LME Sustainability: Discussion Paper Response

December 2020

SETTING THE GLOBAL STANDARD



TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	3
2	BACKGROUND	4
3	FEEDBACK TO THE DISCUSSION PAPER	5
	3.1 Aluminium sustainability	5
	3.2 Planned infrastructure	11
	3.3 Future of LME sustainability	12
	3.4 Additional feedback	13
4	CONCLUSION	15



1 EXECUTIVE SUMMARY

In August 2020, the LME released the LME Sustainability: Discussion Paper (the "Discussion Paper") outlining its proposed path forward in supporting the sustainable transition for the metals and mining industry. The market discussion period outlined in the paper closed on 24 September 2020, and 29 written responses were received. This paper analyses the core themes of those responses, and provides the LME's feedback.

It is clear from the responses received that sustainability has become steadily more important to the LME's stakeholders, and the pervading view from across respondents was that metals are, and will continue to be, an essential enabler of a sustainable future. What was equally clear was that there were multiple interpretations as to what precisely constituted sustainability within the metals industry, with much discussion as to the appropriate sustainable component fundamentals.

While the LME received extensive support for facilitating a broad definition of sustainability, there was significant discussion on the detail. Many respondents explicitly ranked sustainability characteristics within their replies, with extensive debate over the relative merits of methods for measuring carbon emissions, a common vision as to what constitutes a carbon footprint, the role of thresholds and the value of focusing on emissions at the possible expense of other sustainability criteria. Other topics also covered included views concerning a standalone low carbon aluminium contract, future broadening of the LME's sustainability scope into other LME metals, and new cash settled contracts to support the circular economy.

Within the feedback received there was greater consensus from respondents on the value of the LME's advancement of transparency, with praise for both LMEpassport and a spot trading platform's capacity to allow producers of sustainable metal to, on a voluntary basis, assert their claim of "sustainable" production and thus allow metal consumers to discern which information they find of most utility. In this paper, the LME examines those arguments and sets out its own thinking on the respective topics. Broadly, the LME believes that it now has a responsibility to take a flexible and inclusive approach to support the metals industry in the promotion of multiple widely accepted thresholds for both carbon calculations and more holistic sustainability criteria, while providing additional formal methodological criteria where appropriate. As such, and in line with the Discussion Paper, the LME approach will not be to set a sustainability standard for aluminium nor any other metal. Instead the LME's goal will be to support producers in their disclosure of sustainability information that is disseminated. Moreover, the LME believes it has the right and responsibility to be part of this solution and do its part to support the sustainable transition.

As next steps, the LME will continue working with its market in the design of both the spot trading platform and LMEpassport for their expected launches next year. In December 2020 and January 2021 the LME will engage with its metals committees and its stakeholders to discuss the implications of feedback received. Following this, in Q1 2021, the LME will also set up a sustainability advisory group to advise the LME on its roadmap in reaching its sustainability goals.



2 BACKGROUND

On 13 August 2020, the LME released – via Notice 20/193 – a discussion paper setting out the LME's proposed roadmap to support the ongoing transition towards sustainability. Within this Discussion Paper the LME welcomed feedback from the market on its proposed path forward.

The LME would like to thank the 29 market participants who provided written feedback to the Discussion Paper, as well as all those who contacted the LME and provided their ideas and thoughts through meetings and calls. The LME very much appreciates the time and effort taken by all those who contributed.

The LME has taken all the feedback received into careful consideration, and this feedback analysis paper explores that feedback in detail, and explains the amendments the LME is proposing to make to its original proposal on the basis of such feedback and the LME's own analysis. It also outlines that feedback which it has not incorporated into its broader proposals and provides a rationale for these decisions.

Further, the LME has today additionally published a feedback analysis paper exploring feedback to the LME Discussion Paper on LMEpassport ("Feedback Analysis to the LMEpassport Discussion Paper"), released via Notice 20/194. Feedback pertaining to potential sustainability related features of LMEpassport's design will be outlined in this feedback analysis paper, particularly Section 3.2. For a more detailed review of feedback related to LMEpassport's design please refer to the Feedback Analysis to the LMEpassport Discussion Paper.

The LME would welcome any market participant wishing to arrange further discussion or seeking clarification in relation to the LME's proposed roadmap to support the ongoing transition towards sustainability. The LME asks such participants to contact <u>sustainability@lme.com</u>.



3 FEEDBACK TO THE DISCUSSION PAPER

The majority of responses to the discussion paper were broadly supportive of the LME's understanding of sustainability within the metals industry and the LME's proposed role. Responses also generally encouraged the LME to continue on its planned sustainability roadmap, however, also offered suggestions as to how the LME's proposals could be refined.

For ease, the LME has categorised the key feedback sections this paper will consider:

- Aluminium sustainability
- Planned infrastructure design
- Additional feedback

3.1 Aluminium sustainability

3.1.1 Considerations on a single LME supported low carbon aluminium definition

Initial focus amongst many respondents centred on whether there should be LME support for a single low carbon aluminium ("LCAL") definition. This was the case particularly for those of the view that there already is an industry consensus as to what constitutes LCAL (the mechanics of which, it was claimed by some, were already widely accepted), and, conversely, those respondents who believed that the LME insisting on one or very few LCAL definitions would negatively impact aluminium producers that used other carbon calculation methods, yet could still be considered to be undertaking sustainable practices. Within the Discussion Paper, the LME asserted its understanding that there does not yet exist comprehensive market consensus on the exact LCAL definition, and that it would not be appropriate to itself establish a common LCAL definition. However, also emphasised in the Discussion Paper was the LME's view that consensus around LCAL definitions is likely to emerge over time, and if appropriate, the LME is prepared to focus more narrowly on the emerging consensus at that point.

Amongst those respondents that supported the sole use of an established narrow LCAL definition, a common claim was that the LME acknowledging only one (or very few definitions) would be the best way to ensure that information is comparable and thus useful to potential LCAL consumers. Consequently, it was argued by this group that focussing on one definition would prevent confusion and ensure information is digestible by the wider market. One respondent suggested that if the LME would allow for the use of multiple LCAL definitions on its platforms this could be deemed irresponsible as it would hinder the transition to a more sustainable economy by adding to consumer misperception. A second key argument for a single LME supported LCAL definitions in place, producers would simply select whichever definition was most likely to ensure their own aluminium was considered "green". An example outlined was the case of greenhouse gas ("GHG") emission calculations and the inclusion or exclusion of recycled content or carbon offsets within a given calculation. These respondents expressed concerns that GHG emission calculations varying based on differences in scope, rather than representing differences in emissions, risked double-counting and undermined the outcome the LME wished to achieve through supporting transparency of LCAL information.

Despite many of these respondents claiming that there already is an industry consensus on definitions as to what constitutes LCAL, this group also gave multiple examples as to which definition was deemed to be the most recognised and useful. Some respondents argued that consensus had already emerged around a 2°C alignment scenario for aluminium producers, and that therefore the LME should consider defining low-carbon

aluminium against a 2°C pathway.¹ Other respondents asserted that the International Aluminium Institute's ("IAI") Aluminium Carbon Footprint Technical Support Document, published in February 2018, outlined the LCAL definition the LME should support.

Alternatively, many respondents argued that multiple and more broad definitions of LCAL should be supported by the LME and available for use on LME platforms. A primary concern from this group was the risk that relevant LCAL definitions and calculations, particularly those that consider the impact of emissions throughout the production cycle, including bauxite mining, alumina refining, smelting and casting, would be discarded in favour of a definition that focussed on only one carbon metric. This, it was argued, introduced the potential for the positive promotion of aluminium production that has significant adverse environmental effects. To demonstrate this point, one respondent used the example of an aluminium producer actively promoting its LCAL calculation associated with a hydropower facility but the calculation would not take into account carbon emissions produced from the increased transport needs or building work involved in building the plant. Respondents in this group also asserted an overly restrictive definition, focussed just on smelting carbon emissions, could potentially "lock out" aluminium producers which do not have access to hydroelectric power and thus disincentivise their transition to more sustainable production by setting unobtainable thresholds. "Green" thresholds, it was further asserted, were not yet appropriate for the market in its current state of maturity. Moreover, it was argued by one respondent that suitable thresholds for embodied carbon of products procured by any given organisation are dependent on bespoke, organisational level plans for alignment with the goals of the Paris Agreement. Consequently, it was argued, it was not currently understood how the LME would be able to set, and objectively monitor, an appropriate threshold that is applicable to an entire industry. As such, many in this group argued that LCAL definitions should be broader than what was suggested in the Discussion Paper, and cautioned the LME against imposing "green" thresholds on the industry at this stage.

Some responses even cautioned against using the term LCAL at all, especially considering, as one respondent maintained, there is no market consensus on an exact definition and the minimum information requirements in current definitions would not guarantee low carbon material. A better term, another respondent argued, was "climate smart" as this was a more co-operative expression that fit into the World Bank's 12 pillars.

The LME agrees that there has been excellent and diligent work from across the aluminium industry in defining carbon content calculations. However, while the LME recognises both sides of the debate, it remains the LME's understanding that the market is yet to come to a precise consensus on the parameters of an LCAL definition, and further, that concerns remain that it would be premature to insist on low carbon thresholds that may permanently exclude large parts of a global industry and, indeed, may discourage sustainability progress in aluminium producers that would see these thresholds as unobtainable. As such, the LME continues to believe that (i) allowing all producers to list their credentials rather than setting a threshold for inclusion remains the right route forward and (ii) that providing scope for producers to use their own methodology will encourage participation. However, the LME does also agree that the value of providing comparable data achieved through consistent methodology would have significant value. As such, the LME will explore the possibility of including a specific additional category for carbon disclosures using a set of transparent and consistent criteria defined by the LME (but ideally leveraging existing work already completed in this field). In particular, in considering the LMEpassport data taxonomy, the LME will aim to capture not just reported quantitative data, but also the calculation parameters (for example, the specific process steps which are within the scope of carbon disclosure). More information on this will be provided in due course. The LME will continue to monitor the development and uptake of definitions over time and, as the market position converges, it - in conjunction with the industry - can agree and pursue the appropriate next steps. The LME also anticipates that a similar approach could be adopted in respect of recycled content metrics (for example, capturing the types of scrap to which the quantitative disclosure relates).

¹ Set for the industry by the Sectorial Decarbonization Approach (SDA)

3.1.2 Views on minimum mandatory conformance to certain sustainability metrics supplemented by further LME guidance or independent review and mandatory disclosure of assurance

Similar to the feedback received on an LCAL definition, many responses also contended that the LME should go further than the voluntary transparency outlined in the Discussion Paper. There were many comments from respondents that urged the LME to both require minimum mandatory disclosure of certain sustainability metrics and provide more guidance as to what these metrics should be and how they should be calculated. Further to this, some respondents insisted the LME require disclosure of assurance undertaken to prove sustainability metrics had indeed been achieved. In the Discussion Paper, the LME stated that voluntary transparency via the LME's intended new platforms would still facilitate the relevant metal sustainability information to be known, and it was not deemed that there was a sufficient market agreement for the LME to impose minimum mandatory disclosures (including minimum assurance disclosures).

Respondents that believed minimum mandatory disclosures of sustainability information should be required by the LME cited that voluntary disclosure, without clear LME guidance on which metrics would be sufficient, would risk undermining the LME's integrity as there was an increased chance of the information submitted being misleading. Additionally, it was argued that, without minimum mandatory disclosures, genuine sustainable industry transformation would not be achieved as there would not be enough inducement for producers to transition away from unsustainable practices and coalesce around agreed upon disclosures. One respondent went further still and commented that the LME should introduce this requirement to disclose agreed upon sustainability metrics as a matter of top priority for all LME registered primary aluminium brands (rather than just the new sustainability platforms), as low-carbon transitions of the aluminium sector needed, in their view, a specific, immediate, and additional focus given the urgency of the climate crisis.

Many respondents whom argued for minimum mandatory sustainability disclosure requirements contended that a lack of industry agreement on appropriate sustainability metrics should not hamper the LME in insisting on them as a prerequisite. They emphasised that the LME should not be afraid to take a more active role in guiding the market towards mandatory disclosure of certain sustainable metrics and should work in close collaboration with the industry regulators. Moreover many respondents pointed to existing mining and metals standards, for example the ICMM Mining Principles and the ASI Performance Standard, which it was reasoned already have broad stakeholder acceptance and currency in the industry. At the very least, it was argued, the LME should indicate a timeframe as to when compulsory disclosure would be implemented. Other respondents asserted that mandatory minimum disclosures should also be required to have documented whether such data underwent a rigorous review process through an independent third party or that the LME should insist all documentation uploaded to the platforms to undergo third party review.

In opposition, there was also a significant quantity of feedback that outlined the view that mandatory minimum requirements of sustainability are premature and that any precise guidance issued by the LME would only serve to further reduce liquidity in a market that is in its infancy. One respondent argued that, as suitable thresholds were reliant on custom-made company level plans, consequently the LME insisting on mandatory disclosure of certain sustainability metrics would prove to be too rigid a response to an issue that requires flexibility. It was suggested in some responses that the LME's goal should not be seeking to establish consensus on a sustainability framework, but rather focus on establishing a flexible platform for increased transparency. As a result, many respondents were supportive of the LME's voluntary transparency plans as they believed the market has yet to support the adoption of a centralised set of priorities with regard to sustainability data and thus promoting the disclosure of a broad spectrum of data will assist the industry to progress towards an agreed standard. Furthermore, one respondent challenged any mandatory minimum



disclosure thresholds as, it was asserted, rigid thresholds would limit sustainability innovation in the industry and disincentivise those that wanted emissions standards to be far below that threshold.

The LME is in agreement with respondents who asserted that voluntary transparency of sustainability metrics should be the initial focus of the LME's strategy; however, the LME does recognise the demand for mandatory minimum disclosures and the potential value of such a step, and will carefully monitor to assess whether this might be introduced over time. The LME agrees in the importance of evidence-based claims for sustainability credentials, and is pleased that the functionality within the proposed LMEpassport system will allow for audit reports and certifications to be attached, with only LME members, listed warehouse companies or producers of LME-listed brands to be able to undertake uploading of data. While the LME believes it is now appropriate to extend its remit to a broader range of sustainability considerations, it is still believes that any designation of compulsory disclosure of sustainability requirements should be market led rather than imposed by the LME.

3.1.3 Considerations on the limitations of focus within sustainability and broadening of scope

In general, respondents were supportive of the LME taking a broad definition of sustainability, rather than limiting its scope to carbon-related issues only. The majority of respondents approved of this position, given the broadness of the sustainability topic within aluminium and the metals industry, albeit some respondents believed that the primacy of environmental concerns meant that carbon emissions should be the initial priority.

A number of responses praised the LME for confirming its willingness to consider in the near future the full breadth of sustainability issues on LME platforms outlined in the Discussion Paper. Particular support was shown by this group for the LME's stated ambition of looking beyond carbon and GHG emissions as, as stated by one respondent, it is important to recognise that sustainability touches on many different aspects of metal production. However, some respondents from this group asserted that given the importance of addressing the broad range of applicable sustainability topics, the LME's argument for starting with LCAL consequently does not come with any clear rationale. It was argued that it should be left to the market to decide which wider sustainability metrics were of importance and to emphasise carbon emissions in the first instance, rather than allowing for more holistic sustainability calculations, would be inappropriate. Members of this group also stated that the term low carbon should not be confused with sustainable production, and an initial focus of the LME on carbon metrics risked conflating the two terms. This is because if consumers searching for sustainable aluminium on an LME platform only had access to LCAL data, there would be a chance they would consider this metal to be "fully sustainable" rather than just the low carbon data that metric would truly represent. Similarly, respondents in this group believed a carbon focus would give too narrow a view of metal production and this would, for example, incorrectly benefit producers that had access to "greener energy" (e.g. hydroelectric power) to produce their metal yet undertook unsustainable practices in other areas of their business (e.g. deforestation or displacement of indigenous communities). Consequently, respondents in this group urged the LME to make its intention to broaden the scope in the future more clear.

Many responses, whilst also highlighting the potential issues inherent within a strategy focussing initially on carbon emissions, also emphasised other sustainability indicators that were of equal or, in their view, of more importance in supporting the transition to environmentally sustainable metal production. These responses argued that by allowing correspondingly important environmental challenges, for example water management or indigenous rights, to have a subordinate role to carbon calculations on LME sustainability platforms, this would risk limiting progress of other improvement opportunities. Moreover, one respondent believed that the focus on making carbon information available on an LME platform in the hope of determining a "carbon premium" would be unnecessary as the market already has several differentiated prices for aluminium (e.g. for grade, source, quality etc.) which is reflected in the spot premia which are already suitably negotiated. Therefore they did not believe the market would be adding a specific premium for LCAL as it would already be reflected in the overall consolidated premia.



Of the opposing viewpoint were responses that supported an initial focus on LCAL. This group understood low-carbon transitions of the aluminium sector to be the immediate priority, and an area where producer action was overdue. To underline this, one respondent stressed that the carbon content of the electricity consumed during the electrolytic process can account for over 80% of an aluminium smelter's carbon footprint in cases where electricity from coal-fired plants is consumed. Therefore, the most effective way for an aluminium smelter to contribute to a more sustainable future is to transition towards a low-carbon or zero-carbon electricity supply. Accordingly, to this respondent, the LME and the wider industry should give primacy to a focus on encouraging forsil fuel-based metal production to develop more renewable content in power portfolios rather than allowing for a broader focus on sustainability in the future. The LME proposals, it was argued, as currently drafted will do nothing to encourage such a development as it would allow for a broader sustainability viewpoint rather than push more directly towards this common goal.

LME broadly agrees with the prevailing opinion that a full breadth of sustainability issues should in due course be available to be addressed and facilitated by any LME spot trading platform and LMEpassport. In response to this feedback the LME believes it is worth reiterating that envisaged early functionality of LMEpassport will enable interested producers or metal owners to input a wide variety of environmental criteria, beyond carbon thresholds, of their brands, for example water or tailings management certifications. The spot trading platform is also expected from its launch to facilitate free text fields under the "other information" category that will allow for further sustainability metrics to be discovered. It is similarly envisioned that ASI certification will also be an available category. ASI Certification covers a much broader range of issues relating to aluminium production than emissions, including human rights, biodiversity management and material stewardship, and consequently will allow for a broader sustainability focus to be achieved. In response to doubts around the potential of a clear low carbon premium developing, although anecdotal evidence to date suggests that an LCAL premium may not yet exist, it is possible that one emerges and the transparent and trusted availability of such data would be an asset for many market stakeholders.

The LME re-emphasises that its goal is for its infrastructure – new contracts, transparency and access – to be designed to be as inclusive as possible, such that this can be the first step for the LME to support aluminium, and indeed all metals, in addressing the pertinent issues for their value chain as appropriate, and as prioritised by the market.

3.1.4 Considerations on the use of carbon offsets and carbon credits on LMEpassport or the spot trading platform

Certain responses focussed particularly on the use of carbon offsets and whether they would have utility on LMEpassport and the spot trading platform. The Discussion Paper delineated carbon offsets as a potential separate category, as it was stated that a primary aim of the LME was to provide user flexibility, and therefore the LME was keen to ensure access for potential users included those pursuing methods such as carbon offsets. Feedback received was mixed on the facilitation of carbon offsets, with many respondents requesting the LME further clarify its position in this area as well as give more specific guidance as to how carbon offsets will be factored into the overall carbon calculation of metal on LME platforms.

Respondents that were supportive of carbon offsets cited that their inclusion as a distinctive category on the LME spot trading platform and LMEpassport was important as they enabled broader industry inclusivity. This is because use of carbon offsets, it was argued, meant comparatively "high" carbon aluminium producers were still able to contribute to a sustainable marketplace and were not "locked out" from using these platforms. One respondent urged the LME to also ensure that the platforms also facilitate the use of carbon credits beacuse, they asserted, these more effectively target net zero emissions goals and would provide greater transparency and serve as a better long-term carbon-reduction strategy when compared with offsets.

Feedback opposed to the use of carbon offsets on LME platforms asserted that offsets did not reflect the physical realities of production. The only way to prove carbon efficiency should be, one respondent asserted, Page 9



to decarbonise the production activity itself. Thus the LME allowing carbon offsets usage on its platforms would simply serve as a way for metal producers to circumvent true progression to decarbonisation of production. As a result, it was emphasised by this group of respondents that carbon offsets would facilitate the "greenwashing" of unsustainable aluminium production.

Some respondents were not explicitly against the LME facilitating the use of carbon offsets, however, they wished to make clear that other sustainability areas listed as potential categories on the platforms also factor in carbon offsets, e.g. ASI and IAI certification. They consequently wanted to draw the LME's attention to the risk of double counting should a producer list both ASI certification and use carbon offsets to advertise the sustainability of aluminium on LME platforms. Accordingly, these respondents requested more guidance from the LME pertaining to carbon offsets and particularly whether or not they will be allowed in any GHG per tonne calculation.

The LME remains conscious that the production of LCAL can be a less demanding task for those producers with access to hydro or other alternative forms of renewable power. It is also remains aware that many producers, without such renewable energy access, make significant efforts to balance their carbon use through other means, such as carbon offsets. The LME therefore maintains its view that LMEpassport and the spot trading platform should retain functionality that facilitates the use of carbon offsets so as not to discourage producers from the benefits of their use and, therefore, these platforms should support disclosures of certifications that use and allow for carbon credits or offsets included in their methodology. However, it is the LME's view that "uncoupled" carbon credits or offsets appended to metal post-production should not be supported by LME platforms and there should not be a separate explicit categorisation for carbon offsets, either on the spot trading platform or LMEpassport. The new LME sustainability platforms are not chain of custody platforms and, therefore, the LME will not have the functionality available to track carbon offset records if users try to couple and subsequently decouple offsets/credits post production. Consequently, carbon credit usage on the platform will solely be when used as part of a wider certification methodology. The LME acknowledges calls for further guidance that addresses the risk of double counting between sustainability categories on the platform, particularly between certifications that include carbon offsets in their carbon calculations and the distinct carbon offset category, and plans to release further guidance in due course.

3.1.5 Considerations around adjusting LME primary aluminium brand requirements or launching a secondary primary aluminium contract for low carbon metal

Some responses argued for either amending of the LME's brand requirements for the primary aluminium contract to include sustainability concerns, or launching a second primary aluminium contract for low carbon metal. Within the Discussion Paper, the LME emphasised the importance of its relationship with the producers of LME-listed brands and its desire not to require these companies, absent an overwhelming market demand, to again change brand requirements so soon after the introduction of responsible sourcing requirement changes. Moreover, in regards to a separate primary aluminium contract for low carbon aluminium, the LME emphasised the likelihood of this contract "competing" for liquidity with the current primary aluminium contract as, it was stated, production levels of LCAL are not yet sufficiently high to generate the necessity for such a contract.

From respondents that argued a secondary contract should be explored, there was questioning of the LME's assertion that production of LCAL was not yet high enough to generate enough liquidity for this contract, with one respondent requesting the data behind this assertion and the definition of LCAL the LME had used in its assertion. This group of respondents also argued that an LCAL contract would be more impactful to the industry as it would allow producers to better manage specific price risk as well as address uncertainties related to regulatory and market transformations taking place.



The far larger second group of respondents, that supported the LME's statements towards the prospect of an LCAL contract in the Discussion Paper, underlined the importance there was that the current primary aluminium contract did not lose its integrity and resulting liquidity. Whilst the aluminium industry, it was argued by one respondent, is in the early stage of a "Green Revolution" it is still reliant upon the LME contract to hedge and price all production and relevant exposure. Any attempt to "split" the current contract or introduce a low-carbon-aluminium contract would have an extremely negative effect on liquidity on the primary aluminium contract. It was therefore urged by this group that the LME consider only building passive tools for the expected sustainable transition.

The LME remains of the view that there should not be a change at this time to either the brand listing requirements of its current primary aluminium contract to incorporate sustainability thresholds, or a launch of a separate LCAL contract. The LME conducted extensive market engagement to reach this conclusion, whilst considering the definition of LCAL through the lenses of the well-known carbon definitions outlined in the Discussion Paper. Although the LME agrees that a separate LCAL contract could help better manage price risk for those producers looking to specifically protect against price movements as well as price discovery, it does not yet believe that this contract would generate sufficient market support to be a success, nor that there exists sufficient quantities of low carbon aluminium to support trading.

3.2 Planned infrastructure

Within the Discussion Paper, two separate trading infrastructure proposals were broadly outlined: (i) LMEpassport and (ii) a spot trading platform. Please note, feedback pertaining to potential sustainability related features of LMEpassport's design will be outlined in this section. For a more detailed review of feedback related to LMEpassport's design unrelated to sustainability, please refer to the Feedback Analysis to the LMEpassport Discussion Paper.

3.2.1 Considerations around LMEpassport and the spot trading platform

Many respondents positively commented on the potential increased transparency both the spot trading platform and LMEpassport would provide, with one respondent affirming that they would both be a "useful and progressive" step in the right direction for the industry in that they will allow for the amplifying of sustainability characteristics to the metals markets. Functionality that allowed interested producers the ability to input a wide variety of environmental criteria, beyond carbon thresholds, of their brands, for example water or tailings management certifications, was also praised. This view was not just attributable to respondents that are producers, but echoed by market participants across the value chain. The increased access to information, it was emphasised, that both services would provide to the market would contribute to enhanced price discovery and trading for sustainably sourced metal.

Alternatively, some respondents were concerned that the two future platforms could undermine or reduce the appeal of existing sustainability criteria if sustainability initiatives that already exist are not fully utilised and promoted as key, validated certifications. Respondents that expressed this concern argued that care should be taken to ensure both platforms were not overly restrictive in the criteria that could be available on them so that the market can be given the chance to determine which sustainability criteria was deemed most important.

In particular, LMEpassport's operational gains around Certificates of Analysis ("CoAs") were well received with comments affirming the merit electronic COAs have in terms of traceability and standardisation. However, one respondent cautioned the LME to give particular attention to warehouse companies registering of electronic CoAs, as it was argued that there was a particular risk at this point that metal could be registered that did not reflect the information stipulated in the COA. The LME understands this viewpoint and will collaborate closely with the operators of its licensed warehouses to ensure the mitigation of this risk and make certain warehouse operators understand and complete the COA registration in-line with appropriate requirements.



Although some responses were opposed to the creation of a spot trading platform, with one respondent cautioning that the envisaged plan could potentially lead to unforeseen consequences in the metals market, the LME believes that generally feedback remained in favour of developing a platform with the purpose of allowing certain sustainability specifications to be made more transparent. Nonetheless, the LME will continue to exercise caution around the comments highlighted in response to this initiative and will work with those market participants to resolve their concerns where possible.

3.3 Future of LME sustainability

3.3.1 Feedback received considering the further broadening of the sustainability scope beyond aluminium to other LME metals

Numerous responses concentrated on the likely expansion of the LME sustainability strategy, beyond that which was indicated in the Discussion Paper, and particularly beyond initial use of aluminium on both LMEpassport and the spot trading platform. Much feedback was supportive of the LME broadening the scope to other metals quickly to address what was considered to be easy sustainability wins within their suggested metal category, whereas other responses cautioned against broadening scope to other metals too quickly. Within the Discussion Paper in "Figure 2: Access to sustainable metals on the LME" the LME outlined its existing access to sustainability focussed product and services and its future plans. These products were multi-metal initiatives; however, feedback to a widening of the LME's sustainability scope tended to be concentrated on the metal suite available on LMEpassport and the spot trading platform.

Many respondents indicated their agreement with the LME's assertion in the Discussion Paper that metals are the cornerstone of sustainability and, accordingly, they emphasised the importance of the LME widening its sustainability scope further to other metals on a swifter timeframe. One respondent highlighted the high recycling rate of tin and its role in battery technologies and solar capture and urged the LME to emphasise tin and its sustainability properties further within its sustainability strategy. Another respondent advised the LME to add, amongst other suggestions, traceability guidelines and requirements for its lead brands in both primary and secondary production as part of the LME's wider sustainability ambitions. An additional common theme was support for the LME's contention that there was "power in coalition" and that the aluminium industry in particular, along with the LME must work together with other metals industries to achieve broader sustainability goals. Other feedback stated that the LME initially focusing on offering access to low carbon aluminium may cause the LME's stakeholders to misunderstand that non-aluminium metal is "high carbon". This could be detrimental to the cause for decarbonisation, as perceived "low-carbon" aluminium may still produce higher emissions than the average production of a competing metal.

Nevertheless, many respondents put emphasis on the LME exercising caution when considering broadening the scope of LMEpassport and the spot trading platform to other metals. These respondents asserted that whilst there are similarities between metals, their production processes and markets differ significantly and consequently all metals face unique opportunities and challenges. The example of nickel was given, with one respondent outlining that nickel is mainly used as alloying element (such as stainless steel) with more than 85% of all nickel being further used in different nickel containing alloys. Therefore setting a recycled content for nickel would not be as appropriate as it would be for aluminium. It was warned that the LME should take these metal value chain differences into account when determining next steps and platform offerings. One respondent further suggested the LME review the average GHG emissions associated with each of the LME's listed metals before creating any new tools on LME passport or the spot trading platform for other metals. To help the LME in rolling out to these platforms to additional metals, one respondent suggested the LME should carefully consult and communicate well in advance on any future steps to avoid unintentional market impacts or disruptions. It was forewarned by this respondent that the implications of LME actions may require material investment of time and resource and therefore as much notice as possible.



However, it was also repeatedly acknowledged by this group that any learnings the LME gathers from the initial case of aluminium that was transferrable to other metals should be communicated by the LME, so that best practice could be utilised. In general, when viewed through the lens of spot trading and LMEpassport, the feedback from this group urged that, given the potential consequences that the envisaged activities might have on metals markets, the LME should set up an adequate process before proposing measures and activities to (other) metals traded at the LME, however, predominantly this group saw aluminium as a good first step.

The LME is appreciative of each of its stakeholders within all of its metals categories that are working towards the shared goal of transitioning to a sustainable future. In answer to respondents that highlighted how specific metals are contributing to sustainability, the LME will commit to doing its utmost to facilitate the promotion of their sustainable properties and further the role of those metals in offering viable solutions to sustainability challenges.

The LME also acknowledges concerns from some respondents that LME stakeholders may view metals that were not available as low carbon products on the spot trading platform as high carbon products. Within the Discussion Paper the LME outlined how each of its listed metals contributed to the sustainable transition but also how aluminium, due to its selection in September 2019 at the United Nations Climate Action Summit as one of the "hard-to-abate" industries from the perspective of decarbonisation and energy intensity, was a logical initial first step. The LME does not agree that choosing to focus on LCAL as this first step on the spot trading platform will lead to other metals being considered "high carbon" due to their initial unavailability on the platform. It is also worth noting that both LMEpassport and the spot trading platforms have plans to expand to other metals when it is appropriate. The LME agrees with respondents who called for caution and understanding of the specific intricacies of a metals use and value chain before further expansion of the LME sustainability strategy. The LME is already in the process of setting up an industry advisory group to help develop scope and functionality for LMEpassport for the foreseeable future, and will also enact the same plan for the spot trading platform. The LME also emphasises that it will engage with its established metals committees and known industry experts before further expansion of the sustainability strategy is implemented. Furthermore, and as advised from feedback received, the LME intends to utilise learnings understood from the initial aluminium step when expanding into other metals where suitable.

3.4 Additional feedback

3.4.1 Feedback received considering the circular economy

As outlined in the Discussion Paper, the LME plans to launch additional circular economy related cash-settled futures contracts, including a Used Beverage Can ("UBC") aluminium scrap contract and Taiwanese and Indian steel scrap contracts. Most participants that touched on the circular economy within their feedback were broadly positive of these contract launches.

Those that were supportive of the LME's circular economy proposals called for further expansion of the contract suite, with an increased frequency in the launch of recycling contracts (such as scrap copper and aluminium shredded products). These respondents suggested that more focus should be placed on the recycling of aluminium because secondary aluminium had the "lowest embodied carbon available on the market today". Promoting recycling, it was asserted, would act as a more inclusive avenue for all producers to improve their levels of sustainability, and not just those that were well placed geographically. In addition, respondents in this group indicated that the LME should go beyond recycling by reviewing circular production and circular mining practices and how they could be supported.

Feedback opposed to specific aspects of the circular economy strategy was limited, with only one participant demonstrating disagreement with the UBC aluminium scrap contract, stating that it was "not required and will be unsuccessful" as there is not the prerequisite demand required for a successful LME contract in the North American market. Another respondent cautioned that, although the aluminium scrap contract represents a



potential price discovery and risk management tool for an increasingly important market, it is critical that the contract is designed in way that promotes liquidity and is representative of the physical market. Therefore the LME should increase its market engagement with the physical market to fully understand the contract specifications needed.

The LME acknowledges the demand from some respondents for further scrap contracts and an increased circular economy agenda. The LME will continue to monitor market demand for additional secondary contracts and take appropriate action when industry consensus arises. The LME is also appreciative of the concerns shared by respondents regarding the UBC aluminium scrap contract and will continue to work closely with the market to ensure appropriate measures are taken for its success. Engagement will be completed with the various established metals committees and known industry experts before the contract is launched to ensure that the contract's successful integration into the market.

3.4.2 Lithium contract

The LME has plans to launch a new lithium contract, with the aim of providing risk management tools to the battery and electric vehicle industry. Although there were no direct objections to the proposed lithium contract, one participant called for initial exploration into other contracts that displayed "less complex supply chains and economics than lithium". The respondent detailed that by expanding into other contracts, for example vanadium and manganese, the LME would be protected from the risk of concentrating all of its efforts in lithium and subsequently missing other opportunities.

The LME maintains the view that the in recent years there has been unprecedented price volatility in the lithium market, driven particularly by electric vehicle ("EV") battery demand. The LME has been approached by a number of industry players, including producers, end users and several leading automotive firms, to develop effective lithium price-risk management tools and therefore will be sustaining its course in the launch of a lithium contract. The LME will have the power to launch additional contracts in the future should market demand indicate substantial interest.



4 CONCLUSION

One of the stated aims of the Discussion Paper was to help facilitate further discussions, and ensure that the LME can understand and incorporate as broad a range of perspectives as possible within its sustainability roadmap. As indicated by the many insightful responses the LME received to the Discussion Paper, the LME firmly believes the Discussion Paper achieved those aims, and the LME will utilise this feedback in its ongoing planning. The LME's market participants have dedicated a considerable amount of their time and expertise to providing the LME with in depth and carefully thought through analysis of its proposals. The LME hopes that the above consideration of this feedback does justice to the effort involved and demonstrates the seriousness with which the LME takes all the comments received.