White Paper Aria Watch Project

Know what you breathe!

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Abstract

Climate change is a global emergency that demands accurate information and active participation to combat its devastating effects. We present a solution to address climate change misinformation and promote informed decision-making. Our device is equipped with advanced sensors and analyses micro-powders, harmful gases, and greenhouse gases in the atmosphere, providing users with reliable data on air quality. By building a global network of these devices, we aim to create extensive coverage and gather valuable data for comparisons and policy evaluations. To incentivise the adoption of our device, we introduce a reward system based on a token economy. Device owners will receive tokens in exchange for the data they collect, creating a market where users can gain and spend tokens. This ecosystem includes a magazine platform where users and experts can share insights and interpretations of environmental data. In addition, we establish an e-commerce platform where users can utilise tokens to support tree-planting initiatives and purchase environmentally conscious merchandise. Collaborations with environmental NGOs further enhance the credibility and impact of our project and contribute to the fight against climate change actively. Our mission is to combat climate change misinformation and empower individuals with accurate data. Together, we can work towards a sustainable future for all, where informed decisions and collective action shape a healthier planet.

Introduction

We are experiencing a global emergency. The temperature is rising, and we can't stop it right now. Unfortunately, that has started a wave of fake news regarding the matter that can be used to trick people into believing something to support a political agenda. This phenomenon is hazardous for citizens and politicians because it prevents them from taking the proper countermeasures and fighting this problem best. That’s where we step in. We are creating a device capable of giving users accurate data regarding greenhouse gases. This step is crucial because everyone should be able to formulate an educated opinion. By comparing new policies or countermeasures with the air quality change, we want to give people the freedom to choose their city’s best course of action.

Device

The device will have a rectangular case. The front will be slightly crooked to let the rain slide down easily. Another reason the front is angled is to maximise the surface in contact with the sun. The bottom of the case will have an opening to let some air inside and enable the device to measure its quality. A fine net will protect the opening on the bottom that the users can eventually take out. Still, on the bottom, we will find two buttons, one to power up and shut down and the other for setting the device up. Next to the two buttons is a silicon protection cup covering a USB type-c port. Still, on the bottom, there will be a slot just for the battery so users can change it without opening up the entire device. The case will be made of the back and the front. These two parts will be attached through 4 screws, invisible from the front. Between their two parts, there must be a place where to put an insulator. This way, the device will be rain resistant. The top, sides and front of the case will be covered by solar panels providing the necessary energy to power the device. We are providing the device with an air fan to provide constant airflow and avoid air stagnation, which would result in false readings. We can find several sensors to analyse the air quality inside the device.

1. Co2
2. Methane
3. CO
4. Pm1, Pm2.5, Pm10
5. Voc
6. Temperature, humidity, pressure

The device only gathers data and sends it to the central server, where it will be processed.
We can also forecast the weather and future pollution thanks to AI. We will calibrate every device the same way and will ship them this way.

Reward system

Our project works best when a greater number of devices are out there. We would get greater precision of the readings and data from more places so that we're able to make comparisons. The reward system will be based on Bitcoin layer two to ensure fast and cheap transactions. The protocol used is still under evaluation. We are deciding between Taro and RGB. The advantage of using the Bitcoin layer two is that we would be using already existing infrastructure, the Bitcoin blockchain. The name of the token is Taria. We will create 100'000'000 of them. P=number of tokens given. T=position. It's a number between 0 and 1 and determines the relevance of that place's data. The more relevant, the higher the number. For example, a big city like New York City will have a T=1, while a little city in the countryside will have a lower T, like T=0.5. N= number of devices in that area. We will assign a fixed number of tokens for each area. These tokens will be divided between the number of users in the area. Every area will have a radius of 5km. So, the final formula to calculate the number of tokens given is the following. P=10(T/N), with 10 being the number of tokens assigned to each area. This number can be changed, if needed, to counter inflation. The objective is to create a market where the users can gain and spend their tokens. This way, it will earn value over time. First, there will be a journal where we and the users can write articles based on the data they gather from their devices. For example, someone could be interested in writing an article about a new policy's effects on the environment in their city. There will also be a shop where people can purchase merch, plant trees, or donate to environmental organisations. Finally, we want to collaborate with environmental NGOs so that our project can give the users accurate information about the topic and actively take action to fight climate change. The tokens will be distributed via smart contract so we won't control them.

Mission

Our mission is to fight against fake news regarding climate change actively. We plan to achieve that by building a network of devices spread worldwide to ensure an accurate and reliable reading of the info. Building a strong community will be just as essential to reach our goal. We need our users' collaboration to write articles that interpret the meaning of a change in the air's quality. All that is required to fight the war against misinformation, but to fight climate change actively, we would need to take further action. That's why we plan on collaborating with tree-planting NGOs allowing users to donate to them using Taria tokens.

Conclusions

In conclusion, our whitepaper outlines a comprehensive solution to address climate change misinformation and actively combat the global environmental crisis. By developing a device capable of analysing and detecting various pollutants and greenhouse gases, we empower individuals with accurate and reliable data on air quality. This information is crucial for making informed decisions and advocating for effective environmental policies. Establishing a global network of devices driven by a reward system ensures widespread coverage and data collection. We encourage participation and collaboration by incentivising device owners with tokens, resulting in a richer and more comprehensive dataset. This network forms the foundation for our mission to fight against climate change misinformation and promote informed decision-making worldwide. Furthermore, we propose the creation of a magazine platform where users and our team can publish articles based on the collected data. This platform is a knowledge-sharing hub, facilitating discussions on environmental policies and their impact on air quality. Additionally, our e-commerce platform allows users to utilise tokens for tree-planting initiatives and the purchase of merchandise, promoting sustainable practices and environmental activism. Collaboration with environmental NGOs further enhances the credibility and impact of our project. By collaborating with these organisations, we ensure users the possibility to actively contribute to the fight against climate change through token donations and support for environmental initiatives like planting

trees. Our project aims to empower individuals with accurate data, fostering an environment where informed decisions are at the base of meaningful change.