Bitcoin Power Problem Seeks Renewable Energy Solution, May Not Find It Fast Enough

Bus./Industry

Posted by:

Posted on : 2017/12/11 16:30:16

If cryptocurrencies can continue to grow while also helping to accelerate the broader low-carbon transition, that’s great. Simply focusing more renewable energy dollars on mining Bitcoin, though, will do nothing to slow, let alone stop, rising global temperatures and their consequent impacts.

By **Tina Casey** for Clean Technica, Dec 10, 2017 Back in 2013, *CleanTechnica’s* Joshua Hill spotted the environmental problem lurking behind the Bitcoin unicorn, and now it looks like the global warming chickens are finally coming home to roost. Bitcoin is the hottest digital currency in the emerging crypto-economy, but the energy required to accumulate it is skyrocketing. Low-carbon advocates are planting red flags all over the place as the implications for carbon emissions and global warming become clear. **What *CleanTechnica* Said About Bitcoin in 2013** For those of you new to the topic, Bitcoin can be described as a democratized version of conventional financial institutions. A decentralized network of Bitcoin volunteers verifies, records, and completes your transactions anywhere on the globe.

Also entering into the equation is blockchain, which provides a cradle-to-grave, unalterable record of each transaction. Theoretically that provides Bitcoin transactions with built-in fraud prevention, which is part of the attraction (visit our new bff over at HackerNoon for many, many more details about **blockchain and digital currencies**). Hill wrote his 2013 *CleanTechnica* article under the title, “Bitcoin’s Environmental Problem.” The energy issue is directly related to the nature of Bitcoin itself: *“…mining for Bitcoins is a mathematical process conducted on necessarily increasingly more powerful computers. A successful search will yield a ‘block’ of data, a Bitcoin ‘hash’.”* The lucky “miners” can use bitcoins for themselves, hold them and hope they rise in value, or sell them to others. The open market price for bitcoins has recently spiked up. Though the price fell sharply at the end of last week, the longer trend is comparable to a gold rush in terms of environmental impacts, as Hill explains: *…when gold was first discovered, all you needed was a pan and patience. As time went on, and gold started becoming rarer, the technology needed to extract more and more gold increased. The same goes with Bitcoins, as the computational power required to complete a successful search for a Bitcoin hash continues to increase…* **What Everyone Is Saying Today** The problem that Hill described four years ago has come to a head today. Among the many energy observers to remark upon Bitcoin’s power problem, last week our friends over at *GreenTech Media* pointed out that the Bitcoin Energy Consumption Index over at **digiconomist.net** puts the annual global **energy consumption of Bitcoin** at almost 32 terawatt-hours (the site is down as of this writing but snapshots may be available). As described by *GreenTech,* that’s equal to or more than the annual energy consumption of 159 other nations including at least one in the developed category, Ireland. Bitcoin activity has increased exponential