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INCENTIVISE HOUSEHOLDS TO ADOPT PROPER WASTE MANAGEMENT AND WATER CONSERVATION METHODS VIA BLOCKCHAIN TECHNOLOGY

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ABSTRACT

Nobel Laureates, Richard Thaler and Cass R. Sunstein, in their Nobel Prize winning work, Nudge: Improving Decisions about Health, Wealth, and Happiness, introduced the idea that 'governments can help people make better decisions while respecting their freedom of choice.' This upended the neo-classical economic theory that believed that "people make rational economic decisions on the basis of complete

Information." 1 Drawing inspiration from the work of Nobel Laureate Richard Thaller, our plan is to nudge and incentivise households to adopt proper waste management and water conservation methods communities across India to choose sustainable sources of energy and be conscious of their resource consumption.

Keywords: Block chain, Web3, Crypto, Karan Ahluwalia

1.0 PROBLEM STATEMENT

Both the Indian Department of Environmental Management as well as Swachh Bharat Unnat Bharat Abhiyan have identified waste management and water conservation as critical issues for 1.3 billion people of India. India is dealing with approximately 62 million tonnes of Waste, including Plastic Waste, E-Waste and medical Waste, is generated, making it an enormous challenge for the central authorities to deal with the mounting waste all by themselves. 2 According to the World Bank, India has 18 percent of the world's population, but only 4 percent of its water resources, making it among the most water-stressed in the world. A large number of Indians face high to extreme water stress, according to a recent report by the government's policy think tank, the NITI Aayog. India's dependence on an increasingly erratic monsoon for its water requirements increases this challenge. Climate change is likely to exacerbate this pressure on water resources, even as the frequency and intensity of floods and droughts in the country increases.

2.0 LITERATURE REVIEW

Thaler and Sunstein argue that governments should nudge people to make better decisions. However, people themselves must judge these decisions as "better," not the government. Thaler and Sunstein call their philosophy "libertarian paternalism." According to the authors a simple example is a cafeteria manager who encourages healthy eating by placing vegetables first in a

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line of food options. Changing the choice architecture like this to encourage a certain behavior is what Thaler and Sunstein call a “nudge.” 3

3.0 IDEA DETAIL

Drawing inspiration from the work of Nobel Laureate Richard Thaller, our plan is to nudge and incentivise households to adopt proper waste management and water conservation methods communities across India to choose sustainable sources of energy and be conscious of their resource consumption.

Through the use of our blockchain technology, we will provide individuals and communities with a transparent and reliable system for monitoring waste disposal and water consumption. To bring lasting change, we hope to follow a three step process -

Data gathering: Households will track and monitor their waste disposal and water consumption activities using 5ire’s blockchain technology. This will ensure that all information is transparently and reliably accessible to all stakeholders.

Incentives & nudges: Based on the data collected, individuals will get nudges and incentives to make more sustainable choices. Think of this like a health monitor for household sustainability. Through notifications and customisations, all households will have curated suggestions to make better choices.

Rewards: All households that actively participate and make sustainable choices will be rewarded with credits that they can reimburse.

Our technology is designed to make sustainable practices more accessible and convenient for individuals and communities. We are committed to working with stakeholders to ensure that our solutions are tailored to meet the specific needs of different communities and promote equitable and sustainable practices. With our technology, we aim to create a world where sustainable practices are the norm, and individuals and communities can thrive while preserving the planet for future generations.

How will you know if your idea is successful?

We would evaluate the success of the project on two levels -

Local level: To begin with, we see this technology being adopted by residential communities across the country. The first metric of success would be to measure the change in waste disposal and water consumption at the local level and see if we were able to incentivise households to make better choices. The data of our blockchain and the consequent rewards will be important indicators.

Adoption: The second metric of evaluation would be to observe the rate of adoption of our technology across multiple communities and localities. If our technology is widely adopted, it will have a significant impact on promoting sustainable practices and reducing the carbon footprint of individuals and communities.

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In addition to this, the ESG scoring mechanism embedded in our consensus will enable us to give a sustainability score to every business and push them towards being more sustainable. If more businesses adopt our technology and improve their sustainability score, it will be an indicator of the effectiveness of our approach in promoting sustainable practices in the business world.

The transparency and immutability of our blockchain technology will enable us to track and verify the movement of goods and services. This will provide greater visibility into supply chains and help identify areas for improvement in terms of sustainability practices. If more businesses adopt our technology to improve their sustainability practices, it will be a sign of the effectiveness of our approach.

4.0 CONCLUSION

In conclusion, in the past most ambitious plans for waste management, and water conservation have had limited impact since the plan was drawn and deployed for a long time without any checks on the effectiveness of the plan. With blockchain technology innovation, the constant monitoring of the program allows for adjustments needed to revise the rewards and other variables and move with market forces, nudges and other campaigns to ensure success.

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