

# Tempe South Water Treatment Plant Solar

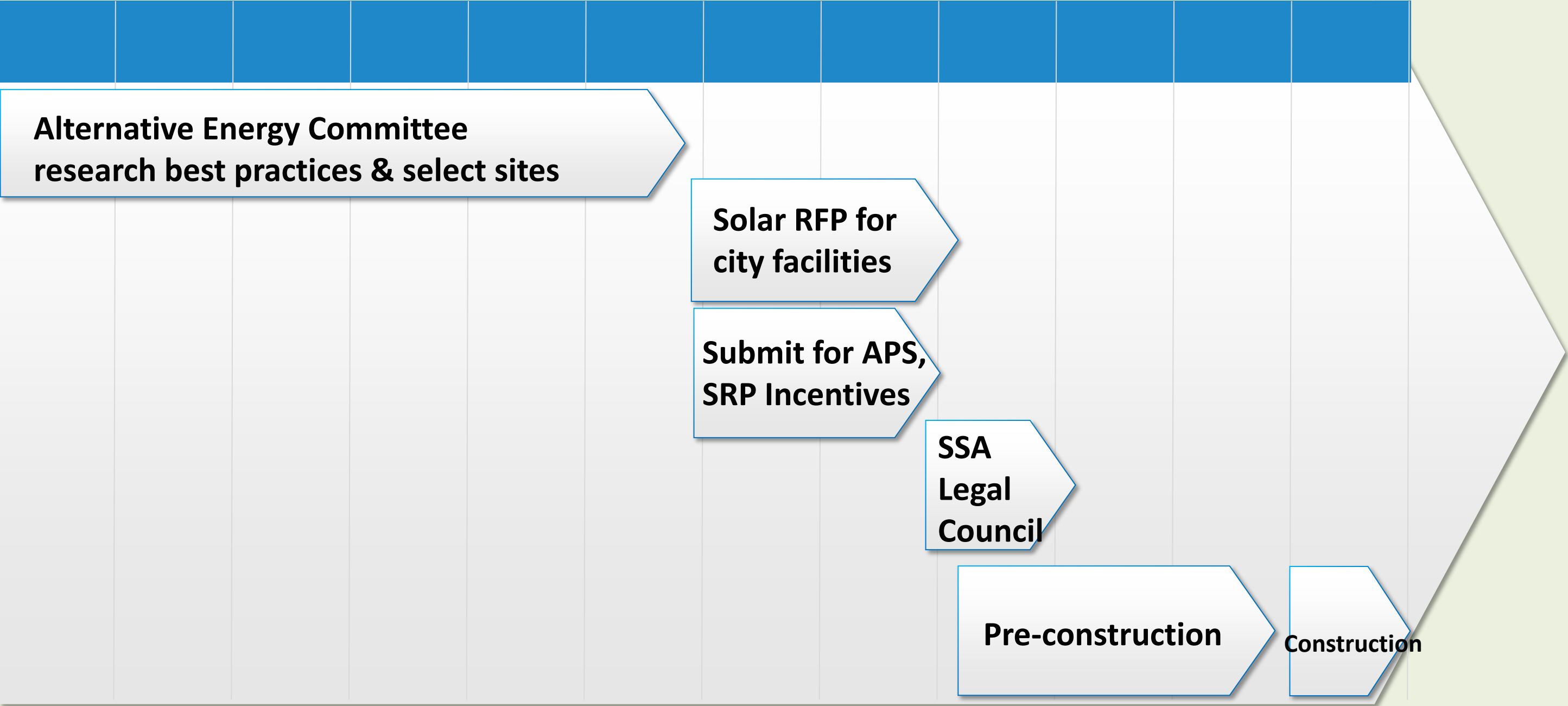


**March 27, 2014**

# Solar Timeline

2012

2013





# Tempe Water Treatment Plant Solar

1. Alternative Energy Committee
2. Solar Request for Proposals (RFP)
3. Solar Service Agreement (SSA)
4. APS & SRP Incentives
5. Pre-construction
6. Construction & Commissioning



# Alternative Energy Committee

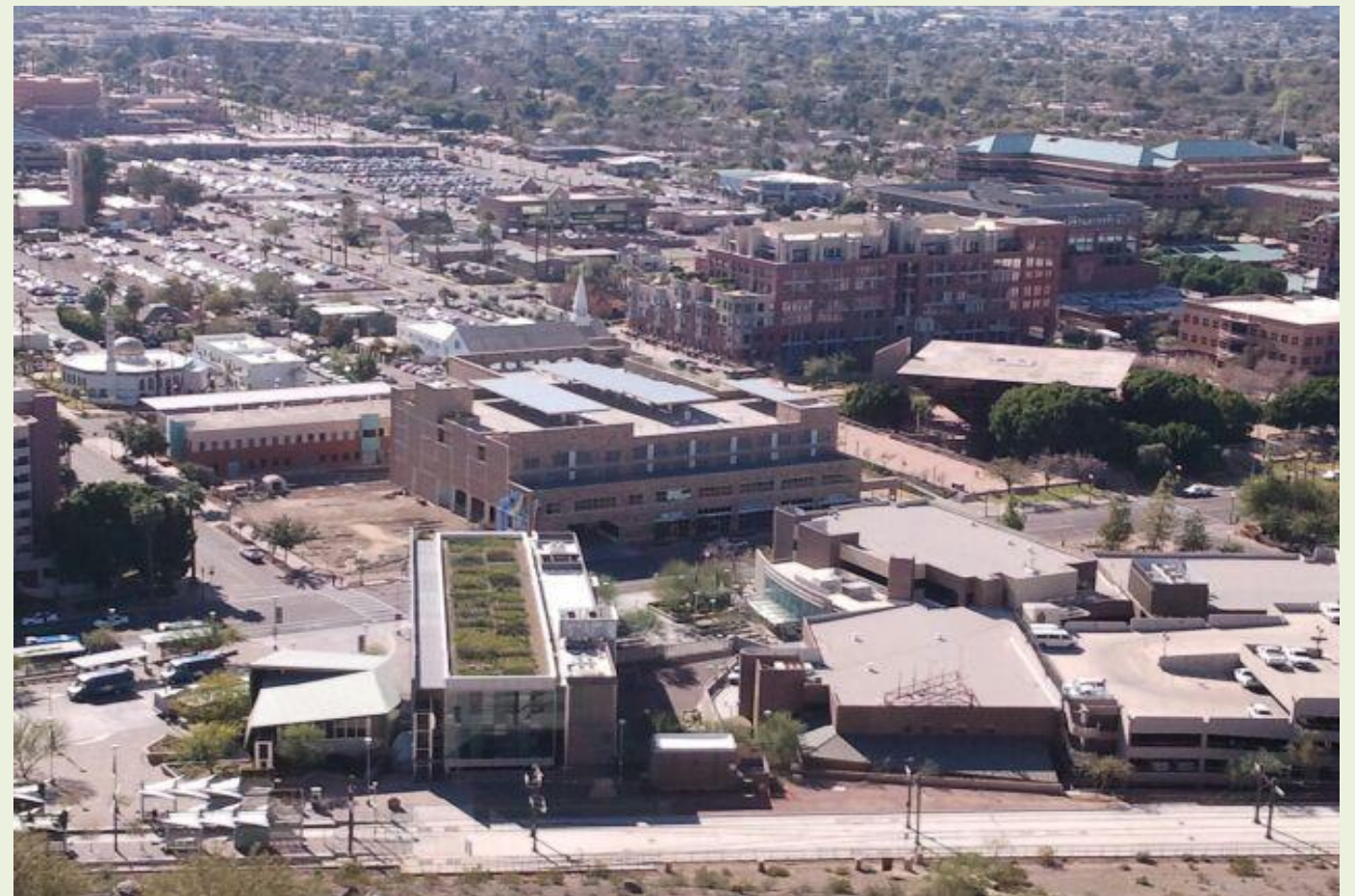
- Why committee?
- Goals of Committee:
  - No capital costs for city
  - See immediate savings
  - Power facilities with alternative energy
- Select sites
- Best practices of RFPs and SSAs



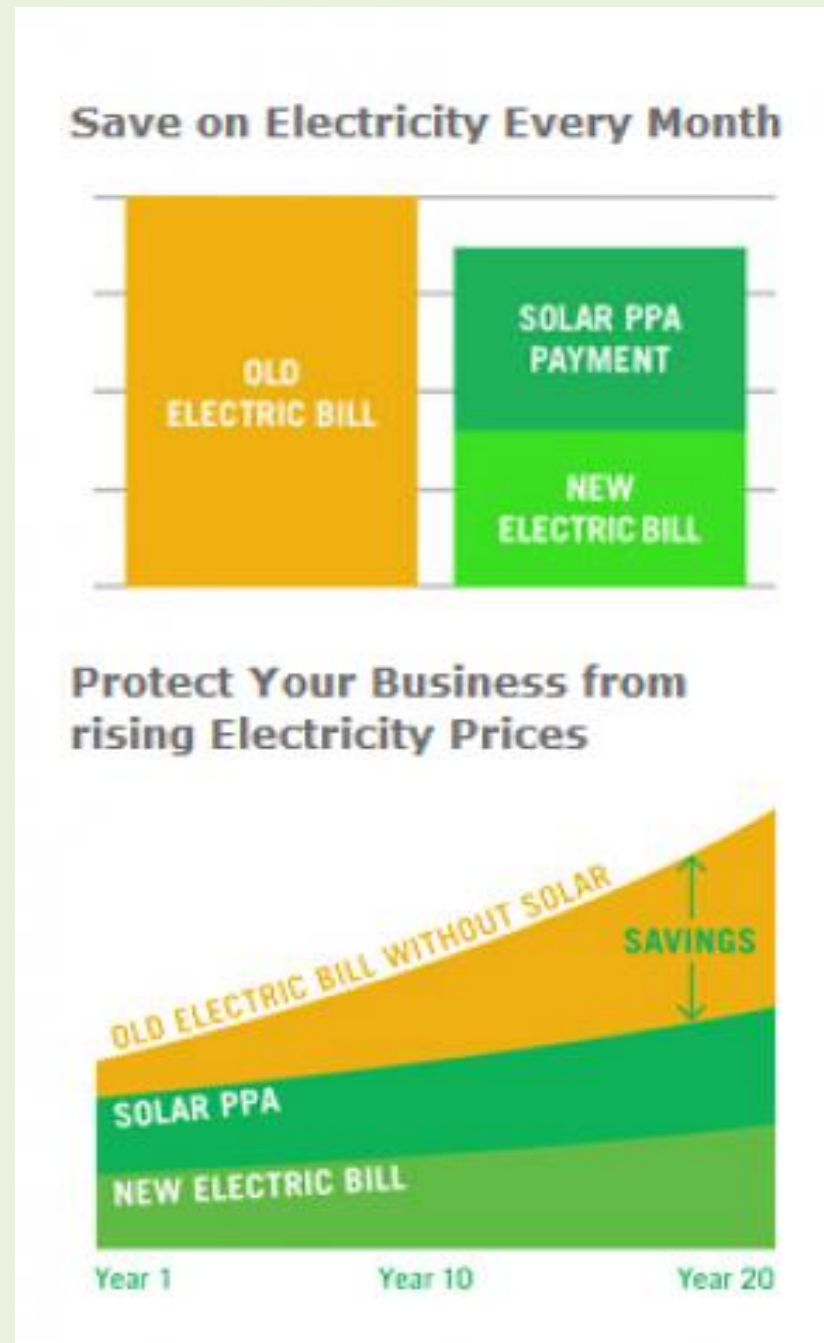


# Solar Request for Proposals

- Best Practices of Solar Requests for Proposals (RFP) and Solar Services Agreements (SSA):
  - City of Chandler
  - City of Mesa
  - Prescott Valley
  - Arizona State University
- Selected 7 sites



# Solar Services Agreement (SSA)



- Third party model
  - Solar vendor installs, operates & maintains system
  - Financial partner owns system
  - City purchases power at agreed upon rate, a rate lower than the current cost of power
  - No out-of-pocket costs for city
  - Contract term 20 years

# Solar Request for Proposals

- Bid Issued December 2012
- Submittals due March 2013
- 10 vendors submitted
- Interviews and evaluation by April 2013
- Legal Review of SSA
- Council approval May 2013– selected 4 vendors
- Council approved SSAs with SolarCity for SWTP & Police/Courts

# APS & SRP Incentives

- APS incentives in 2013 – reverse auction
- SRP incentives in 2013 – first come first serve basis
- Incentives
  - Shovel-ready projects
  - Vendor selected
  - Must offset load use, cannot build PV system to generate more power than site demand
  - Interconnection on one continuous property



# APS & SRP Incentives

- APS Production Based Incentives Application:
  - Production Based Incentive Calculation Sheet
  - PV Watts or system calculation sheet
  - Fully executed installer agreement
  - System description
  - Panels and Inverters specs
  - W-9 for system owner
  - 12 months energy consumption for building

# Pre-Construction

- 5 months
- Planning and Building Safety
- Engineering review
- Risk Management
- Security – background checks
- Bi-weekly meetings

Construction – 6 weeks





# Solar City SSA at South Water Treatment Plant





# Solar City SSA at South Water Plant

- 923.9 kW system
- \$.05/kWh for 20 years no escalator
- Current rate \$0.083/kWh
- SRP incentives \$.04/kWh
- Year 1 production 1,647,700 kWh
  - 15% annual energy use
  - Plant annual use is 10,667,769 kWh
  - Annual electric bill is ~ \$800,000
- Periodic Buyback provision
  - at 20 years = \$132,584 or fair market value
- City will pay the current rate for electricity on portion not offset by solar
- \$25,536 savings in the first year, total savings \$2.3 million over 20 years





# South Water Treatment Plant Ribbon Cutting March 14



# Next Solar Projects

- 250 kW system at Police/Courts building downtown
- 900 kW system at Johnny G. Martinez Water Treatment Plant
- Library Complex in planning phase



# Next Solar Projects



SolarCity installed 3MW at Walmart Distribution Center



Tempe JGM Martinez Water Treatment Plant



# Tempe South Water Treatment Plant Solar



[www.tempe.gov/energy](http://www.tempe.gov/energy)  
[www.tempe.gov/green](http://www.tempe.gov/green)

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