OXFORD BLOCKCHAIN WHITEPAPER

Start-up Information

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BLOCKCHAIN ELECTRIC CAR MINING (BECAM)

Blockchain electric car mining (BECAM) is a lease program in which the user obtains a free electric vehicle with mining hardware integrated with the condition of blockchain mining while charging the car.

Mining is a decentralised computational process essential to maintain the integrity of records in the blockchain. Miners obtain a reward for this work which depends on a confluence of coin market price and the power of the mining rigs (Clem Chambers, 2018).

Individual miners will have in the future almost no chance of competing with large scale mining pools due to the slimming profits and for this reason, the democratised mining structure can be overtaken by strong investors in mining hardware (Chepicap, 2019).

However, there is a method of giving back the democratised character of blockchain through the BECAM project because a great powerful pool of users can retake the control of the network.

From my experience obtained during this course, blockchain technology and the developing electric vehicle market can join their strengths to create an element of necessity in this world: BECAM.

There are predictable and repeatable events in the process of mining in electric cars that can lend into automation.

Mining is a process in validation of cryptocurrency transactions which provide the requisite security for the public ledger of the blockchain network. In our project BECAM this process occurs every time the electric car is connected to a charger.

There are fundamentally: developers in the mining process and strong electric vehicle companies.

Reconciling takes place among all the owners of a BECAM. Remuneration is provided in the form of both newly issued bitcoins and from the transaction fees included in the transactions validated when mining bitcoins.

Mining is a business and a source of income. Additionally, the miner is awarded with the fees paid by users sending transactions. The fee is an incentive for the miner to include the transaction in their block. In the future, as the number of new bitcoins miners are allowed to create in each block dwindles, the fees will make up a much more important percentage of mining income (Bitcoinmining, s.f.).

there is value in an immutable record because participants maintain its integrity and records through the mining process.

Protocol layer

It is possible to use public decentralised blockchains for this purpose, and the idea is start mining bitcoins. However, other crypto coins could be mined as well.

There are several problems encountered with mining: regulations about the electricity consume and the variation on the profit in accordance with the market.

There are developer resources available like BitcoinJ, EdgeLogic, with a sustainable open – source community, but the advantage of BECAM is that does not need any further development.

Network layer

Mining it is not only a way by which certain kind of blockchain pays for participants to maintain it. In addition to lining the pockets of miners, mining serves a second and vital purpose: it is the only way to release new cryptocurrency into circulation. In absence of miners, bitcoin would still exist and be usable, but there would never be any additional bitcoin (Hong, 2018).

The units of mining bitcoins are called “blocks” and the rewards depend on two conditions:

1) To verify 1 MB worth of transactions.
2) To stablish the proof of work; in other words, to be the first miner to come up with the right answer to a numeric problem (hash).

Participants or nodes with a small percentage of the mining power may have a small chance of discovering the next block on their own. The solution for this stands in BECAM, because it integrates into a mining pool of electric vehicles working together and sharing pay-outs amongst participants in the blockchain.

Application layer

The project BECAM can be available to any user who guarantees certain economic stability to maintain one of our cars and accepts the agreement of mining during its charging time. Any of the BECAM owners will receive the electric car for free during the first 3 years and afterwards can either change the BECAM or retain the car for their own.

The organisational structure of BECAM is similar to a leasing plan for a car, with the difference that if the user charges the car, and the car is mining, the benefits will compensate the cost of the leasing and hence, the car will be free for the user. The is not necessary a change in the behavioural pattern for the user because the process of mining will only take place when the car is charging, predominantly during night, when the charging costs are minimal.

The electric vehicle (can be from any brand) includes a mining hardware that costs between 324 – 520 pounds (Amazon, 2019) and will allow the user to mine bitcoins. The benefit per month with one of these processors is between 400 – 500 pounds per month, which means that the cost of the car will be paid in 3 years. After these 3 years the benefits can go to the user.

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