

# Unified Energy Interface

Open Network for Multi-Purpose Energy Transactions

**Enabled by Beckn Protocol**

Sujith Nair

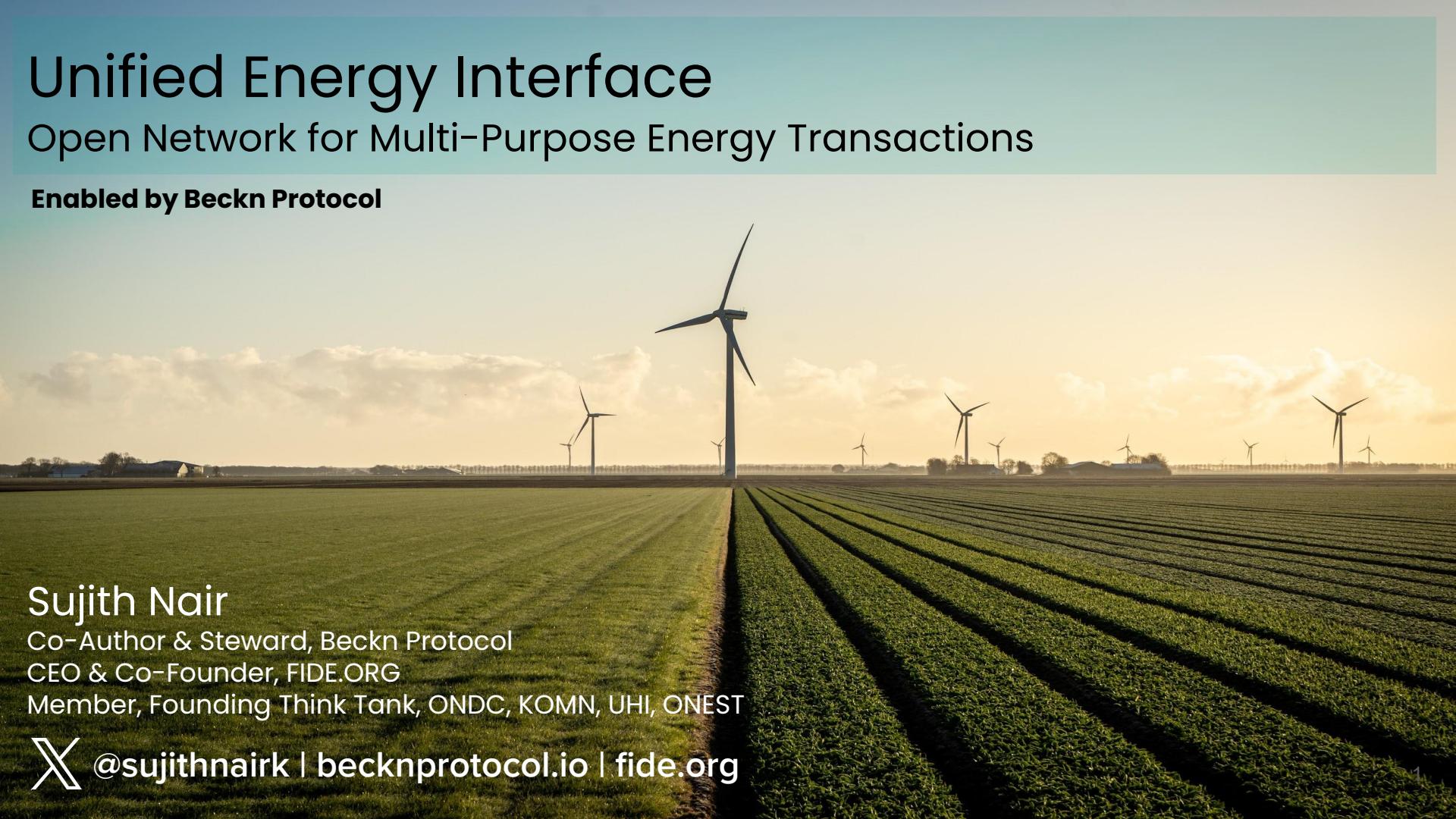
Co-Author & Steward, Beckn Protocol

CEO & Co-Founder, FIDE.ORG

Member, Founding Think Tank, ONDC, KOMN, UHI, ONEST



@sujithnairk | becknprotocol.io | fide.org



# India laid the foundation for digital economy

*Through a new model of population scale inclusion: Digital Public Infrastructure*



**1.39 Bn**

Aadhaar IDs issued



**105 Bn**

Aadhaar authentications



**~12 Bn**

Monthly UPI Transactions



**\$1.7 Tn**

Transferred on UPI in FY'23



**2.3 Bn**

Vaccines Administered



**\$419 Bn**

Direct benefit transfer  
(all time)



Source:

<https://dbtbharat.gov.in/> (1 USD= 83 INR)  
[https://uidai.gov.in/aadhaar\\_dashboard/india.php](https://uidai.gov.in/aadhaar_dashboard/india.php)  
<https://npci.org.in/>  
<https://www.bis.org/publ/bppdf/bispap106.pdf>  
Economic Times, 2024



FIDE.ORG | A Not-for-profit Entity

**Nandan Nilekani**

Co-founder, FIDE



**Dr. Pramod Varma**

Co-founder, FIDE



**Sujith Nair**

CEO & Co-founder, FIDE



Like how **UPI** accelerated **digital payments** at a population scale

**Open Networks** are deepening access in

**Commerce**



Open Network for  
Digital Commerce  
**(ONDC)**

**Mobility**



Namma Yatri  
Yatri  
Yatri Sathi

**Healthcare**



Unified Health  
Interface  
**(UHI)**

**Skilling & Education**



Open Network for  
Education and Skilling  
Transformations

....

And other areas

All enabled by an open source protocol

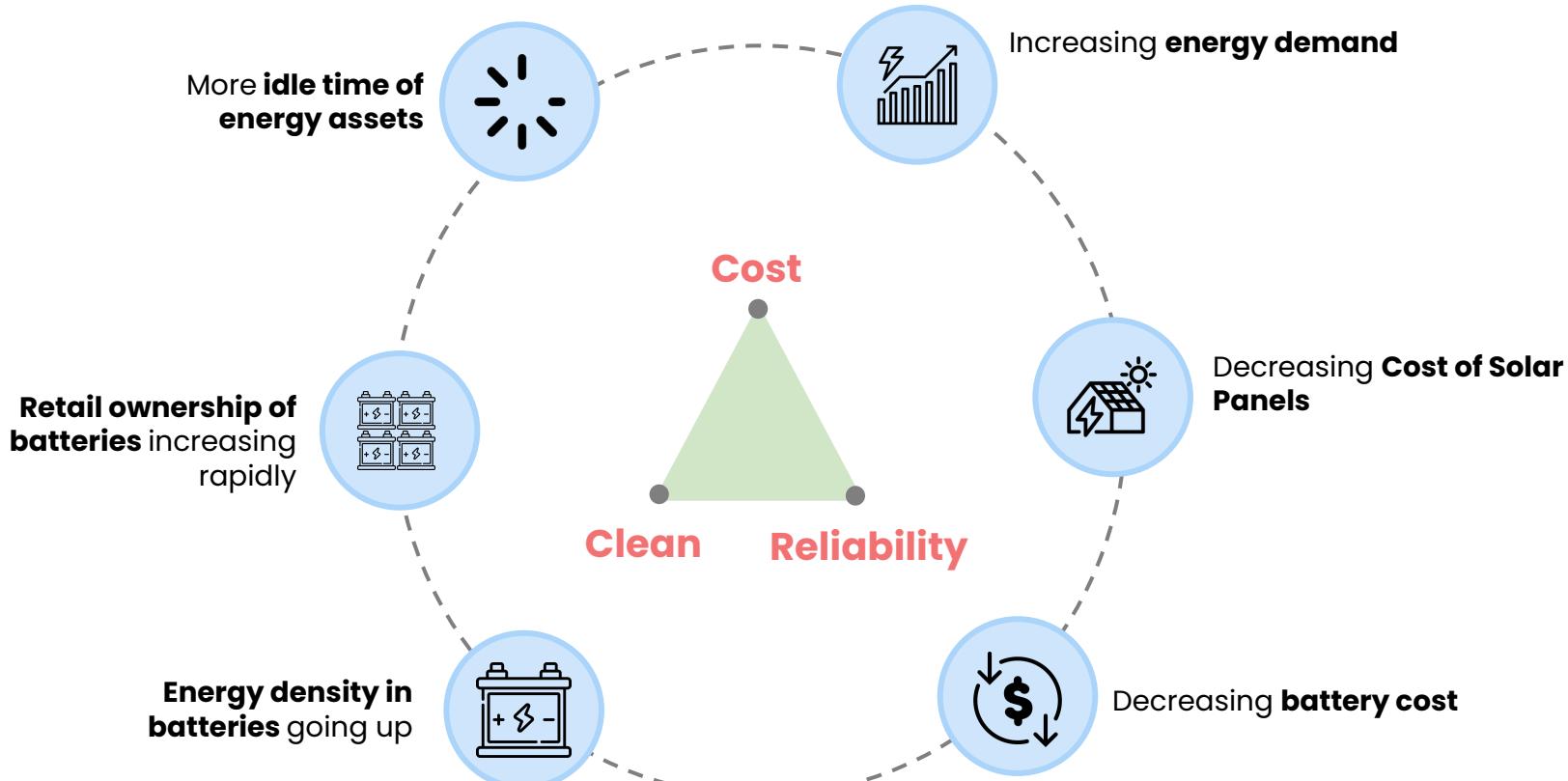


<https://becknprotocol.io/>

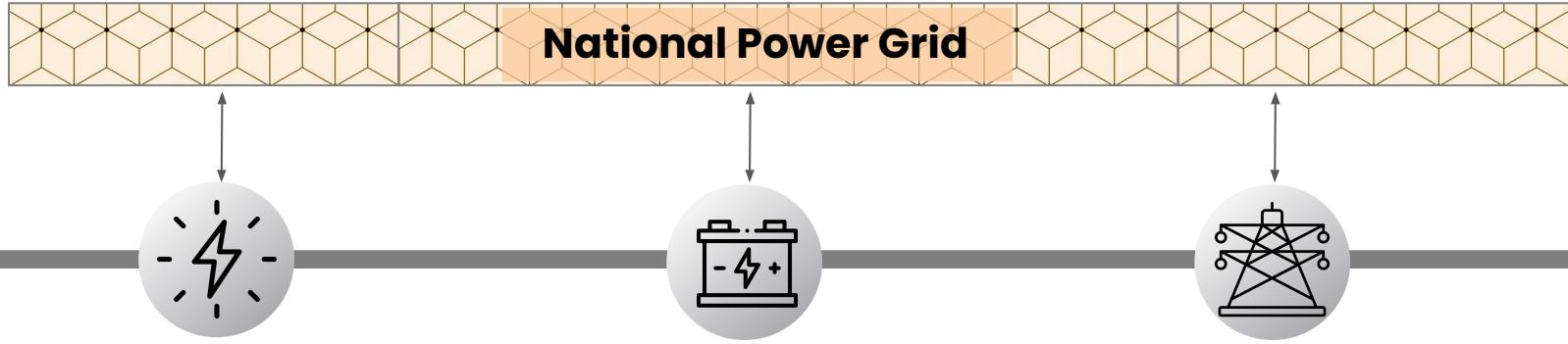
Is there a need for  
such a **DPI thinking**  
to accelerate the  
transition to clean  
energy at  
population scale?



# The changing energy landscape



# .. leading to a groundswell in energy applications



## Increased Demand



More EV chargers  
More swap-stations

## Increased Storage



More household batteries, EV batteries & commercial battery banks

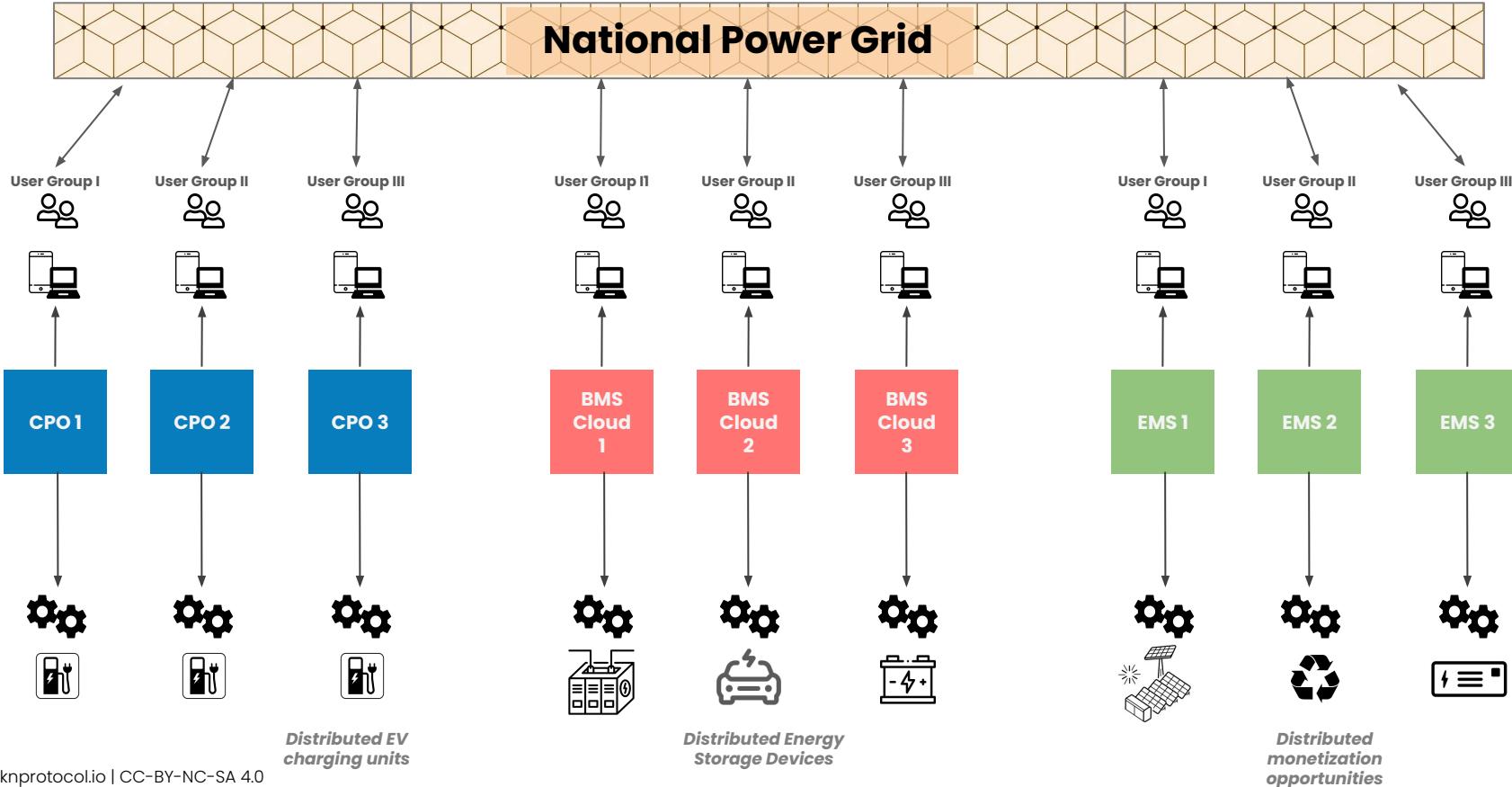
## Increased & Diverse Generation



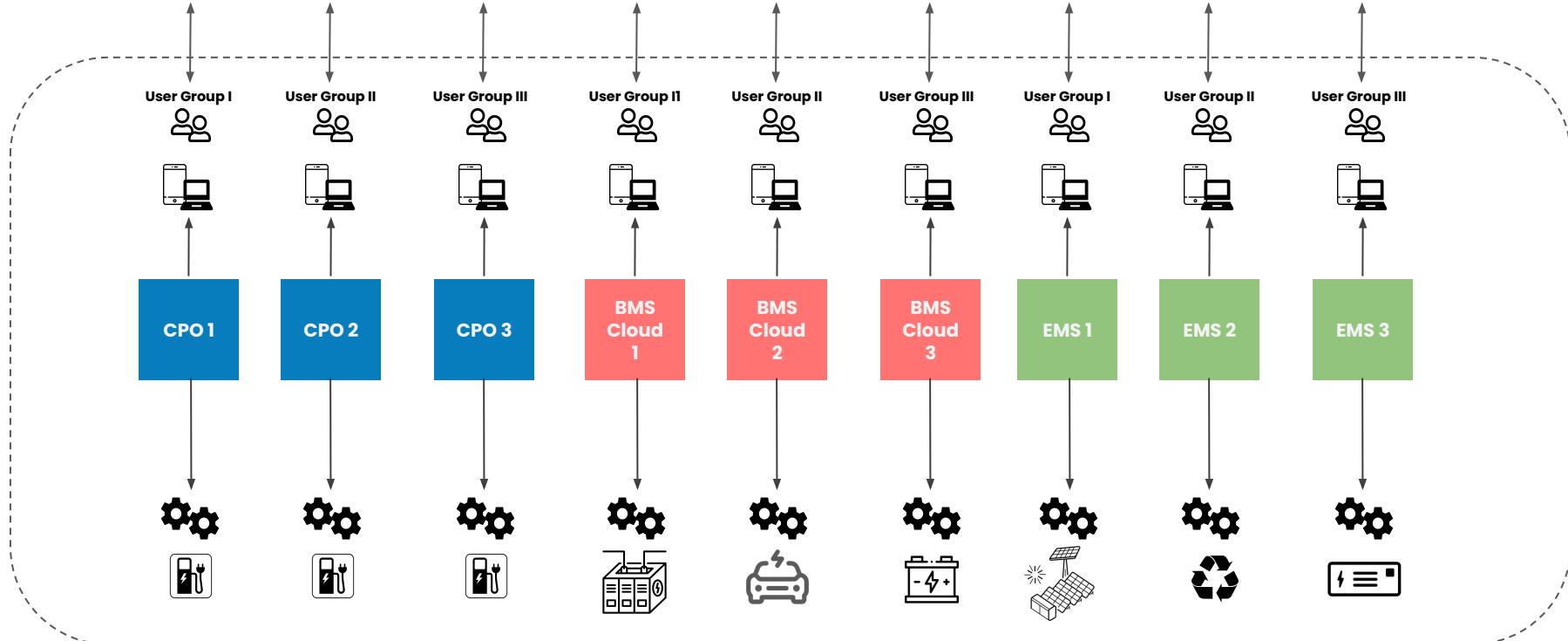
More solar rooftops, biogas processors, small wind turbines

(Consumers becoming prosumers)

... with many digital platforms, but all operating in silos



# National Power Grid



Can we affect **accelerated** green energy transition  
by **unifying** the **fragmented ecosystem**?

# Unified Energy Interface -Simplifying Energy Transactions

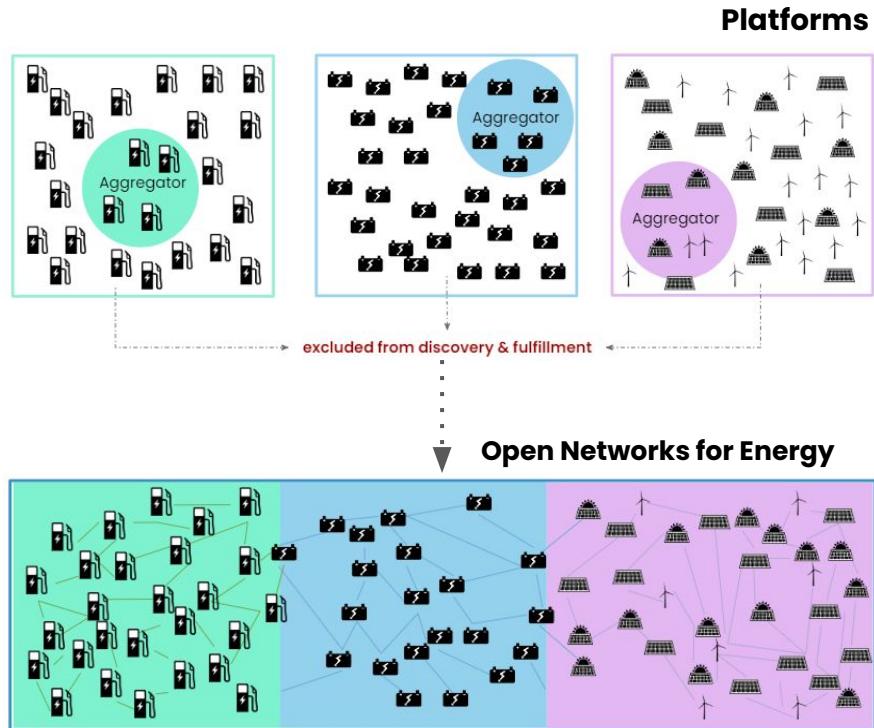


Unified Energy Interface (UEI) is an **open network for energy** to enable transactions between digital energy systems

Solves for

**D**iscovery  
**O**rdering  
**F**ulfilment  
**P**ost-fulfilment

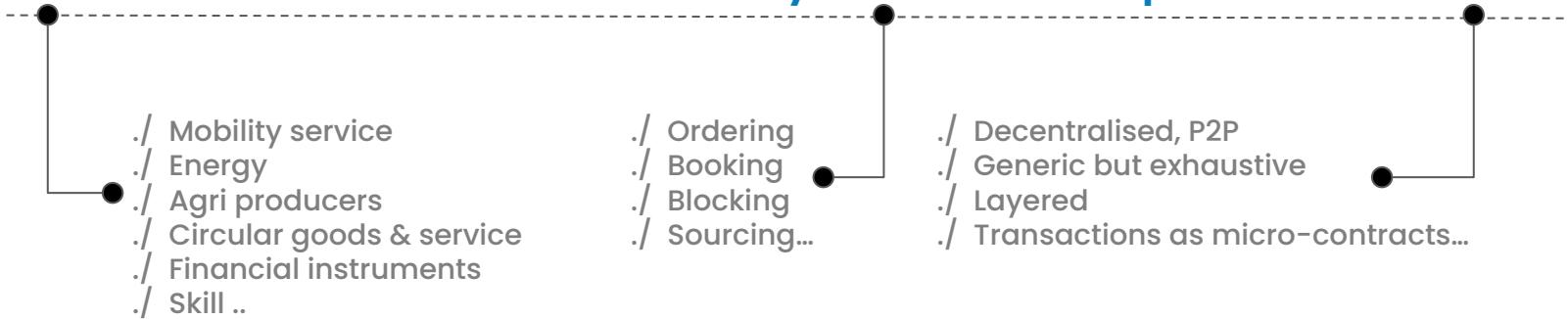
Built on



Market Expansion | Autonomy at Nodes | Asynchronous & Combinatorial innovation

Built on **beckn**, an open source universal transaction protocol

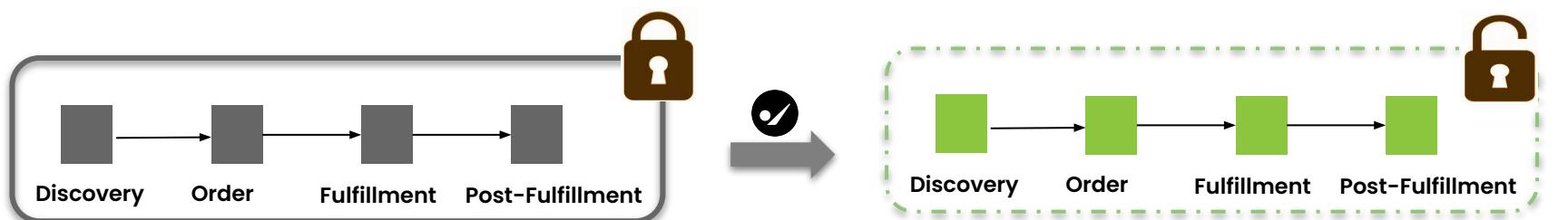
## An economic resource discovery & transaction protocol



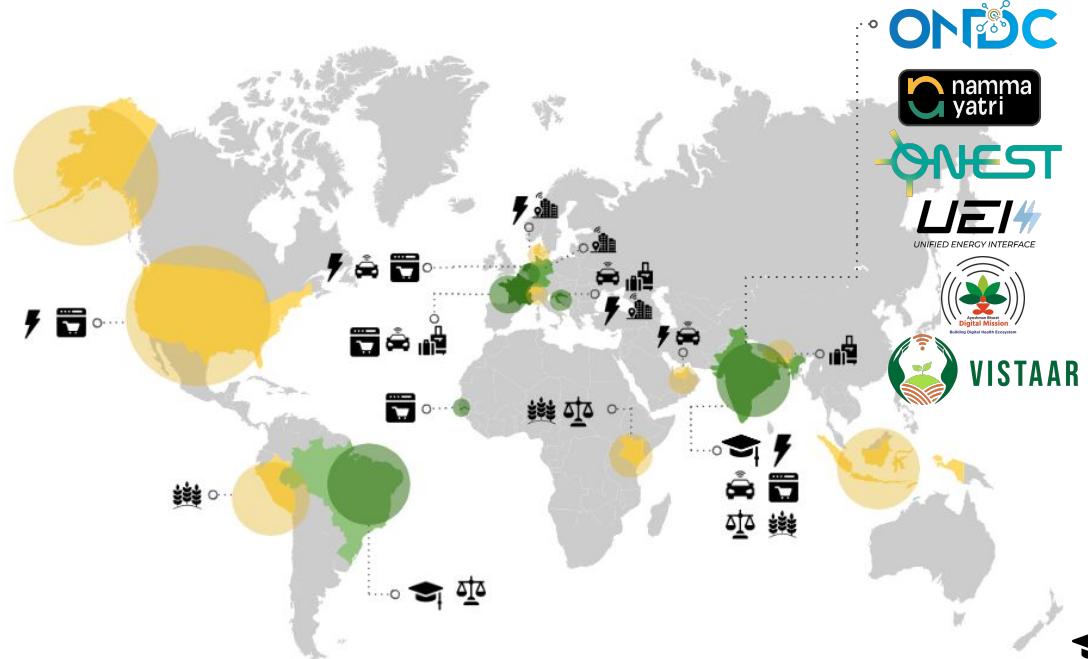
Open Source Specifications

Tech Neutral

Open Community



# The same protocol that powers networks like -



**65+**

Projects in different stages

**15+1**

Countries

**5.5 Mn**

Transactions per month

**\$60Mn+**

Unlock of Economic Value

## Legends

- Live Applications
- Ongoing Ventures



Social Livelihood



Agriculture



Energy & climate



Tourism & Hospitality



Mobility



Smart city innovations

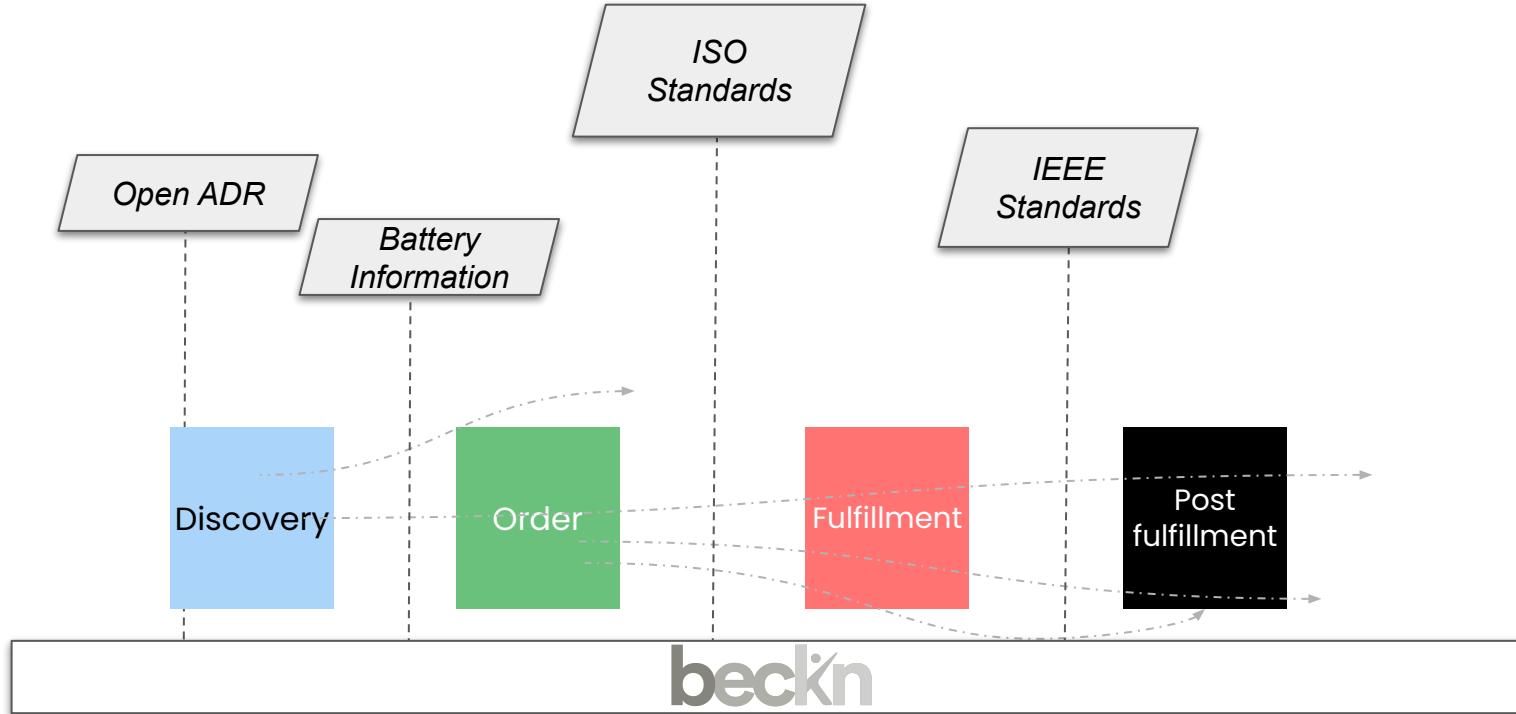


Retail & e-comm

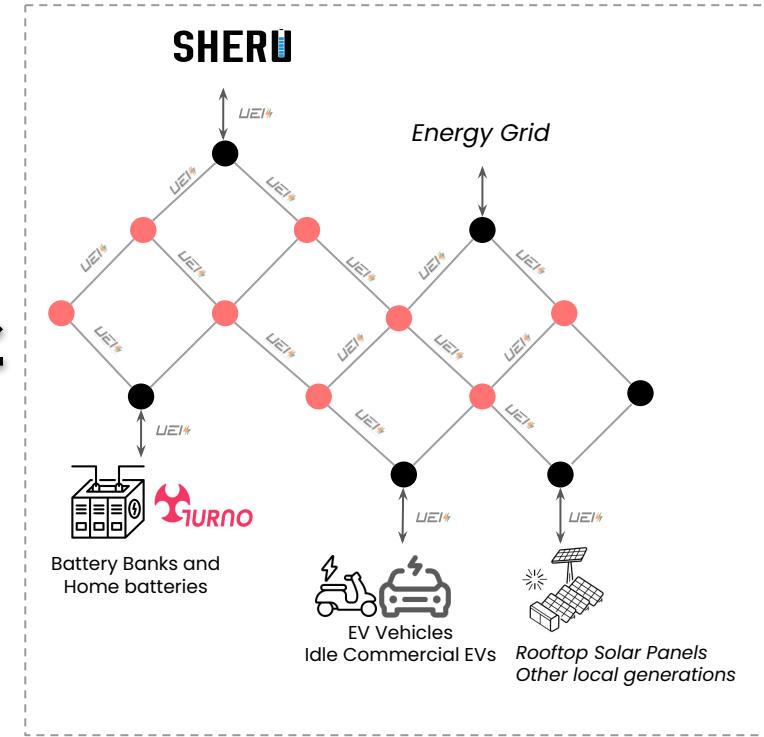
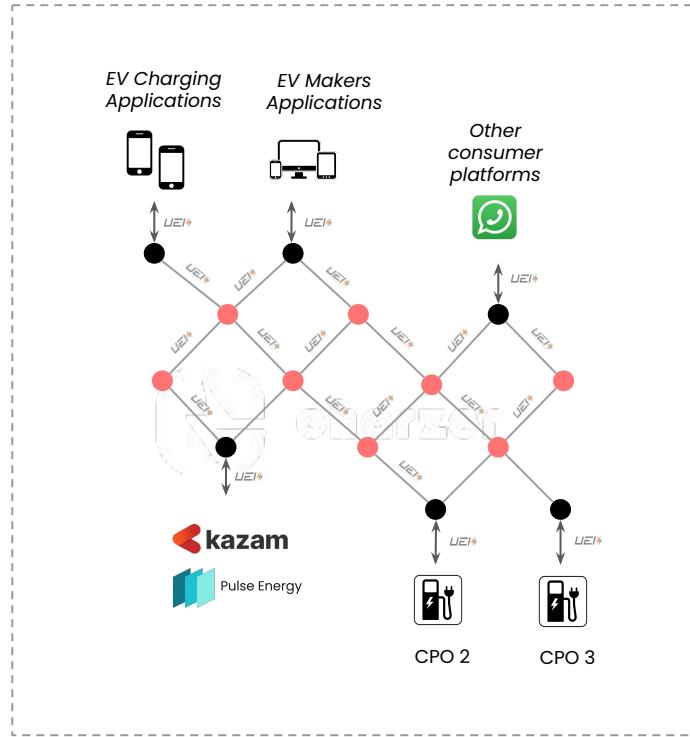


Social Justice

# beckn is not a replacement, rather an underlying fabric



# Open Network for EV charging, virtual energy warehousing & battery monetization



**EV Charging Network**

**UEI\***

**Virtual Energy Storage &  
Battery Monetization Networks**

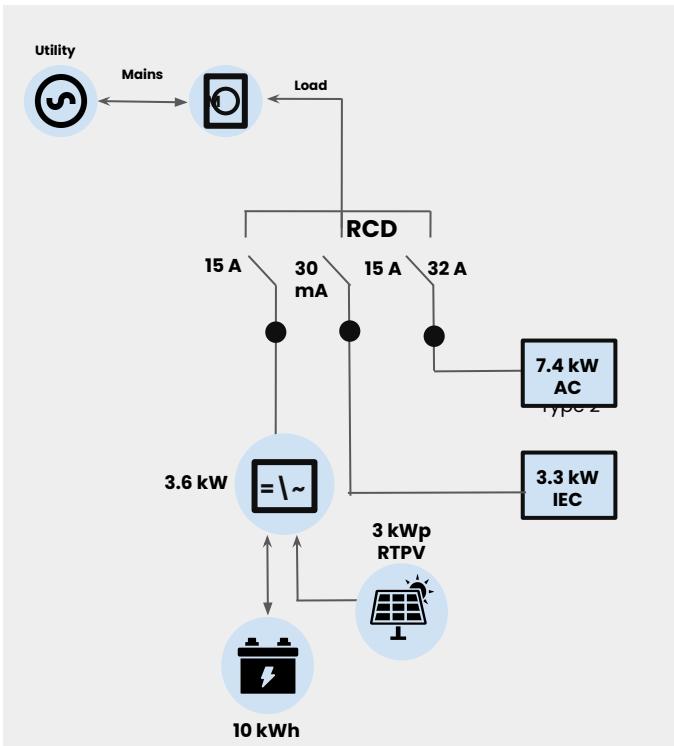
\*\* Unified Energy Interface (**UEI**):  
**Beckn Protocol** for Energy

\*\* Note: Brand logos are for illustrative purposes only

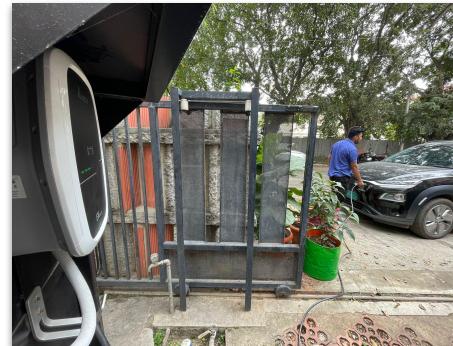
# Technical demonstration already live in Bangalore

## Setup at demo site

 HSR Layout, Bengaluru, Karnataka



## EV charging on field



# Interoperable infrastructure leads to massive private innovation on common digital rails



**Physical Infrastructure**



**Railways, Roads, Cell Towers, Internet cables**

**Digital Infrastructure**  
to catalyse digital services



**Interoperable standards & systems** for Identity, Digital Payments, and beyond

Both drive  
**Private Innovation**

# Rising global focus on Digital Public Infrastructure (DPI)



Image Source: [Press Trust of India](#)

They were delighted with the launch of a project by Aivancy (Grande Ecole on Artificial Intelligence), mentored and supported by India's **Foundation for Interoperable Digital Economy (FIDE)** to use their open source **Beckn Protocol** to enhance travel and stay experience during Paris Olympics.



# Thank you

Join the movement  
& pioneer the new-age DPIs

Read more at  
<https://becknprotocol.io/>

Find the team at  
<https://fide.org/>

Write us at  
[sujith@becknprotocol.io](mailto:sujith@becknprotocol.io)



FIDE is the winner of the 14th **Aegis Graham Bell Award** under the nomination title **Beckn Protocol**

**Aegis Graham Bell Award**  
Innovation in Digital Infra, 2024

India's Digital Public Infrastructure offers scalable, secure and inclusive solutions for **global challenges**. The Open Network for Digital Commerce (ONDC) is democratizing e-Commerce.

Indian Prime Minister Narendra Modi



Indo- France leaders discussed overall progress and next steps on the **implementation of Digital Public Infrastructure**

**India- France Joint Statement in 2023**