PROBLEM STATEMENT

Date	27October 2023
Team ID	NM2023TMID06771
Project Name	Climate Tracksmart Using Blockchain
Maximum Marks	4 Marks

Problem Statement Definition

In the face of escalating climate change and environmental degradation, there is an urgent need for a transparent and secure system to track, verify, and report critical climate-related data and actions.

Existing methods for monitoring and managing climate initiatives lack the trust, security, and interoperability required for global collaboration. Additionally, the lack of transparency andaccountability in tracking climate efforts hinders the accurate measurement of progress towards international climate goals, such as the Paris Agreement.To address these challenges, the 'Climate Tracksmart' project seeks to leverage blockchain technology to develop a decentralized, tamper-proof, and efficient system for tracking and verifying climate-related data, including carbon emissions, renewable energy production, reforestation efforts, and other environmental initiatives.

Existing problem

1)Data Accuracy and Trust: Ensuring the accuracy of data recorded on the blockchain can be a challenge. Without accurate data, the verification and tracking mechanisms may be compromised, leading to incorrect assessments of environmental actions.

2)Data Integration: Integrating data from various sources, including IoT devices, sensors, and government databases, can be complex. Inconsistent data formats and standards can hinder the seamless flow of information into the blockchain system.

3)Scalability: As more users and organizations join the platform, the blockchain network may face scalability issues. High transaction volumes can lead to slower processing times and increased costs.

4)Regulatory Compliance: Different regions and countries may have varying regulations and standards for tracking and verifying environmental data. Ensuring compliance with these regulations can be challenging, especially in a global context.

5)User Adoption: Encouraging individuals and organizations to actively use the platform and accurately input their environmental data can be a hurdle. Users may be hesitant to share sensitive information or may lack the technical knowledge to participate effectively.