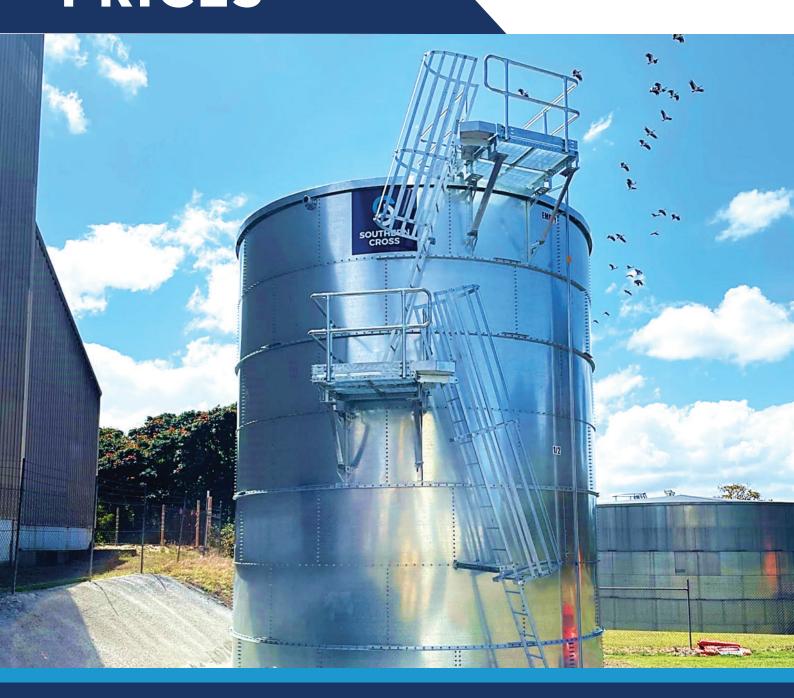
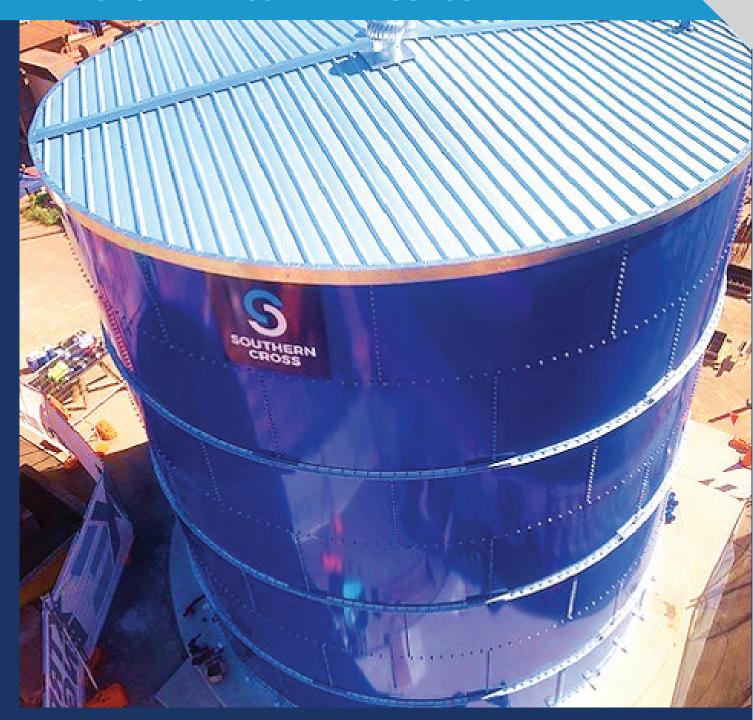


STEEL PRICES



THE STEEL PRICE RISE AND WHAT IT MEANS FOR THE AUSTRALIAN CONSUMER

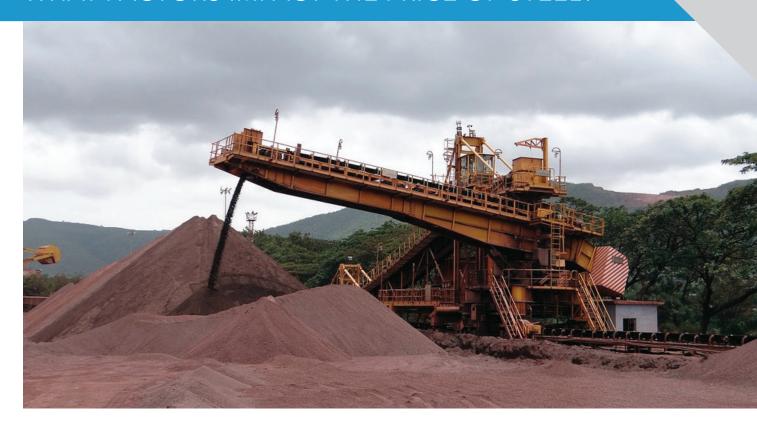


If you have tried to buy anything made of steel, or containing steel projects lately, you may have read or been told about a steel price rise.

But what is a steel price rise? And what causes it?

Many of these price rises are simply stated and not explained, which can lead to confusion and consumer dissatisfaction. This report seeks to clear up some of the reasons behind an increase in the price of steel, and what it means for Australian consumers.

WHAT FACTORS IMPACT THE PRICE OF STEEL?



How steel is made

Iron ore itself, a mixture of iron and oxygen, is not very strong, however iron with a low concentration of carbon gives steel its strength and malleability.

Steel is produced from iron ore by creating molten steel from iron oxides in a blast furnace. Blast furnaces first appeared in the 14th century, and despite obvious improvements in production rates and equipment, the same basic processes take place inside the furnace, using coking coal, iron ore and limestone to produce steel.¹

The coal is used to create coke, which then is used to add this carbon to the iron, giving the steel its strength. The limestone - or flux - is used to remove any other impurities, helping reduce the iron to a more basic elemental state.

Iron has been a key part of human progression since its discovery, and this is truer today than it ever has been. Developing and developed nations alike have a reliance on the material to build strong and durable structures in a timely and affordable manner.

Increase in the price of Iron Ore

Iron ore, the key ingredient in steel production, has been increasing, in terms of both price and demand, at unpreceded levels since the beginning of the pandemic.² Much of this has been due to increased demand for the product thanks to government stimulus in countries such as China and Australia^{3,4}, as well as many steel mills being forced to close during the pandemic.²

Iron ore imports in china alone increased by more than 150% in 2020, and haven't slowed down

in 2021 ⁵, as then nation seeks to continue growing and developing at a rapid rate.

In May of 2020, iron ore was priced at \$83.50 USD per tonne, and by May 2021, this figure had skyrocketed to a record \$237 USD per tonne.⁶ Miraculously a report from the China Iron and Steel Association sees the current demand of steel not peaking until 2023⁵, as scrap steel recycling in China scrambles to catch up.⁷

Despite political disagreements, and looming threats of trade wars, Australian Iron Ore still remains vital to China's steel production. Currently 60% of China's iron ore supply comes from Australia, and China's other major supplier 8, Brazil, has been struggling with the coronavirus pandemic as well as some significant high profile mining accidents.^{8,9}

WHAT FACTORS IMPACT THE PRICE OF STEEL?



Increase in the price of Coking Coal

Coking coal, or metallurgical coal, is an important ingredient in current steel production, and despite moves from some big names in the iron and steel industries, such as Andrew "Twiggy" Forrest, to move toward the more sustainable and less coal reliant Green Steel, which utilises hydrogen rather than carbon¹⁰, coal looks to be an important part of steel production for years to come.

In part thanks to coal developing a bad name around the world reducing willingness in some countries to mine it ¹¹, and in part due to the rapid growth of India and China, coking coal is also becoming more expensive and in higher demand.

Despite a slump at the beginning of the pandemic, the coal price surged in the second half of 2020¹¹, almost doubling from September to December, and it has since almost doubled again, meaning the current price of coal is almost four times that of what it was twelve months ago.¹²

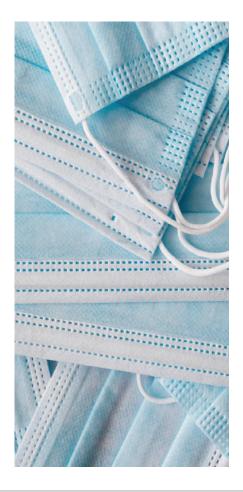
Impacts of the Coronavirus Pandemic

As with almost everything else in our day to day lives, the steel manufacturing industry has been heavily impacted by the Covid-19 Coronavirus Pandemic.

Brazil has famously been one of the worst hit nations throughout the Coronavirus pandemic, and as they are the second largest iron ore producer in the world¹³, this has understandably had a significant impact on worldwide supply, placing more stress on Australian iron ore exports.

Transport and shipping has also taken a hit during the pandemic, as the steel industry, like many others, has struggled to move iron around nationally and internationally as effectively and efficiently as was possible prior to the pandemic. Not only do these transport and logistics issues result in delays in steel and iron delivery, increasing lead times, it also lends to increasing the price of iron ore and steel production.

Many mining and manufacturing workers also in the past travelled both interstate and overseas for work¹⁴, something that has been heavily impacted by the curtailing of international travel, particularly into Australia, and out of Brazil.



WHAT ELSE IS HAVING AN EFFECT?

Government incentives and new building costs

As the pandemic spread across the globe, many countries' economies were impacted or shut down, and in order to kick-start them, governments looked to stimulate their economies with incentives in construction industries both for businesses and residents.³

In Australia, and many other places, this caused a national construction boom, thanks to the combination of these government stimuli and record low interest rates. New house starts in Australia are currently at the highest level in over fifty years.¹⁴

This has caused an increase in demand for not just steel, building materials across the board, from concrete, to timber, to laminated beams, meaning that the shortage of steel could not be covered by other materials to alleviate pressure of demand.⁴

With borders closed, necessary workers can't be shipped in from interstate¹⁴, stalling both residential and commercial infrastructure projects alike. This is resulting in a combination of higher lead times as well as higher costs.

In a recent report by News.com. au¹⁴, 93% of Master Builders Association members reported steel delays. Even the prices of freight were being increased to meet demand.¹⁵

Many contracts were already in place, meaning that price increases weren't able to be softened across projects and customers¹⁴, and the full brunt was being seen in new builds and projects.

Exsisting and planned infrastructure projects

Across Australia, existing infrastructure plans by state and federal governments have also been placing high pressures on the supply of steel products.⁴

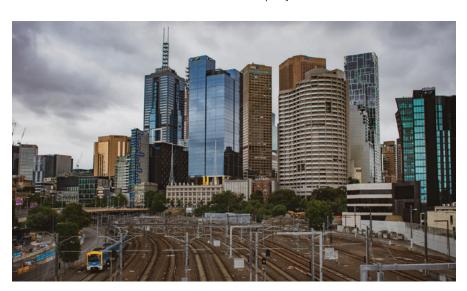
The Inland Rail project, started by the Gillard Government, and continued by the Abbott/Turnbull Governments, is a 1727km railway set to connect Brisbane and Melbourne by 2026, with the purpose of bypassing the busy Sydney metro area, and allowing for the use of double stacked freight trains.¹⁶

In Melbourne the Metro Tunnel (previously known as the Melbourne Metro Rail Project) is an in-progress project involving the construction of twin nine kilometre underground rail tunnels between South Kensington and South Yarra, with five new underground stations set to be installed. This project is ongoing and expected to be completed by 2026.¹⁷

Metronet is a long term project regarding extensions to Perth's transport network, aiming to connect more of the city, and reduce the need to transit via the CBD to get between locations. The Forrestfield-Airport link is currently underway, with the new Ellenbrook like set to commence construction in 2021. The Metronet plan also includes construction of 246 new railcars.¹⁸

In New South Wales, the Sydney Metro project, aiming to make room for 100 000 extra customers across Sydney, is also ongoing, with a project timeline projected until at least 2024.¹⁹

All of these rail projects require vast amounts of steel, and not just for the tracks, but also for the construction of platforms, overhead power lines, and modification to existing facilities, and for any new trains or railcars that may need to be built for the projects.⁴



WHAT ELSE IS HAVING AN EFFECT?



What BlueScope had to say about it?

Understandably, as one of the largest steel suppliers and manufacturers in Australia, BlueScope Steel has felt the brunt of the increases in iron ore and coking coal prices, as well as the squeeze placed on steel suppliers due to unprecedented levels of demand.

Despite having produced a record volume of steel for the Australian market in the 20/21 Financial Year²⁰, BlueScope was

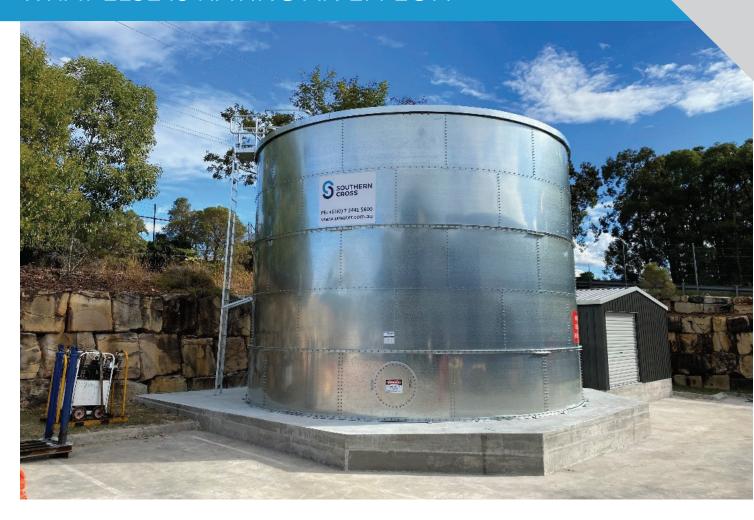
still unable to meet the increased demand in the market, even after commissioning extra capacity, and increasing production levels.

This lack of supply has resulted in longer lead times, as BlueScope tries to fairly service the market with as adequate supply of Australian steel as possible.

To try and reduce lead times, BlueScope has fast tracked new processing capability, and utilised sea freight for domestic supply, in addition to current rail and road transport arrangements. However, as demand for steel continues to surge as companies try to manage their lead times and backlog of projects, BlueScope is still unable to keep up with market demand, forcing rations on steel supply.

This has also resulted in a significant increase in the price of steel.

WHAT ELSE IS HAVING AN EFFECT?



Who is this impacting?

A better question might be who it isn't impacting. Steel is such a major part of modern life, that even without new buildings and infrastructure, there would still be significant demand.

Hundreds of every day applications rely on steel, from water tanks and sheds, to roofing and roller doors, to even smaller things like brackets, windows and even car parts.

Many of these industries have been forced to increase their prices to cover the costs with obtaining steel to manufacture their products^{3,15,21,22}, and those that haven't yet will likely be forced to in the not so distant future.

The suppliers of these products are facing similar issues to that of steel suppliers. There has been significant demand for the building of new sheds, water tanks and other home improvements that require the use of BlueScope steel.

For suppliers such as Southern Cross Water Tanks, who refuse to compromise on quality, and use only Australian made BlueScope steel, there has been no choice but to implement pricing changes to cover the materials costs required to continue producing industry leading Australian products.

Not all impacts are negative, however, and iron ore and steel companies are recording record profits, and the Australian iron ore industry is booming. From a 70 billion dollar industry in 2015, treasury has predicted the iron ore industry in Australia will top 136 billion dollars this financial year.

REFERENCES

- 21. A STEEL PRICE RISE IS COMING RANBUILD [INTERNET]. RANBUILD.
 2021 [CITED 2 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.RAN-BUILD.COM.AU/NEWS/LATEST/STEEL-PRICE-RISE-IS-COMING/
- 10. ALLEN J, HONEYLANDS T. 'GREEN STEEL' IS HAILED AS THE NEXT BIG THING IN AUSTRALIAN INDUSTRY. HERE'S WHAT THE HYPE IS ALL ABOUT [INTERNET]. THE CONVERSATION. 2021 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://THECONVERSATION.COM/GREEN-STEEL-IS-HAILED-AS-THE-NEXT-BIG-THING-IN-AUSTRALIAN-INDUSTRY-HERES-WHAT-THE-HYPE-IS-ALL-ABOUT-160282
- 19. AUSTRALIA'S BIGGEST PUBLIC TRANSPORT PROJECT I SYDNEY METRO [INTERNET]. SYDNEYMETRO.INFO. 2021 [CITED 6 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.SYDNEYMETRO.INFO/
- 15. BLUESCOPE STEEL RAISING PRICES AGAIN WITH ROLL FORMERS FOLLOWING SUIT. I STEEL SHEDS IN AUSTRALIA [INTERNET]. STEEL SHEDS IN AUSTRALIA. 2021 [CITED 3 AUGUST 2021]. AVAILABLE FROM: HTTPS://SHEDBLOG.COM.AU/BLUESCOPE-STEEL-RAISING-PRICES-AGAIN-WITH-ROLL-FORMERS-FOLLOWING-SUIT/
- 9. CHAU D. AUSSIE ECONOMY AND MINERS TO PROFIT FROM BRAZIL'S COVID-19 OUTBREAK [INTERNET]. ABC.NET.AU. 2020 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.ABC.NET.AU/NEWS/2020-06-08/ECONOMY-MINERS-BENEFIT-VALE-CORONAVIRUS-IRON-ORE/12332164
- 12. COAL I 2008-2021 DATA [INTERNET]. TRADINGECONOMICS.COM. 2021 [CITED 6 AUGUST 2021]. AVAILABLE FROM: HTTPS://TRADINGECONOMICS.COM/COMMODITY/COAL
- 20. DYER G. BLUESCOPE FLOURISHING ON STEEL DEMAND SHARECAFE [INTERNET]. SHARECAFE. 2021 [CITED 3 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.SHARECAFE.COM.AU/2021/04/27/BLUESCOPE-FLOURISH-ING-ON-STEEL-DEMAND/
- 13. GARSIDE M. LARGEST PRODUCER OF IRON ORE IN THE WORLD 2020 | STATISTA [INTERNET]. STATISTA. 2021 [CITED 6 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.STATISTA.COM/STATISTICS/267380/ IRON-ORE-MINE-PRODUCTION-BY-COUNTRY/#:~:TEXT=AUSTRALIA%20 AND%20BRAZIL%20ARE%20AMONG,TONS%2C%20RESPECTIVELY%2C%20 IN%202020.
- 7. GLOBAL TIMES. AUSTRALIA NEEDS TO FIND NEW IRON ORE EXPORT MARKETS. [INTERNET]. 2021 [CITED 2 AUGUST 2021];. AVAILABLE FROM: HTTPS://WWW.GLOBALTIMES.CN/PAGE/202106/1225717.SHTML
- 8. HALL M. HOW CHINA IS MOVING BEYOND AUSTRALIA FOR ITS IRON ORE HUNGER [INTERNET]. MINING-TECHNOLOGY.COM. 2021 [CITED 2 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.MINING-TECHNOLOGY. COM/FEATURES/HOW-CHINA-IS-MOVING-BEYOND-AUSTRALIA-FOR-ITS-IRON-ORE-HUNGER/
- 16. HOME INLAND RAIL [INTERNET]. INLAND RAIL. 2021 [CITED 5 AUGUST 2021]. AVAILABLE FROM: HTTPS://INLANDRAIL.ARTC.COM.AU/
- 17. HOME | METRO TUNNEL [INTERNET]. METROTUNNEL.VIC.GOV.AU. 2021 [CITED 6 AUGUST 2021]. AVAILABLE FROM: HTTPS://METROTUNNEL.VIC.GOV.AU/
- IRON ORE I TODAY'S SPOT PRICE & CHARTS MARKET INDEX [INTERNET].
 MARKETINDEX.COM.AU. 2021 [CITED 3 AUGUST 2021]. AVAILABLE FROM:
 HTTPS://WWW.MARKETINDEX.COM.AU/IRON-ORE

- 14. LE MAY R. TRADIES AND SUPPLIES SHORTAGES DRIVE UP PRICES,
 MASSIVELY PUSH OUT WAIT TIMES FOR BUILDING WORK [INTERNET].
 NEWS.COM.AU. 2021 [CITED 2 AUGUST 2021]. AVAILABLE FROM: HTTPS://
 WWW.NEWS.COM.AU/FINANCE/REAL-ESTATE/TRADIES-AND-SUPPLIESSHORTAGES-DRIVE-UP-PRICES-MASSIVELY-PUSH-OUT-WAIT-TIMES-FORBUILDING-WORK/NEWS-STORY/4C35F8C257290D18R88FER995936AAF1
- 18. METRONET > HOME [INTERNET]. METRONET.WA.GOV.AU. 2021 [CITED 6 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.METRONET.WA.GOV.
- 4. MURRAY D. TIMBER, CONCRETE AND STEEL MORE EXPENSIVE AS DEMAND SURGES [INTERNET]. THE FIFTH ESTATE. 2021 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://THEFIFTHESTATE.COM.AU/INNOVA-TION/MATERIALS/TIMBER-CONCRETE-AND-STEEL-MORE-EXPENSIVE-ASDEMAND-SURGES/
- 1. STEEL PRODUCTION AMERICAN IRON AND STEEL INSTITUTE [INTERNET]. AMERICAN IRON AND STEEL INSTITUTE. 2020 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.STEEL.ORG/STEEL-TECHNOLOGY/STEEL-PRODUCTION/
- 3. THE RISING PRICE OF STEEL [INTERNET]. WIDE SPAN SHEDS. 2021 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.SHEDS.COM. AU/NEWS/THE-RISING-PRICE-OF-STEEL/
- 22. THE YEAR OF PRICE RISES [INTERNET]. THE SHED COMPANY. 2021 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.THESHEDCOMPANY.COM.AU/RESOURCES/STEEL-PRICE-RISE/
- 2. THIS IS WHY US STEEL PRICES KEEP INCREASING IN 2021 MADEWELL CONCRETE PRODUCTS [INTERNET]. MADEWELL CONCRETE PRODUCTS. 2021 [CITED 3 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW. MADEWELLCONCRETEPRODUCTS.COM/BLOG/WHATS-CAUSING-STEEL-PRICE-INCREASES-IN2021-IN-USA
- 11. TREADGOLD T. IT'S NOT SUPPOSED TO BE HAPPENING, BUT COAL PRICES ARE RISING [INTERNET]. FORBES. 2021 [CITED 4 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.FORBES.COM/SITES/TIMTREAD-GOLD/2020/10/08/ITS-NOT-SUPPOSED-TO-BE-HAPPENING-BUT-COAL-PRICES-ARE-RISING/25H=425FC7496FCF
- 6. TURNER-COHEN A. AUSTRALIAN IRON ORE PRICE UP DESPITE CHINA'S MOVE TO SCRAP IMPORTS [INTERNET]. NEWS.COM.AU. 2021 [CITED 2 AUGUST 2021]. AVAILABLE FROM: HTTPS://WWW.NEWS.COM.AU/FINANCE/MARKETS/WORLD-MARKETS/AUSTRALIAN-IRON-ORE-PRICE-UP-DESPITE-CHINAS-MOVE-TO-SCRAP-IMPORTS/NEWS-STORY/ABD882BB2DC91620F9CF0A8BF74D8B58
- 5. YUMAE S, ONISHI T. CHINA STEEL IMPORTS SURGE 150% IN 2020 ON ECONOMIC STIMULUS BOOST [INTERNET]. NIKKEI ASIA. 2021 [CITED 2 AUGUST 2021]. AVAILABLE FROM: HTTPS://ASIA.NIKKEI.COM/ECONOMY/TRADE/CHINA-STEEL-IMPORTS-SURGE-150-IN-2020-ON-ECONOMIC-STIMULUS-BOOST



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