

# SolarWall Power Tower

## CONSERVAL SYSTEMS INC., BUFFALO NY

### Project Summary

SolarWall Solar Power Tower is a revolutionary concept which combines the best features of multiple renewable technologies into one Hybrid Energy Tower (HET)

Project will expand upon current developments and patents to complete the HET development of HET which includes SolarWall transpired solar air collectors, solar updraft tower, wind downdraft tower, Venturi or diffuser chamber for turbines, PCM thermal storage and integration of PV thermal and recovery of PV heat in PCM storage

GO phase will complete a demonstration of the first HET in USA at Tech Parks Arizona



### Key Personnel/Organizations

- Conserval Systems and SolarWall inventor, John Hollick
- Bill Stein, Project Manager for demonstration at Tech Parks
- Professor Dogan Eryener, SolarWall Turkey and Trakya University, built first two prototypes, inventor of HET
- Conserval's existing supply chain for SolarWall components
- University of Arizona Center for Innovation
- Tech Parks Arizona
- Neal Energy, Perrysburg, Ohio. PCM thermal storage
- Sandia to perform CDF on turbines

### Key Milestones & Deliverables

<b>SET:</b>	Complete design for 250 kW prototype ready to begin construction of demonstration project Finalize agreement with Tucson Electric Power to purchase power
<b>GO:</b>	Complete demonstration at Tech Parks Arizona

### Project Impact

SolarWall Power Tower generates power 24 hours a day with towers 100 feet tall

Scalable from 250 kW to many MW at costs competitive with PV systems

New PV farms can be built to recover thermal energy to increase capacity and operate continuously without battery storage

Including wind with solar increases potential for locating wind energy closer to urban areas

