

# Energy Policy Innovation Council (EPIC) Update

Sustainable Cities Network  
Meeting

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# About EPIC

- Based at the Center for Law, Science & Innovation, the Sandra Day O'Connor College of Law
- Our Mission:
  - To provide timely and fact-based information on energy policy issues that affect Arizona.
  - Advance Arizona's energy industry potential, energy security and public welfare.

# Today's Agenda

1. Recent Developments in the AZ Energy Policy Landscape
2. Current EPIC Activities

# 1. AZ ENERGY POLICY LANDSCAPE

# Some Data

- In 2014,  $\geq 6\%$  of retail electricity sales (kWh) in AZ came from from non-hydro renewable energy sources.
- In 2014, utility energy efficiency programs achieved annual incremental savings of  $\sim 2\%$  of retail sales.

# Rooftop Solar Developments

- SB 1465 adopted:
  - Adds new disclosure requirements for rooftop solar providers
  - <http://www.azleg.gov/legtext/52leg/1r/bills/sb1465h.pdf>
- 5 new net metering proposals pending at ACC
  - APS, TEP, UNS Electric, Trico, & Sulphur Springs
- TEP and APS given “green light” to launch utility-owned DG Programs (Dec 2014)

# Salt River Project pricing proceeding

- 3.3% overall rate increase, effective April 2015
- Increased customer charge
  - Now \$20 (up from \$17) per month for average residential
- New demand charges (per kW) for:
  - Rooftop solar customers
  - Large C&I customers

# Energy Efficiency Developments

- SRP Reduced its EPCAF budget
  - Primarily affects Commercial EE Programs
- New TEP programs & measures approved by ACC:

Residential	Commercial
<ul style="list-style-type: none"><li>• Appliance Recycling</li><li>• Multi-family</li></ul>	<ul style="list-style-type: none"><li>• Bid for Efficiency Pilot</li><li>• Retro-commissioning</li><li>• Combined Heat and Power (CHP) Pilot</li><li>• Energy Codes Enhancement</li></ul>
<a href="https://www.tep.com/efficiency/newhomeprograms/">https://www.tep.com/efficiency/newhomeprograms/</a>	<a href="https://www.tep.com/efficiency/newbusinessprograms/">https://www.tep.com/efficiency/newbusinessprograms/</a>

\*Approved supply-side measures not shown in this table

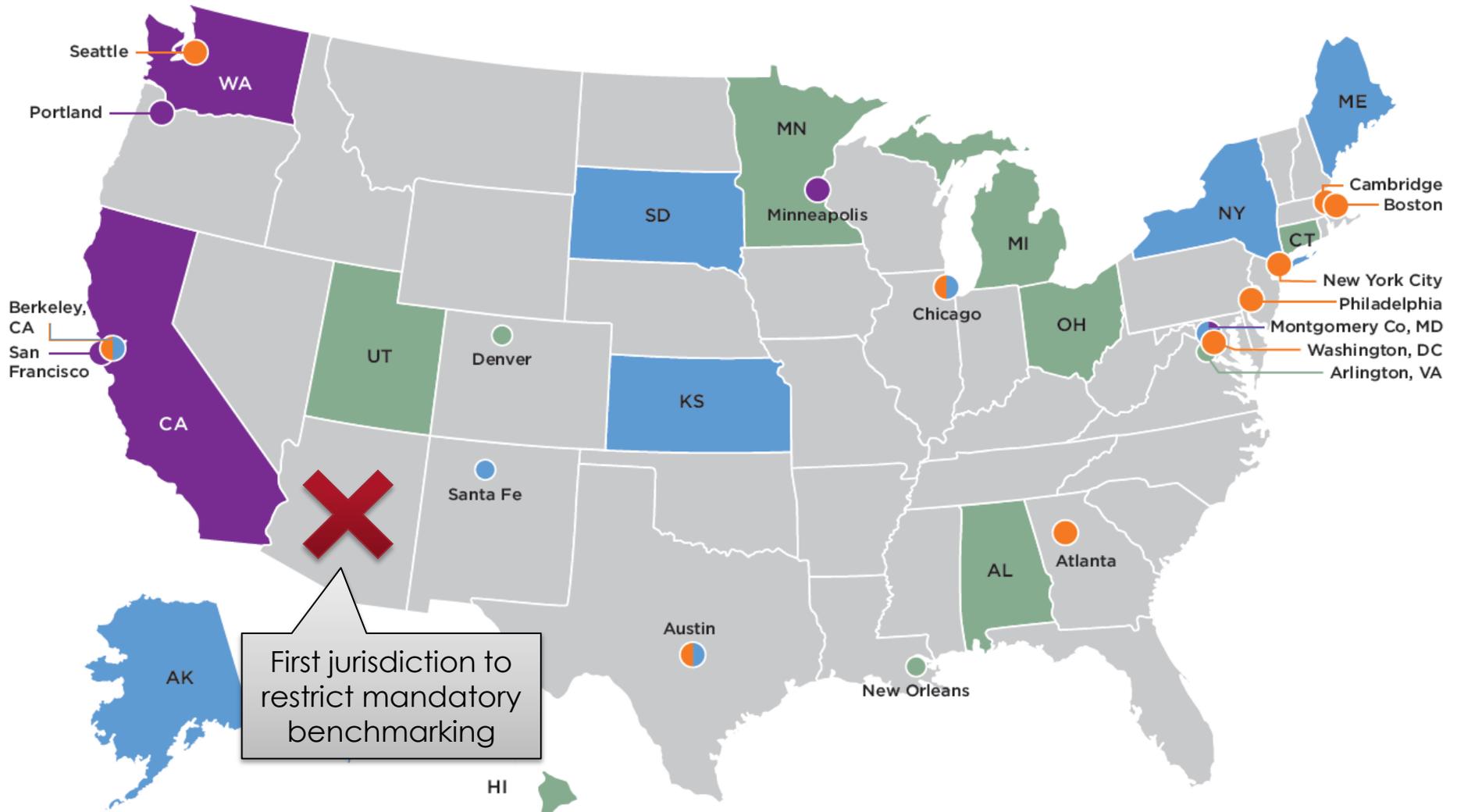
# SB 1241: Statewide Restriction on Local Energy Benchmarking & Plastic Bag Bans

ARS §9-500.34:

“A city or town may not:

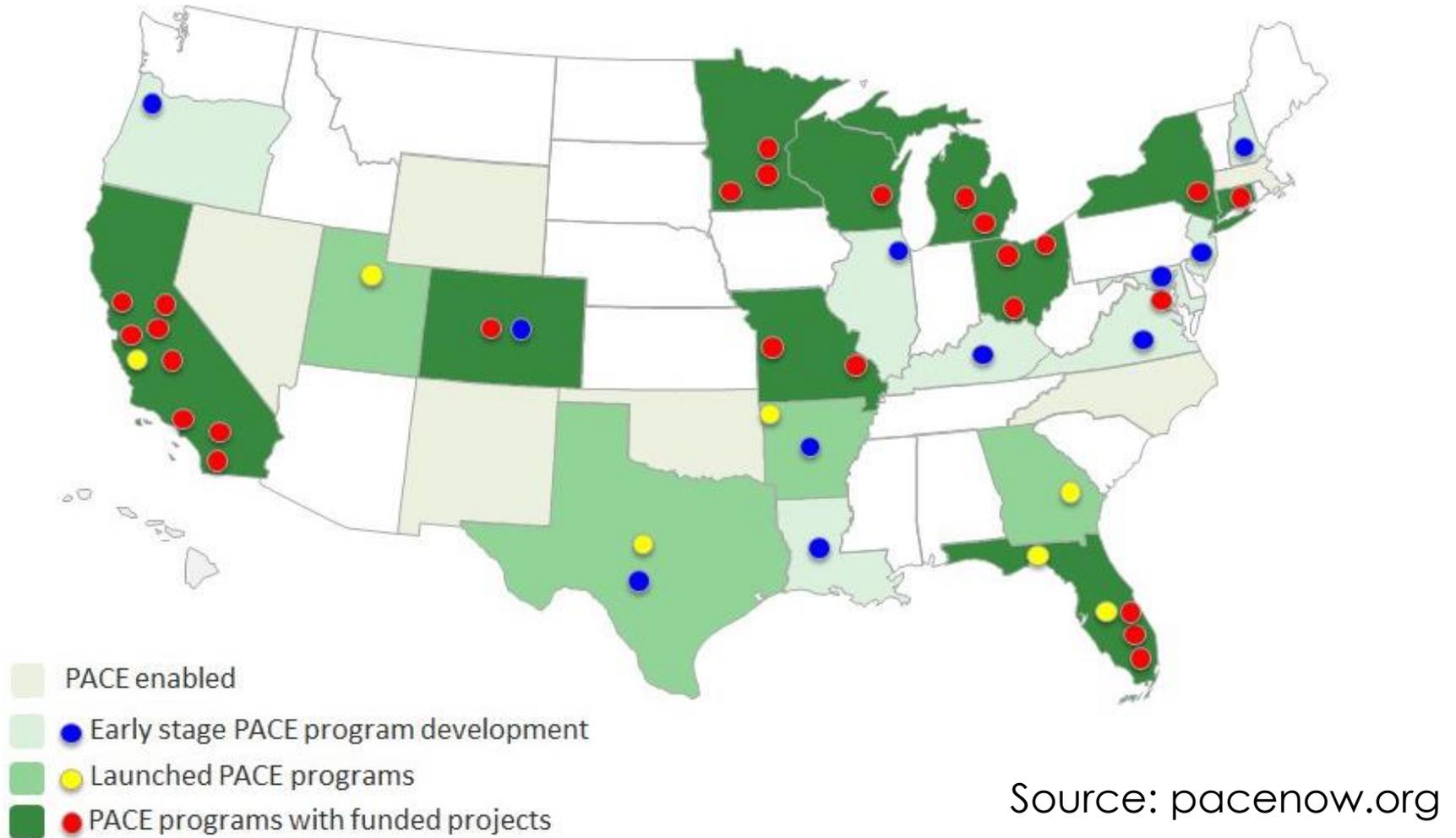
1. Require an owner, operator or tenant of a business, commercial building or multifamily housing property to measure and report energy usage and consumption, including energy consumption benchmarking and building facility energy efficiency audits...”

# U.S. Building Benchmarking and Transparency Policies



- Commercial policy adopted
- Commercial & multifamily policy adopted
- Public buildings benchmarked
- Single-family transparency adopted

# Property Assessed Clean Energy in 2016?



## 2. CURRENT EPIC INITIATIVES

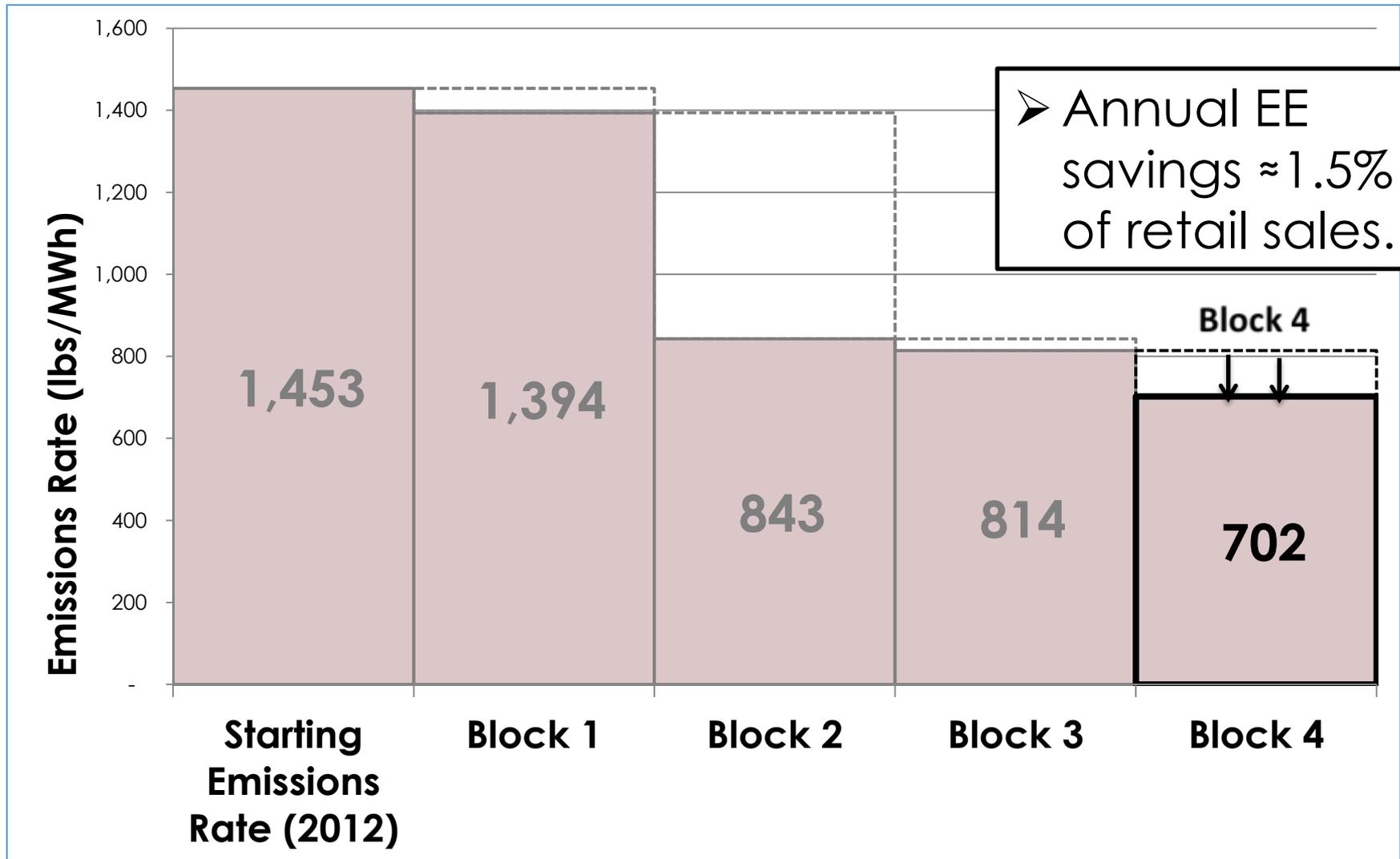
# Clean Power Plan Initiative

- ASU Partnership with ADEQ
- Areas of focus:
  - Compliance scenario modeling
  - Economic impacts
  - Reliability impacts
- Workshop held in February
  - <https://energypolicy.asu.edu/clean-power-plan-initiative/>

# Overview of EPA's Proposal

- First rules to address CO<sub>2</sub> emissions from existing power plants.
- Relies on EPA's statutory authority under Clean Air Act § 111(d).
- Aims to reduce U.S. power sector emissions 30% by 2030 (vs. 2005 levels).
- Assigns numeric emissions goals to each state.

# AZ's Four "Building Blocks"



# Regulatory Timeline

## Rulemaking

- ✓ June 2014 – Notice of Proposed Rulemaking
- ✓ December 2014 – Written Comment Deadline
- Summer 2015 – Final Rulemaking

## Proposed Compliance Schedule

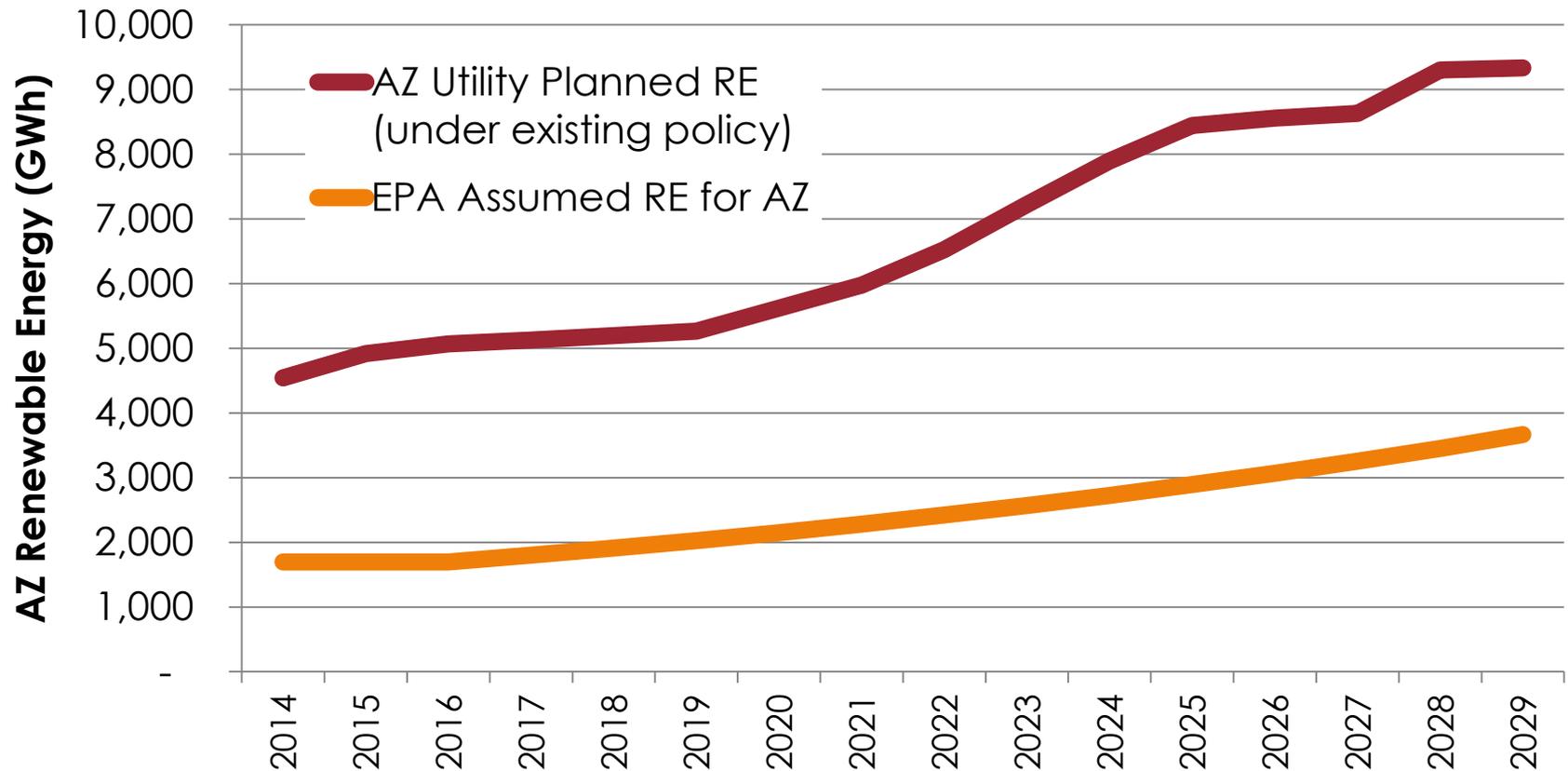
- Summer 2016 – State Implementation Plans due
  - ADEQ's stakeholder process:  
<http://www.azdeq.gov/envIRON/air/stakeholder.html>
- Summer 2017 – State plans due if eligible for 1-year extension.
- Summer 2018 – Multi-state plans due

# Opportunities for Local Jurisdictions

- Local RE or EE programs/measures:
  - Public building programs
  - Building Energy Codes
  - Other ideas?
- Considerations:
  - EM&V: is it measurable? verifiable?
  - Possible RE/EE credit trading opportunities?

# Sonoran Institute: RE Build-out Study

## Renewable Energy in AZ (2014-2029)



# Upcoming EPIC Policy Briefs

- SRP's Pricing Changes
- Legal issues regarding solar on common roof spaces (e.g. condominiums)
- Energy benchmarking
- Other topic ideas?

# Local Policy Database

## Chandler

County: Maricopa  
 Population size: 245,628 (as of 2012)  
 Population density: 4,243 people/sq. mi.  
 Elevation: 1215 ft.  
 Area within limits: 57.9 sq. mi.

### Authorities searched:

Town code: <https://library.municode.com/index.aspx?clientId=10158>  
 General plan (2008): <http://www.chandleraz.gov/content/ChandlerGeneralPlan.pdf>  
 Green Building Program: [http://www.chandleraz.gov/Content/GB\\_Ch\\_GBP.pdf](http://www.chandleraz.gov/Content/GB_Ch_GBP.pdf)

### Summary of findings for Chandler:

The General Plan, from 2008, focuses on green energy issues, especially emphasizing a desire to encourage green building standards, energy efficiency standards and practices, and renewable energy development. The General Plan sees renewable energy research and development as a path to economic development for the city. The General Plan acknowledges that when the developers are contemplating land use they must also consider the impacts on water use. The Municipal Code uses the most recent energy efficiency building code available (the 2014 code will be out later this year).

Policy Category	Citation	Language	Summary
Energy efficiency & conservation	General Plan Energy Element	Goal: Encourage the Efficient Use of Energy Resources. Objective: Establish an incentivized Green Building Program. Objective: Promote energy conservation through public education. Objective: Modify City development standards to encourage energy efficiency Objective: Encourage energy efficient retrofitting for private development. Objective: Promote land uses that result in increased pedestrian and bicycle transportation opportunities.	Prioritize and support end user energy efficiency in both city-owned and privately-owned buildings.
	General Plan Energy Element	Goal: Improve Energy Efficiency in Public Applications Objective: Provide leadership in energy conservation through City projects and purchases. Objective Perform energy audits, assessing energy use of municipal facilities and programs.	Encourage and support energy efficiency practices and behaviors for city operations.



NAME	CITY/TOWN/County	IECC	IECC Code
APACHE	COUNTY		
APACHE JUNCTION	CITY	Yes	2003
AVONDALE	CITY	Yes	2012
BENSON	CITY	Yes	2006
BISBEE	CITY		
BUCKEYE	TOWN	Yes	2012
BULLHEAD CITY	CITY	Yes	2006
CAMP VERDE	TOWN	Yes	2012
CAREFREE	TOWN	Yes	2003
CASA GRANDE	CITY	Yes	2012
CAVE CREEK	TOWN	Yes	2009
CHANDLER	CITY	Yes	2012
CHINO VALLEY	TOWN	No	0
CLARKDALE	TOWN	Yes	2012
CLIFTON	TOWN		
COCHISE	COUNTY	Yes	2003
COCONINO	COUNTY	Yes	2012
COLORADO CITY	TOWN	Yes	2006
COOLIDGE	CITY	Yes	2006
COTTONWOOD	CITY	No	0
DEWEY-HUMBOLDT	TOWN	Yes	2006

# Thank You

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