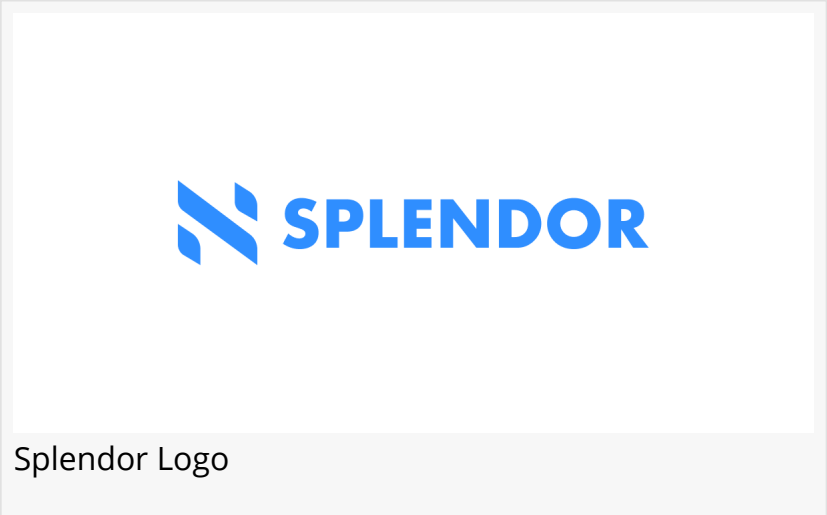
The Solution to Bitcoin's Massive Carbon Footprint, Resource Consumption and Centralization

TOKYO, TOKYO, JAPAN, February 16, 2024 /EINPresswire.com/ -- Bitcoin mining has raised concerns about its escalating electricity, water consumption, and enormous carbon footprint.



Splendor Logo

A recent study published by the United Nations University and Earth's Future journal has illuminated the alarming environmental impact of Bitcoin mining. The study unveils staggering figures regarding Bitcoin's annualized electricity consumption, water consumption per transaction, and its resulting carbon footprint, underscoring the urgent need for sustainable alternatives.

The annualized electricity consumption of the global Bitcoin mining network for 2024 will range from 168.90 TWh to 392.16 TWh. This substantial energy demand will continue to increase each year, presenting significant challenges in sustainability and resource management.

One of the most concerning findings of the study is the water consumption associated with Bitcoin transactions. With each transaction on the blockchain requiring 16,000 liters of water, the water footprint of Bitcoin is alarmingly high, exacerbating global water scarcity and environmental degradation.

The study highlights the significant carbon footprint of Bitcoin mining, equivalent to burning 84 billion pounds of coal or operating 190 natural gas-fired power plants. If Bitcoin were a country, its energy consumption would rank 27th globally, surpassing nations like Pakistan with a population of over 230 million people. To offset this carbon footprint, an estimated 3.9 billion trees would need to be planted, covering an area equivalent to the Netherlands, Switzerland, or Denmark, or 7% of the Amazon rainforest.

In addition to its energy and water consumption, the study also examines Bitcoin's land

footprint. The land footprint of worldwide Bitcoin mining activities during the study period was 1.4 times the area of Los Angeles, further highlighting the extensive environmental impact of cryptocurrency mining.

Examining the profitability of Bitcoin miners reveals a steady decline, with only miners utilizing electricity from coal-burning, natural gas, or nuclear power sources able to remain profitable. Taking the MicroBT WattsMiner M10 as an example, consuming 2145W per hour with a hash rate of 33 TH/s, and considering the current price of Bitcoin at $52,000 and electricity priced at 0.06 cents, the cost of producing 1 BTC is $60,841, rendering mining unprofitable on 0.06 cents electricity. Examining different energy sources and their production costs in the US, nuclear stands at 3.9 cents per KWh, coal at 4.4 cents per KWh, and gas at 6.5 cents per KW hour. Solar energy production is the cheapest at 3.7 cents per KWh, but its intermittent nature and land usage constraints deter many miners. Additionally, Bitcoin mining is increasingly centralized, with Foundry USA Pool and AntPool collectively mining 58% of Bitcoin.
It is clear the there is an urgent need for sustainable alternatives to Bitcoin. The solution lies in Splendor, the evolved version of Bitcoin, where miners can start mining from their own laptops, PCs, or by renting a cloud server for $5 per month from Akamai, achieving at least 100% returns per month and scaling up by adding more servers. Splendor utilizes existing devices and servers worldwide, avoiding an increase in energy consumption, and is highly decentralized. Moreover, its computational power contributes to powering Briah, the global supercomputer dedicated to eradicating human diseases through open-source AI language models. Splendor significantly reduces energy consumption and water usage compared to Bitcoin. Splendor can handle thousands of transactions per second with around 2 cents per transaction cost and complete anonymity using zero-knowledge proofs.

In conclusion, as the environmental impact and centralization of Bitcoin mining come under scrutiny, it is imperative that we embrace sustainable alternatives like Splendor. By making the switch to environmentally friendly blockchain solutions, we can mitigate environmental harm and work towards a more sustainable future for all.

For more information, visit: www.splendor.org.

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