

EnergyHive

 Revolutionizing Sustainable Energy Solutions



Team : Hack O' Holics

Issue In Power Sector



- Most production of electricity is from coal leading to **higher costs**, increased **carbon footprinting** & other **environmental issues**.
- In 2022-23, **Discoms** in India reported financial losses of **Rs 68,832 crore**, which is **four times higher** than the previous year due to coal import, processing cost, high grid maintenance and theft.
- Because of centralized power sector, Individuals with surplus energy, like small solar producers, face challenges in selling their energy directly to those in need, often getting underpaid for their contributions.



Solution



Revolutionizing energy, where sustainability meets independence.

- **Decentralised P2P Energy Trading and Analysis Platform:** A platform that enables individuals to trade excess renewable energy with each other, while also providing energy usage analysis.
- **Blockchain for Security:** Blockchain technology ensures secure, decentralized transactions with full transparency, removing the need for a central authority.
- **Transparent, Market-Driven Pricing:** Producers control prices, creating a fair, competitive marketplace that benefits both buyers and sellers.
- **Supporting Sustainability:** By promoting renewable energy trading, our platform empowers clean energy producers and contributes to a sustainable future.



Features

 Energy Consumption Analysis



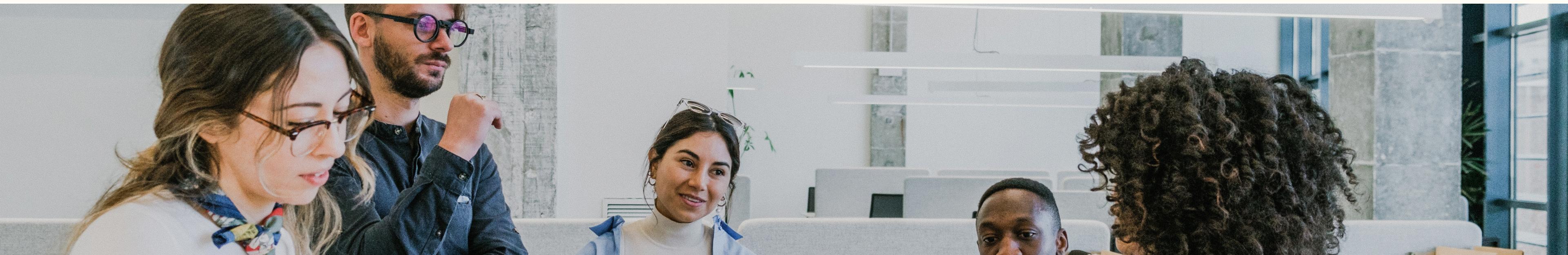
Global Market Analysis



Blockchain Based Transactions



Smart Meter Health Monitoring



Testminonials

"India is about to delicense the power distribution business and create open access to retail customers, enabling them to buy electricity from anybody from anywhere. In that scenario, a blockchain platform for P2P trading of electricity will be a perfect game-changer for the clean energy revolution in the country. We have already done another successful pilot project in Uttar Pradesh. The results of these two projects should instill confidence in the regulators to draw up appropriate regulations for scaling up of P2P trading of electricity in India," said Reji Kumar Pillai, president, India Smart Grid Forum.

Source :<https://www.tataworld.com/news/openinside/tata-power-ddl-rolls-out-live-peer-to-peer-solar-energy-trading>

Uttar Pradesh Government, India

The Uttar Pradesh government has introduced blockchain technology to its rooftop solar power segment and is the only state that has amended its regulatory framework to enable controlled peer-to-peer (P2P) energy trading in India. The pilot project was implemented by India Smart Grid Forum (ISGF) and Powerledger, and hosted by state power utility Uttar Pradesh Power Corporation Limited (UPPCL) and Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA).

Source :<https://powerledger.io/clients/uttar-pradesh-government-india/>



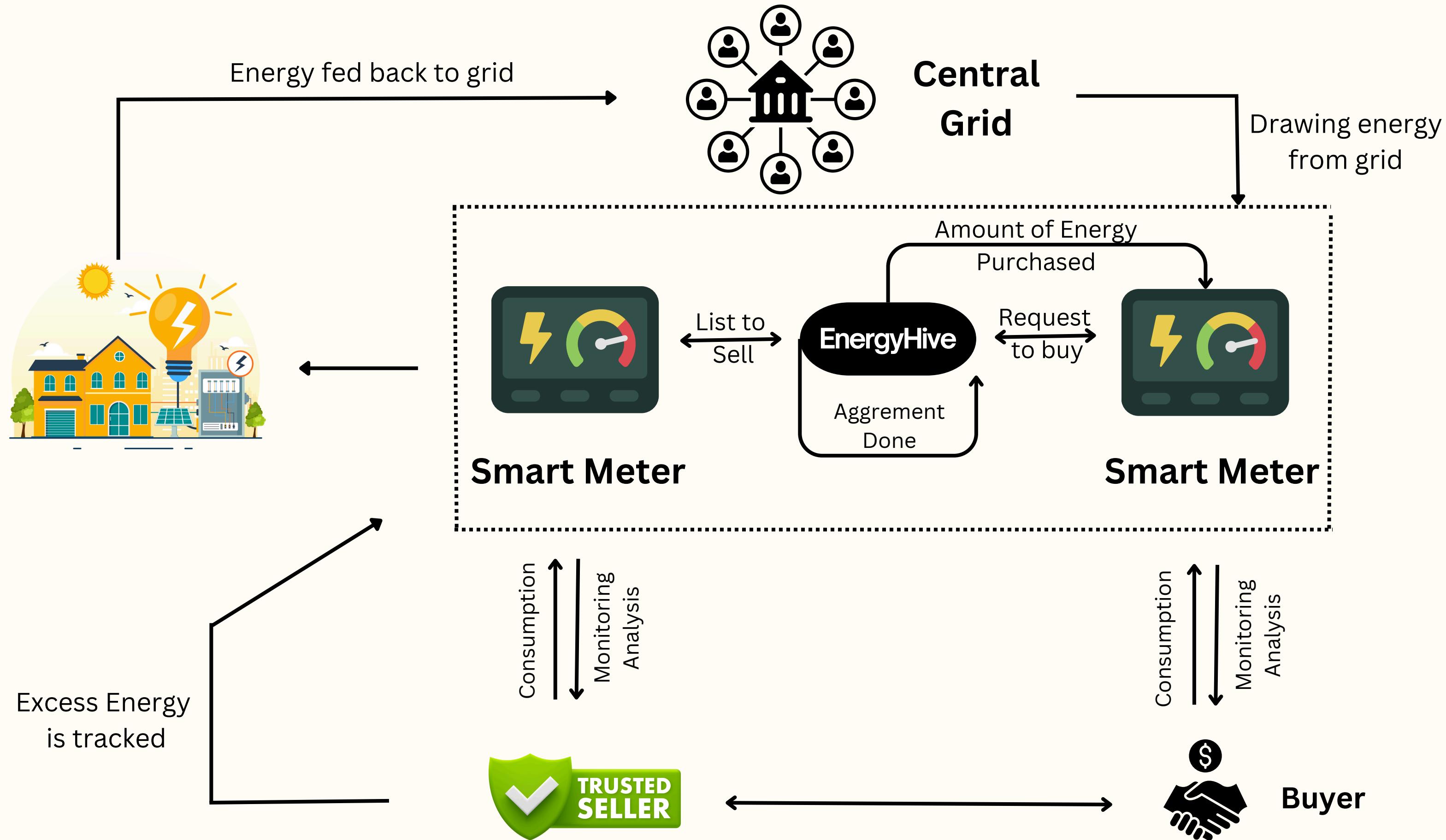
43%

Lower than the retail tariff for peer to peer market buy price

Source <https://powerledger.io/clients/uttar-pradesh-government-india/#tnt7>



Peer-to-Peer (P2P) energy trading platform



Simple Cost Comparision study



ALICE

Consumption at EOM is
300 kWh of energy

Buys 100 kWh from
Traditional Utility Provider at
\$2 per kWh.

Buys 200 kWh from
EnergyHive at
\$1 per kWh.

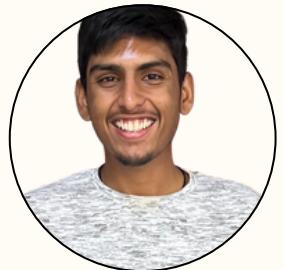
Total amount : $(100*2+200*1) = \$400$

If alice only buys its energy from Traditional Utility Provider then his amounts comes out to be $(300*2) = \$600$.

Thank You So Much



Members of Team
Hack O' Holics



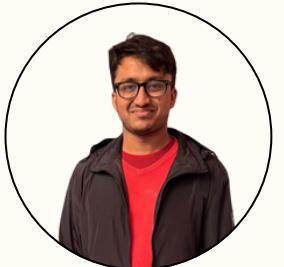
Dhruv Mahalwar



Abhishek Shukla



Tanmay Arora



Harshvardhan Chand



