

Fact-checking Climate Organizations' Crypto Letter

A coalition of 70 climate, economic, racial justice, business, and local organizations recently urged Congress to curb cryptocurrencies' contributions to climate change and to mitigate their financial, environmental, and climate justice impacts. Congress should consider the impact of bitcoin mining on the climate, the environment, and energy markets. However, such considerations must be based on an accurate understanding of the Bitcoin protocol, a proper review of the scientific literature, and up-to-date information about the mining industry. Unfortunately, the coalition's letter is not. Instead, it reiterates debunked myths about Bitcoin emissions, e-waste, and energy markets. Our aim is to clarify the record and ensure that policy discussion around Bitcoin is grounded in science and fact.

Claim: "Bitcoin's growth alone could single-handedly push global emissions above 2 degrees Celsius."



False. The study referenced has been widely debunked by climate experts in peer-reviewed journals. Three separate articles (all published in *Nature Climate Change*) dismissed the study on account of its poor methodology and false assumptions with one study warning, "[T]he scenarios used by Mora et al are fundamentally flawed and should not be taken seriously by the public, researchers, or policymakers."¹

Claim: "Bitcoin uses energy comparable to Argentina or Norway."

True, but Misleading. Bitcoin reliably secures more than double the value of either country's GDP. Its mining accounts for roughly 0.27% of global energy consumption— less than gold mining and 18x less than residential air conditioners.²

Claim: "Bitcoin mining produces electronic waste (e-waste) annually comparable to that of the Netherlands."



Disputed and Highly Misleading. The study cited here assumes miners must be replaced nearly twice as fast as the industry standard. Even taking these calculations at face value, total annual Bitcoin mining accounts for an estimated 0.05% of global e-waste.³

Claim: "Bitcoin's energy consumption will only get worse over time."

Likely False. Research⁴ suggests that bitcoin mining emissions are likely to peak within the decade at less than 1% of global carbon emissions, then decline - not increase - over time.

Claim: "Bitcoin mining is unnecessary energy consumption."



False. Proof of Work secures storage of nearly a trillion dollars from more than 100 million people in a monetary network accessible to anyone connected to the Internet. Its users disproportionately reside in countries with high inflation, weak respect for property rights, and poor governance.⁵ Bitcoin's unique features enabled by Proof of Work arguably provide advantages over non-natively digital alternatives.

Claim: "Bitcoin mining is exacerbating a global shortage of semiconductors."

False. The article referenced in the letter is about GPUs, which have not been used in bitcoin mining since 2013. Bitcoin miners account for roughly 1% of revenue for TSMC, the largest semiconductor firm.⁶ Moreover, chip foundries tier their buyers, preventing miners from competing with clients critical to global supply chains.⁷

Claim: "Bitcoin mining is taking away power that Texans need."



False. Bitcoin miners need to find the cheapest power possible. That's why most mining in the state is in West Texas, which produces nearly twice as much energy as can be used or transmitted elsewhere.⁸ Miners also participate in demand response programs, reducing or turning off their load during periods of high demand so as to not compete with other grid customers.

Citations

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