global response. Therefore, collaboration among countries, as well as between public and private stakeholders, will be pivotal to foster synergies and accelerate progress towards a net-zero pathway.

### 3. The unique position of the GFSEC as a multilateral forum to tackle steel excess capacity

35. The GFSEC is the world's unique multilateral forum to deal with steel excess capacity. The current section starts with reiterating the rationale for establishing the GFSEC, followed by the membership evolutions since its inauguration. This introduction will be followed by an overview of some of the GFSEC's main achievements since its inception, as well the key activities in the year 2022. These key activities of the GFSEC in 2022 include: (1) the information sharing and review process; (2) outreach to non-participating jurisdictions; (3) exploring the nexus between steel excess capacity and decarbonisation; as well as (4) the September 2022 GSFEF Stakeholder event on 'contributing to an open and inclusive dialogue on steel decarbonisation'.
36. The subsequent sections will illustrate the value that the GFSEC has brought to its members since 2016. Its main achievements highlight the GFSEC's steady and continuous relevance to facilitate a multilateral discussion on levelling the playing field in the international steel markets. The GFSEC's objectives and significant progress since 2016 need to be interpreted against the changing global economic context, which has been referenced in the previous section.

#### 3.1. Why do we need a multilateral forum on steel excess capacity?

37. The steel industry fulfils an important function in the global economy, as it serves as an essential input for various sectors, including construction and infrastructure, automotive, as well as machinery and equipment. Without this material, transport and infrastructure networks would not work, renewable and other energy generation systems would fail, and hospitals and other buildings could not be built. Furthermore, the steel sector provides significant employment, both directly and indirectly through the steel supply chain. The industry decarbonisation pathway will also play a significant role in helping to meet climate change ambitions. Numerous policies play an important role in the sector, including in the areas of trade, investment, environment and competition.
38. In 2015, one year before the establishment of the Global Forum on Steel Excess Capacity (GFSEC),<sup>5</sup> global steelmaking capacity exceeded demand for steel by 793 million tonnes, which represented roughly half of the steel use in 2015. Excess capacity has undermined competition and resulted in trade tensions. The steel crisis following the economic downturn led governments at the multilateral level to address the industry's challenges. In 2016, the GFSEC was created to tackle the problem, under the auspices of the G20. Considerable shifts have occurred over the past twenty years, with production shares declining among many GFSEC economies. The participation by and support of large emerging markets, which co-founded the Forum, was seen as an

important driver of the Forum's legitimacy and illustrated its inclusive character.

### 3.2. GFSEC members adopted several initiatives to achieve their main objectives

39. The mandate of the GFSEC, under its Terms of Reference, has been twofold: 1) to enhance communication, information sharing and co-operation among members, and 2) to take effective steps to address the challenge of excess capacity. The subsequent paragraphs elaborate on some of the GFSEC's main intermediate achievements to fulfil these objectives and highlight the Global Forum's relevance.
40. Next, an update is provided on the work that has been conducted in 2022 to further contribute to the GFSEC's objectives.

#### *3.2.1. The GFSEC already achieved important outcomes, which highlight its relevance*

41. The different bullet points below provide an indicative overview of the GFSEC's relevance and main achievements.
  - **Providing a platform to major steel producers and importers.** The GFSEC convenes major steel-producing and importing economies on a regular basis and on an equal footing to discuss the problem of global excess capacity and the policy solutions to alleviate it. The GFSEC also maintains a dialogue with large steel producing economies that decided to discontinue their GFSEC engagements.
  - **Strong industry support.** The GFSEC has attracted strong support from the industry, which is reflected in the participation and constructive dialogue with industry associations and other stakeholders at GFSEC meetings.
  - **Achieved reductions in excess capacity.** During the years of the GFSEC, a number of countries have realized important capacity reductions, resulting in a decreasing level of excess capacity at the global level. The gap between capacity and demand reached its peak in 2015 standing at 793 mmt. The gap declined between 2016 and 2019, falling to 530 mmt in 2019. While it increased in 2020, in 2021 it stood at 475 mmt, which is however still large and demonstrates the importance of continuing the Forum's work.
  - **Reached agreement on the solutions to reduce excess capacity and opened discussions on the implementation of these principles.** In 2017, the Forum achieved a major breakthrough when consensus was reached on six guiding principles and specific policy recommendations for governments to reduce excess capacity and to contribute to a more stable and sustainable steel sector (see paragraph 57 of the Berlin Ministerial Report).



Members have praised the importance of these recommendations and acknowledged time is needed to implement them.

- **Boosting transparency about steelmaking capacity developments.** The Forum has succeeded in greatly improving information on steelmaking capacity worldwide. Detailed information is collected on installed capacities, new additions and closures of capacity for steel plants, sites and companies, as well as information on the characteristics of the plants, such as the technologies used and the plants' ownership (private versus state owned). The result of this work has been the development of a highly-valued government-validated, plant-level capacity database that is not available anywhere else in the world.
- **Established a robust policy review mechanism.** In addition to exchanging capacity data, GFSEC members have actively engaged in providing information on government policies, practices and measures, including subsidies and other support measures provided to steel producers around the world. This has increased the understanding of the policy situation in countries, and provided a vehicle for sharing information on effective approaches to addressing overcapacity. In addition, review sessions have been organised where members can ask their counterparts about specific policies, resulting in a rich and thorough discussion.

**Kicked-off the work on decarbonisation.** The GFSEC started to explore the nexus between excess capacity and decarbonisation efforts in the steel sector. The Facilitator kicked-off this new work stream by the end of 2021 and started identifying various indicators to map the state of play on decarbonising the steel sector. In addition, the GFSEC members exchanged information in the course of the information sharing exercise on the broader policy conditions that are required to provide green government support.

### *3.2.2. The different workstreams in 2022 continue to sustain the Forum's relevance*

#### *Information sharing and review process in 2022*

##### Rationale and questionnaire

42. One of the successes of the GFSEC has been to concisely and clearly define the issue of excess capacity and its causes. Since its establishment in 2016, considerable progress has been made in enhancing transparency and in substantiating policies and recommendations to facilitate restructuring and eliminate excess capacity. Importantly, the Forum developed policy principles, recommendations and policy actions to address excess capacity in the steel sector based on the Berlin Ministerial recommendations agreed to in 2017 (i.e. the Berlin Principles). These Principles act as a guiding instrument for the development and implementation of policies in GFSEC jurisdictions.

43. The Berlin Principles are incorporated in the information sharing exercise. One of the objectives of this exercise is to track the progress that GFSEC members made to align their policies with the Berlin Principles and to share policy experiences. The information sharing exercise has been described as one of the main pillars of the GFSEC. In light of this exercise, members more specifically cooperate on a regular basis by sharing detailed information on steelmaking capacity developments in their economies, as well as on government policies and measures that impact capacity. This activity is accompanied by a rigorous review process whereby members assess the information submitted by their counterparts. Based on the outcome of the information sharing and review processes, members can undertake action which they consider appropriate, in line with the principles and policy recommendations of the GFSEC.
44. In September 2021, GFSEC members expressed their wish to revise the information sharing questionnaire. The Facilitator presented its discussion paper on the revision of the information sharing questionnaire at the February 2022 GFSEC Working Level Meeting, which received wide support from the membership.
45. The in-depth discussions at GFSEC meetings following the information sharing exchange have provided opportunities for deepening the understanding of government policies and measures that are contributing to excess capacity and that members may wish to address, as well as policies that are helping to alleviate the excess capacity problem. The latter include policies used to facilitate steel industry restructuring, as well as general framework conditions that encourage competition and foster a level playing field in the steel sector. These discussions offer insights of lessons learned, which can be translated into voluntary policy actions to help the Forum members achieve the objectives set out in the Berlin Ministerial recommendations.
46. The subsequent paragraphs of the report provide key insights from the information sharing and review processes in 2022 covering key steelmaking capacity developments, as well as government policies and support measures in GFSEC member economies.

*Key insights from the information sharing and review process in 2022*

47. In line with G20 Leaders' call for increased information sharing, the GFSEC continued its work to developing an information-sharing mechanism to exchange information on crude steel capacity developments, government policies to address excess capacity, as well as market distorting subsidies and other government support measures that contribute to steel excess capacity.
48. The GFSEC now has an extensive database on capacity developments at the disaggregated level, provided or verified by governments. It also has collected information on government policies with a direct or indirect bearing on excess capacity in the steel sector. Such data has been provided at the central government level for all members and at the regional or provincial levels for some members. This is the first time that a policy inventory is being built that goes well beyond what is

reported in other fora and whose emphasis is on policies relevant for steel. This tangible process contributes to the collective trust and confidence that are necessary to find collective solutions to the challenge of excess capacity.

### *Capacity*

49. During the two rounds of information sharing in 2022, GFSEC members exchanged information and reviewed developments on steelmaking capacity in their economies. Members also discussed capacity developments taking place in economies that are not members of the GFSEC (see Table 1 in Section 2 of this report for the detailed results of the data exchange on capacity).
50. In 2021, the aggregate capacity of active GFSEC members stood at an estimated 809.6 mmt, with four members experiencing increases in capacity that were partially offset by declines or stable capacity in the other member economies. Since 2016, active GFSEC members have taken out almost 11 mmt of capacity from the market, and, by adhering to the Berlin principles and policy recommendations, many are contributing to greater market balance during difficult years of global steel excess capacity. See Section 2 of this report for further highlights about capacity developments in GFSEC member and non-member economies.

### *Government policies and measures*

#### Results of the information sharing responses

51. Twenty-seven members updated their answers to Part 2 of the questionnaire regarding government policies and measures.
52. There are several trends to observe with regard to steel related government policies and support measures. First of all, the vast majority of GFSEC members continue to express their concern regarding the lingering state of global steel excess capacity, even if members acknowledge that progress has been made by the Forum. Secondly, a large share of members allocate a significant part of their resources to encourage research and development activities. Thirdly, a growing number of members adopts several measures to support greener forms of steelmaking. From a practical point of view, the second and third tendency tend to overlap, which can be illustrated by the implementation of policies that are aimed at increasing energy efficiency and/or reducing greenhouse gas emissions through the adoption of new technologies. Fourthly, multiple members introduced several measures to support displaced workers. Following the highly cyclical nature of the steel industry, an economic downturn may quickly result in curtailments of production volumes or worker lay-offs. To anticipate such restructurings, and to absorb the impact when they materialise, many members have administered holistic labour policies, including for training or upskilling of the steel workforce.
53. To contribute to achieving policy objectives such as encouraging innovation, decarbonising the steel sector, or sustaining steel workers, multiple GFSEC members promulgated different forms of support

measures. It is observed that the total number of support measures implemented by GFSEC members does not seem to be on the rise. In addition, it appears that most of the GFSEC members' policies and support measures take into account the long-term viability and sustainability of the steel sector. The information sharing questionnaire's section on transparency in non-participating jurisdictions seems to suggest that other economies in the world such as Viet Nam are, by contrast, focusing on expanding their crude steel production figures. An interesting point for the GFSEC to monitor going forward will be whether China's crude steel production is (close to) peaking, as the country intends to shift some of its focus to more higher value-added segments of steel production.

#### Outcome of the review process

54. The GFSEC review process, which was established in 2018 pursuant to principle VI of the Berlin Ministerial Report, allows members to provide necessary clarifications and to respond to questions raised by other members regarding steelmaking capacity developments, government policies, as well as subsidies and other types of support by government and government-related entities.
55. Two new rounds of the review process occurred in 2022. The exchange centred around issues related to subsidies and other types of support by government and government-related entities, the decarbonisation of the steel sector, as well as new capacity developments.

#### *3.2.3. Outreach to non-actively participating jurisdictions*

56. The GFSEC regrets the decision of certain former members to leave the Forum. The Forum nonetheless continues to engage with several non-participating jurisdictions and their corresponding steel associations. In 2022, the members of the Forum increased their outreach activities to some of the former GSFEC members, as well as to potential new partners:
  - The Facilitator identified potential areas of interest for two non-actively participating jurisdictions to better understand their interest in joining the GSFEC discussions.
  - The Facilitator engaged with steel industry associations of non-actively participating jurisdictions, as well as potential new members. Several of these industry associations participated in the subsequent GFSEC Stakeholder Events and expressed an interest to be involved in the subsequent discussions.
  - The Facilitator liaised with government officials from certain non-actively-participating jurisdictions to set-up a conversation. The response rate of these invitations unfortunately remained low.
57. Some non-participating jurisdictions have clearly voiced their opinion about the relevance of the GSFEC. Other non-participating jurisdictions, by contrast, are still considering their official point of view. The inaction of certain non-actively participating jurisdictions to

engage in the discussions on excess capacity, makes it hard for GFSEC members to take their interest into account. Non-participating jurisdictions that have been approached and that are keenly interested in multilateral talks are invited to share their insights about the relevance of the GFSEC, as well as about potential areas of future work.

58. In the dialogues held with non-participating jurisdictions, the GFSEC has recognised the right of emerging economies to develop infant industries, such as the steel industry, contingent upon their stage of development. This implies that emerging economies are warranted to build capacity that is needed to satisfy domestic demand, provided that market principles and international trade rules are respected. At the same time, GFSEC members believe that building capacity to satisfy domestic demand needs to be distinguished from production expansions that are exported to third nations. The latter type of capacity expansions has led to trade frictions with third nations, and in practice not seldomly seem to have been coupled with industrial policies that are accompanied with market distorting forms of government support.
59. In addition to the outreach activities, the information sharing questionnaire introduced a new section on transparency, in which GFSEC members could share information about recent capacity and policy developments in non-participating jurisdictions.
60. By way of an illustration, the following paragraphs will describe recent tendencies in non-active GFSEC jurisdictions. The focus will be on India, China and the ASEAN region.
61. India is the second largest producer of crude steel in the world and is projected to double its steel production to about 200 mmt by 2030.<sup>6</sup> Whereas the Indian steel industry is currently highly dependent on coal, India has the potential to become an important player of low-carbon steel production in the future. India for instance acts as a frontrunner of producing steel via the Direct Reduced Iron (DRI) route and has released its National Hydrogen Mission in 2021, in line with the objective to become energy independent by 2047.<sup>7</sup> India intends to cut its emissions to net-zero by 2070. However, a large share of the Indian blast furnace capacity is relatively young and energy intensive.<sup>8</sup> The steel sector currently represents 23 percent of total energy inputs and 30 percent of CO<sub>2</sub> emissions in the Indian industrial sector.<sup>9</sup> Therefore, there may be an incentive for the Indian steel sector to ramp up its efforts to decarbonise its steel industry.
62. It is noted that India will take the helm of the G20 in 2023. In that capacity, India is assumed to chair the GFSEC discussions in 2023 as well, provided that the Forum's Terms of Reference gets renewed. In such case, this would offer India an opportunity to highlight its priorities for the GFSEC and to provide guidance as to the direction that it would like the GFSEC to take in the future, in cooperation with the GFSEC Co-Chairs, as well as all other GFSEC members. Chairing the GFSEC discussions would equally present India with an opportunity to bolster the inclusive character of the GFSEC and to articulate the interests of emerging nations that intend to ramp up their steel capacity figures.

63. China is by far the largest producer of crude steel globally and is responsible for slightly more than half of the world's production. Like India, the vast majority of steel plants in China are fairly young.<sup>10</sup> In 2020, the province of Hebei on its own accounted for 13 percent of global steel production. The Chinese steel production decreased significantly in 2021 and is expected to stay flat for the rest of 2022.<sup>11</sup> However, Chinese announcements in 2022 to support new infrastructure spending might increase the Chinese domestic steel production in 2023 and beyond.<sup>12</sup> Several Chinese steel producers pledged to decarbonise their activities, in line with the Chinese government targets of reaching carbon neutrality by 2060, and are starting to implement greener forms of steel production. This might provide an opportunity for GFSEC members and China to collaborate.
64. GFSEC members are closely following the capacity and investment developments that are being observed in the ASEAN region, as articulated in the GFSEC Ministerial Report of 2021. The South-East Asian Steel Association (SEAISI) for instance points out that 90 mmt of steel capacity expansions have been announced for the region by 2026. Most of the planned investments will occur via the blast-furnace/basic oxygen furnace route.<sup>13</sup>
65. There may be several reasons for ASEAN countries to expand their production of crude steel. However, there seem to be important differences to observe within the ASEAN region as regards the impact of (announced) capacity expansions. Indonesia introduced a large infrastructure programme in 2019.<sup>14</sup> According to the Indonesian Iron and Steel Industry Association (IISIA), its steel consumption is consequently projected to rise to 22.7 mmt in 2024, 40 percent and 38 percent of which can be accounted for by the infrastructure and construction sector respectively.<sup>15</sup> Indonesia has been expanding steel capacity over the years to satisfy this domestic demand. Some of the newly installed steel plants in Indonesia received funding from Chinese investors under the Belt and Road Initiative.<sup>16</sup> Malaysia acts as a medium-sized steel producing nation. Nonetheless, SEAISI announced that around 30 mmt of new steel capacity will be added to the country's production figures. The vast majority of this production expansion is projected to commence in 2024.<sup>17</sup> Thailand does not seem to plan any significant steel capacity expansions in the following years. As one of the world's biggest importers of steel, its domestic steel industry has been impacted by dumping practices from third nations. Finally, it is noted that Viet Nam is considering to draft a strategy to develop its steel industry by 2030, with a vision to 2050.<sup>18</sup> Viet Nam upholds its decision to support domestic demand, which is to a large extent driven by government-led infrastructure programmes as well as an expanding manufacturing base. GFSEC members continue to engage with ASEAN and the respective steel federations in the region to assess the impact of capacity developments in the region on other nations within the ASEAN bloc, as well as on third nations.



### ***3.2.4. Stakeholder event on contributing to a global and inclusive dialogue on steel decarbonisation and excess capacity***

66. Discussions in the GFSEC have emphasised that global steel excess capacity slows down the green transition, as it maintains business uncertainty, creates barriers to investments and increases trade tensions. This was also echoed in the GFSEC Stakeholder event on steel decarbonisation held in September 2022.
67. With direct emissions accounting for more than a quarter of total industrial emissions, the steel sector is of critical importance for achieving the Paris Agreement's climate goals. While the mission of decarbonising steel is an urgent and compelling one, it remains a challenging task to accomplish.
68. On the 21st of September 2022, the OECD facilitated the GFSEC's stakeholder event on steel decarbonisation. The objective of the event was to bring together, and "connect the dots" between the different initiatives that are promoting, supporting and implementing decarbonised steelmaking practices, together with steel industry associations and steel policymakers from GFSEC member countries.
69. The event highlighted that there are two particular fields where steel decarbonisation efforts are increasing, but where further coordination will be crucial:
  1. Data: being instrumental to measure and monitor progress towards steel decarbonisation targets, data is essential to foster implementation. Moreover, data is the foundational building block of definitions for near zero emission steel, standards and other criteria shaping trade measures.
  2. Trade: since steel is a highly traded material worldwide, trade is an indispensable ally in the transition of the steel industry towards decarbonisation. However, without a level playing field, trade can also represent an obstacle to decarbonisation efforts, contributing to carbon leakage and trade distortions. Finding an effective and inclusive approach to the trade, emissions and excess capacity nexus will be vital to ensure the implementation of steel decarbonisation.

## 4. Concluding remarks

70. Since its initiation, the GFSEC has acted as a unique venue to take multilateral and collective action to address the problem of global excess capacity in the steel sector and tackle the government policies and measures that contribute to it. In 2017, the GFSEC reached an important milestone with the adoption of the Berlin Principles. These six key principles lay out the policy solutions that the GFSEC members commit to in order to reduce excess capacity (see Annex A).
71. The unique set of tools developed by the Forum can help countries limit excessive build-up of capacity that overshoots demand, thereby contributing to more stable global steel market conditions. This also helps alleviate trade disturbances and trade tensions involving steel products. The Forum also shares good practices on ways to promote leaner, cleaner, more innovative and competitive steel industries, based on the mutual experiences of steel industry stakeholders from around the world.
72. The GFSEC maintains a strong interest to continue the multilateral dialogue on tackling steel excess capacity, and welcomes co-operation with steel-producing economies from around the world to foster better conditions for their steel industries and stakeholders.

## Annex A. Berlin principles and policy recommendations (2017)

### Box 3. Six principles that guided the development of policy solutions to reduce excess capacity

1. Steel excess capacity is a global issue which requires attention in a global format with broad participation of economies and effective policy solutions to enhance the market function and reduce steel excess capacity. To support these, Forum members may set and publish goals, if appropriate.
2. In order to ensure that the steel market operates under market principles, governments and government-related entities should refrain from providing market-distorting subsidies and other types of support measures to steel producers. These include subsidies and other government support measures that sustain uneconomic steel plants, encourage investment in new steelmaking capacity which otherwise would not be built, facilitate exports of steel products, or otherwise distort competition by contributing to excess capacity.
3. Irrespective of ownership all enterprises acting in the steel market (whether privately-owned or directly or indirectly owned, fully or in part, by their governments or by government-related entities) should not receive directly or indirectly subsidies or other type of support that distort competition by contributing to excess capacity, and should follow the same regulations with economic implications and rules, including bankruptcy procedures. A level playing field should be ensured among steel enterprises of all types of ownership. Global Forum members should also continue to fight protectionism including all unfair trade practices while recognising the role of legitimate trade defence instruments in this regard.
4. Open and competitive markets and a market-driven approach to resource allocation based on the competitive positions of steel enterprises should be the driving forces of the steel sector. New investment, production and trade flows should reflect market-based supply and demand conditions.
5. Wherever excess capacity exists, governments have a role in advancing policies that facilitate the restructuring of the steel industry while minimizing the social costs to workers and communities. Governments should ensure conditions exist for market based adjustment, by facilitating the exit of consistently loss-making firms, “zombie” firms, obsolete capacity facilities and firms not meeting environmental, quality and safety standards. This would lead to a net reduction of capacity.
6. Recognizing that collective policy solutions and transparency are vital for market-based responses by the industry to changing conditions in the steel market, governments should on a reciprocal basis increase transparency through regular information sharing, analysis, review, assessment and discussion as well as regular exchanges about data and concrete policy solutions, among the members of the Global Forum. Governments should ensure that any relevant information on steelmaking capacity developments; supply and demand conditions as well as policy responses including support measures by governments and government-related entities is available on an on-going basis. Members should exchange information on the nature and extent of export credit agency support for new steel

projects. The Global Forum will report to the G20 and to interested OECD countries being member of the Global Forum on progress.

*Source:* Report of the Global Forum on Steel Excess Capacity approved on 30 November 2017 in Berlin

#### **Box 4. Policy recommendations**

##### **a) Framework conditions**

Members should consider the extent to which their framework conditions and institutional settings ensure proper market functioning and policy objectives consistent with the need for reducing global excess capacity.

Particular attention should be given to ensure that: i) competition law, trade and investment policies, and other policies foster a level playing field for competition among companies irrespective of ownership, both domestically and internationally; ii) bankruptcy legislation is effective and procedures are expedited efficiently; iii) the internal financial market is able to price risk and deal with non-performing loans; iv) labour markets and social security systems adequately support adjustment, v) different levels of government do not have conflicting policy objectives and, vi) Procurement policies should not contribute to excess capacity.

##### **b) Market distorting subsidies and other support measures by government or government-related entities**

Members should remove and refrain from adopting market-distorting subsidies and other support measures provided by governments and government-related entities that encourage companies to undertake capacity expansion projects, maintain consistently loss-making or uneconomic steel plants in the market, or which otherwise distort the market.

All Members should expeditiously share data on market-distorting subsidies and other support measures by government or other government related entities. The proper implementation of subsidies and other support measures that facilitate permanent closures of steel facilities should be carefully analysed and follow strict guidelines.

Governments should remove and refrain from market-distorting subsidies and other support measures by government or government-related entities that contribute to excess capacity.

Governments may encourage innovations in the steel sector and implementation of best available technologies among steel producers irrespective of ownership insofar as this does not distort competition and contribute to excess capacity.

##### **c) Fostering a level-playing field in the steel sector**

Irrespective of ownership, all enterprises acting in the steel market (whether privately-owned or directly or indirectly owned, fully or in part, by their governments or by government-related entities) should not receive subsidies or

any other types of support that distort competition by contributing to excess capacity.

All enterprises acting in a country's steel market should follow the same rules and regulations with economic implications, including bankruptcy procedures.

A level playing field should be ensured among steel enterprises of all types of ownership.

#### **d) Fostering industry restructuring by assisting displaced workers**

Governments should favour active labour market policies which maintain and increase the employability of workers who are dismissed as a result of the restructuring.

Employment adjustment measures are an important instrument for addressing the social cost of restructuring. This should be provided as support to workers and should not constitute subsidisation to companies, which could maintain existing capacities in place.

The specific needs of older workers and other disadvantaged groups affected by restructuring should be taken into account to facilitate their transitioning into alternative occupations.

The effectiveness and efficiency of the measures should be evaluated.

#### **e) Government targets**

Steel excess capacity is a global issue which requires attention in a global format with broad participation of economies. To support these, Global Forum members may set and publish goals, as appropriate, to reduce excess capacity through legal and market methods. Capacity reduction targets should be accompanied by actions to eliminate policies that contribute to excess capacity, such as market-distorting subsidies and other types of support by government or government-related entities

The criteria for capacity reductions should, irrespective of ownership, simulate the process of market selection with consistently loss making or non-environmentally compliant firms being forced to exit the market. Ex post assessments of whether this is the case should be undertaken.

Government objectives to increase capacity should not be accompanied by market-distorting subsidies or other types of support by government or government-related entities that contribute to excess capacity, including input support to steel production.

Government targets should take into consideration demand conditions.

#### **f) Issues related to mergers and acquisitions**

Mergers and acquisition should not contribute to excess capacity.

Any measures taken to encourage mergers and acquisitions need to be taken in accordance with effective competition law and market principles.

#### **g) Ensuring export credits do not contribute to excess capacity**

Members should refrain from issuing officially supported export credits for steel plants and equipment which contribute to the expansion of global steel capacity that would not otherwise take place but for such subsidisation or not be in line with global steel demand.

When such support is provided, the terms and conditions of officially supported export credits for steel plant and equipment should be transparent, reflect market

pricing and practices, and take note of guidelines agreed among some members and on-going international negotiations. This will minimise the subsidisation associated with export credits, and thus avoid supporting the creation of additional steelmaking capacity.

#### **h) Enhance transparency**

Members should regularly update the information on sectoral trends (incl. capacity developments and production) and policy measures.

The Global Forum should regularly analyse, review, assess and discuss how the provided information aligns with the agreed principles.

#### **i) Continue the process of the Global Forum**

The Global Forum will meet at least three times per year to further discuss, assess and review this information, to ask questions and provide answers and share best practices thereon. The Argentinian G20 presidency foresees to hold 3 meetings in 2018.

As the priority for 2018, the Global Forum members should swiftly and fully apply the agreed principles and recommendations.

In the first half of 2018, members of the Global Forum will share information on the steps taken to eliminate market-distorting subsidies and other types of support by governments and related entities, as well as tangible and swift policy action for their removal.

The Global Forum should share best practices of steel industry adjustment and exchange experiences on new sources of steel demand.

The Global Forum will report on the process and concrete results in addressing excess capacity to G20 and to interested OECD countries being member of the Global Forum.

*Source* : Report of the Global Forum on Steel Excess Capacity approved on 30 November 2017 in Berlin

## ENDNOTES

<sup>1</sup> See World Steel Association press release at: <https://worldsteel.org/media-centre/press-releases/2022/worldsteel-short-range-outlook-october-2022/>.

<sup>2</sup> The indicator of real steel demand has been calculated using the output (real value added) of steel using sectors (construction, metal goods, mechanical machinery, domestic appliances, electrical engineering, automotive, and other transport) weighted by their share in demand. The forecasts for sectoral output are from Oxford Economics, released in August 2022. Unlike measures of apparent steel consumption, this indicator reflects real underlying demand for steel as required by the steel-using industries without taking into account the net increase in consumer and merchant inventories of steel.

<sup>3</sup> <https://www.iea.org/reports/net-zero-by-2050>

<sup>4</sup> The publication can be found on the GFSEC official website, <https://www.steelforum.org/>

<sup>5</sup> More information about the Global Forum on Steel Excess Capacity can be found on its website: <https://www.steelforum.org/>

<sup>6</sup> The Economic Times (8 July 2022), <https://economictimes.indiatimes.com/industry/indl-goods/svs/steel/india-to-double-steel-production-in-eight-years-to-240-mt-union-steel-minister-iyotiraditya-scindia/articleshow/92756063.cms>

<sup>7</sup> Press Information Bureau of India, National Hydrogen Mission (21 March 2022), <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/mar/doc202232127201.pdf>; Indian Prime Minister's Office (15 August 2021), <https://pib.gov.in/PressReleasePage.aspx?PRID=1746062>; Indian Ministry of New and Renewable Energy (9 February 2021), <https://pib.gov.in/PressReleasePage.aspx?PRID=1696498>

<sup>8</sup> IEA (2020), Iron and steel technology roadmap, <https://www.iea.org/reports/iron-and-steel-technology-roadmap>

<sup>9</sup> Institute for Energy Economics and Financial Analysis (14 February 2022), <https://ieefa.org/resources/ieefa-indias-technology-path-key-global-steel-decarbonisation>

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