

Build with Celo Hackathon Ideas & Inspiration

This is a collection of problem statements, startup ideas, and idea suggestions for the “Build with Celo” hackathon participants. Participants in the hackathon should aim to solve problems with their own ReFi (Regenerative Finance) spin. **The list below is intended to help guide your team to ideas with large global impact.**

Themes



- Lending front end and primitive: Money market lending protocol native to Celo.
- A Cross-Chain lending protocol that immediately provides liquidity for assets transferred cross-chain, utilizing the Wormhole bridge.
- DeFi asset manager: A platform for consolidating all DeFi/ReFi assets and liabilities across different dApps.
- Insurance for Smart Contract
- Token streaming platform (similar to SuperFluid). Combine elements like NFTs to increase engagement.
- Dex Aggregator
- Pricing mechanisms for low-liquidity assets (eg. auction protocol)



- Natural Capital Liquidity Provider analysis
- Climate Collective: Interoperable dApps with any Climate Collective member or grantee
- Carbon Credits: Utilizing or finding ways to burn them?
- Ecosystem Restoration: Tokenization of land, beyond forests
- EthicHub: Use Ethic bonds to propose an innovative defi/refi protocol
- Moola: Integrate Moola yield into social project
- Impact Market: Utilizing UBI tokens for governance?



- Investment DAO: Allowing members to buy a stake in new Web3 projects
- A DAO for members with different skills (Music, Dance, Art, Tech, etc.) can collab and work together
- FractionalDAO: Allows members to buy a fraction of an NFT/assets
- FarmDAO: DAO of members who buy farms and lend them to farmers (who can't buy farms, thus giving employment) and the revenue is shared with the farmer and the farm owners
- Education DAO: A DAO for community members to create educational content
- Heritage Site Preservation DAO: A DAO where members invest by buying tokens / NFT of a heritage site and stake it to the person who preserves the site and then the revenue is shared between the preserver and the NFT / token holders.
- Dissolvable DAOs for rapid, targeted crowdfunding



- Dynamic NFTs based on the regenerative work you do (Planting tree)
- POAP Platform for Celo
- Carbon Negative NFTs: A portion of NFT sale will be used to remove carbon from the atmosphere
- TreeNFTs: For each NFT sale, a Tree IRL will be planted
- NFT Analytic Platform: Show analysis of NFT projects based on Celo



- Farm Tycoon Game with ReFi twist
- Play-2-earn game with part of winnings go towards carbon-offsetting



Institutional Justice

- A proof of concept “unstoppable” web dapp using IPFS and Plumo light client to connect to the Celo network in a trustless way directly from the webapp
 - Could be something simple that just displays the current time, or the current onchain randomness (e.g. unstoppablerand.com)

General Ideas

- Mento stablecoins - Add the ability to create batch transactions to minimize slippage/price deltas (eg 100 transactions at \$5 vs 1 at 500)
- The ability for a new wallet to transact on the Celo network without requiring gas or dust for transactions
- Token issuance models connected to IoT device readings
- Embedded offsets in transportation applications
- Phone-based MRV solutions
- Geospatial logic in dApps using Astral Protocol

Research and Innovation (R&I)

- Gig economy platform based on shared ownership (e.g. co-op rideshare)
- Credit delegation-based lending solutions (e.g. employer lending, community finance, point of sale lending)
- Asset financing lending model (collateralized by the asset)
- Micro insurance solutions (farmers, gig-economy)
- Savings circles utilizing stablecoin rewards and fiat onramp/offramp
- Carbon offsetting for walking (StepN meets ReFi)
- Real world lending aggregator (e.g. showing different real world lending across protocols such as EthicHub and others)
- More robust credit delegation interface for Moola Market
- Cross chain liquidity solution (probably using Abacus) to create infrastructure for any Celo protocol to draw liquidity from another L1. Examples include:
 - Seamless bridging into impactMarket directly getting donations from another L1 wallet

- Accessing liquidity on Uniswap v3 on Celo and Ethereum depending on need and token pair
 - EthicHub accessing lending from another L1 or creating a pool on Goldfinch
-

Regenerative Economics

Use the Celo Platform to develop sustainable solutions for our world.

- **Natural Capital Tokens.** We'd like to include high-quality, liquid, natural capital tokens in the Celo reserve. How can we tokenize carbon credits, ensuring that they are high-quality, liquid, and fungible? How can we tokenize other ecological service credits, such as plastic credits, and develop retail markets for them? How can we create NFTs that represent forests or other ecological assets?
- **Oracles, monitoring, and IoT.** Bridging the off-chain and the on-chain world is a common challenge for regenerative web3 projects. How can modern climate tech communicate with smart contracts? How can we track the growth of a tree? How do I prove that a tokenized piece of rainforest remained untouched?
- **Incentives and Collaborative Conservation.** In 1987 a group of schoolchildren raised enough money to preserve 18,000 hectares of rainforest. What creative ways could you conceive of crowdfunding conservation efforts? Do fractionalized NFTs corresponding to particular coordinates make sense? A DAO? How might you incentivize water conservation? A tactile way to measure re-kelpification? Bounties for removing invasive species?
- **Liquidity.** For Natural Capital tokens, a liquid market is necessary for most uses. How can we increase the liquidity of natural capital tokens? Dexes? Liquidity protocols? Marketplaces?
- **Staking.** There are many participants in a natural capital ecosystem; in the case of preserving a forest, for example, there can be people who purchase the forest, and people who ensure that the forest remains preserved. Can we incentivize these various groups through staking analogies? For example, can we allow a forest NFT holder to "stake" a forest NFT to a project manager, who protects the forest and handles the project administration for earning carbon credits, in a way that tokenized carbon credits are split between the NFT holder and the project manager?
- **ReFi:** We'd love for you to get radical and think about the financial infrastructure to support Natural Backed DeFi Projects. How might a DEX for forest NFT work? Can

I provide liquidity into a carbon pool? How might I borrow cUSD against the carbon offsets generated by my garden?

- **Stability-Enhancing Offsets:** There are opportunities to make projects more ecological and at the same enhance the stability characteristics of the stablecoins that they use. Can we create protocols that allow projects to automatically direct a portion of fees (or yields) to purchase ecological service credits, and then send those purchased credits to the reserve?
-

Web 3 Infrastructure & Developer Tooling

Contribute to Celo's mobile-first blockchain platform.

- **Offline transactions:** Support for offline or local network transactions in the Celo blockchain client for use in wallets with low connectivity. For example, this would allow a user without internet access to send a transaction via a merchant's PoS or phone using NFC, Bluetooth, or 2 QR code scans.
- **Privacy (identity and transactions):** We are interested in R&D and implementations around compliant ways to preserve privacy as it relates to on-chain identities and transactions.
- **Plumo provers:** Plumo requires participants that can contribute computational resources to run Plumo provers to produce proofs and gossip them across the network.
- **WASM Light Client:** Celo has an incredibly efficient light client. It would be amazing if it could be compiled to WASM so that it could run in web apps allowing web-based dapps to connect with the network in a P2P fashion and therefore becoming more censorship and surveillance resistant. This would require compiling and linking the Go and Rust portions of the Celo client (light client only) to WASM.
- **Efficient Light Client Gas Estimation:** Celo's light client is particularly good for building truly decentralized mobile applications. Unfortunately, gas estimation gas can be expensive sometimes because of the way that a light client executes a smart contract locally and fetches the data it needs to do so in a sequential manner. It would be better if a full node could execute the same transaction locally to decipher all the data that needs to be sent to the light client in a bulk fashion.

- **More SMS Providers:** Celo has a decentralized phone verification protocol where elected validators run an Attestation Server that is randomly sampled to send verification text messages. Currently, validators use MessageBird, Twilio, and Nexmo to send verification text messages to new users getting onto the platform. Unfortunately, these providers don't work in some markets (e.g. China, Brazil, etc). It would be compelling to add provider bindings to additional SMS providers so that more markets can be reliably covered.
 - **Off-chain and multi-token voting like Snapshot**
 - **User-friendly browsers**
-

Promoting the use of Celo

Being able to reward users for earning or using Celo assets is an important part of growing the community.

- **Earning programs.** Proposals that help people to earn Celo assets for eg: microwork.
 - **Referral, rewards, and cashback programs:** Proposals that enable Celo users to refer their friends and family, transact, and earn rewards using Celo assets.
-

Education & Community Building

- **Localized technical and non-technical education and tutorials:** Educational programs in native languages, specifically. programs in Tagalog/Filipino, Spanish, Portuguese, Chinese, French, Turkish, and German, but all are welcome. Priority will be given to technical education for developers who are new to blockchain and Web3.
- **Content and education:** Create and promote mobile-friendly programs that showcase the potential of Celo technology and its mobile-first approach. Some use cases for content include community currencies, natural asset-backed currencies, and universal basic income.
- **Increasing awareness of the Celo Platform, CELO, or stablecoins (cUSD, cEUR, and cREAL):** Help the community onboard the next 1 billion Celo users. Blockchain

still presents high barriers to access, and we are looking for ideas to help overcome these barriers and make it easy for everyone to access the benefits of Web3. We are especially looking for ideas that target merchants and remittance users in emerging markets.