Ripple welcomes the opportunity to comment on the European Securities and Market Authority (ESMA) second consultation paper: Technical Standards specifying certain requirements of Markets in Crypto Assets Regulation (MiCA), published on 5 October 2023.

Ripple would like to thank ESMA for the in-depth and comprehensive analysis that has been undertaken in drafting this consultation, as well as the opportunity to provide our comments. We respectfully request you take them into consideration as you consider the development of final technical standards under the MiCA regime. We welcome the opportunity for ongoing engagement with ESMA and the other European Supervisory Authorities (ESAs) on the development of Level 2 measures under MiCA.

In this response to the consultation, Ripple focuses solely on Section 3: Content, methodologies and presentation of sustainability indicators on adverse impacts on the climate and the environment. Ripple's positions on other sections of the consultation are reflected in our trade associations' responses.

I. Introduction

Ripple's software products allow financial institutions to send money globally, on a real-time basis, at a fraction of the cost of traditional services available to market participants. Using blockchain technology and digital assets, Ripple allows financial institutions to process payments instantly, reliably, cost-effectively, and with end-to-end visibility anywhere in the world.

Ripple's aim is not to replace fiat currencies, but rather to enable a faster, less expensive, and more transparent method of making cross-border payments that is in the public's best interest.

II. XRP and the XRP Ledger

The XRP Ledger is decentralized, open-source, and operates on what is known as a “consensus” protocol,1 and the digital asset XRP is native to the XRP Ledger. While there are well over a hundred known use cases for XRP and the XRP Ledger, Ripple leverages XRP for use in its product suite because of XRP's suitability for cross-border payments. Key characteristics of XRP include speed, scalability, energy efficiency, and cost efficiency. Although Ripple utilizes XRP and the XRP Ledger in its product offerings, XRP is independent of Ripple.

See [https://xrpl.org/index.html](https://xrpl.org/index.html), XRP Ledger.
III. Ripple and sustainability

Ripple is committed to taking action for a sustainable future.

Ripple has reduced our own carbon footprint and is on track to reach our net-zero carbon emissions target by 2030 or sooner. Our enterprise crypto solutions leverage the XRP Ledger - the world's first major carbon-neutral public blockchain.

Real change requires broader collective action. Blockchain technology can play a catalytic role in helping to address climate change, while also driving increased financial inclusion and finance efficiency. So Ripple advocates for a low-carbon future for the crypto industry and global economy. Ripple is a co-founder and active member of the Crypto Climate Accord, WEF’s Crypto Impact and Sustainability Initiative, and Blockchain x Climate Leadership Network.

Reducing emissions alone will not be enough to limit the rise of global temperatures. So we also enable climate action by supporting companies who build the infrastructure to scale equitable climate finance, and we invest in innovative carbon removal projects.

IV. General comments on section 3: sustainability indicators

Given Ripple’s own commitment to achieving sustainability goals both directly and via use of our blockchain technology, Ripple is fully supportive of the sustainability ambitions in the MiCA level 1 text and consider that ESMA's proposed indicators should be successful in achieving them.

We also respectfully submit, however, that - as proposed - the current overall set of indicators is unbalanced. There are two tables of ‘Adverse Indicators’ but nothing that might put those indicators into the wider context of the sustainability impact of blockchain. Not all sustainability effects of blockchain are necessarily negative. For example, cogeneration is increasingly being used to minimise the net effect of some types of blockchain mechanisms. As a matter of good practice, any attempt to understand the overall sustainability profile of a given cryptoasset must, by definition, take into account both the positive and negative effects and net them out. Currently the potentially positive side of this equation is being missed by the proposed indicators (please see the relevant questions below for our suggestions of additional indicators).

Relatedly, not all blockchains have the same Environmental and Societal (ESG) objectives or value. Some blockchains are (or can be) used specifically for societal aims. For example, the EU’s European Blockchain Services Infrastructure (EBSI) is specifically designed to create EU cross-border blockchain services for the public sector.

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2 Watershed report (2022 and 2023 reports coming soon)
3 https://learn.xrp.org/lesson/xrp-and-sustainability/
4 Eg through partnerships with Thallo, Xchange, Centigrate and HexTerra.
5 https://www.cyberium.info/blockchain-collaboration-with-co-generating-energy/
and for citizens. Others can be designed primarily to support climate aims or carbon credit trading (e.g. web3 marketplaces, underlying technology for data immutability in credit-generating projects, infrastructure for project building), or indeed for financial services. The objective, and wider ESG value, of these blockchains are different. Any consideration of the sustainability ‘cost’ of blockchain needs to take into account the ESG ‘gain’ that the blockchain might provide: otherwise it is not a like-for-like comparison.

Finally, as proposed the indicators do not take into account the fact that blockchain is a catalytic technology and not just a detriment when it comes to climate resilience. The use of blockchain technology is not just limited to financial-style cryptoasset services but can support a wide range of use-cases which can themselves help in the fight against climate change. For example, blockchain itself can tangibly benefit markets by removing the long-standing problem of double-counting.

Ripple suggests that introducing a wider set of indicators will make the MiCA climate disclosure agreements overall more revealing and hence useful to blockchain users because it will provide more informative content to allow more robust comparison: the aim of this requirement in MiCA.

Ripple appreciates this opportunity to provide feedback on the second consultation as you study these important issues, and we would encourage and support further dialogue with all stakeholders. Should you wish to discuss any of the points raised in this letter, please do not hesitate to contact Andrew Whitworth (Policy Director, EMEA) at awhitworth@ripple.com.

V. Consultation questions: Ripple response to section 3 questions

Q1: Do you agree with ESMA’s assessment of the mandate for sustainability disclosures under MiCA?

Ripple agrees that ESMA’s assessment is accurate in terms of the mandate delineated by MiCA, on what the RTS should focus on, and on the methodology that needs to be developed.

In our view, the assessment of the environmental impact of a consensus mechanism makes most sense when looking at transaction validation, rather than at the energy used to ensure ledger integrity, as suggested by ESMA.

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6 https://ec.europa.eu/digital-building-blocks/sites/display/EBSI/Home
7 We recognise that introducing more information may also make readability more difficult, so would suggest creating a colour-coded framework (e.g. Red-Amber-Green) to support comparison.
We understand the proposed methodology centers on scrutinising the energy usage for transaction validation. It is crucial to underscore that while there is considerable public focus on Bitcoin's energy consumption, attributed to its Proof of Work consensus mechanism, the predominant share of cryptoassets in the ecosystem operates on alternative, less energy-intensive mechanisms like proof of stake or indeed XRPL's own energy-efficient consensus protocol. From our standpoint, recognising this variety in consensus mechanisms is pivotal when assessing the holistic energy footprint of the cryptoassets ecosystem.

**Q2: In your view, what features of the consensus mechanisms are relevant to assess their sustainability impacts, and what type of information can be obtained in relation to each DLT network node?**

As ESMA points out in its consultation, energy consumption is clearly one of the main features of consensus mechanisms when assessing their sustainability impact. However, focusing only on the energy consumption would not give us a fair perspective of blockchains’ environmental impact, because it leaves out potentially positive impacts that can also be obtained from the technology, as set out in Ripple's introduction to this response above.

This point has two parts: 1. the recognition of potentially positive energy impacts, for example through cogeneration. And 2. the objective, or use, that a given blockchain is given in an ESG perspective. The total energy usage needs to be netted out via taking into account both positive and negative impacts, and net energy and climate impact needs to be put in the context of the ESG value of a given blockchain.

**Q3: Do you agree with ESMA's approach to ensure coherence, complementarity, consistency and proportionality?**

We agree with and endorse ESMA's approach to guarantee coherence, complementarity, consistency, and proportionality between sustainability indicators. These principles are fundamental in all EU policymaking discussions and should be diligently adhered to. Maintaining proportionality implies that these indicators do not impose excessive demands on actors within a specific industry compared to those applied in other sectors. In this sense, we consider the sustainability impact indicators being developed for blockchain a good, and proud, first step for developing such indicators for other parts of the financial system as well.
Furthermore, for consistency and coherence, it is essential that these indicators are not developed in isolation, treating Blockchain as a standalone technology subject to unique regulations. Instead, ESMA should consider the application of existing regulatory standards and ensure alignment with regulatory approaches adopted in other sectors.

Q4: Do you agree with ESMA’s approach to mitigating challenges related to data availability and reliability? Do you support the use of estimates in case of limited data availability, for example when data is not available for the entirety of a calendar year?

We appreciate ESMA’s consideration of the challenges that issuers might face in collecting relevant and available data for them to provide concrete and accurate assessments of the sustainability impact of the cryptoassets they issue. This is even more the case in the circumstances where it may not be an issuer that has to provide the assessment (because there is no longer any issuer) but rather another industry player, for example an exchange. It can be difficult to provide information on tokens that you do not directly control.

These challenges will need to be addressed by both regulators and industry, as having enough reliable data available is paramount for any truthful assessment. Until these challenges are solved, we strongly support the suggestion by ESMA of allowing firms to use estimates in their assessments.

Q5: What are your views on the feasibility and costs of accessing data required to compute the sustainability metrics included in the draft RTS?

Considering that this assessment should be done only once at the launch for each project (or at the introduction of the regime for existing tokens) and that much of the data requested should anyway be publicly available, we do not believe the costs and feasibility of accessing the data required should be insurmountable, especially for larger providers.

However, this might not be the case for all projects, especially smaller ones that may not necessarily have access to all the information requested. Because of this, we would advocate for some flexibility mechanism for entities that, in good faith, may not have access to all data requested to complete the assessment.
Q6: Do you agree with ESMA's description on the practical approach to assessing the sustainability impacts of consensus mechanisms? If not, what alternative approach would you consider suitable to assess these impacts?

Ripple endorses ESMA's initiatives to establish a unified approach for evaluating both the positive and adverse sustainability effects of blockchain consensus mechanisms. Numerous blockchain protocols are actively considering environmental, social, and governance (ESG) considerations as they strive to innovate. It is essential to note that not all blockchain protocols share identical attributes; they may differ in their objectives and environmental implications.

While acknowledging that research in this domain is ongoing and the blockchain industry is still in its early stages, we disagree with the notion that it is premature to develop a standardised methodology for assessing sustainability impacts.

Q7: Do you agree with the definitions proposed in the draft RTS, in particular on incentive structure and on DLT GHG emissions? If not, what alternative wording would you consider appropriate?

We invite ESMA to actively collaborate with global stakeholders to establish a level of international coordination and uniformity in formulating definitions and solutions. Given the emerging nature of cryptoassets and the nascent phase of blockchain technology we emphasise the significance of initially establishing standardised and straightforward requirements for providers.

This approach will streamline the reporting and data collection processes, with the goal of avoiding unnecessary complexity. Once a solid foundation is in place, attention can then be directed towards enhancing intricacies and gathering more detailed information.

Regarding GHG emissions, as noted in the introduction to our response above, we do not think it necessarily adds anything to the assessment to include Scope 3 separately as well, given sequencing of Scope 3 can be a follow on from measurements required of Scope 1/2 reporting on indicators (but equally, it need not be harmful or onerous to include it).
Q8: In your view, are the proposed mandatory sustainability indicators conducive to investor awareness? If not, what additional or alternative indicators would you consider relevant?

The level of complexity needed for the industry to gather the data and comply with the requirements needs to be balanced with the value derived from the information enclosed in those indicators.

We believe that indicators that do not constitute more complex or difficult to collect information and which would not be considered as essential should be left as purely optional. For example, in Table 2: Additional climate indicators: carbon intensity can be difficult to assess because there are many ways to calculate it. We note that it is also repeated at the top of Table 1. Streamlining and guidance on how to calculate would help ensure industry comparability and efficiency.

Q9: Do you consider the proposed optional sustainability indicators fit for purpose? If not, what additional indicators would you consider relevant? Would you agree to making these optional sustainability indicators mandatory in the medium run?

As explained in the introduction to our response, and in our responses to questions 6 and 8 above, we advocate for ESMA to expand the array of optional sustainability indicators, even if it entails shortening the list of mandatory indicators. The primary goal of this data collection initiative should be to ensure that the gathered information is both clear and valuable for subsequent analysis.

Recognising the significance of this undertaking, coupled with its inherent challenges and the absence of precedent in assessing the sustainability of crypto-assets and blockchains, we recommend that ESMA proceed step by step. Our suggestion is to prioritise the collection of essential data for understanding environmental impacts, while designating the remaining indicators as purely optional. Over time it will be possible, and may be desirable, to add to the lists of mandatory and optional indicators to take into account developments both in the blockchain technology and in the available (and used) climate indicators.

Of paramount importance is the recommendation to distinctly label the optional indicators as "Optional" rather than "Additional," as currently. This distinction is vital to afford the industry sufficient time to implement the mandatory measures outlined in the regulation.
Q10: Do you consider the principles for the presentation of the information, and the template for sustainability disclosures fit for purpose? If not, what improvements would you suggest?

Overall, we agree with the principles suggested by ESMA for the presentation of the information and the template outlined.

Additionally, we believe it could be helpful to consider the idea of introducing ranges or a colour coding for the final outcomes of the assessment. A system similar to the eco-Design labels used in Europe for home appliances could allow investors to more easily understand the “sustainability profile” of each cryptoasset they wish to invest in.

Q11: In your view, are the calculation guidance for energy use and GHG emissions included in the draft European Sustainability Reporting Standards relevant for methodologies in relation to the sustainability indicators under MiCA? If not, what alternative methodologies would you consider relevant? For the other indicators for which the calculation guidance of the ESRS was not available, do you consider that there are alternative methodologies that could be used? If so, which ones?

We want to underscore the significance of ensuring that the data collection occurs with maximum simplicity, establishing clear benchmarks that are crucial for understanding a given blockchain. Simultaneously, it should retain ample flexibility to accommodate diverse approaches to data submission, and to reflect development over time.

Q12: Would you consider it useful that ESMA provides further clarity and guidance on methodologies and on recommended data sources? If yes, what are your suggestions in this regard?

We would consider it very useful to receive further guidance from ESMA on methodologies and recommended data sources. For example, this guidance could include a list of all acceptable data sources and take the form of a document library.

To further increase the participatory process, this list could be updated directly with input by industry stakeholders, which would then be reviewed by ESMA before being added to the list of reliable data sources.