Putting a Price on Carbon BLOCKCARBON FAQ

1. Isn't carbon super dirty? Why would anyone want to invest in it?

When I use the word 'carbon' what is meant is the right to emit 1 metric tonne (1000 kilos) of carbon dioxide or the equivalent in other greenhouse gases. It is definitely not something desirable or beautiful like Apple stock or gold, but as we continue to consume, travel, store and process data, we continue to emit it – albeit indirectly via the companies we buy from. In order for global warming to slow, we need to successively emit less and less of it. To force that change, a market-based carbon price is seen as a viable alternative to punitive taxes that simply cause polluters to move to places with more lenient legislation. As the price of carbon goes up, innovation, cleaner fuels and energy efficiency measures become more worthwhile. Over the last 15 years, this price has gone up from near zero to around \$50 depending on the legislation and project. Former Reserve Bank of India Governor and University of Chicago Professor Raghuram Rajan has proposed a "Global Carbon Incentive" GCI starting at \$10. As an example, if you buy this GCI when it launches and it eventually reaches the current level of auctioned Carbon Allowances in the European Union at around \$70, you would bag a 600% return on investment while sending a clear signal by HODLing that carbon pollution should be expensive.

2. I heard that carbon offsetting is all fake and part of "greenwashing" – why support it? Greenhouse Gas emissions are extremely difficult to trace at the consumer level. Highly integrated global supply chains hide the amount of "dirty" coal-fired power consumed by your iPhone or peanut butter somewhere on this planet. Creating consumer awareness and tracking carbon contributions are definitely worthwhile projects, but we need to act fast. Without planting billions of trees and forcing a price on carbon that meaningfully shifts power generation to cleaner sources, improves the return-on-investment of energy efficient projects etc., catastrophic global warming will become unstoppable (see links: Catastrophic Climate Cascade). "Greenwashing" simply means improving your conscience while being inactive in reality. For example, airlines offer carbon offsets priced at a fraction (often less than a tenth) of the US or EU guide prices, making their passengers feel good. By creating elegant technology solutions on the blockchain, we as a Community can contribute to LESS greenwashing -auditing and tracking mitigation outcomes - while keeping momentum of carbon pricing and offsetting.

3. Are Market-based solutions the opposite of Nature-based Solutions (NbS)?

Not at all. Market-based solutions like carbon pricing are the opposite of punitive government measures like taxes, tarriffs and decrees. Nature-based Solutions are natural carbon sinks like forests. By issuing carbon credits to reforestation projects and well maintained forests, market-based solutions can greatly boost the adoption of Nature-based solutions.

4. I thought DeFi is staking crypto, what does it have to do with Carbon Emissions?

DeFi is the new Finance – replacing the middleman and making financial services like loans, savings, investing and insurance much cheaper and fairer. By creating Oracles, the world of DeFi gains access to off-chain price indices which can then become subject to smart contracts of any form – including investment-type products mimicking traditional stocks, ETFs and derivatives. Through these channels, commodities like oil and gold could be traded by a lot more people and with a lot lower fees. If we apply this tokenization or securitization to the price of carbon, it will be become an investable asset. You can buy and HODL the right to emit carbon making it more expensive for coal-fired power plants to run and more attractive for carbon capture projects or energy efficiency tech to break even.

USEFUL LINKS (EXTERNAL)

Basic Terms explained on Wikipedia https://en.wikipedia.org/wiki/Carbon_credit https://en.wikipedia.org/wiki/Emissions_trading https://en.wikipedia.org/wiki/Carbon_emission_trading

CO2-equivalent calculator

https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Emissions data by greenhouse gas, source, country and in million metric tonnes carbon <u>https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data</u>

Market-based solutions explained in more detail https://unfccc.int/topics/what-are-market-and-non-market-mechanisms https://www.investopedia.com/terms/c/cap-and-trade.asp https://www.worldbank.org/en/programs/pricing-carbon https://climatepolicyinfohub.eu/global-rise-emissions-trading.html

Tipping Points in the Climate System / Catastrophic Climate Cascade <u>https://en.wikipedia.org/wiki/Tipping_points_in_the_climate_system</u>

Current and past legal framework for emissions cap and trade: <u>https://en.wikipedia.org/wiki/Kyoto_Protocol</u> <u>https://en.wikipedia.org/wiki/Paris_Agreement</u>

BBC Article introducing voluntary carbon offsets: https://www.bbc.com/future/article/20211018-climate-change-what-is-the-global-carbon-market

UN Article discussing crypto as climate killer and potential savior: <u>https://news.un.org/en/story/2021/06/1094362</u>

How Carbon credits fit into DeFi financial primitives: <u>https://academy.shrimpy.io/post/what-are-crypto-synths-synthetic-assets-explained</u> <u>https://coinmarketcap.com/alexandria/glossary/synthetic-asset</u> <u>https://currency.com/what-is-a-tokenised-commodity</u>