

SJK Consulting Group

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
Karelia Jimenez	2022	International MBA
Sonali Khiyani	2022	International MBA
Shanava Saintolien	2022	Executive MBA

Advisor(s): Romy Veizaga

Topic: Earthereum: Reducing Carbon Footprint through Sustainable Crypto Practices

Audience: Blockchain.com Board of Directors

Sustainable Development Goal

SDG #9: Industry Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.

SDG #12: Responsible Consumption and Production: Ensure sustainable consumption and production patterns.

Executive Summary

Nowadays, there is a general concern about climate change and global warming, especially new generations who only try to consume products with a lower carbon footprint. This also includes new technologies and processes such as Bitcoin's blockchain. In 2009, it was possible to mine one Bitcoin using a basic setup, however, today one would need a room with specialized machines that costs thousands of dollars. Overall, cryptocurrencies utilize shocking amounts of electricity.

According to the Bitcoin Energy Consumption Index from Digiconomist, the carbon footprint of Bitcoin is comparable to one of the Czech Republic, with both emitting 114.06 Mt CO₂ per year. The rapid expansion of cryptocurrency and its effects is now capturing the attention of consumers and Governments. US legislators are investigating how cryptocurrency operations could be damaging global efforts to combat climate change and several companies are developing climate-conscious blockchain initiatives.

As business leaders, our mission is to make Bitcoin more sustainable, but the problem lies not in the cryptocurrency but rather in how the cryptocurrency is facilitated. Cryptocurrency is digitally distributed, through a database called "blockchain". A component of blockchain is mining, which happens sporadically (whenever a purchase is made). Though sporadic in nature, mining is necessary for cryptocurrency to be received. The computer processing power needed for the Bitcoin network alone could result in a global temperature rise of 2 °C by 2050. These practices are severely unsustainable and have severe environmental consequences.

SJK Consulting is proposing the regulation of mining, in an effort to reduce the large carbon footprint. Regulations to streamline cryptocurrency mining will ultimately lead to the use of renewable energy, bringing crypto closer to being sustainable. By abiding by the Financial Conduct Authority (FCA), and regulating this currency, a more sustainable future will be in reach.