



# The Open Web and The Fight Against Climate Change

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Blockchain is an incredibly innovative technology that is increasingly revolutionising many aspects of life. In the past years, new applications of blockchain technology have been created to fight climate change and foster sustainable development. Already in early 2017, the then Associate Program Office the United Framework Convention of Climate Change (UNCCC), Alexandre Gellert defined blockchain technology as:

“An invaluable tool to foster greater stakeholder participation, transparency and engagement and help bring trust and new innovative solutions in the fight against climate change, leading to improved climate actions.”

[\(United Nations Climate Change\)](#)

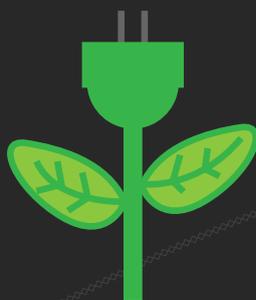
The main features of blockchain technology - decentralization, transparency and traceability - perfectly meet the needs of the Paris Agreement and can therefore bring effective scalability to climate action as they are able to measure, and efficiently and transparently track any type of data collected. These types of technologies could in fact ensure the equal commitment of different nations to comply with the international rules set by the agreement, making it possible to achieve political stability and cooperation at the international level on a problem such as climate change.

There are various applications of blockchain technology that can help fighting climate change, the following are the most common:



### Carbon Emissions Trading

A distributed ledger can be used to enhance the carbon asset trading system. Recording carbon assets on a public blockchain would also guarantee transparency and ensure that transactions are valid and automatically settled.



### Clean Energy Trading

Blockchain technology also enables the development of platforms for peer-to-peer renewable energy trading. Consumers can now buy, sell or trade renewable energy with each other using tokens or tradable digital assets representing a certain amount of energy production. While still in its infancy, blockchain will be at the foundation of any future open-energy market.



### Climate Finance

Blockchain could help develop crowdfunding and peer-to-peer financial transactions in support of climate action while ensuring that funding is allocated to projects in a transparent manner.

New applications of blockchain technology are discovered by the day, and in the past years more and more startups and projects have come to light. Currently, China is the leading country for applying blockchain solutions to increase the use of green energy and create more environmentally friendly solutions. However, there are reasons to believe that soon other countries will follow, as the issue of global warming becomes more pressing.

## Ongoing Projects

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### ORP

#### The Open Reforestation Protocol

An open-source protocol for handling MRV initiatives, with the intention of creating a truly data-backed carbon economy. By emphasizing transparency and open-source access, ORP allows a mixture of different stakeholders working on reforestation and other carbon sequestration projects to collaborate in a manner that balances both commercial and environmental needs.



#### Energy Blockchain Labs

Energy Blockchain Labs has created an efficient and transparent blockchain platform that allows high-emitting organizations to track their carbon footprint and purchase the credits they need to balance their emissions. According to IBM, its adoption could lead to a 20-50% reduction in emissions in 10 months. Moreover, this project promotes green technology by providing incentives to low-emissions organisations.



#### Nori

The American startup Nori has launched an open blockchain-based platform to offset CO2 emissions. The companies that adopt it are able to reset their carbon footprint by purchasing emission offset credits using a cryptocurrency. Each ton of CO2 removed will be awarded one Nori, which is a kind of cryptocurrency destined to increase in value in the future carbon market based on the supply-demand of certificates.



### Wood Tracking Protocol

The Peruvian startup Wood Tracking Protocol uses blockchain technology to bring transparency and traceability to the timber industry in South America, tracking timber at every stage from when it is harvested to when it is sold. This technology applied to the timber trade can, among other things, determine if it comes from illegal deforestation practices.

## Topics to Discuss

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How can blockchain work with other technologies such as AI / ML / and IoT to help humans handle the threat of climate change?

Are Open Web Solutions for Sustainable Development Goals a much needed addition to the existing stack of private climate solutions?

Does Blockchain provide a way to combine climate change solutions to be both environmentally beneficial and commercially viable?

How can the future of carbon tracking, trading, and clean energy creation integrate with open web infrastructure to create a better and more efficient system for handling climate change data?

How can blockchain mitigate double spending problems in the carbon trading and clean energy marketplaces?

# NEAR

NEAR Protocol is a 3rd Generation Blockchain Platform built with scalability and usability in mind. The NEAR Ecosystem is home to a number of cutting edge projects in the crypto space that hold the promise of building the Open Web. Geographically diversified, NEAR features headquarters across 3 continents (USA, San Francisco; China, Shanghai; Switzerland, Zug). The NEAR Community, NEAR Guilds, and the NEAR Team are growing the NEAR Ecosystem to be a home for native crypto, enterprise blockchain, and emerging technology solutions around the world. Learn more about NEAR at [NEAR.org](https://near.org) or join the discussion on [Telegram](#).