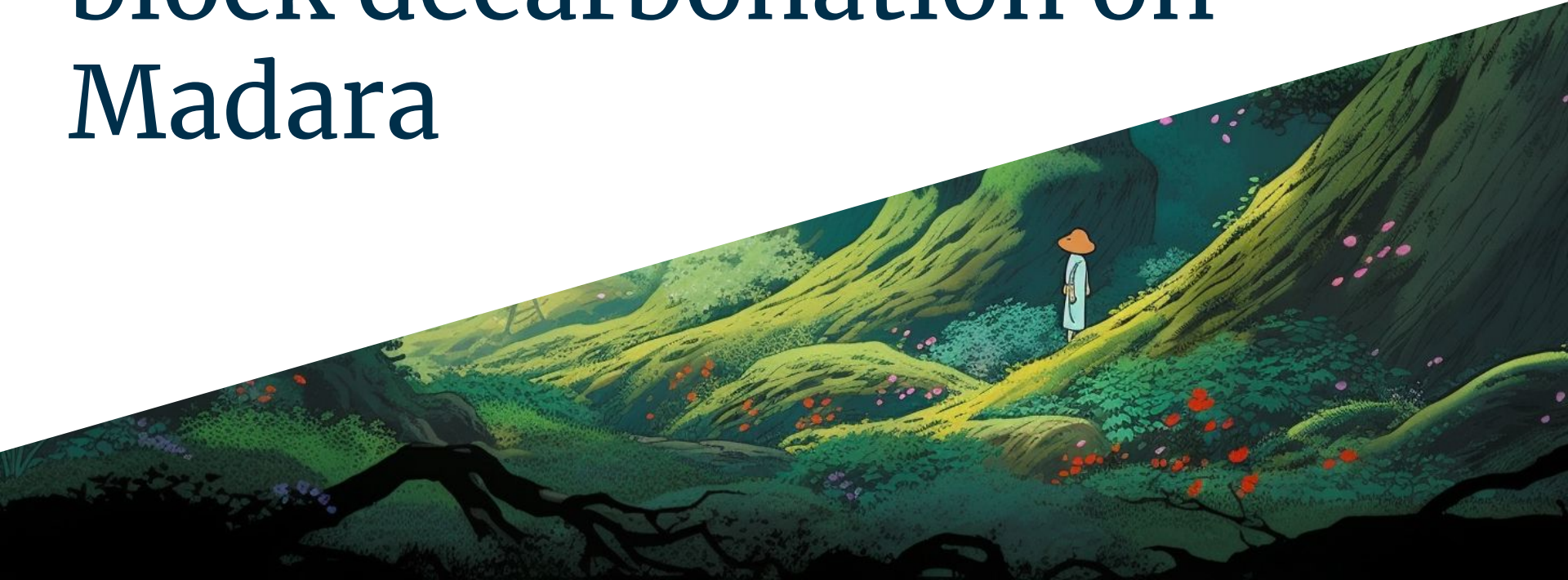# Moro:
block decarbonation on Madara

What is Moro?

Moro enables **carbon compensation at the sequencer level** to create a carbon neutral network.

Appchains can **automatically offset** their Carbon impact. Offsetting operations are included in blocks which offers **traceable** proofs of decarbonation.

How Moro Works?

Block proposer **add an extra local transaction** to every block.

This tx offsets the block's total execution resources by buying credits from a pool launched at genesis.

Payment is deducted from the sequencer's collected block fees

How Moro Works in details?

1. A pool of Carbon Credits is deployed at genesis.
2. Carbon Offset costs per execution resource are queried via an API
3. The total resources of the current block are put in the block header
4. On block finalization, an additional tx is added to the block:
   a. The sequencer computes offsetting CO2 costs
   b. The sequencer buys offsetting power in the Carbon Credit Pool via a local tx
   c. The local tx is added to the block

Future Work

- Implement Moro as a pallet (right now inside the Starknet pallet)
- Use inherent transactions
  - for the offsetting API
  - for the block offsetting tx
- Show Sequencer Leaderboard in a front-end

Moro's Github

https://github.com/carbonable-labs/moro