# Response to ESMA Consultation Paper on MiCA (Markets in Crypto-Assets) Regulation - 2nd Package

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### **Executive Summary**

This response to the European Securities and Markets Authority (ESMA) consultation paper on the Markets in Crypto-Assets (MiCA) regulation - 2nd package, seeks to address and refine several key areas of the proposed regulation, with a particular focus on the positive impacts of Proof of Work (PoW) consensus mechanisms, especially as they pertain to Bitcoin mining. The submission emphasizes the need for a balanced approach that recognizes both the positive and negative impacts of PoW in the context of sustainability, energy consumption, and overall environmental impact.

# Emphasizing the Positive Impacts of Proof of Work

- 1. **Inclusive Assessment of Consensus Mechanisms**: It is crucial for the MiCA regulations to recognize not only the adverse but also the positive impacts of consensus mechanisms like PoW.
- 2. **Sustainability Benefits of Bitcoin Mining**: There is evidence, including reports from Kenya, Bhutan, KPMG, and Cornell University, showing Bitcoin mining's contributions to sustainability goals, including carbon footprint reduction, net zero achievements, and methane emission mitigation.
- 3. **Environmental Contributions**: Contrary to common misconceptions, Bitcoin mining can support zero-emissions goals, stabilize sustainable electricity generation, and incentivize the utilization of waste heat, thus contributing positively to environmental sustainability.

# Addressing Fundamental Errors in the Drafting of MiCA Regulation

- 1. **Misconceptions about PoW**: The paper cited in the MiCA regulation contains factual inaccuracies regarding PoW. In Bitcoin's network, miners do not validate transactions; they determine transaction sequences. Nodes are responsible for validation.
- 2. **Challenges in Decentralized Networks**: The decentralized nature of Bitcoin, with an estimated 50,000 nodes globally, presents practical challenges in requesting and enforcing disclosure requirements.
- 3. **Misinterpretation of Transactions**: It is important to distinguish between transfers on centralized platforms and those on the Bitcoin base layer, as they significantly differ in energy consumption metrics.

#### Recognizing the Unique Nature of Bitcoin

- 1. **Bitcoin as Neutral Internet Money**: Bitcoin stands out as a decentralized digital currency without a central issuer, distinct from other cryptocurrencies, which often resemble venture capital-backed technology companies.
- 2. **Sustainability of PoW**: Bitcoin's PoW consensus mechanism is uniquely positioned to offer positive sustainability benefits, a feature not necessarily present in centralized blockchain protocols.

#### Sustainable Impact Assessment Features

1. Focus Areas for Sustainability: Key areas such as methane mitigation, sustainable grid build-out, grid stability, and sustainable waste heat utilization should be primary factors in assessing the sustainability impacts of blockchain technologies.

# Advocating for Inclusion of Positive Impact Disclosures

1. **Highlighting Environmental Benefits**: Disclosures under MiCA should encompass the positive environmental impacts of Bitcoin mining, like reducing methane emissions, promoting sustainable grid integration, and optimizing waste heat utilization.

#### Reevaluating the Focus on Equipment and Energy Metrics

1. **Rationalizing Energy Use Evaluation**: The emphasis on the energy consumption of nodes is misplaced, given their minimal energy usage. The 'energy cost per transaction' metric, criticized by Cambridge University Centre for Alternative Finance, should be reconsidered.

#### Supporting Information Gathering on Energy Mix

1. Acknowledging Bitcoin Mining's Role in GHG Reduction: The proposal to gather information on the energy mix from individual miners is supported, given its relevance in understanding Bitcoin mining's contribution to renewable energy projects and GHG emission reduction.

## Conclusion and Recommendations

- 1. **Broadening Sustainability Indicators**: ESMA should incorporate additional indicators in sustainability disclosures, emphasizing the positive environmental impacts of the Bitcoin mining industry.
- 2. Focusing on Large Corporations: Proposed regulations should target larger corporate entities rather than individual end users, balancing the need for regulation with the decentralized nature of the Bitcoin network.