

Providing  
Utility-Scale  
Solar Energy to  
Urban, Rural, Farm,  
and Wild Lands

**3.3 bil gal.** of water saved from  
evaporation and power  
generation annually (AZ)<sup>1</sup>

**≤140k acres** of wild +  
farm land  
saved (AZ)<sup>3</sup>

**11.2 mil \$USD** saved in canal  
maintenance  
costs annually (AZ)<sup>2</sup>

**17.2 mil MWh** of projected  
power  
generation<sup>4</sup>

Water Transportation is the  
Largest Single Energy  
User in the West, and  
Thermo-Electric Generation is the  
Largest Industrial Water Consumer

Adapts to 20'-150'  
Canals of any shape

**29 bil \$USD** estimated  
market value  
(AZ)<sup>5</sup>

**2** filed  
patents

1. Calculated from data presented in "Energy and water co-benefits from covering canals with solar panels", Nature, 2021
2. Calculated from data presented in "Energy and water co-benefits from covering canals with solar panels", Nature, 2021
3. Based on 7.9-85 acres per MWh "Land-Use Requirements for Solar Power Plants in the United States" from NREL in 2013
4. Based on internal estimates for CSSP power production and cost
5. Based on internal estimates for CSSP power production and cost

Reducing the Power Demand  
on Thermo-Electric Power

**CSSPs** Generate  
Electricity

Reducing Water Consumption  
for Power Generation

**AUTOMATED DESIGN PROCESS INCLUDES:**

- Generation of Geometry, Including Sizing of Structural Members
- Generation of 3D BIM Model for Easy Drawing Creation
- Software Optimizes for Solar Collection and Levelized Cost of Energy
- Physically Accurate Solar Power Generation Estimation
- Market Based Estimation of Construction Costs
- Lower LCOE Reduces Return on Investment Term

COVER + POWER CANALS WITH SOLAR ENERGY

Software+Hardware Solution by Tectonicus Constructs



Software will Model Secondary and Tertiary Value Added and Savings Including:  
Micro Climate Increased Power Performance | Savings in Canal Maintenance  
Increased Water Quality | Compounding Benefits at Utility-Scale