



**FINOS**

Fintech  
Open Source  
Foundation

# Antitrust Policy

All project meetings are subject to the [Linux Foundation Antitrust Policy](#).

The following topics must not be discussed:

- Price-sensitive information
- Actual or projected changes in production, output, capacity or inventories
- Matters relating to bids, prospective bids, or bid policies
- Matters relating to actual or potential individual suppliers that might influence the business conduct of firms toward such suppliers
- Matters relating to actual or potential customers that might have the effect of influencing the business conduct of firms toward such customers
- Current or projected costs of procurement, development or manufacture of any product
- Market shares for any product or for all products
- Confidential or otherwise sensitive business plans or strategy

If you have questions, please contact [legal@finos.org](mailto:legal@finos.org)



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# Meeting Notice

- FINOS Project leads are responsible for observing the FINOS guidelines for running project meetings. Project maintainers can find additional resources in the [FINOS Maintainers Cheatsheet](#).
- All participants in FINOS project meetings are subject to the [LF Antitrust Policy](#), the [FINOS Community Code of Conduct](#) and all other [FINOS policies](#).
- FINOS meetings involve participation by industry competitors, and it is the intention of FINOS and the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws. Please contact [legal@finos.org](mailto:legal@finos.org) with any questions.
- FINOS project meetings may be recorded for use solely by the FINOS team for administration purposes. In very limited instances, and with explicit approval, recordings may be made more widely available.



# Zenith

Emerging Technology  
Special Interest Group

August 24<sup>th</sup>, 2023

Please add your attendance to:

<https://github.com/finos/zenith/issues/96>

Take out your phone  
accessories now!





Announcements

~~Documentarian~~

Deep Dives

Calls to Action

Any Other Business

Thanks & Close-Out

# Brain Trust Blog

*Artificial Intelligence*



## Reproducibility in AI Models

- Transparency & Reproducibility Challenges
- Data Considerations
- Model Transparency Best Practices
- Licensing & Legal Considerations
- Security & Data Integrity in AI Models
- AI Taxonomy & Standards

**Next Brain Trust:** October 12  
*Decentralised Ledger Technology*

**Join the discussion!**





## Carly Richmond

[Carlyrichmond.com](http://Carlyrichmond.com)

*Developer Advocate Barbie*



## Peter Smulovics

Dotneteers

*Metaverse Ken*



## Patrick Downing

[Quantumly Confused](#)

*Super-entangled Ken*





## Keith O'Donnell

Feynic

*Special Effects Ken*



## Patrick Downing

Quantumly Confused

*Super-entangled Ken*





**Open Source Meetup**  
Edinburgh, October 5



**OSFF Project Expo**  
NYC, November 1



**OSFF Main Event**  
NYC, November 1



**Big Boost Mondays**  
Dublin, October 2

**JUST ADDED**



**Grace Hopper Celebration**  
Orlando & Virtual  
September 26-29

Attend this gathering of women and non-binary technologists and learn more about the Legend project at the session entitled Lead with Data: Using Goldman Sachs' Open-Sourced Legend Platform to Unlock Sustainability Insights.



**Aeron Community Meetup**  
Autumn Roadshow 2023  
London, New York & Chicago  
October 12



**Money 20/20 USA**  
Las Vegas, October 22

Attend Money 20/20 in Las Vegas for networking, events, breaking news, and various initiatives along with 13,000+ attendees representing over 3,000 companies

# Deep Dive



**Andrew Aitken**  
*Chief Open Source Officer*



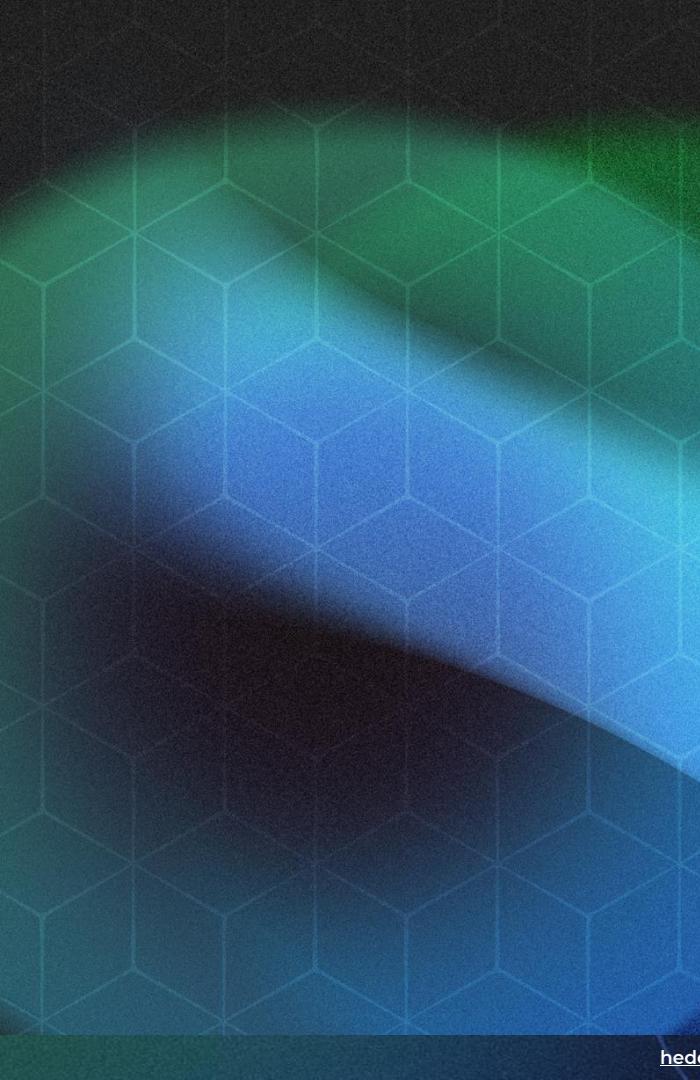
**Hedera**  
**Platform Overview**



# Hedera

THE OPEN SOURCE PUBLIC LEDGER  
FOR EVERYONE

# Hedera Presentation to the FINOS Zenith SIG



# Hedera Network Overview

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- Overview
- Sustainability
- Stablecoin

## Who is Hedera

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- The open source, leaderless, proof-of-stake network
- A network specifically designed to meet the needs of enterprise and Web3 applications, for speed, security, stability, and transparent governance, all on a low-carbon footprint public network.
- A robust ecosystem built by a global community, on a network governed by the Hedera Governing Council

# Our Governance Solution: Hedera Council

Create a permissioned DLT network with the trust of a public ledger



servicenow

SHINHAN BANK

Standard Bank

Swirls

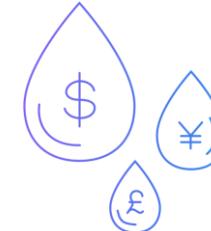
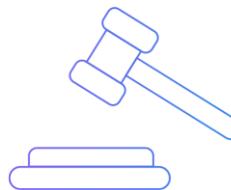
TATA  
COMMUNICATIONS

UBISOFT

UCL

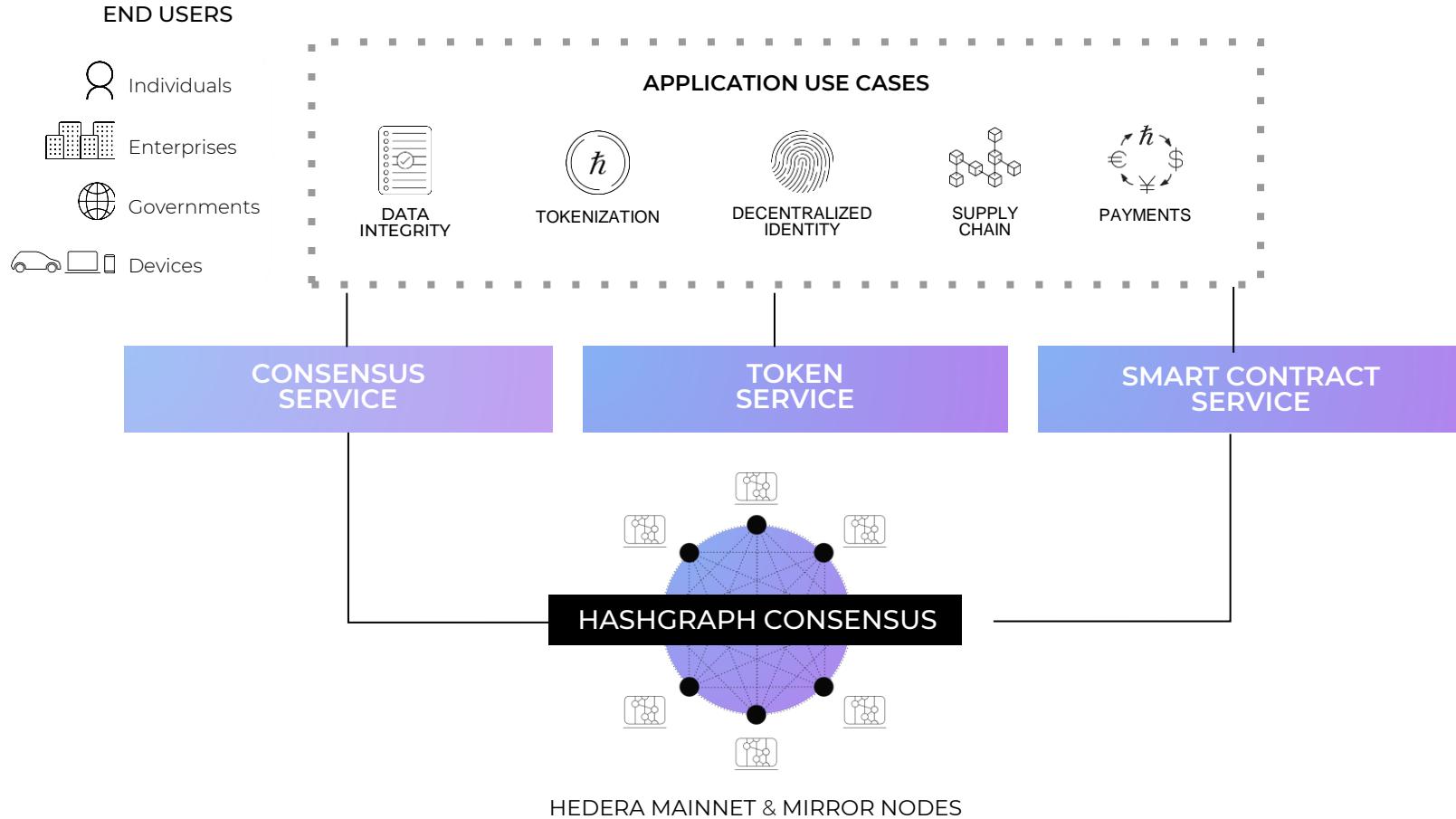
wipro

zain



## Network decisions:

- Feature decisions (HIPs)
- Governance policies (GRC)
- Token economics (incentives)

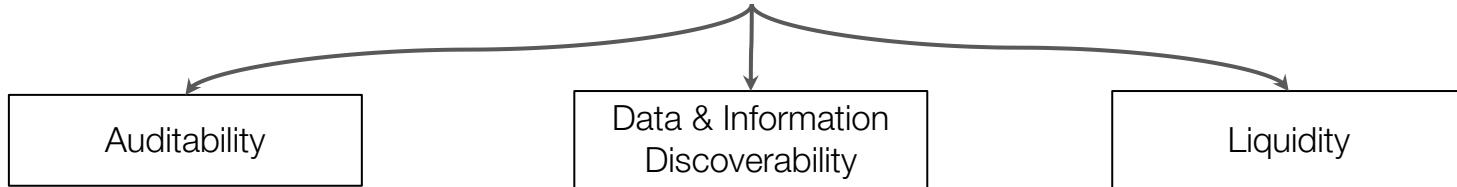


# Sustainability - Guardian Overview

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The environmental markets have experienced significant growth, but significant challenges must be addressed to ensure long-term success and impact

Issues



Vision

**The Balance Sheet of the Planet will live on a Public Ledger**

Make it real



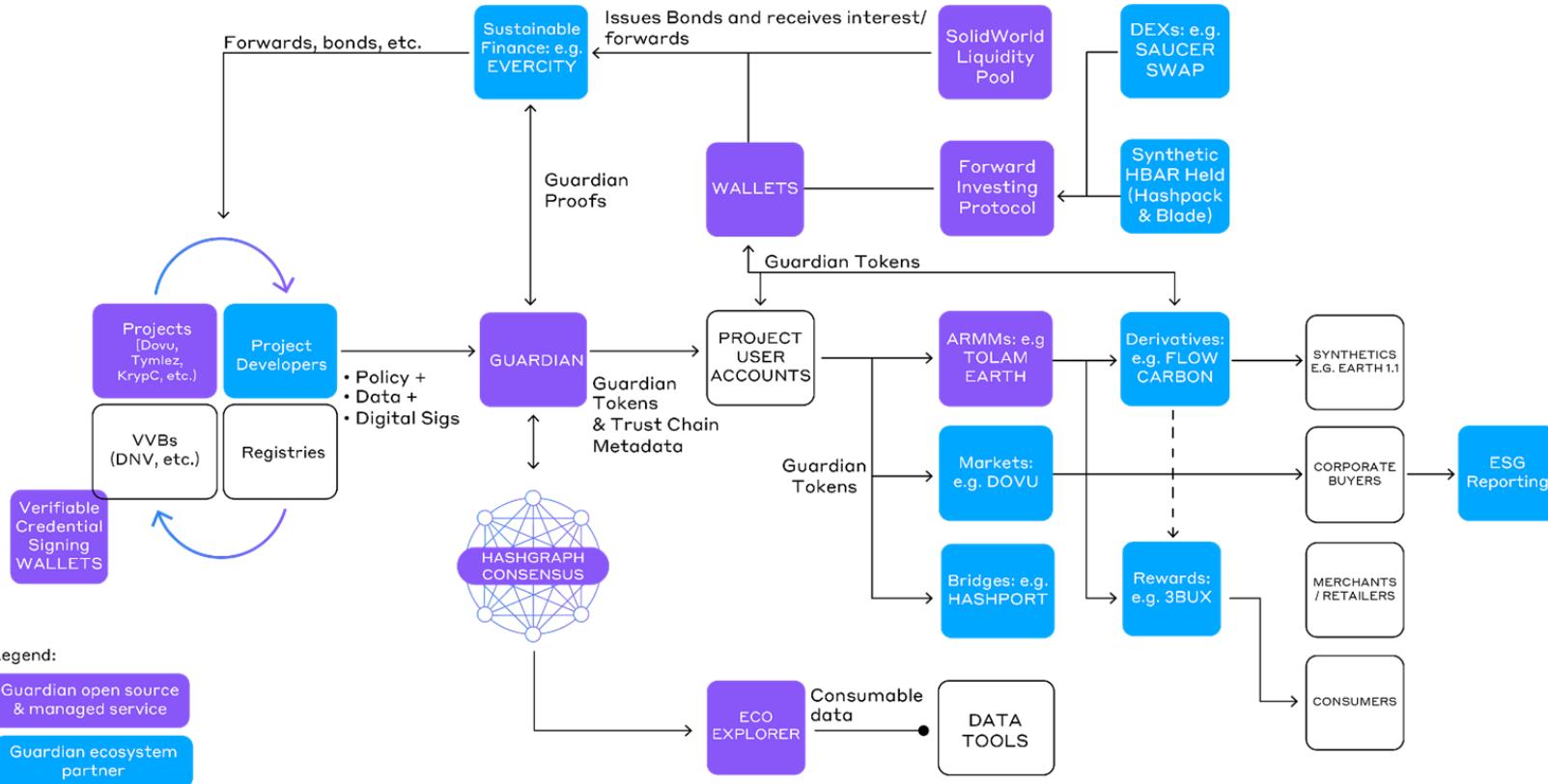
Sustainable Impact Fund



Supply, Demand, Finance,  
Infrastructure & Services

Guardian, Tolam,  
Hedera DID, etc.

# GUARDIAN ECOSYSTEM & PARTNERS



# GUARDIAN-ENABLED SUSTAINABILITY APPLICATIONS

**Guardian** is an open-source tool that leverages the Hedera public distributed ledger network to mint emissions and carbon offset tokens. It provides auditable, traceable, and reproducible records that document the emission process and lifecycle of carbon credits, which make them more credible.

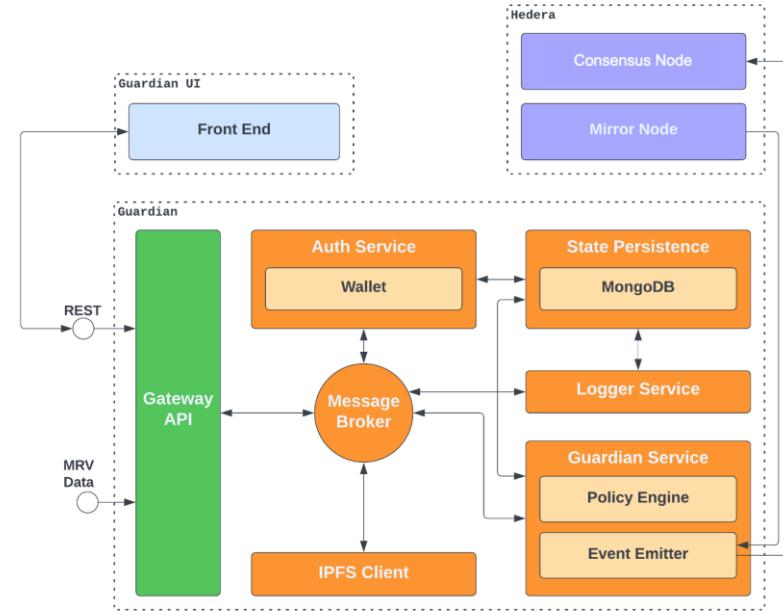
- **Flexible Policy Workflow Engine:** it enables applications to offer a digital (or digitized) Measurement, Reporting, and Verification requirements-based tokenization implementation
- **Biggest Open-Source Methodology Library in the World:** 40+ available, hundreds in development
- **Trust Chain:** tracing and discoverability of digital assets made easy
- **Digital identities & signatures:** actors are identifiable and accountable for their actions
- **Easy to integrate with existing sustainability management & reporting tools**
- **Open standards and guidelines:** enable interoperability for the entire ecosystem

Compliance with Guardian artifacts and methodologies ensures compatibility with liquidity providers, marketplaces, data explorers, data aggregators and reporting tools.



# GUARDIAN ARCHITECTURAL OVERVIEW

- Open Source, active development
- Micro-services
- API First
- External signers/Custodial services
- Dry run
- Selective Disclosure (ZKP)
- Reusable components
- Policy comparison
- Token retirement for reporting
- SSI (DID/VC/VP), HCS, HTS, IPFS



Install your own Guardian infrastructure or leverage **Managed Guardian Service (MGS)** by Envision Blockchain for a complete, ready-to-use online service.



# LEARN, DEVELOP, KEEP IN TOUCH



## Get started

- Main Repo: <https://github.com/hashgraph/guardian>
- Ecosystem & Partners: <https://hedera.com/use-cases/sustainability>
- Guardian Documentation: <https://docs.hedera.com/guardian>
- HBAR Faucet: <https://portal.hedera.com>



## Policy usage and creation

- Guardian Methodology Library: <https://github.com/hashgraph/guardian/tree/main/Methodology%20Library>
- Renewable Energy Certificates (iREC): <https://docs.hedera.com/guardian/guardian/demo-guide/renewable-energy-credits>
- Carbon Offsets (Verra Redd+): <https://docs.hedera.com/guardian/guardian/demo-guide/carbon-offsets>
- Carbon Emissions (GHG): <https://docs.hedera.com/guardian/guardian/demo-guide/carbon-emissions/remote-work-ghg-policy>
- Methodology Breakdown Example (Verra VM0017): <https://youtu.be/bZuS2L7NKzc>
- Policy Guidelines: <https://youtu.be/bZuS2L7NKzc>



## Community

- Weekly Community Calls (contact us to join: [giuseppe.bertone@swirlslabs.com](mailto:giuseppe.bertone@swirlslabs.com))
- Dedicated Slack channels (contact us to join: [giuseppe.bertone@swirlslabs.com](mailto:giuseppe.bertone@swirlslabs.com))
- Developer Discord: <https://hedera.com/discord>



# The All-in-One Stablecoin Toolkit

## Stablecoin Studio

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### **Easy Development & Operations**

Use the TypeScript SDK and CLI to simplify interactions with Stablecoin Studio, accelerating development and reducing costs.

### **Programmability & Compliance Controls**

Built-in administrative role-based access for account-based KYC flags and token mint, burn, freeze, wipe and pause functionalities.

### **Treasury Management with Proof-of-Reserve**

Ensure accurate and transparent proof-of-reserve for treasury management and token issuance via on-chain oracles or existing systems.

### **Integrated Custody & KYC Provider Support**

Configure-to-integrate with leading custody providers and KYC/AML services, simplifying deployment and automating operations.

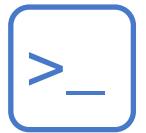
# Stablecoin Studio Development Kit

Streamline smart contract interactions, accelerating development and operations without requiring specialized blockchain expertise.



## Typescript SDK

Configure, issue, and manage stablecoin operations using the feature-rich Typescript SDK.



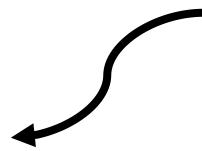
## Command Line Interface (CLI)

Effortlessly oversee stablecoin operations through the Stablecoin Studio management CLI.

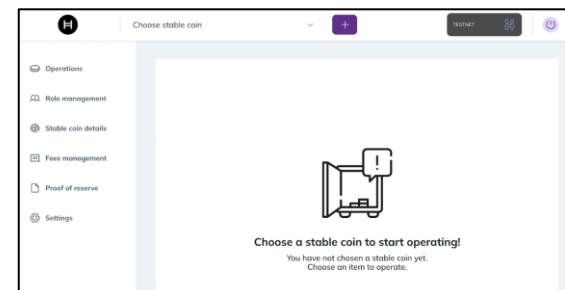


## Open Source Demo Application

An open-source React-based demo application to visualize Stablecoin Studio with a firsthand experience of its capabilities.



**Try the Sandbox!**  
[stablecoinstudio.com](https://stablecoinstudio.com)



# LEARN, DEVELOP, KEEP IN TOUCH



## Get started

- Repo: <https://github.com/hashgraph/stablecoin-studio>
- Learn more: <https://hedera.com/stablecoin-studio>
- Documentation: <https://docs.hedera.com/hedera/open-source-solutions/stablecoin-studio/core-concepts>
- HBAR Faucet: <https://portal.hedera.com>



## Videos and demos

- Installation: <https://youtu.be/eThs08nUsLI>
- Issuance: [https://youtu.be/gh7f\\_VX1iYQ](https://youtu.be/gh7f_VX1iYQ)
- Administration: <https://youtu.be/41ag-y9cYck>
- Proof of reserve: <https://youtu.be/a7sNXD5GKWA>



## Community

- Dedicated Slack channels (contact us to join: [greg@swirlslabs.com](mailto:greg@swirlslabs.com))
- Developer Discord: <https://hedera.com/discord>

# Thank You



## Hedera

#hellofuture



# Record your Attendance!





# Join our Discussions





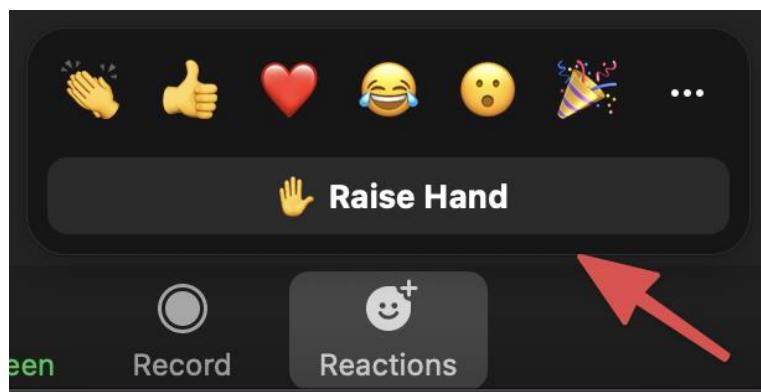
Read, review &  
add to the Primers



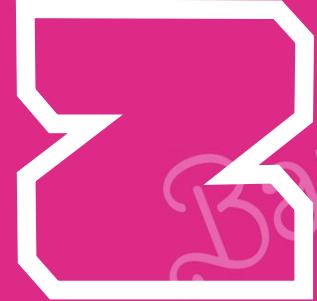
# Time to Open the Floor!



- OR -



Feel free to unmute  
now or raise hand to  
get unmuted



# Thank you

Join the discussion at  
[zenith.finios.org](http://zenith.finios.org)

