

## **Power2peer: Annual Report 2023**

The year 2023 ended with the significant changes in the solar energy marketplace. The prices of the solar panels dropped significantly from \$0.32 / watts to almost \$0.22 /watt.

The distributed energy resources are making big comeback for powering EV and standalone applications. Power2peer in the process of focusing attention on the growing carbon credit market and working with the solar projects generating carbon credits.

### **Accomplishments in 2023:**

1. Reorganization of the power2peer in Rochester, NY
2. Power2peer joined the Nextcorp incubator in Rochester.
3. Received the RG&E grant of \$25,000 for the development of blockchain demonstration.
4. Power2peer engaged with University of Buffalo and Prof. Bina Ramamurthy for the development of the Ethereum based demonstration of the transaction engine.
5. Developed the software for the designing of solar power systems for commercial and residential units and measuring production of clean energy kilowatts.
6. Power2peer was awarded CEIS Fuze hub grant from Rochester Institute of Technology \$10,000 in collaboration with Prof. Santosh Kurinek.
7. The research paper was presented at the RIT IEEE conference as the poster presentation.
8. Launched Power 2 Peer with a new interface and a self custody wallet feature.
9. Using Zero-knowledge (ZK) powered EVM's, we set our data entirely on chain saving us data storage and bandwidth in the long run.
10. New blogs were published on the website.
11. The paper developed with Power2peer CEIS funding received the best-paper award for the intern Andrew Lyon (Master student at RIT)

12. The full paper will be published in the a peer reviewed journal
13. NSF accepted concept paper.

### **Goals for 2024**

1. Develop Carbon Credit calculator for distributed ledger
2. The blockchain platform to connect with the public ledger
3. Apply NSF phase I funding.