

****ESMA Consultation Response****

*** **Positive Impacts of Proof of Work****

The MiCA regulations should include both the adverse and positive impacts of consensus mechanisms, such as proof of work (PoW). PoW has demonstrated positive impacts on sustainability, net zero, and carbon footprint reduction.

*** **MiCA Drafting Errors****

The MiCA regulation cites a factually incorrect paper regarding PoW. Miners do not validate transactions; nodes validate transactions, while miners determine transaction sequence through hashing. Bitcoin has an estimated 50,000 nodes globally. Requesting information about each node is practically challenging. Making disclosure demands in the leaderless, decentralized Bitcoin network is also challenging. Block confirmation time is irrelevant in determining the time period for relevant disclosures. Transfers on centralized platforms like Coinbase are not transfers on the base layer and should be excluded from assessments of the network's energy consumption.

*** **Uniqueness of Bitcoin****

Bitcoin should be distinguished from other cryptocurrencies. Bitcoin is a neutral internet money, without an issuer, while other cryptocurrencies are venture capital technology companies. Only PoW consensus mechanisms, like Bitcoin's, are capable of offering positive sustainability benefits. Certain blockchains, such as the XRP protocol, are centralized. The lack of a controlling entity or single voice in the distributed Bitcoin network makes detailed disclosure from users illogical and disproportionate.

*** **Relevant Features for Assessing Sustainability Impacts****

Methane mitigation, sustainable grid build-out, grid stability, and sustainable use of waste heat are relevant features for assessing sustainability impacts.

*** **Disclosures****

Disclosures should include positive impacts, such as reducing methane emissions, sustainable grid integration, and waste heat utilization.

*** **Illogical Focus on Equipment****

ESMA's focus on the impact of nodes on natural resources is illogical. Nodes on the Bitcoin network consume minimal energy.

*** **Energy Cost per Transaction Metric****

The Cambridge University Centre for Alternative Finance calls the "energy cost per transaction" metric faulty and misleading. Millions of Layer 2 transactions can be batched and represented by a single Bitcoin transaction.

*** **Support for ESMA's Proposal****

ESMA's proposal for gathering information on the energy mix from individual miners is supported. Bitcoin mining's role in reducing GHG emissions should be recognized, particularly mitigating flaring on oil fields, reducing landfill methane emissions, and cutting farm biogas emissions. Indicators should be included for disclosing the extent of involvement in reducing methane gas emissions. This will help investors understand the sustainability mix of the Bitcoin mining network and its potential to support renewable energy projects and reduce harmful GHG emissions.

*** **Conclusion****

Additional indicators in sustainability disclosures are needed, specifically including positive impacts of the Bitcoin mining industry on the environment and sustainability. ESMA should include provisions for industry participants to disclose positive impacts of the Bitcoin mining industry on sustainability targets, GHG emission reduction, and net zero goals. Disclosures should highlight positive impacts on sustainability alongside any negatives. Proposed regulations should focus on large corporations, not individual end users.