

A full-page photograph of a man in his 40s or 50s with a beard, wearing a white hard hat, safety glasses, an orange high-visibility jacket with reflective stripes, blue jeans, and black work boots. He is standing in the center of a long, narrow industrial tunnel. On both sides of the tunnel are metal railings and structural supports. The floor is concrete. In the background, a red fire extinguisher is visible on the left wall. The lighting is from overhead industrial lamps.

# NEWSLETTER

**TIER 1 MINING & DEVELOPMENT**

November 29, 2021

## CHAMPION IRON NEWSLETTER

Since our August 3, 2021 newsletter, Champion Iron Limited ("Champion" or the "Company") reported robust production and financial results for the quarter ended September 30, 2021. Champion also announced that its Phase II expansion project, expected to double the nameplate capacity of the Bloom Lake mine, had completed several critical construction work programs enabling the Company to evaluate a potential accelerated completion for the project currently scheduled for mid-2022. In addition to the ongoing feasibility study on the Kamistatusset iron ore project (the "Kami project") located a few kilometres south-east of Bloom Lake, Champion initiated an additional study, following laboratory test work, to evaluate the processing and infrastructure required for the commercial production of a 69%+ Fe Direct Reduction ("DR") pellet feed product.

Benefiting from a robust balance sheet, Champion recently continued to deploy its capital return strategy by redeeming the remaining \$125M Quebec Iron Ore preferred shares held by Caisse de dépôt et placement du Québec. With \$182.9M in net cash<sup>1</sup>, including working capital, as at September 30, 2021, pursuing capital return strategies and other organic growth opportunities is now facilitated with the preferred shares fully redeemed, lowering the Company's cost of capital.

### A STRUCTURAL SHIFT ON THE HORIZON – CHAMPION'S PRODUCT AS A POTENTIAL SOLUTION

With the steel sector responsible for approximately 8% of global carbon emissions<sup>2</sup>, recent statements by global leaders and announcements at global symposiums addressing elevated emissions embedded in steel production highlight a structural shift in the industry towards reducing emissions.

#### EUROPEAN COMMISSION – JULY 15, 2021

The commission presented plans for the world's first carbon border tax, which is expected to impact imports of carbon-intensive products including raw materials. The proposed program is designed to shield imports of products with heavy embedded emissions<sup>3</sup>.

#### Bill 232 – October 31, 2021

The USA announced it would drop section 232 duties on steel which were imposed by the Trump administration. While the news alone was somewhat immaterial for global trade flows of steel, the announcement also indicated that the USA/EU will negotiate the world's first carbon-based arrangement by 2024 to address the sector's carbon intensity and work on restricting access to their markets for "dirty steel"<sup>4</sup>.

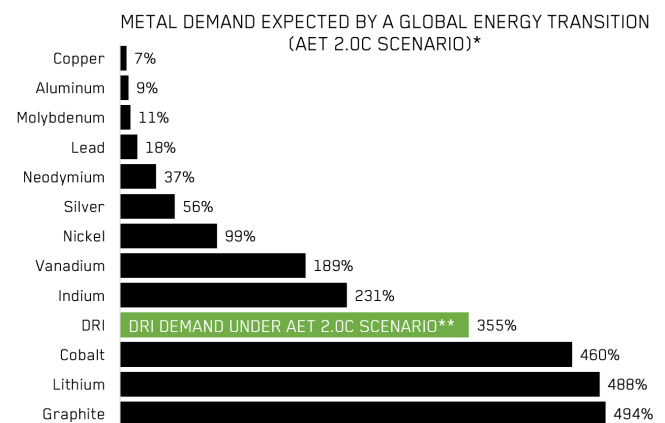
#### COP26 – October 31 to November 12, 2021

The summit brought global leaders together to accelerate actions towards achieving the goals set by the Paris Agreement in 2015 and the UN Framework Convention on Climate Change. One of the main goals of the summit was for countries to come forward with ambitious reduction targets to reach global net zero emissions by 2050 and maintain the 1.5°C global warming target.

Presenting at the event was Agora Energiewende ("Agora"), a recognized group developing strategies for the transformation of industries across value-creation chains. The outcome of their study on the required shift in the steel industry at the summit, concluded that the 2020's will be a crucial timeframe for the steel industry to transition towards supporting such targets. The report highlights the need to address 70% of existing coal-based blast furnaces ("BF") worldwide which are expected to reach their end of operating life by 2030<sup>5</sup>.

Agora outlines the crucial industry transition required in the next decade from BF and Basic Oxygen Furnace ("BoF"), which produce steel with iron ore and coal products as primary feedstock, towards direct reduced iron ("DRI") and electric arc furnaces ("EAF"), which produce steel from scrap material and DRI as primary feedstock. Agora outlined that this transition in the steelmaking route would be the main feasible method to reduce emissions in the industry, as the technology is already being deployed, while alternatives such as coal-based assets equipped with carbon capture and storage ("CCS") technologies may not be a viable solution to reach the reduction targets. The ripple effect of a transition from BF/BOF to DRI/EAF in steelmaking would increase DRI demand, which Agora estimated would rise to approximately 390 million tonnes ("Mt") by 2030<sup>6</sup>.

Accordingly, and considering the minerals for climate action study published by the World Bank Organisation in 2020<sup>7</sup>, metal demand from a global energy transition by 2050 would result in DRI demand ranking favourably compared to many battery metals.



Source: Champion Iron Limited, \*The World Bank Organisation; \*\* Wood Mackenzie data

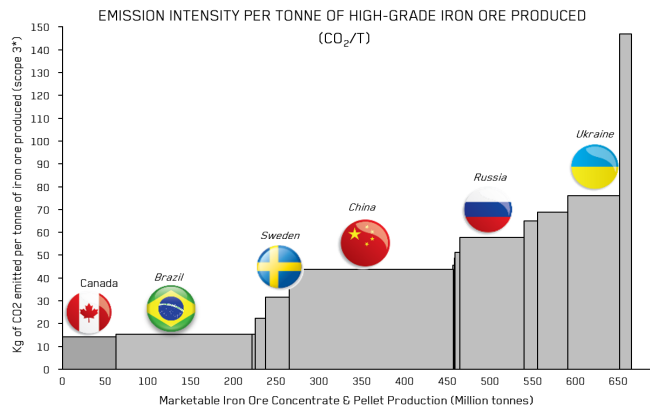
### CHAMPION'S PRODUCTS AS A SOLUTION

While Champion's high-grade concentrate already contributes significantly to reduce emissions by nearly 10% compared to the use of low-grade iron ore in the BF/BOF steel making route<sup>8</sup>, our Company has also commercially proven its ability to produce a 67.5% Fe DR quality concentrate, which can be used as feedstock for DRI/EAF. Additionally, the ongoing study to produce a 69% Fe direct reduction pellet feed would further position our Company to engage with DRI/EAF based steel producers and provide the ability for BF/BOF steel producer to reduce their emissions. Our Company views such high-grade iron ore products as a



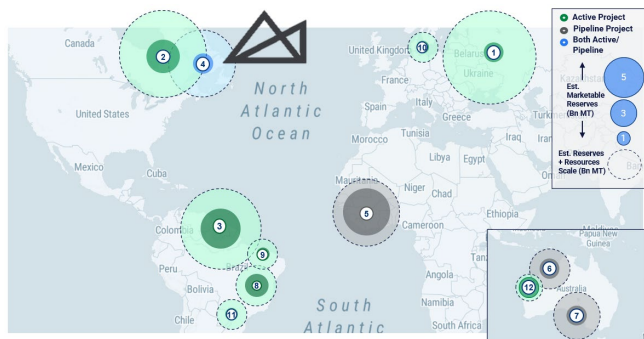
solution to reduce emissions for steel makers in light of the required shift in the steelmaking routes outlined by Agora at COP26.

In addition to its high-quality products, Champion's Bloom Lake mine benefits from access to renewable hydroelectric power in the Labrador Trough, providing the region with one of the lowest carbon emission intensities required to produce high-grade iron ore products.



Source: Champion Iron Limited, Wood Mackenzie data

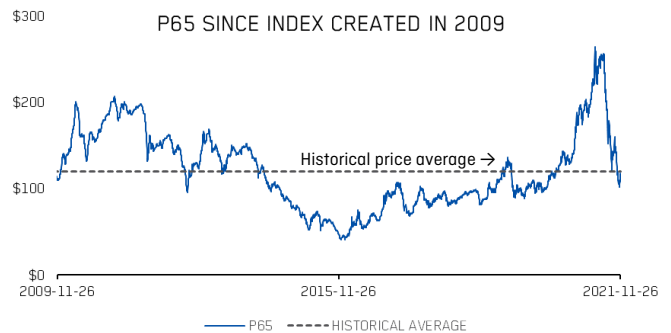
In light of these dynamics and our competitive product positioning, we believe Champion is uniquely positioned to respond to the expected increase in demand for DRI in the years ahead. Following a series of acquisitions in the region, Champion now controls one of the largest known resources within high-grade producing regions globally.



Source: Champion Iron Limited, Wood Mackenzie data

## RECENT IRON ORE PRICE VOLATILITY

Since our previous newsletter, iron ore prices have experienced tremendous volatility with prices correcting below historical averages. The Platts P65 index, which was created in 2009, most recently traded 6% below its historical average of US\$120/t<sup>9</sup> (unadjusted for inflation). Arguably, historical prices are a good gauge of the prices required to motivate supply. Accordingly, some iron ore producers disclosed that select marginal cost production may be shut down, given the challenging price environment<sup>10</sup>. While Champion believes its premium products are well positioned to benefit from the expected transition in the steel industry, current prices continue to offer positive operating margins when compared to our previously released operating costs.



Source: Champion Iron Limited, Platts data, Bloomberg data

**Recent iron ore price volatility can likely be attributed to several factors including<sup>11</sup>:**

- The ongoing emission reduction mandate in China, leading to a steel output reduction target year on year in 2021, and emission controls ahead of the February 2022 Olympics
- An energy crunch in China due to thermal coal and Liquefied Natural Gas ("LNG") shortages, resulting in curtailment of power intensive industries such as steel
- Concerns relating to one of China's largest real estate developers, Evergrande, and its ability to service debt

These factors likely contributed to China's recent decline in steel output. Despite the dynamics focused on China, the world ex-China continues to demonstrate a robust recovery in steel output in the recent quarter ended September 30, 2021, posting a 12.6% increase<sup>12</sup> in output compared to the same prior year period. This ex-China growth continued in October 2021, with a 6.5% year on year increase with particular strength in select developed economies such as the USA with a 21% year on year growth<sup>13</sup>. The pace in ex-China growth ranks as one of the fastest in recent decades. As highlighted in previous Champion newsletters, robust steel output in the world ex-China is supportive of demand for high-quality iron ore products given the typical higher emissions standards ex-China.

Focusing on factors impacting the steel industry, some could contribute to stabilizing steel output and the related demand for iron ore products. While China's recent focus was to reduce steel output year on year in 2021, in order to control emissions, recent data suggests that the 2021 output is already tracking below 2020 levels, with output for January to October standing at 877 Mt, a decline of approximately 0.7% year on year<sup>14</sup>. As such, a recent Bloomberg article highlighted that China could substantially increase output in November and December while maintaining their zero growth objective<sup>15</sup>. Additionally, it is worth highlighting that China's February 2022 Olympics are less than three months away, after which there could be a lifting of restrictions recently imposed on the steel industry<sup>16</sup>.

At the forefront of the declining Chinese steel output is the energy crisis in China, in which over 20 provinces representing more than 66% of the country's GDP announced some form of power cuts in September<sup>17</sup>. With a heavy reliance on thermal coal as an energy source, representing roughly 61% of China's energy supply<sup>18</sup>, their thermal coal prices surged to record highs in recent

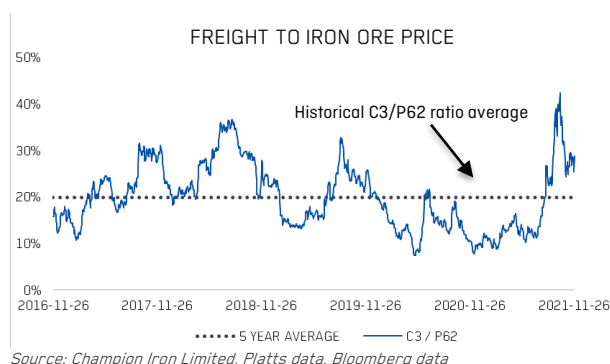
months, following supply issues<sup>19</sup>. Most recently, signals point to an easing in China's energy crunch, with coal prices declining by approximately 50%<sup>20</sup> from recent peaks.

China's steel industry was also impacted by negative sentiments related to its real estate property sector. Following years of uninterrupted expansion in the property sector, China's Evergrande Group was recently in the spotlight with risks of defaults with over US\$300 billion in liabilities, fueling concerns about access to capital for other property developers in the country<sup>21</sup>. More recently, China's central bank offered reassurance in mid-October that it was of the view that the developers' struggles and access to capital were "controllable" and unlikely to spread<sup>22</sup>. Top economic officials have called for measures to stabilize the property market slowdown so that a reasonable amount of infrastructure construction can be brought forward as the nation seeks to boost domestic demand<sup>23</sup>.

## EASING FREIGHT VOLATILITY

Shipping delays have impacted the global supply chain with several commentators describing the situation as one of history's biggest traffic jams<sup>24</sup>. The issue led to a USA Presidential order in mid-October to force certain ports in the country to extend operating hours<sup>25</sup>. Such disruptions impacted the dry bulk C3 freight index, used to price our product's freight, in recent weeks. Accordingly, in October, the Capesize freight rates for the key C3 Brazil-China route had levels unseen since 2009<sup>26</sup>. Also contributing to the freight index increase was the fact that Brazil's iron ore production reached its seasonal peak in September. Furthermore, the spike in coal exports, due to the energy deficit described above, also increased demand for Capesize vessels<sup>27</sup>.

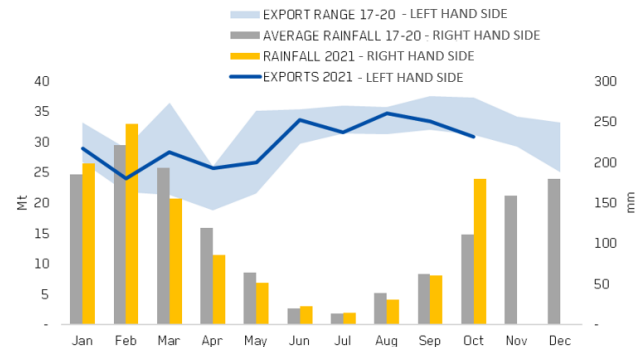
With the global freight trade improving and Brazilian customs data reporting iron ore exports in October at their lowest level since May, freight indices have declined by approximately 44%<sup>28</sup> from recent peaks. Accordingly, recent freight index prices have now retreated to levels in line with its historical relationship with iron ore prices, where the historical ratio of the C3 Freight index to the P62 iron ore index averaged approximately 20% over time.



Also noteworthy is Brazil's long history of production seasonality primarily due to its rain season. Most recently, rainfalls in October 2021 were 61%<sup>29</sup> higher than the October average for the previous four years, likely

contributing to the recent fall in Brazilian exports. Such production seasonality may contribute to balancing the global markets, including for high-grade iron ore given Brazil's global dominance as a high-grade iron ore producer.

## BRAZIL IRON ORE EXPORTS AND RAINFALL



Source: Champion Iron Limited, Wood Mackenzie data

While future iron ore demand may be hard to predict, one region with major steelmaking capacity is projected to accelerate steel output in the next decade. The Indian government recently reiterated targets for crude steel capacity of 300 Mt by 2030-31, representing a 140% increase from their recent output<sup>30</sup>.

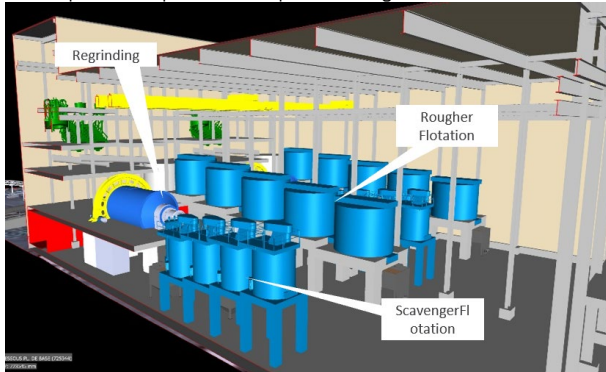
While recent events impacted steel demand and iron ore prices, iron ore supply remains structurally unchanged with no new major project announcements since the release of our previous newsletter. Adding to this lack of new visible iron ore supply is the recent coup d'état in Guinea, where the Simandou project is located, which is widely speculated in the industry as the next major iron ore project. This situation arguably increases development risks for the project, which already faces major hurdles, including the absence of required infrastructure<sup>31</sup>.

## STUDY – 69% FE DR PELLET FEED

In light of the anticipated transition required in the steel industry, our Company continues to adapt its product with a vision to minimize emissions for our customers and maximize our operating margins. Accordingly, on October 27, 2021, Champion announced it had initiated a study to evaluate the required processing and infrastructure to commercially produce a 69% direct reduction pellet feed, which would further enable our Company to engage with DRI-EAF producers.

The anticipated technology and infrastructure required, including mild regrinding and silica flotation stages, are well known in North America, with such processes widely used by other mining projects. The proposed project would require the addition of a simple circuit adjacent to the existing concentrators and the product produced would likely enable the Company to capture a premium beyond its existing high-grade concentrate. Due to the anticipated demand for DRI in future years, certain experts believe that DRI pricing could merge with that of scrap pricing<sup>32</sup>, which would substantially improve the pricing power of 69% Fe DR pellet feed in the coming years.

Conceptual DR pellet feed plant design

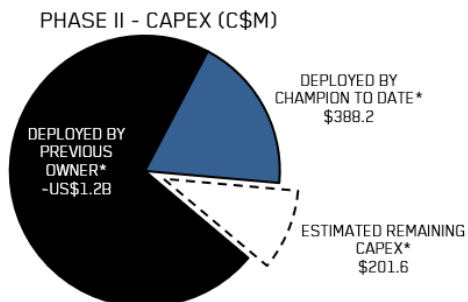


Source: Champion Iron Limited

## PHASE II - COMPLETED CRITICAL ITEMS

Champion recently announced that its Phase II expansion project, which aims to double the nameplate capacity at Bloom Lake to 15 Mtpa, continues to track the initially estimated expenditures required for the project and that it had completed critical work programs, including the major tie-in between the Phase I and Phase II plant infrastructure. Additional work programs completed in the most recent quarter included further detailed engineering which is now 97% complete, steel structure erection and equipment installation in the concentrator, delivery of the Mamu accommodations complex, and the installation of the load-out conveyors. By achieving these key milestones, Champion is evaluating a potential accelerated completion schedule for the project currently expected by mid-2022.

In addition to the US\$1.2B invested by Bloom Lake's prior owner, the completion of the project will mark a significant milestone for the Company following important investments detailed in the project's Feasibility Study which was released in 2019 (the "Feasibility Study"). As of September 30, 2021, Champion has invested a total of \$388.2M in the Phase II project, with an estimated remaining \$201.6M to deploy, as per the Feasibility Study. With \$182.9M in net cash<sup>33</sup>, including working capital, and access to \$470.9M in undrawn credit facilities as of the quarter ending September 30, 2021, the Company is well positioned to complete the project with a robust balance sheet.



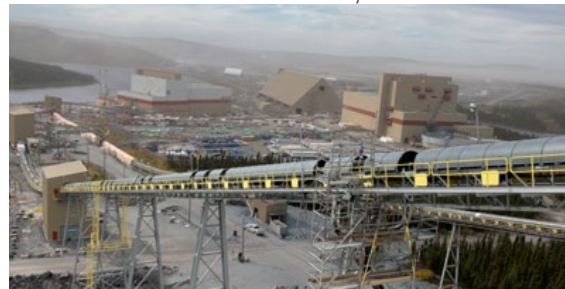
Source: Champion Iron Limited, Previous owner estimated CAPEX US\$1.2B based on 1.24 C\$/ exchange rate; Estimated capex based on Phase II Feasibility Study released on June 20, 2019 including contingencies; Cumulative work programs to date of \$388.2M including \$44.6M in advance payments and excluding \$25M in deposits; Contingencies of \$75.5M and CAPEX is pre-deposits of \$44.0M.

## THANK YOU TO OUR STAFF

Since the beginning of our operations in 2018, our employees and partners have continuously demonstrated their agility and motivation. Despite the ongoing battle against the pandemic, our significant progress towards completing the Phase II project in such a challenging environment continues to demonstrate their strength and qualities. The positive alignment of our people and partners enables our Company to continue to provide a positive impact on the region, and become a global leader in our industry's fight against climate change, with steelmakers benefitting from our high-grade iron ore products.

## PHASE II – RECENT PROJECT MILESTONES

Installation of the load-out conveyors



Delivery of the Mamu accommodations complex (300 people capacity)



Completed tie-in between P1 crusher & P11 plant







**David Cataford**  
Chief Executive Officer



**Michael O'Keeffe**  
Executive Chairman of the Board



**Michael Marcotte**  
Senior Vice-President, Corporate  
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Our website at [www.championiron.com](http://www.championiron.com)

This newsletter has been authorized for release to the market by the CEO of Champion Iron Limited, David Cataford.

The information regarding the Phase II expansion of Bloom Lake has been taken from the Phase II Feasibility Study announced on June 20, 2019 and filed on August 2, 2019. Champion is not aware of any new information or data that materially affects the information included in the Phase II Feasibility Study and confirms that all material assumptions and technical parameters underpinning the estimates in the Phase II Feasibility Study continue to apply and have not materially changed. The Phase II Feasibility Study dated August 2, 2019 is available at [www.sedar.com](http://www.sedar.com).

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**FORWARD-LOOKING INFORMATION**

This newsletter includes certain information that may constitute "forward-looking information" under applicable securities legislation. All statements, other than statements of historical facts, included in this newsletter that address future events, developments or performance that Champion expects to occur, including statements regarding (i) the Phase II expansion project, its impact on nameplate capacity, its completion schedule, economies of scale and remaining capital expenditures; (ii) studies to evaluate the commercial production of a 69%+ FE Direct Reduction ("DR") pellet feed product; (iii) capital return strategies and other organic growth opportunities; (iv) shift in the steel industry to reduce emissions, announcements to

address elevated emissions embedded in steel, increase in DRI demand and the Company's positioning in connection therewith; (v) global macroeconomic conditions and factors that could influence the steel market and iron ore production; (vi) Bloom Lake's life of mine; and (vii) the Company's cash position; are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates", "aims", "targets", or "believes", or variations of, or the negatives of, such words and phrases or state that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Although Champion believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such forward-looking statements involve known and unknown risks, uncertainties and other factors, most of which are beyond the control of the Company, which may cause the Company's actual results, performance or achievements to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause the actual results to differ materially from those expressed or implied in forward-looking statements include, without limitation: project delays; changes in the assumptions used to prepare feasibility studies; continued availability of capital and financing and general economic, market or business conditions; general economic, competitive, political and social uncertainties; the effects of catastrophes and public health crises, including the impact of COVID-19 on the global economy, the iron ore market and Champion's operations; future prices of iron ore; failure of plant, equipment or processes to operate as anticipated; delays in obtaining governmental approvals, necessary permitting or in the completion of development or construction activities, as well as those factors discussed in the section entitled "Risk Factors" of the Company's 2021 Annual Information Form and the risks and uncertainties discussed in the Company's MD&A for the year ended March 31, 2021, all of which are available on SEDAR at [www.sedar.com](http://www.sedar.com), the ASX at [www.asx.com.au](http://www.asx.com.au) and the Company's website at [www.championiron.com](http://www.championiron.com). Champion cautions that the foregoing list of risks and uncertainties is not exhaustive. There can be no assurance that such information will prove to be accurate as actual results and future events could differ materially from those anticipated in such forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information. All of Champion's forward-looking information contained in this newsletter is given as of the date hereof and is based upon the opinions and estimates of Champion's management and information available to management as at the date hereof. Champion disclaims any intention or obligation to update or revise any of its forward-looking information, whether as a result of new information, future events or otherwise, except as required by law. If Champion does update certain forward-looking information or statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements or information. Investors and others should carefully consider the above factors as well as the uncertainties they represent and the risks they entail. Inherent in forward-looking statements are risks, uncertainties and other factors beyond the Company's ability to predict or control. The forward-looking statements contained herein are made as of the date hereof or such other date or dates specified in such statements.

\*P62: Platts TSI IODEX 62% Fe CFR China; P65: Platts IO Fines 65% Fe CFR China; C3: Freight rate Tubarao-Qingdao

## REFERENCES:

<sup>1</sup> Non-IFRS financial performance measure with no standard definition under IFRS. Net cash including cash & short-term investment, restricted cash, working capital and short-term and long-term debt

<sup>2</sup> World Bank data, Wood Mackenzie data

<sup>3</sup> Clarksons, July 15, 2021

<sup>4</sup> Reuters, October 31, 2021

<sup>5</sup> Global Steel at a Crossroads, Agora Energiewende, November, 2021

<sup>6</sup> Global Steel at a Crossroads, Agora Energiewende, November, 2021

<sup>7</sup> <https://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climates-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf>

<sup>8</sup> Wood Mackenzie data (Based on Wood Mackenzie estimate of 8% reduction for P65 vs. P58)

<sup>9</sup> Platts data

<sup>10</sup> IIMA, November 1, 2021

<sup>11</sup> Canaccord, October 18, 2021

<sup>12</sup> World Steel Association data

<sup>13</sup> World Steel Association data

<sup>14</sup> Bloomberg, November 15, 2021

<sup>15</sup> Bloomberg, November 23, 2021

<sup>16</sup> Bloomberg, August 10, 2021

<sup>17</sup> Bloomberg, September 28, 2021

<sup>18</sup> IEA data

<sup>19</sup> Reuters, October 19, 2021

<sup>20</sup> Bloomberg, November 6, 2021

<sup>21</sup> Bloomberg, November 10, 2021

<sup>22</sup> Bloomberg, October 15, 2021

<sup>23</sup> BMO, November 4, 2021; Bloomberg, November 10 and November 24, 2021

<sup>24</sup> Bloomberg, November 2, 2021

<sup>25</sup> Reuters, October 14, 2021

<sup>26</sup> Bloomberg data

<sup>27</sup> Wood Mackenzie, October 29, 2021

<sup>28</sup> Bloomberg data; Baltic Exchange data

<sup>29</sup> Wood Mackenzie data

<sup>30</sup> MINISTRY OF STEEL, May 9 2017

<sup>31</sup> Macquarie, September 7, 2021; Wood Mackenzie October 15, 2021

<sup>32</sup> BMO, November 20, 2020

<sup>33</sup> Non-IFRS financial performance measure with no standard definition under IFRS. Net cash including cash & short-term investment, restricted cash, working capital and short-term and long-term debt