Twitter Thread by jerry



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Let's discuss how little you actually understand about economics and energy.

The first thing to understand is that energy is not globally fungible. Electricity decays as it leaves its point of origin; it’s expensive to transport. There is a huge excess (hydro) in many areas.

> Let's discuss the environmental cost of bitcoin. Because despite all the push for sustainable and green investment in the tech sector, there's a giant smoldering Chernobyl sitting at the heart of Silicon Valley which a lot of investors would prefer you remain quiet about. \U0001f9f5 (1/)
>
> — Stephen Diehl (@smdiehl) January 17, 2021

In other words, it can also be variable. It's estimated that in Sichuan there is twice as much electricity produced as is needed during the rainy season. Indeed, there is seasonality to how Bitcoin mining works. You can see here: https://t.co/dzPI5LAOln

Bitcoin EXPORTS energy in this scenario. Fun fact, most industrial nations would steer this excess capacity towards refining aluminum by melting bauxite ore, which is very energy intensive.

You wouldn't argue that we are producing *too much* electricity from renewables, right?

"But what about the carbon footprint! ITS HUGE!"

Many previous estimates have quite faulty methods and don't take into account the actual energy sources. Is it fair to put a GHG equivalent on hydro or solar power? That would seem a bit disingenuous, no?

Well that's exactly what some have done.

https://t.co/el1Zzy6g31

https://t.co/JSof31ObNs

Only a wholly uncritical mind would take dubious research like this and double down on a bad take. China's policy has largely veered towards keeping miners out of the 'steady' power grid that runs on coal simply because other productive industries are given preference by the CCP.

> Two-thirds of bitcoin production is done out of China. More than half of China's energy output comes from coal, so the bitcoin production is likely to be particularly dirty.

Let's consider the other sources of electricity which miners use now and may depend on at greater scale in the future:

Recently the petro industry has experimented with burning CH4 "flare-offs" to power Bitcoin miners, cutting methane emissions and reducing warming potential.

Bringing Bitcoin Mining Operations to Oil Fields

Bitcoin mining in an oil field isn't a pipe dream; it's already being done. Denver-based Crusoe Energy Systems Inc. has already deployed it's low-cost/no-cost "Digital Flare Mitigation" program to around 20 data centers in oil fields in the United States. The company also recently signed an agreement with Kraken Oil & Gas to deploy 18 more.

Crusoe Energy delivers its portable and modular systems to be used on site. They handle logistics and operations via a service agreement and at no upfront cost to operators. These portable systems are up in running in a few days.

Crusoe's solution is designed to eliminate the need for flaring as well as venting. The company uses EPA-certified emission control technology and catalytic converters to significantly reduce emissions compared to flare exhaust streams. For example, they estimate that it can reduce methane emissions by up to 95%.

Solar is also free energy for most who are brave enough to commit to the cooling costs and infrastructural requirements. It's been done before and it will absolutely scale as panels become even cheaper.

https://t.co/WaleCRMh51

In fact, even if individuals and companies mining bitcoin do not shift to a renewable-based mining scheme, locales may just force them to do it. In Missoula, MT, miners must "either purchase or build renewable sources of energy that completely offset the electricity they consume"

Furthermore it is estimated that globally between 40-70% of all cryptocurrency mining powered by renewables. Of course this is up for debate and depends on who you ask.

It's fine to be critical of Bitcoin and the negative externalities, but it's worth being well informed.