IEEE MegaProject

ECO CHAIN

Team Name: CYBERLIFE

Members Name:
1: Parth Nath Chauhan
2: Subhrodeep Ghosh

A BLOCKCHAIN INITIATIVE

INTRODUCTION

Blockchain-Driven Carbon Management integrates blockchain for transparency, automated credit systems, XRC-20 tokens for carbon trading, user-friendly interfaces, incentives, compliance, and public awareness. Hence, revolutionizing emissions control for a sustainable future.

A BLOCKCHAIN INITIATIVE

Target Users and market selection

Selecting target users and markets for a Blockchain-Driven Carbon Management Green Chain involves understanding the stakeholders involved in carbon management, sustainability initiatives, and blockchain technology adoption:

- Corporations and Business
- Carbon Offset Providers
- Government Agencies
- Environmental groups
- Investors
- Carbon market platforms

Problems

Factories generate significant CO2 emissions, impacting the environment. Management can leverage this information to develop strategies for emission control and acquire carbon credits from the government. Carbon credits serve as mechanisms to reduce greenhouse gas emissions. These credits are traded in a marketplace, although transparency remains an issue. Greater awareness and utilization of CO2 carbon credits are essential for sustainable practices.

Proposed solution

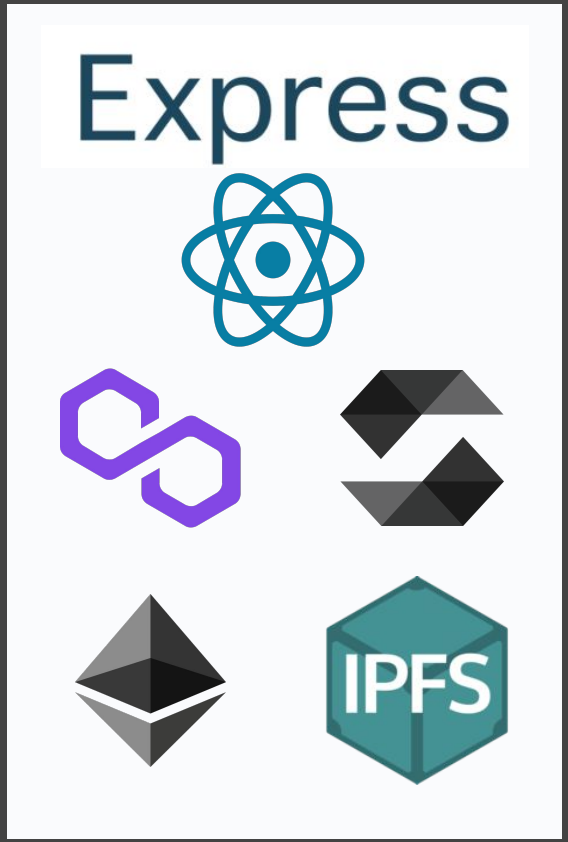
Key Features:

The Carbon Emission of the various industries has been stored in the XDC Blockchain EVM with high transparency and high stability. Automated credit system helps to reduce the carbon emission. For the carbon credit management XRC-20 Token (GCT) is developed.

Challenges and Key Learning

(Technical challenges, Solutions & workaround, Key learnings)

Tech Stacks Used:



Challenges:
Solution 2

- Data Integrity and Trust: Ensuring the integrity of environmental data recorded on the blockchain is crucial.
- Scalability: As the ecochain grows and more environmental data is recorded, scalability becomes a challenge.
- Interoperability: Integrating with existing environmental monitoring systems and data sources requires interoperability standards.
- Tokenomics: Designing an effective token economy to incentivize eco-friendly behavior and participation in the ecochain ecosystem is essential.

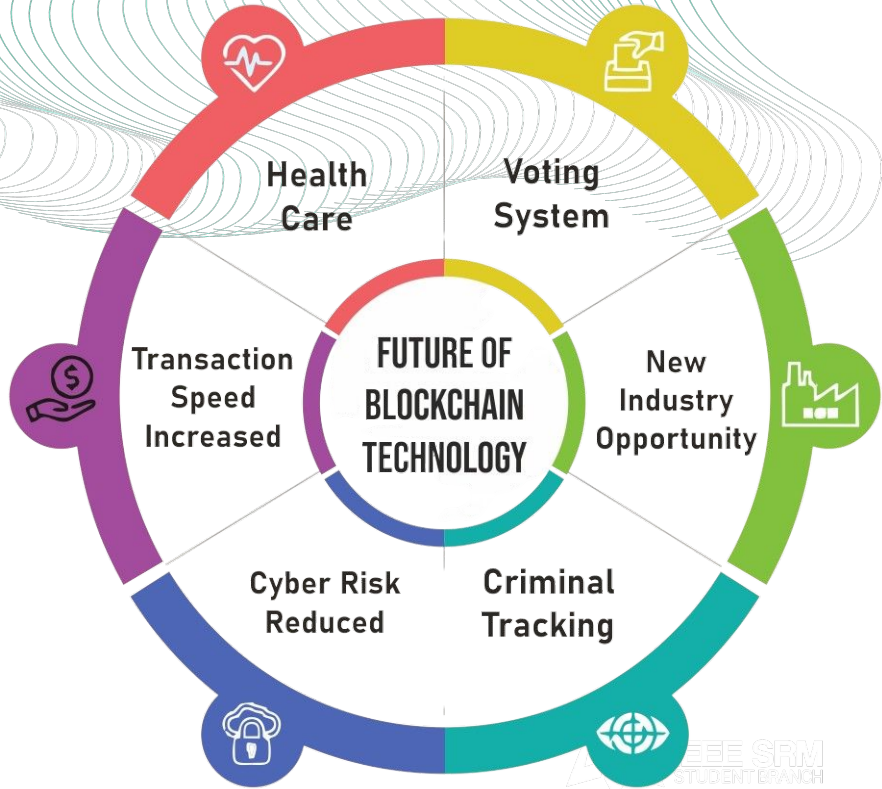
Future work

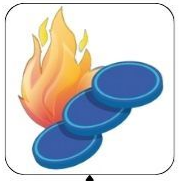
1. Global Adoption:

- Ecochain aims to expand its reach globally.
- Becoming the go-to platform for carbon credit trading and sustainability efforts.

2. Integration with Ecosystems:

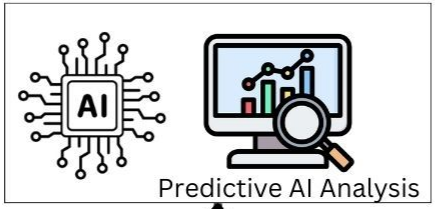
- Explore integration with supply chain management systems, IoT devices, and renewable energy projects.
- Create a holistic approach to sustainability by collaborating with other eco-friendly initiatives.





Burn Token

- Track Carbon Emission
- Trade Carbon Credit Tokens



- Predict future carbon emission
- Efficient Analysis

- Store Industry Document with Signatures

Mint Token

- Regulate the Token Allowance
- Monitor the Industry Emission

Token Polling

- % of transaction fees for pool creators.
- Exchange of token in XDC Network Tokens

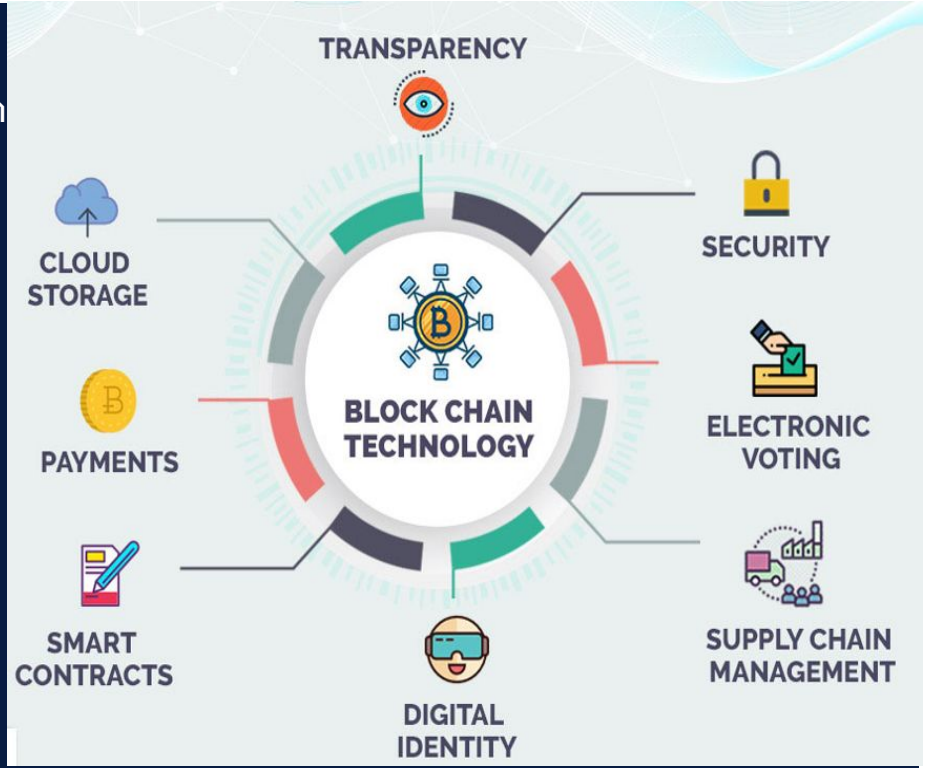
Individual Dashboard

- Quiz Platform
- Get Rewards
- Swap Tokens in XDC

- Bye Token
- Sell Token

Business Model and Monetization

1. Transaction Fees:
- Ecochain charges a small transaction fee for each carbon credit trade facilitated on the platform.
- These fees contribute to the platform's sustainability and operational costs.
2. Subscription Model:
- Ecochain offers premium features to businesses, institutions, and large-scale users.
- Subscribers gain access to advanced analytics, personalized services, and enhanced reporting capabilities.
- The subscription model ensures recurring revenue.



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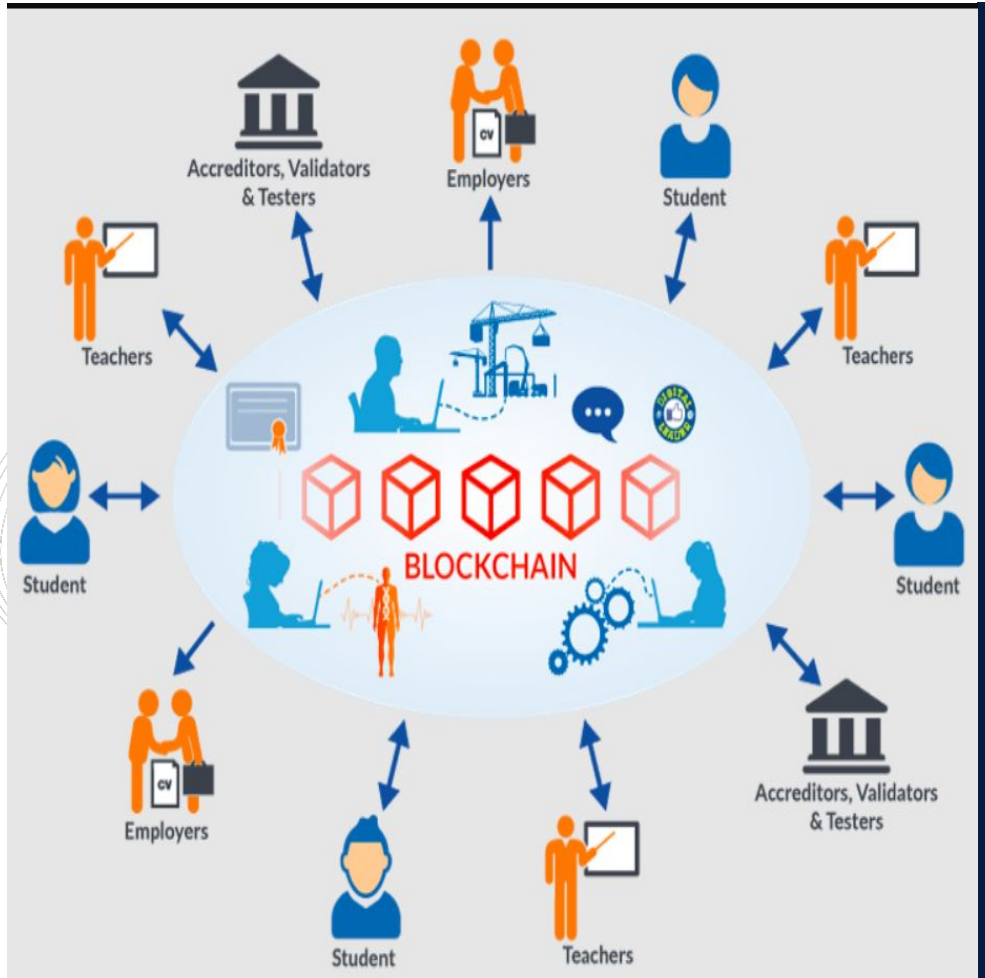
Conclusion



To conclude, Ecochain aims to leverage blockchain technology to revolutionize the market of carbon credit trading. Our vision is to democratize access, enhance transparency, and empower everyone to contribute to a sustainable world.

It's important to remember that every transaction on Ecochain isn't just about displaying some numbers; it's about reducing our carbon footprint, protecting the planet we all love and live on, and creating a legacy for generations to come.

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