

DEPARTMENT OF TRADE, INDUSTRY & COMPETITION

(SECTORS BRANCH)

DRAFT STEEL ROADMAP FOR SOUTH AFRICA

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1. Introduction

Crude steel production faces a structural crisis that has very different impacts on key stakeholders. In this context, the dtic is developing a roadmap to ensure coordinated decisions and programmes that consistently promote the national interest. The roadmap:

- Specifies the core aims of government intervention,
- Identifies the main instruments to achieve them, and
- Allocates key responsibilities.

This document identifies the strategic direction for long and flat steel, and strategies to increase demand for steel. It starts by identifying the criteria for success – in effect, the ultimate destination on the road map. It then explores the crisis in crude steel and how it affects downstream steel-based manufacturing and public infrastructure investments, with a SWOT analysis for crude steel. The fourth section indicates the core decisions that shape strategies across the steel landscape. The final section indicates the critical next steps for the road map.

2. Criteria for success

The crisis in the steel value chain is hard to handle because the stakeholders have divergent interests, political and economic clout, and capacity for lobbying. AMSA, the mini mills, scrap producers, downstream manufacturing and construction, and their workers and communities all have different and sometimes contradictory interests. As a result, government decisions affect them in very different ways. To ensure rational and strategic decision making in this context, policymakers need to determine the national priorities for the steel value chain. That makes it possible to set clear criteria for managing the unavoidable trade offs between the various interest groups.

This roadmap centres on solving for growth in downstream steel-based manufacturing and public infrastructure. The aim is not to save crude steel for its own sake, but to support downstream producers, which are more jobs-rich, value-adding and dynamic. By extension, long-term solutions to the crisis in crude steel have to focus on:

- cutting production costs and prices to downstream users, and
- ensuring the supply of products meets the needs of downstream manufacturing and infrastructure.

Except for short transitional periods, the strategy cannot rely on subsidies, tariffs or designations to protect the existing dominant producers, because that approach would raise costs for downstream users in both the public and private sectors.

In the longer term, steel production will also have to transition gradually to greener sources of energy, both to sustain exports and to address the climate crisis directly. The main areas for change are increased recycling of steel; greater use of renewable electricity; and increasing the value added in steel-based exports.

Finally, any sustainable solution will require substantial restructuring of crude steel production, in terms of the nature and location of production, ownership and technology. The closure of Newcastle reflected this underlying imperative, reflecting the over-capacity that had emerged for domestic producers.

To be socially desirable and economically and politically sustainable, reconstruction of crude steel production requires a just transition so that the burden of change does not fall on working people and their communities. Ideally, the production of more competitive crude steel will ultimately boost national employment and incomes, providing workers with a greater range of opportunities in the long run. It is nonetheless critical to ensure resourcing and capacity for measures to minimise the costs to vulnerable workers and communities in the short run.

3. The challenge

3.1 The crisis in crude steel production

Steel-based manufacturing remains a pillar of South African industry. Basic steel products plus machinery and equipment, including automotives, contribute 2.4% of employment, 3.4% of the GDP and 22% of exports, mostly from auto and machinery. Crude steel alone is far smaller. It contributes 0.1% of total employment and 0.5% of the GDP. It provides 6% of exports, but most is ferro alloys rather than basic steel.

Steel-based production has historically been a driving force in economic development and growth in South Africa. From the 1920s to the early 2000s, crude steel production was state owned and centred on the then-dominant technology of oxygen-blast furnaces. It supported growth in more advanced industries by supplying low-cost, high quality inputs for construction, including in mining, and the manufacture of machinery and basic steel products such as pipes and hardware. South African steel inputs competed with imports thanks to:

- Significant public investment;
- The steel mills' ownership of iron ore mines, enabling them to procure iron ore at the cost of production rather than international prices; and
- Reliable and affordable electricity and rail transport provided by state-owned enterprises.

Over the past 20 years, a combination of technological and economic developments has undermined the historic model of competitive crude steel production in South Africa. Some of these result from deep-seated international and domestic trends. Critical factors include the following.

Over the long run, the steel industry worldwide has seen demand stagnate due to the falling steel intensity of production combined with slowing global growth. In South Africa, demand for crude steel is currently at levels last seen in the mid-1970s.

In this context, soaring costs at the dominant steel producer, AMSA, set off the current crisis. In constant rand (deflated with CPI), AMSA's costs per tonne

climbed 74% from 2007 to 2024, with a 30% jump from 2019 to 2024 alone. As a result, the company faced growing competition - for flat steel, from imports; for long steel, from local mini mills that emerged in the 2010s using electric arc and induction furnaces with scrap metal as the main input. As a result, AMSA's market share dropped precipitously, from over 70% in 2006 to 40% in 2023, while its output fell 60%. It closed down its long steel plant at Newcastle as capacity utilisation fell to 50%. For flat steel, it is at 60%.

These challenges have profoundly affected AMSA's long-term sustainability. It made losses in seven of the past 10 years. Its market capitalisation dropped from around R20 billion in the late 2000s to R1.2 billion in April 2025. As a result, it has fallen from over 5% of ArcelorMittal's global market capitalisation in the mid-2010s to under 0.5% in 2024.

The surge in AMSA's costs resulted from four main factors.

First, AMSA gradually reduced its capital investment over the past 20 years. Its annual capital investment was around 0.7% of all private fixed investment between 2000 and 2008; it fell to 0.2% from 2018 to 2023. The result was rising operating and maintenance costs and more frequent breakdowns at its oxygen-blast mills and coking coal production.

Second, when iron ore and coal prices spiked in the early 2020s, AMSA's raw material costs rose significantly. The company gave up control of Iscor's iron ore mines in the mid-2000s. From the mid-2020s, it clawed back some of the benefits of cheap local iron ore by signing agreements with small domestic producers. These agreements ensured a discount on world prices, but apparently did not prevent a price increase in line with global trends. Coking coal is an even more important input for AMSA than iron ore, and it has failed to develop a reliable regional supply. As a result, the extraordinary increase in coal prices in 2023 and 2024 contributed substantially to higher production costs.

Third, Eskom and Transnet raised their tariffs and saw significant service disruptions, especially from 2020.

Finally, as AMSA lost market share to more competitive domestic long steel producers and to flat steel imports, its overhead costs per tonne soared. That further inflated its unit costs.

As a result of these trends, AMSA is undergoing substantial restructuring. Ultimately, in order to hold down its production costs, it will have to upgrade its technology as well as finding more reliably affordably input sources, especially for coking coal, iron ore and electricity. If it cannot compete with imports in the long run, it will be difficult to defend continued high tariffs.

3.2 Impacts on steel supply

The long-run decline at AMSA has had divergent impacts on the supply of long and flat steel, which are here discussed separately.

3.2.1 Long steel

Long steel accounts for around two fifths of total steel consumption, by weight, in South Africa, or around 2.2 million tonnes a year. From the 2010s, lower-cost mini mills using electric arc furnaces were able to undercut AMSA in this area. They benefited in part from government efforts to moderate input costs by limiting exports of scrap, their main raw material. From 2025, however, they face new competition from a Chinese complex in Zimbabwe, which has already led to increased long-steel imports.

The majority of mini mills use induction ovens to produce very basic long steel products. Some of these mills then simply export crude steel billets. Two mini-mill companies, and AMSA, have electric arc furnaces, which can produce specialised higher quality steel. Absent new investments, however, the existing electric-arc mills can only meet about half the demand for special steels produced at AMSA's Newcastle plant. As a result, the closure of Newcastle leaves a gap of around 200 000 tonnes, of which 80 000 is needed for auto components.

The shift to mini mills reflects a global trend. Outside of China, the share of electric arc furnaces in steel production increased from 23% in 1982 to 50% in 2022. The main advantage of electric arc compared to oxygen blast furnaces is that they are smaller and consequently both more flexible and less costly to establish. They also

emit much less greenhouse gas emissions.

In South Africa, the emergence of the mini mills has reduced imports of long steel and expanded jobs in crude steel production. In 2024, around 5% of long steel used in South Africa was imported, compared to 30% of flat steel. The mini mills employ over 8000 people. For comparison, AMSA employed 1500 permanent workers at Newcastle and 6300 permanent overall, plus over 3000 contract employees.

While the Newcastle mill was less competitive than the mini mills as a group, and employed far fewer workers, the shift to new producers imposed costs on some stakeholders, whatever the hoped-for benefits in the longer run. These costs affect:

- Downstream manufacturers and construction projects that require special steels. Estimates suggest that upgrading capacity at existing mills in order to replace Newcastle's output will require investments of around R4 billion. The new sources require certification from the foreign machinery and auto brands – the original equipment manufacturers or OEMs – which can take two years. AMSA's electric-arc mill at Vereeniging is already certified, but the mini mills are not.
- AMSA itself has lost further market share and had to write off assets at Newcastle.
- The Newcastle municipal economy will have to develop alternative production clusters or see an outflow of businesses and skilled workers. According to Quantec estimates, the Newcastle mill directly generated around 2.5% of the municipality's formal employment, and 4% of its gross value added. While the municipality has capacity to diversify into other activities, it requires considerable support to identify and invest in new opportunities.
- Government regulation of scrap prices will have to remain in place in some form. In this context, downstream manufacturers of steel-based products have had to sell scrap, a byproduct of their production, to the mini mills at a discount of around 30% on the export price.¹ To the extent that some mini mills export only billets, the process ultimately transfers rents from more advanced manufacturers back to crude steel production. That could offset at least some of the

¹ Almost no metal scrap is produced by informal recyclers, who primarily collect plastic and paper.

benefits of more competitive domestic long steel production.

- In the longer run, expanding mini mill output will likely outrun local scrap supplies. Electric arc furnaces can, however, also use concentrated iron ore in the form of direct reduced iron (DRI). There is only very limited production of DRI in South Africa today, however. Expanding its production would necessitate both significant new investment and access to iron ore at cost-plus prices. If successful, the new production lines would enable production of higher quality steel. Potentially it could also lead to exports of DRI instead of raw iron ore, which would increase local value add to a leading export commodity for South Africa.

Domestic long steel producers also face intensified competition from imports due to the opening of the new Dinson oxygen-blast mill in Zimbabwe. Dinson owns its own iron ore mine and Zimbabwe produces coking coal. Imports from Zimbabwe of semi-finished products used in long steel production began in January 2025, and averaged R14 million a month through August in constant (2025) rand. Before 2025, South Africa did not import semi-finished steel products at all. It imported an average of R8 million a month in other raw steel (ingots, granules, etc.) from 2024 to 2025. These products compete directly with the basic output of some mini mills, although others supply more advanced manufactures. The Zimbabwe plant produced only billets as of mid-2025, but apparently planned to expand into more advanced manufactures over time.

Ultimately, the benefits of more competitive steel for the national economy can only be realised if the mini mills themselves sell long steel to downstream users at cost-plus prices, rather than matching the cost of imports. Otherwise, when international steel prices spike, as they did in the early 2020s, the rents from domestic scrap will end up with the mini mills rather than supporting more advanced and much more jobs-rich downstream manufacturing.

3.2.2 Flat steel

In flat steel, declining competitiveness at AMSA saw an increase in imports, because no other domestic producers can produce flat steel products at the same scale and variety. Imports climbed from under 3% of flat steel use in 2005 to 30% in 2024. In long steel, thanks to the mini mills, the figure is only 5%. Vanderbijlpark

saw capacity utilisation drop from over 85% in the mid-2010s to around 60% in 2023. Pressure from imports will increase in the next few years as a result of slowing growth in China and the new US tariffs.

In the longer run, the new Dinson steel plant in Zimbabwe may begin to produce flat steel in the next few years. The plant will have relatively low costs, since it has comparatively new technology and access to local metallurgical coal and iron ore. It will also presumably face lower tariffs under the AfCFTA.

Efforts to retain production at Vanderbijlpark will require recapitalisation. Rough estimates put the cost at R10 billion.

Table 1: SWOT for the steel value chain

Strengths	Weaknesses
Globally competitive and diverse manufacture of downstream steel-based products, including some kinds of machinery (mostly capital equipment for mining and auto) High quality iron ore and energy, including renewable energy and coal, that have low production costs by international standards Globally competitive production of basic long steel products in mini mills thanks to government efforts to moderate the price of scrap steel, the main input Long history of steel production and downstream manufacturing has built competence and support services, including engineering and skilled production workers (although ageing); OEM certification; export relationships; and good logistics and energy infrastructure compared to other upper middle income countries Government is committed to promoting industrialisation	Crude steel producers mostly charge downstream manufacturers and public infrastructure providers import prices, rather than reflecting South Africa's comparative advantage in cheap iron ore and scrap. As a result, downstream users do not benefit as hoped from South African mineral riches. Production worldwide, and notably in South Africa, has become less steel-intensive while Chinese production in particular has soared. That increases the competitive pressure on domestic producers from imports and limits exports of crude steel. AMSA, a dominant producer protected by tariffs, has seen a rapid increase in production costs over the past 15 years, accompanied by loss of market share (to imports in flat steel and mini mills in long steel) and losses in most of the past 10 years. Its escalating unit costs result from: (1) a 60% fall in production over the past 20 years as its market share fell, without an equivalent fall in overhead costs; (2) reduced capital investment leading to higher production costs and more breakdowns, notably for coking coal production; (3) reliance on outside suppliers of iron ore, raising the cost of a critical input especially when world prices peak; and (5) higher costs and reduced reliability for Eskom and Transnet services. Its position became untenable when iron ore and coal prices spiked from the early 2020s. South Africa does not have domestic sources of coking coal and processing at AMSA has been problematic. Zimbabwe is likely to increase its low-cost steel production substantially in the coming five years. That threatens the survival of AMSA's flat steel plant at Vanderbijlpark unless it becomes more competitive, as well as pressuring the mini mills. Government is under pressure to manage hard trade-offs in the steel value chain, in particular on (a) whether and how to shift rents from mines and crude steel producers to downstream manufactures, and (b) how to allocate the rents from scrap production for long steel.

Opportunities	Threats
Strong raw materials base could support downstream manufacturing growth and reduce the cost of public infrastructure if government measures effectively restore rents to downstream producers. That requires (a) measures to hold down input costs for crude steel, with substantial investment in upgrades at Vanderbijlpark and in the remaining long-steel producers; and (b) measures to ensure domestic manufacturers have access to cost-plus steel products in the required quality. In the longer run, development of DRI and coking coal production for domestic use and possibly export. Develop green energy sources (solar and possibly green hydrogen) to avoid carbon pricing for downstream manufacturers and reduce pressure on national grid Roll-out of the infrastructure programmes presents opportunities for steel-intensive downstream products Expanded regional market access if (a) common standards are developed and enforced, including rules of origin under AfCFTA; (b) an effective marketing strategy is adopted; and (c) financing for capital goods exports is improved.	Continued increase in unit prices for crude steel undermines downstream manufacturing, leading to nationally significant loss of jobs and capacity in auto, machinery, fabrication of other steel products and in construction, and higher costs for public infrastructure. Closure of Newcastle mill leads to increased imports of special steels rather than development and certification of new local capacity. Government is unable to agree on ways to ensure access to low-cost iron ore, coking coal and electricity, undermining the foundations of South African competitiveness in flat steel production and opening the door to competition from new Zimbabwe plants. Government tariffs and designations to support local crude steel production lead to higher prices and consequently slower economic growth and higher costs for infrastructure projects. Newcastle municipality does not have support for a just transition for working communities affected by loss of up to 1400 jobs at AMSA plant, leading to a loss of incomes for working people and political and social contestation US tariffs lead trading partners to dump steel in South Africa. Failure to reduce carbon emissions along the steel value chain contributes to the climate crisis and limits exports in the long run.

4. Strategic approaches

This section outlines the strategic approaches adopted for long and flat steel, and for increasing domestic demand. In each case, it identifies where more specific, programmatic outputs will be required.

4.1 Long steel

The aim going forward is to ensure low-cost, quality production of long steel, with a recovery in production of specialised steels for downstream manufacturing as soon as possible and a long-term shift from scrap to DRI. The disruption to the industry from the closure of the Newcastle mill requires urgent policy shifts in order to secure these outcomes.

Government will finalise specific programmes on the following five transitional issues as soon as possible, drawing on consultation with industry stakeholders and partners across the state.

1. Establishment of programmes to support a more just transition for Newcastle, including repurposing of the existing site if possible. The dtic is working with the municipality and other stakeholders to develop and resource proposals.
2. Addressing the gap in production of the specialised steels formerly provided by the Newcastle plant. Investment to boost capacity at Vereeniging, Scaw and/or other mills to supply special steels is expected to cost about R5 billion and take at least two years to gain certification. The IDC is working on specific options. The dtic will urgently engage with the auto industry to manage the transition. The aims include amendments to the APDP to permit time-limited imports of special steel, and fast-tracking the certification of new domestic specialty steels as they become available.
3. Enabling domestic long-steel producers to meet the challenge of competition from the new Zimbabwean plant without raising tariffs. The response should ensure that the new competition encourages lower prices to domestic users without closing down local producers. In that context, the current pressure from imports means that any changes in the regulation of scrap exports will have to avoid short-term increases in input costs for the mini mills. In addition, government will review ways to moderate the cost of electricity and other inputs over the medium term.
4. Reforming the regulation and taxation of scrap exports to ensure a fair balance of costs between downstream manufacturers of steel products and the producers of long steel. Any decision will have to take into account the trade offs between the original scrap manufacturers and the mini mills. As noted below, these trade offs could be alleviated in part by increased production of DRI.
5. Encouraging growth in domestic production of DRI based on access to iron ore at cost-plus prices. This would both relieve dependence on scrap, making its regulation easier, and enable the production of higher quality steels by the mini mills. It will, however, require substantial investment over the medium to long run as well as access to iron ore at cost-plus prices.

4.2 Flat steel

Government aims to reduce unit costs of domestic flat steel production as the basis for a long-term decline in imports. Policy initiatives will be finalised in the following areas.

1. Ensuring the recapitalisation of Vanderbijlpark and re-start of Saldanha. The cost of recapitalising Vanderbijlpark is estimated, very roughly, at around R10 billion. That is around 20% more than the value of AMSA's fixed assets in 2023, and eight times its market capitalisation.
2. Reduce the cost of key inputs, specifically coking coal, iron ore and electricity. Government would have to ensure competitive (i.e. cost-plus) pricing from iron ore mines; support more efficient production of coking coal either as part of the recapitalisation effort or separately; and explore less expensive electricity options. This will require some concessions from suppliers, especially the iron ore mines and possibly Eskom. Local demand for iron ore is currently around 10% of total production, with the remainder exported. AMSA's total demand for electricity is currently around 0.9% of Eskom's sales.
3. Ensuring that lower unit costs are passed through to downstream manufacturers. Government will have to monitor prices to downstream manufacturers carefully to ensure that new programmes to reduce input costs for flat steel ultimately support manufacturing.
4. Developing a strategy to reduce emissions from flat steel production. This will require significant technological shifts, especially in terms of the energy and type of production technology used, as well as the reliance on scrap.

4.3 Increasing demand

4.3.1 Exports

Export demand for steel will likely be suppressed for the foreseeable future due to the combination of high US tariffs and slow growth in China. These factors mean that on most export markets South African producers will be competing with much larger, lower cost producers. The AfCFTA will provide some advantages, but details must still be finalised.

Government will fast-track engagements to secure open and fair markets under the AfCFTA through tariff phase outs and rules of origin. It will also promote greener steel in order to reduce the impact of the EU's new carbon tax on imports known as CBAM (the Carbon Border Adjustment Mechanism).

4.3.2 Domestic demand

Ideally, domestic demand should be increased through falling prices for crude steel to downstream manufacturers and infrastructure. That would enable downstream users both to expand production more rapidly and to shift away from imports without harming their own competitiveness.

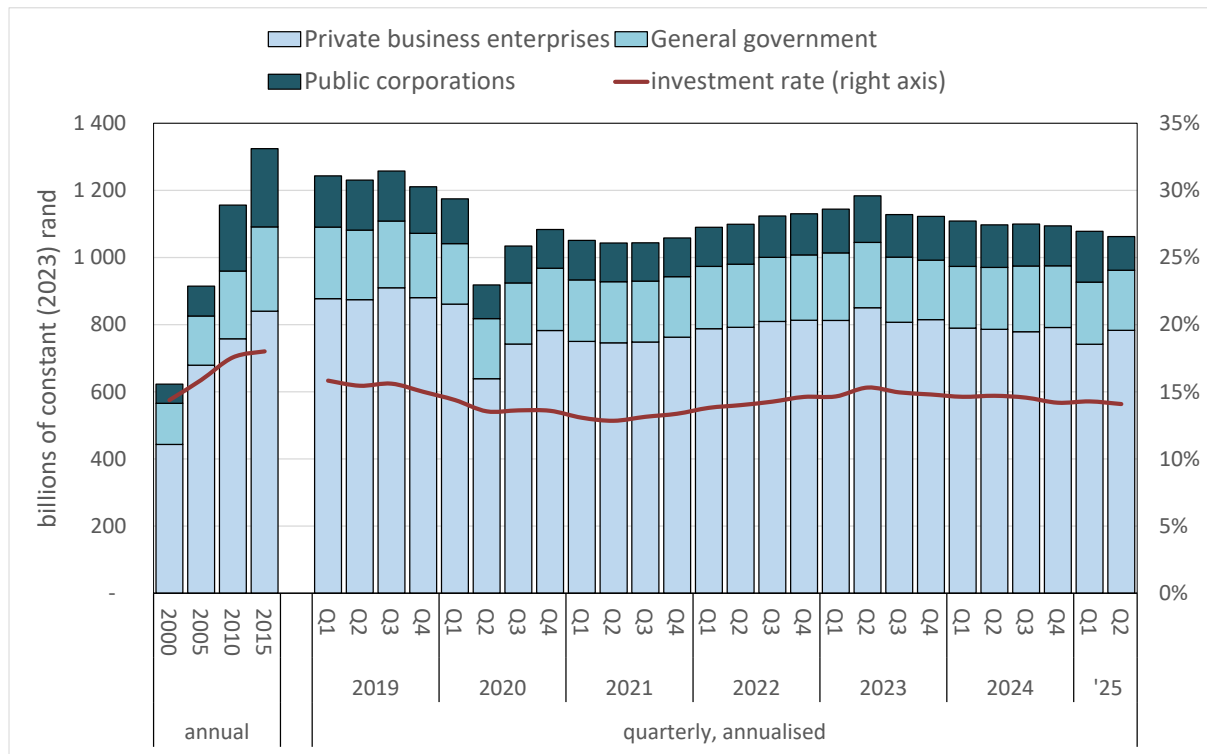
Government will also seek to accelerate growth in the production of steel manufactures. A 5% expansion in downstream manufacturing would generate around 20 000 formal jobs if labour intensity remains unchanged. Government can encourage this aim through:

1. Regulation of crude steel prices to ensure more of the rents go to downstream manufacturing;
2. Targeted improvements in infrastructure (especially electricity and freight transport) in terms of reliability and price;
3. Greater support for exports, including improved export financing arrangements for capital goods and development of a marketing strategy for steel-based products and capital goods; and
4. Incentives for higher investment in steel-based production.

Finally, the system of designations aims to maximise local inputs into the infrastructure build programme. The dtic will continue to engage to ensure they are utilised as far as possible. Still, designations will not ensure significantly increased steel use unless domestic production costs decline. Under the new procurement act, government agencies can reject local-content requirements if domestic producers cannot compete on price and quality. Moreover, designations do not apply to private suppliers unless they are contracted to a government entity.

In any case, it will take some time before the proposed increase in infrastructure investment occurs, particularly given fiscal constraints. Public investment fell 2.6% in 2024, putting it 11% below pre-pandemic levels in 2019 and 35% below its peak in 2015. As the following graph shows, it essentially remained flat through mid-2025.

Figure 1: Investment by type of investor in constant 2025 rand and the investment rate (a), every five years from 2000 to 2015 and quarterly from 2020 to the second quarter of 2025



Source: TIPS. Real Economy Bulletin. Second Quarter 2025. Page 14. Downloaded from www.tips.org.za in October 2025.

5. Conclusion

Government is committed to ensuring a more dynamic, sustainable and competitive crude steel industry that can promote growth in downstream industries and reduce the costs of the infrastructure build programme. To that end, it will engage with stakeholders and experts to develop policies and programmes that achieve the following.

- In long steel, secure the most efficient and fairest possible transition around the closure of the Newcastle plant for both the community and for customers, while ensuring the industry becomes increasingly sophisticated and competitive.
- In flat steel, reduce production costs in order to support competitiveness, while channelling more of the benefits of local crude steel production to downstream manufacturers and infrastructure.
- Promoting demand for crude steel, above all by supporting growth in downstream production including exports while working to improve the implementation of designations.
- Encouraging adaptation of the technologies needed to reduce emissions as the

basis for long-run sustainability and competitiveness.

In the short run, these measures will require tough trade-offs, on the one hand between the suppliers of iron ore, coking coal and electricity and the crude steel producers; on the other, between the crude steel refineries and downstream manufacturers. Ultimately, these trade-offs will have to be managed in ways that ensure the achievement of the desired end state – that is, a more dynamic, competitive and low-emissions steel value chain, with rapid growth especially in the production of basic steel products and capital equipment.