



# (UN)DePIN to Connect Every School (and Hospital) in the World:

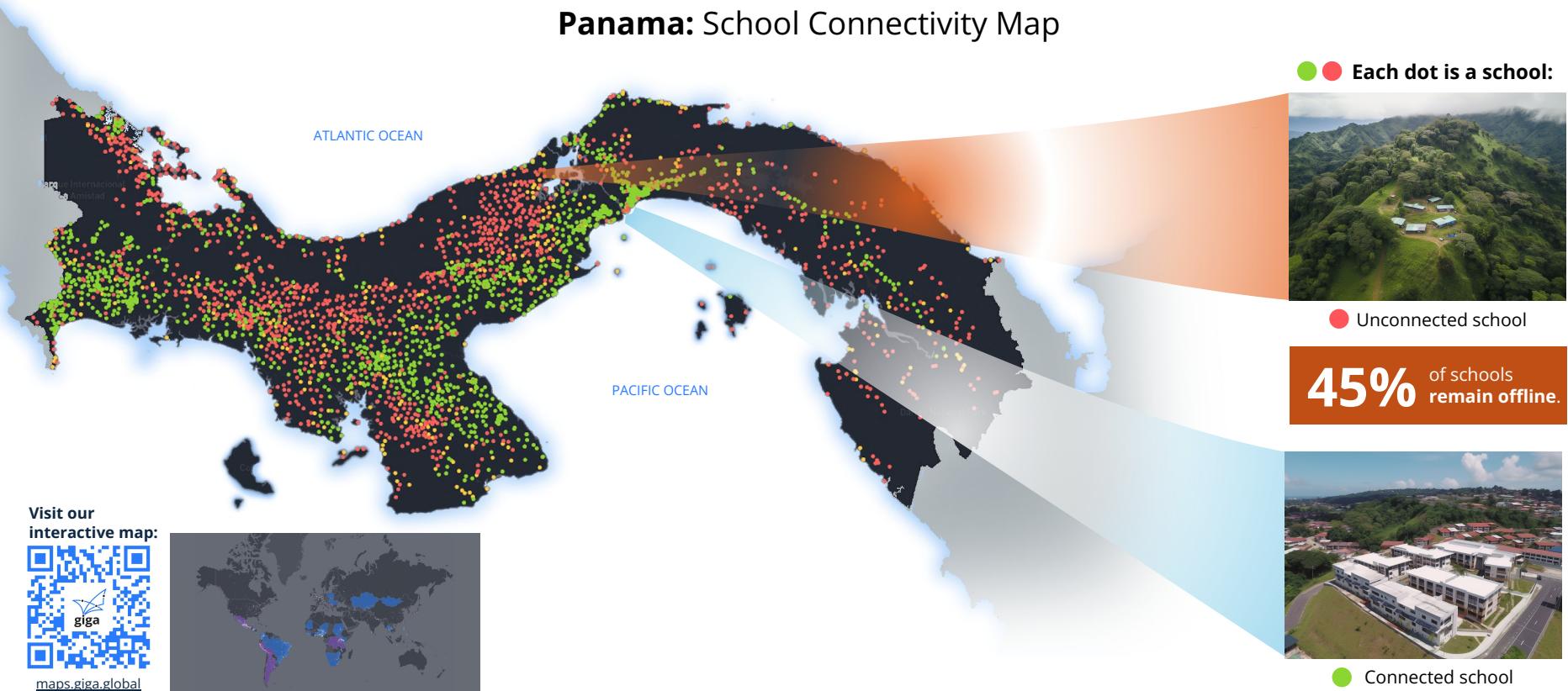
## A connectivity marketplace

DEVCON 7: SEA  
Bangkok, November 2024



# What digital inequity looks like

## Panama: School Connectivity Map





**One out of three people  
don't have access to the Internet**



**More than half** of the world's schools are  
**not online**

# Giga's Snapshot

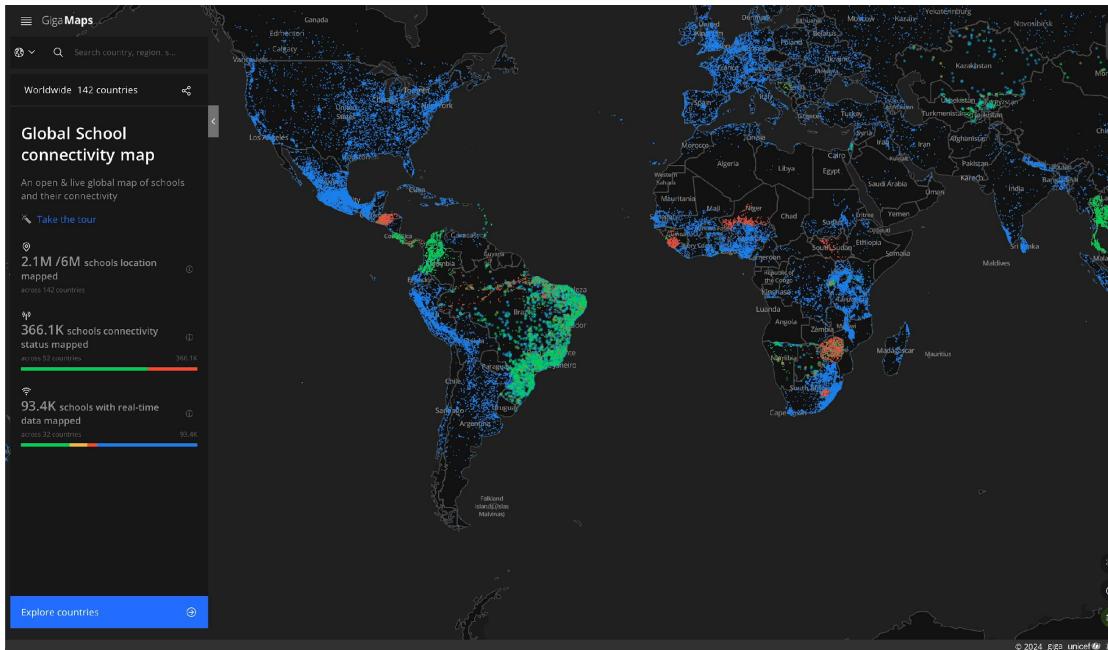
**Active in 34 countries**

**Connected > 12,000 schools  
and more than 7,000,000 kids  
in 2 years.**

**Structured > \$1.7bn for school  
connectivity**

**Reduced school connectivity  
costs by >55%, increased  
speeds by >400%**

**Mapped 2.1M schools out of ??**



The Gigabyte is our core asset.  
We track and pay for it using (drumroll) ... bytes themselves



**A 100pc digitally native real world asset is primed for tokenization**

# Three Steps to Tokenized Gigabytes

## Identify the need

Find the buyers and sellers. Create a trusted platform that links them.

## Tokenize the commodity

*Connectivity and infrastructure are digital and can be tokenized.*

## Build a blockchain-based marketplace

*A transparent and efficient trading platform, like the marketplace for carbon credits.*

**Identify** the need

**Tokenize** the commodity

**Build** a blockchain-based marketplace



**Governments need to finance public connectivity.**  
Globally, this costs more than \$400B.



**Digital + Tech companies want the last 2 billion people connected .**

**Identify** the need

**Tokenize** the commodity

**Build** a blockchain-based marketplace

**Giga, and the UN, can "make" this market because it is trusted by Governments**

**Need to connect**



**Governments need to finance public connectivity.**  
Globally, this costs more than \$400B.

**SELLERS**

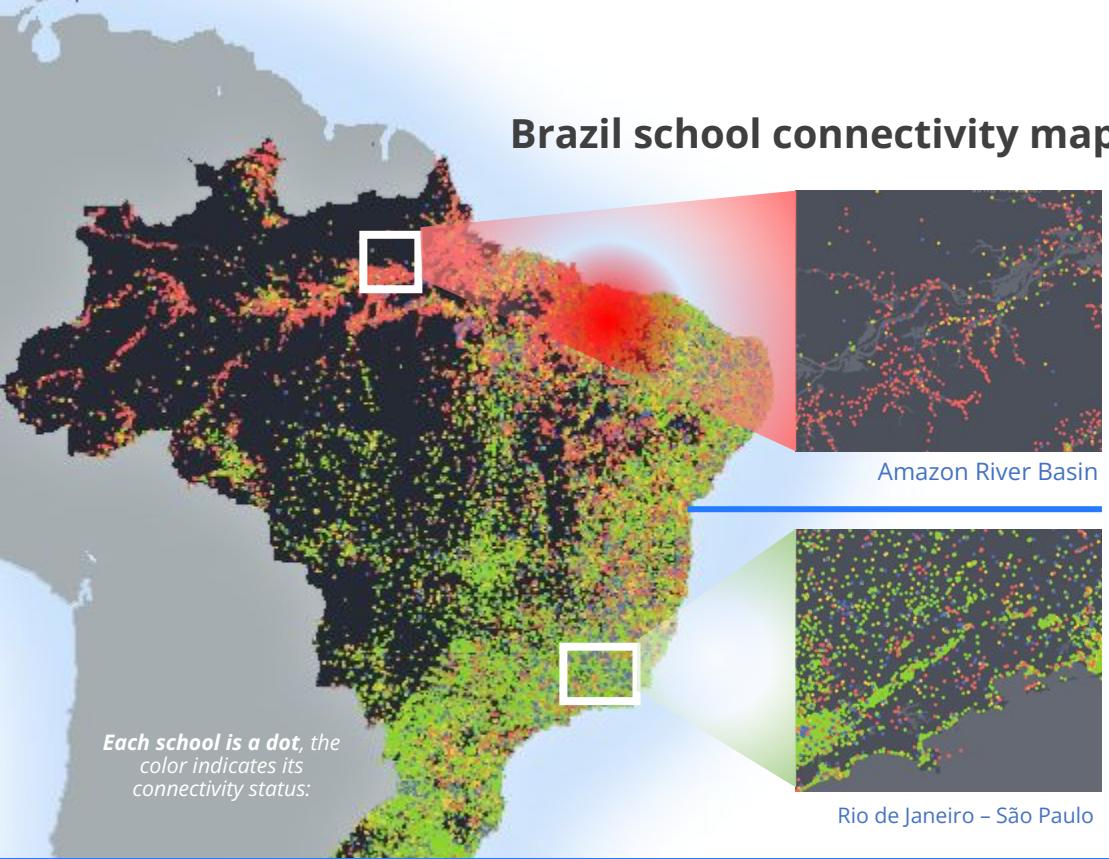


**Digital + Tech companies want the last 2 billion people connected .**

Identify the need

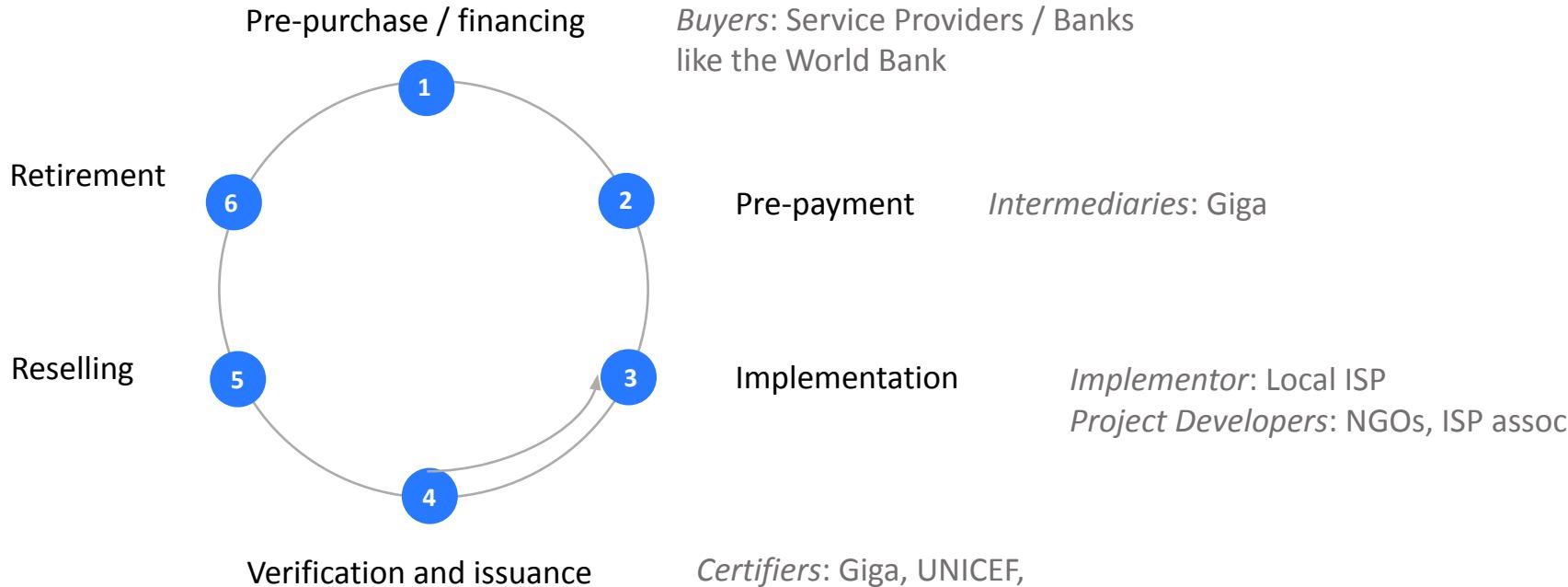
Tokenize the commodity

Build a blockchain-based marketplace



**Giga's global connectivity map**  
displays the internet status of individual schools and health facilities which  
generate the credits

## Connectivity Credits: The Market Cycle



Identify the need

Tokenize the commodity

Build a blockchain-based marketplace

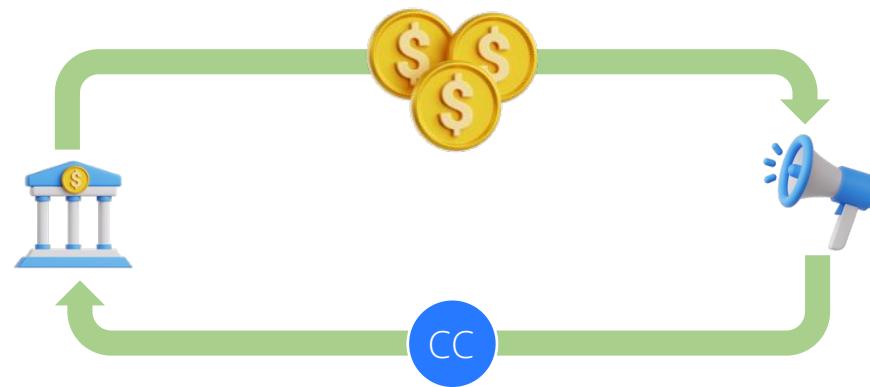
## Build the tooling: a sustainable financing DePIN protocol, based in Geneva

Protocol



Foundation | tx%, governance

Marketplace



National Credits



Certification body



Association | standards

**Identify** the need

**Tokenize** the commodity

**Build** a blockchain-based marketplace

## **Field the players:** We already have these partners for various prototypes

**Buyers** | Government ministries, Development Banks, companies

**Intermediaries** | Neutral protocol and platform in Switzerland

**Sellers** | Large ISPs sharing infra; small ISPs connecting

**Certifiers** | An Association of UN orgs and partners verifying standards

**Liquidity** | Private investors, governments as liquidity providers

**Identify** the need

**Tokenize** the commodity

**Build** a blockchain-based marketplace

Currently Building in:  
**Malawi, South Africa, Rwanda, Kenya, Mexico**

### Subsidies

Universal Service Funds 2.0

School-as a node

### Tax exemptions

Corporate Tax exemptions

Mandatory CSR contributions

### Infra discounts

National fiber backbone access

Discounted private infra access



Stories from the field

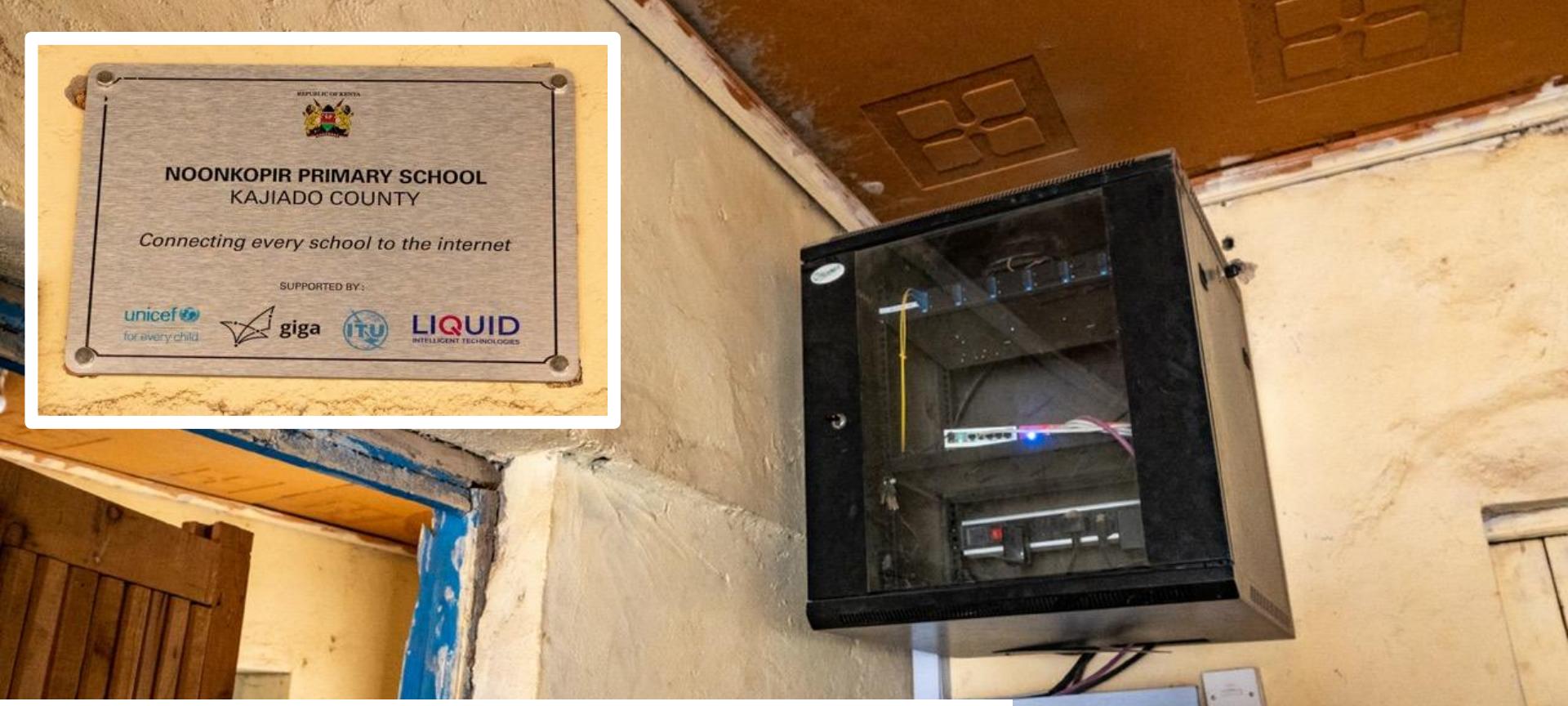
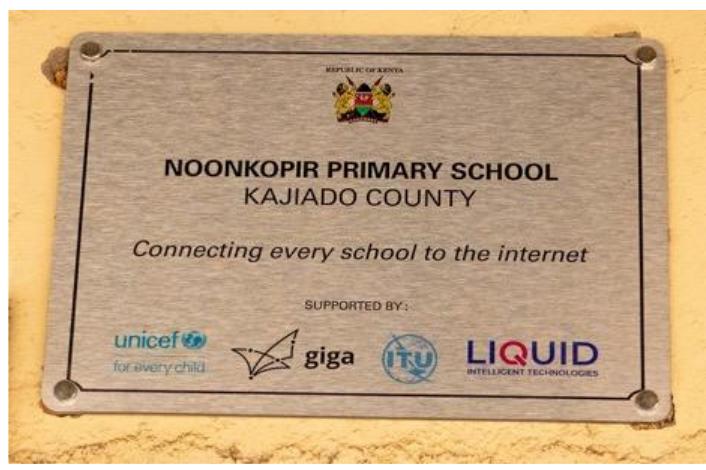
# Meaningful change comes with connecting schools

**Noonkopir Primary School**  
Kajiado County, Kenya (1.12M pop'n)  
33km from Nairobi Business District





**Noonkopir Primary School: 1,300+ students and 41 teachers**



Giga and its partners helped **connect the school in June 2021**



In the last year, the school's academic performance score has **increased by 9.75%**.  
The student population has **almost doubled** in some grade levels

**“Life before the Internet was really chaotic. It was really bad, it was something I wouldn’t wish to go back to.”**

**Head Teacher Peris Gaturi**  
Nonkoopir Primary School, Kenya

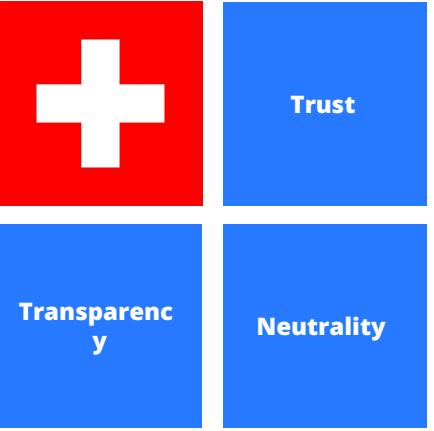




# Giga's Geneva-based Gigabyte Marketplace Solves Challenges in Tokenizing Real-World Assets

- 1 Feasibility and Standardization Issues
- 2 Lack of User Interest and Relevance
- 3 Trust and Validation Concerns

# The Swiss Stamp of Approval



Giga is proud to be hosted by the Government of Switzerland, and developing our open source software and protocol in Geneva, in collaboration with the the Canton of Geneva, the University of Geneva, and many, many nerds.



# Help us connect every school and hospital

1. Contribute Technical Expertise to our open source repos
2. Develop Marketplace Tools / Add Ons (ie other impact credits)
3. Build Local Partnerships in Countries to Pilot New Use Cases
4. Advocate for Connectivity Credits with Digital Infra Providers

Visit [giga.global](https://giga.global) for more info and reach out via X (@chrisfabian)

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“Number rules the universe.”  
— Pythagoras

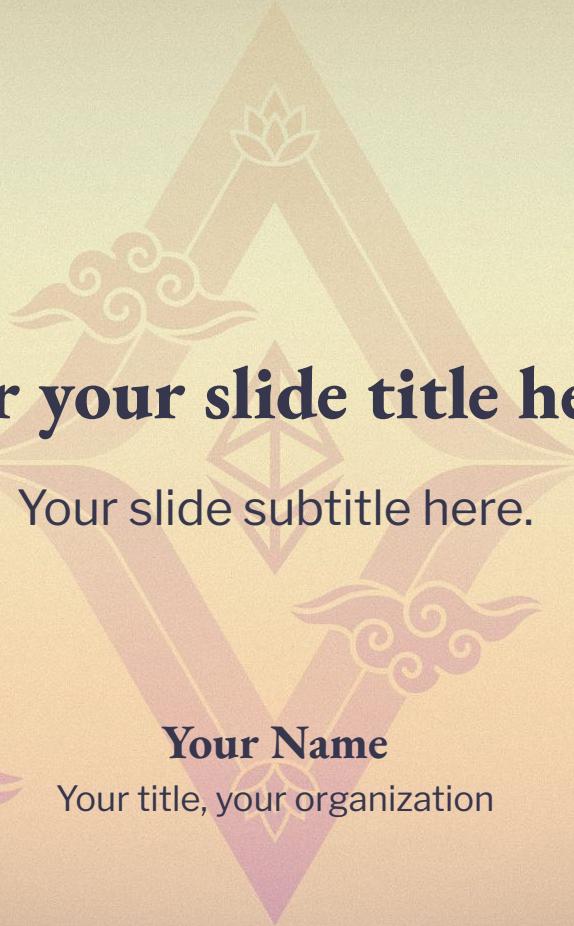
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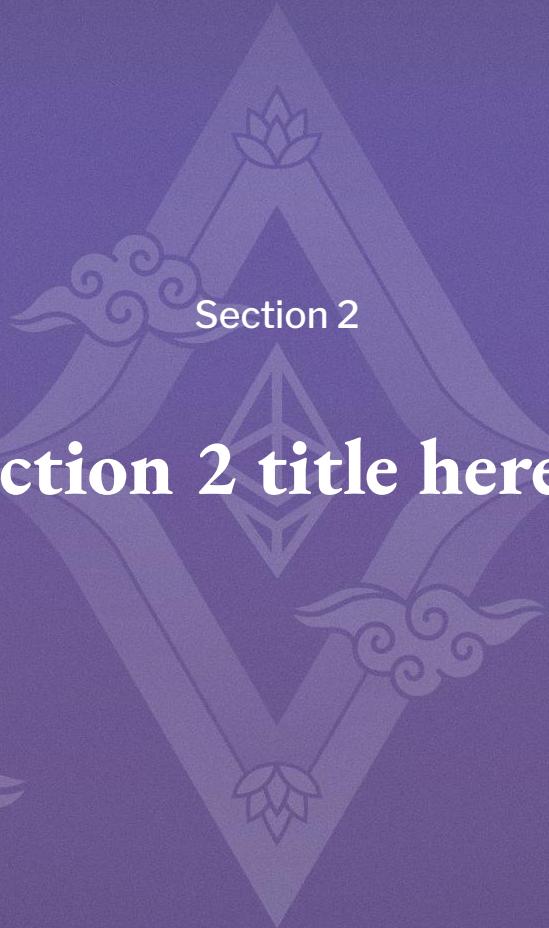
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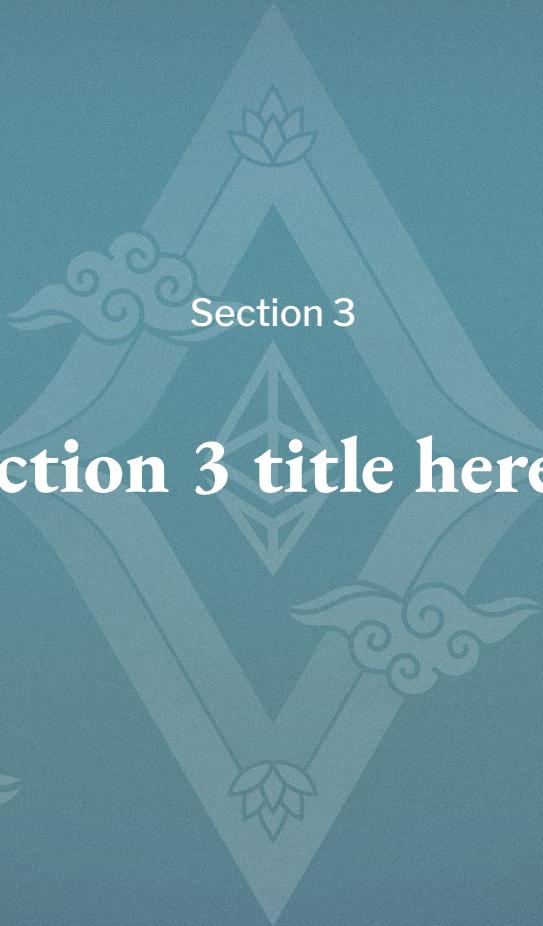


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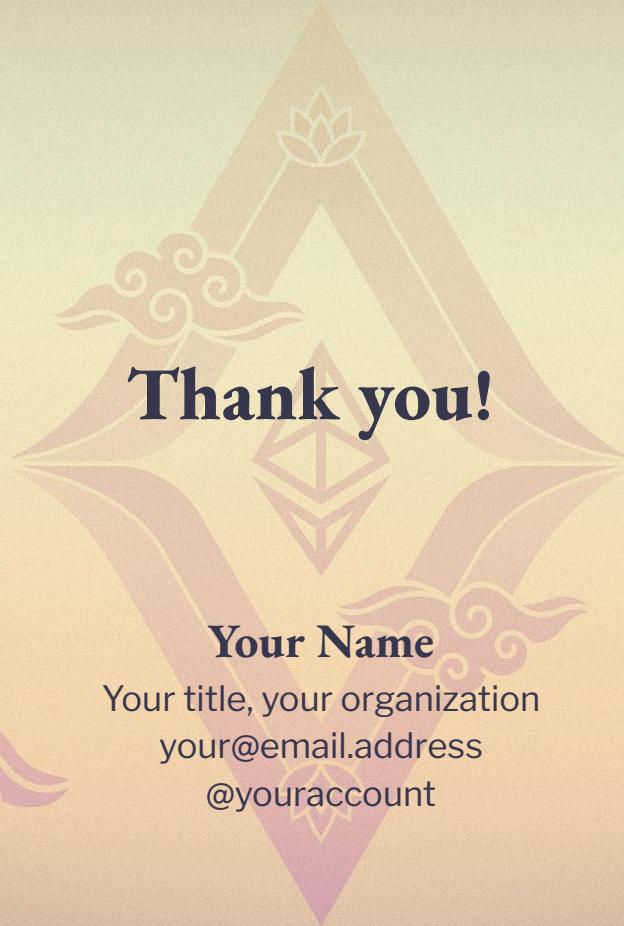


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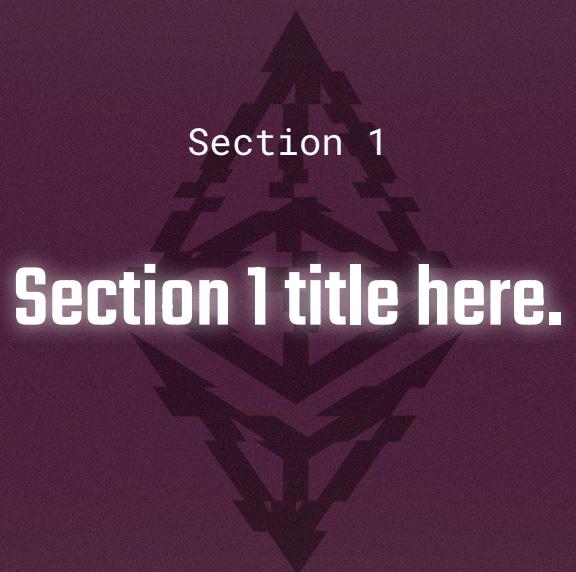


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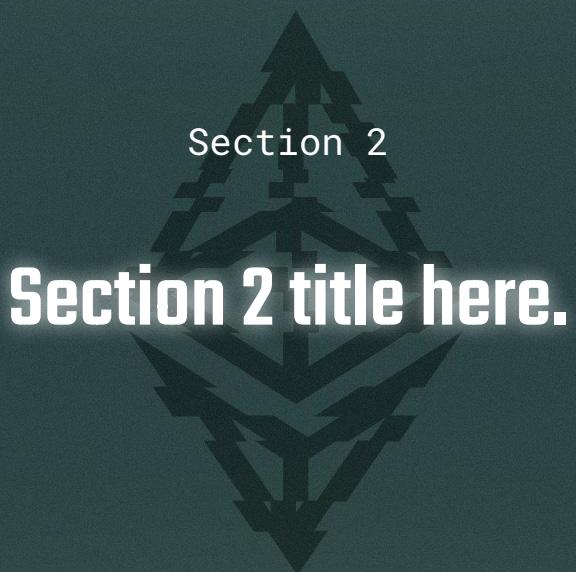
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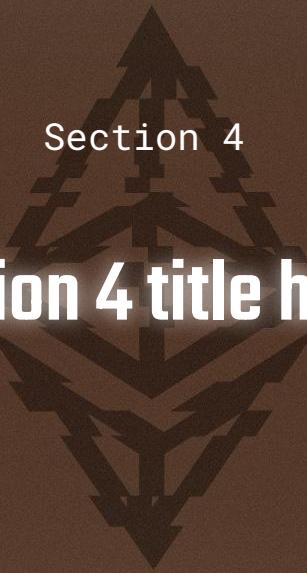
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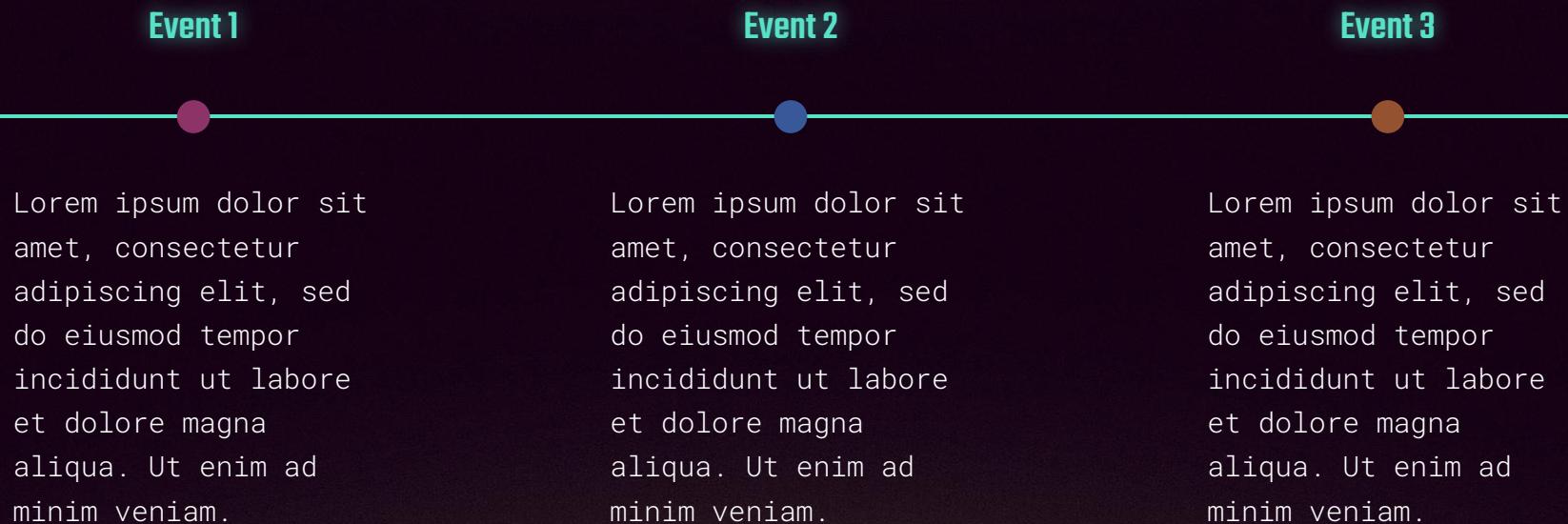
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