

# Aggregated Community Solar + Storage Using Blockchain Transactive Energy

James Orenstein & Michael Fladmark, Trinity River Community Solar Systems (TRCSS), [jorenstein@trcss.org](mailto:jorenstein@trcss.org) & [mjfladmark@trcss.org](mailto:mjfladmark@trcss.org)



## Background

- Utility-scale solar in Texas is MASSIVE!
- No state policies encourage Community Solar in Texas, BUT nothing prevents it in deregulated areas.
- BUT why is Texas lagging other states in adopting Community Solar?

## Questions

- What are the critical barriers to successfully adopting Community Solar in Texas?
- What are innovative solutions to address those barriers?
- What are lessons learned from other successful programs?

## Methods: TRCSS is:

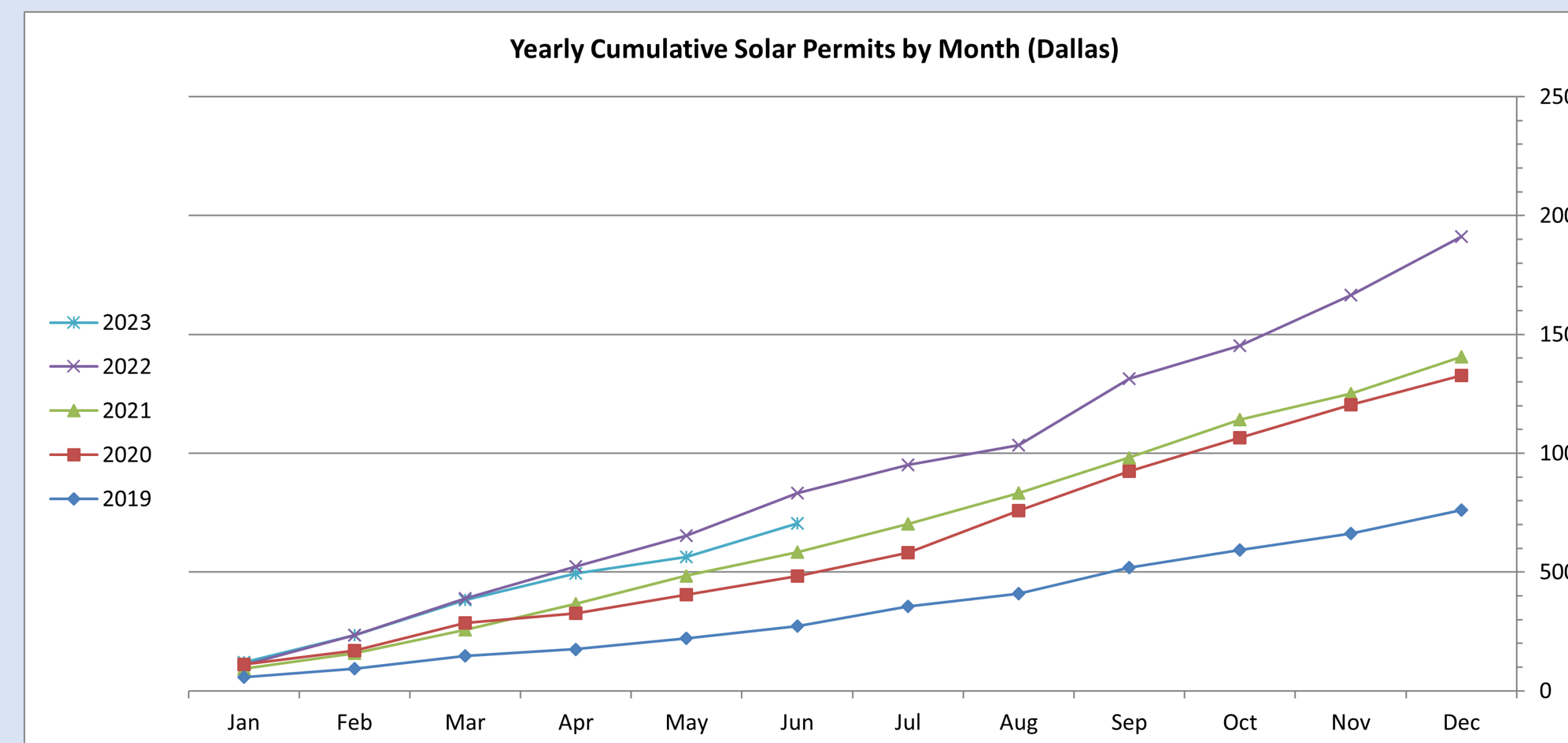
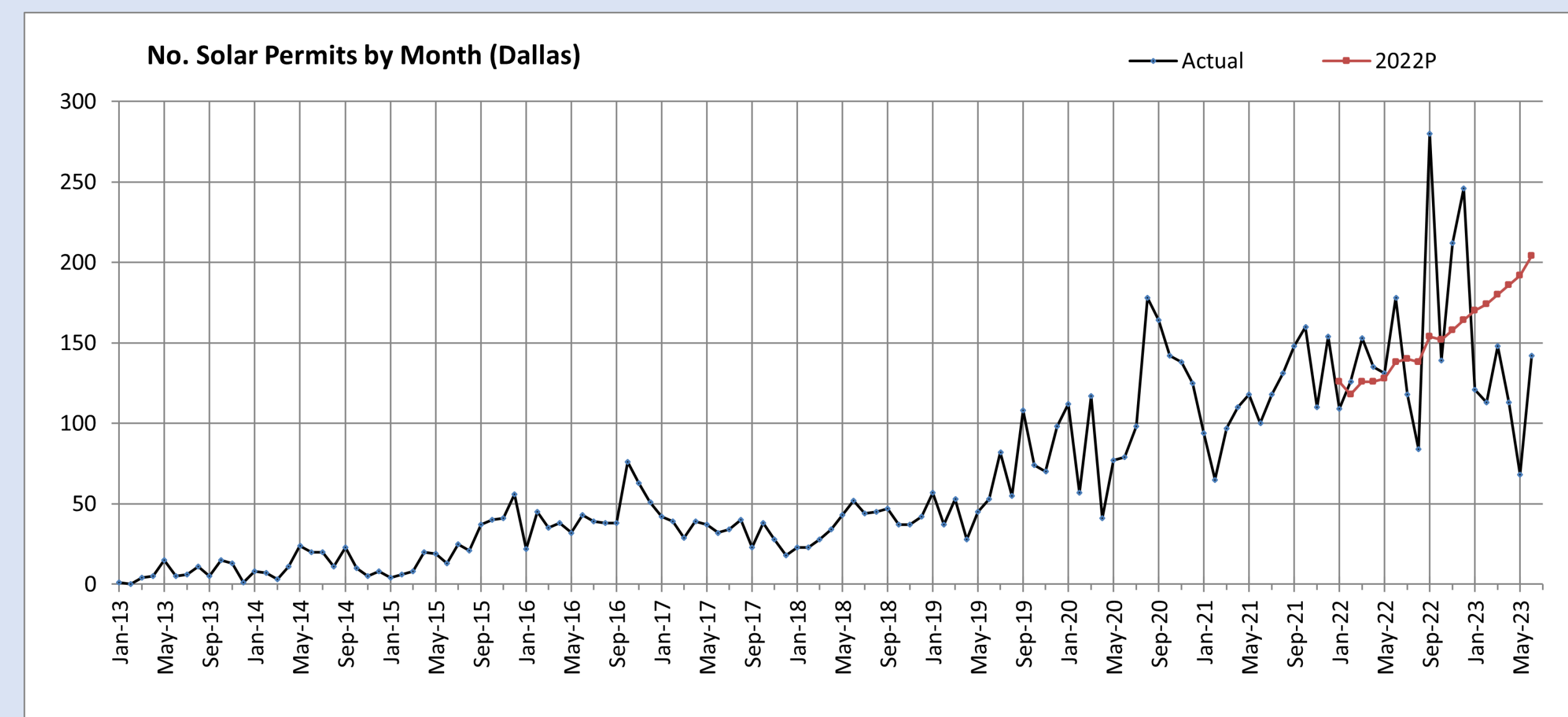
- Researching Blockchain Transactive Energy (BCTE) applications for Solar + Storage.
- Participating in the Texas ERCOT Aggregated DER (ADER) Pilot program as an aggregator of Community Solar projects.
- Working with other organizations through US Department of Energy (DOE) sponsored programs.

## Key Conclusions

- Successful deployment of TRCSS' innovative solutions for Community Solar + Storage will significantly contribute to Greenhouse Gas reductions and Air Quality improvements.
- Our equity-based approach will provide benefits to consumers experiencing Energy Poverty.

## Key Results: TRCSS is:

- Analyzing City of Dallas Solar Permitting data trends.



| Oncor Distributed Generation Report: Year - Year Increase (%): 2022 |                 |               |
|---|-----------------|---------------|
| City  | Facility* Count | Solar kW (AC) |
| Grand Total   | 42%             | 36%           |
| FORT WORTH  | 42%             | 42%           |
| DALLAS  | 29%             | 32%           |
| ARLINGTON   | 41%             | 45%           |
| ROUND ROCK  | 28%             | 27%           |
| ODESSA  | 25%             | 24%           |
| KILLEEN   | 53%             | 56%           |
| PFLUGERVILLE  | 25%             | 27%           |
| PLANO   | 33%             | 20%           |
| GRAND PRAIRIE   | 33%             | 31%           |
| MIDLAND   | 18%             | 17%           |

- In discussions with Powerledger to use their BCTE applications for Community Solar in Texas.
- Participating in the Public Utility Commission of Texas (PUCT) "Technical Requirements and Interconnection Processes for Distributed Energy Resources (DERs)" proceedings.



Community Energy Trading in TX: Potential Revenue Streams for Helping Make Community Solar Sustainable:

<https://www.linkedin.com/pulse/community-energy-trading-tx-potential->

**ASES -2022 ANNUAL CONFERENCE**

Presented by: James Orenstein & Michael Fladmark

Trinity River Community Solar Systems, Inc



TRCSS is focusing on the Dallas Fort Worth Metroplex:

<https://www.linkedin.com/company/trinity-river-community-solar-systems-inc-trcss>



James



Michael