

# Case Study:

## Municipally Owned Utilities in Texas

# Austin Energy

### Quick Facts

As of October 2015, the Austin City Council approved Austin Energy to contract for up to **300 MW** of new solar energy.

According to [Austin Energy's 2015-16 Proposed Budget](#), solar rebates prompted an **8 MW** savings in 2014-15.

Austin Energy has a power purchase agreement for **30 MW** of solar energy in Webberville, TX. The system produces over **50,000 MW-hour** of energy annually, enough energy to power nearly 5,000 homes.

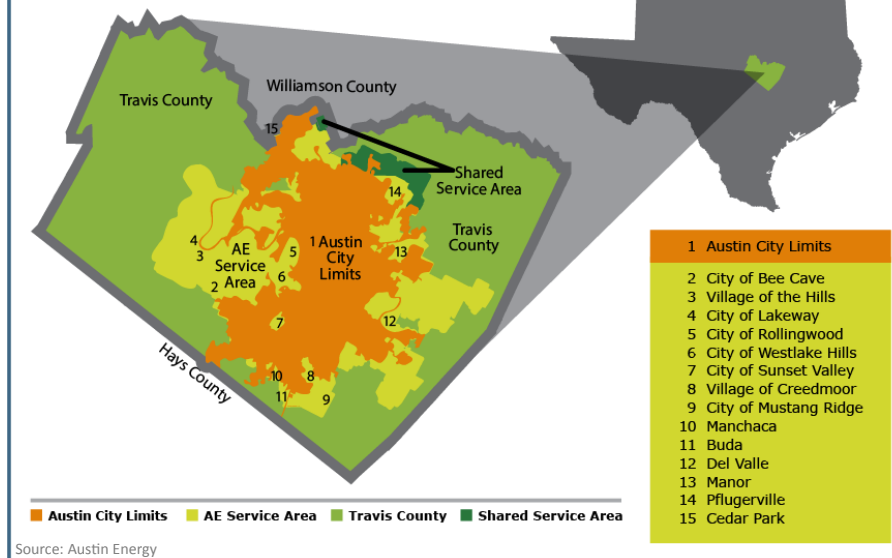
As of 2014, Austin Energy has **22 MW** combined generation from municipal, commercial, and residential installations.

Austin Energy has installed more than **100** solar arrays at schools and municipal buildings in the service territory.

Austin Energy contracted Recurrent Energy to build a **150 MW** array in West Texas, the largest single solar power plant in the State of Texas. It is expected to go online in 2016.

### AUSTIN ENERGY SERVICE AREA

50% City of Austin • 50% Outside City of Austin



### Summary

Austin Energy is the nation's eighth largest publicly owned electric utility serving a population of almost one million. Austin Energy has a service territory of 437 square miles, falling mostly within Travis County and parts in Williamson County. Austin Energy's mission is to safely deliver clean, affordable reliable energy and excellent customer service. The utility is committed to creating environmental sustainability by setting goals for reducing emission, increasing renewable energy, and reducing water use. Austin Energy had previously set a goal of generating 35% of energy through renewable sources by 2020. However, the utility was able to reevaluate that value as they were on the path to exceed that goal in a cost effective manner before 2020. Austin Energy began exploring more aggressive opportunities and developed a new goal to generate 55% renewable energy by 2025. As a part of that goal, Austin Energy aims to increase installed solar capacity to 950 megawatts (MW), including 200 MW of locally placed solar. During 2015, Austin Energy issued requests for proposals for 600 MW of utility-scale solar. City of Austin residents and policy makers embrace the renewable energy goals set by Austin Energy.

The City of Austin is one of the fastest growing population centers in the country. Austin Energy's plan to implement more renewable energy is driven by both customer and stakeholder demand. More customers are looking to install distributed energy resources, such as solar energy or battery storage. Due to this increase in demand, there has been a 10% reduction in residential energy use over the last 4 years (2011 – 2015). This reduction is based on citizen desire to conserve energy or shift consumption out of peak times.

# Case Study: Municipally Owned Utilities in Texas

Austin Energy

## Austin Energy's Community Solar Project

Austin Energy has a goal of 200 MW of locally placed solar installed by 2025, of which 100 MW need to be sited by customers. Currently, there are about 30 MW sited by customers and another 30 MW of utility scale solar. Austin Energy is looking to fill the gap of missing solar MW by finding ways to offer the benefits of solar to customers whose rooftops are not well-suited to solar, which account for 55% of their customer base. The concept of community solar meets this need and allows Austin Energy to open up the market to new types of customers.

In 2015, Austin Energy announced plans to construct a 2 MW community solar farm on Austin Energy-owned land in East Austin. The land that will be used for the solar farm was once home to a toxic petroleum tank farm that was forced to close down by nearby residents and regulators. The community solar project will allow customers who cannot install solar panels on their roof because of upfront costs, or those who live in apartments or homes covered by shade, to subscribe to clean energy from the project. The project will continue to grow the booming clean energy industry already occurring in the City of Austin. The community solar project will also address equity of solar, allowing everyone to have an opportunity to participate and gain the benefits of solar energy. The community solar project can hedge against future rate increases for customers by locking in electricity rates. Currently, electricity from the community solar farm will be more expensive than the rest of the market. Customers anticipate this reality and are choosing to lock into current rates for a long time and expect at some point the market prices will be less than the cost of other energy sources. Customers are visualizing the long term value of opting in to the benefits of solar energy.



## Sustainable and Holistic Integration of Energy Storage and Solar PV (SHINES) Project

Austin Energy was recently awarded \$4.3 million from the [U.S. Department of Energy's SunShot Initiative](#) for the SHINES Project. The project will pilot and research solar, battery storage, and smart inverter technologies tied to the planned community solar farm. The City of Austin will be home to one of the first energy storage systems tied to a community solar project in Texas. This project will allow Austin Energy to store the solar power for when the sun doesn't shine. There will be one 1.5 MW battery storage location at the Mueller Community development funded through the DOE SunShot Initiative and another 1.5 MW storage at the Kingsbury community solar array, which is supported financially through a \$1 million [New Technology Implementation Grant from the Texas Commission on Environmental Quality \(TCEQ\)](#). Austin Energy has a goal to incorporate 10 MW of storage for solar energy by 2025. This project will help develop data on how to optimize the balance between solar and storage to figure out how solar energy can serve someone during the night time. Because the energy grid is designed to always balance supply and demand, exploring ways to optimize this balance will minimize the concerns of renewable energy's intermittent nature.

# Case Study: Municipally Owned Utilities in Texas

Austin Energy



## Austin Energy Rebates and Incentives

Austin Energy offers solar rebates and incentives to all commercial and residential customers. For residential customers who purchase rooftop solar photovoltaic (PV), Austin Energy provides a rebate to help pay for the new system. The rebate is based on available capacity at the current incentive level and the installed solar PV system size and is available on a first come first serve basis. Residents may be eligible to receive rebates for up to 10 kW of PV, not to exceed 50% of the total system cost. Austin Energy customers may also qualify for a 30% Federal Tax Credit based on the cost of the solar PV system. The installation of a solar PV system may also qualify a customer for a property tax exemption. For more information on all incentives available to Austin Energy Customers, see [Austin Energy's Power \\$aver Program Solar Photovoltaics \(PV\) Incentive](#).

Austin Energy also offers a [Value of Solar \(VOS\) rate](#) to residential customers who install solar PV. The VOS credit appears on their monthly bill for every kilowatt-hour of electricity the solar system produces. If a customer's solar credit is larger than their energy bill, the remaining credit rolls over to the next month.

For commercial customers, Austin Energy offers a [Performance-Based Incentive \(PBI\)](#). The PBI is paid as a monthly credit on a commercial business's electric utility bill for every kilowatt-hour the system produces for ten years. Austin Energy approves a PBI electricity rate for each system, and the rate is locked in for the 10-year period. The incentive applies to systems sizes up to 1,000 kW-hr. The commercial incentive is tiered based on project size and the aggregated capacity of previously installed commercial projects incentivized by Austin Energy. Austin Energy also aims the Performance-Based Incentive at multifamily properties to use as an incentive to attract new residents and decrease turnover. Commercial customers taking advantage of the PBI are also eligible for net metering, tax credit exemptions, and property tax exemptions.



# Case Study: Municipally Owned Utilities in Texas

Austin Energy

## Property Assessed Clean Energy (PACE) and Austin Energy

Travis County established Texas' first Property Assessed Clean Energy (PACE) program in March 2015. PACE is a voluntary economic development tool that allows property owners to obtain long-term financing from private lenders to upgrade or retrofit their property. The Travis County PACE program is administered through the nonprofit organization, Texas PACE Authority (TPA). TPA is taking a market-based approach to energy finance and economic development. TPA works with all parties – property owners, contractors, and lenders to bring energy and water improvements that are both economically sound and environmentally friendly. For more information about the Texas PACE Authority, please visit [www.texaspaceauthority.org](http://www.texaspaceauthority.org).

Over 96% of Austin Energy's service territory falls within Travis County. Offering PACE financing to commercial and industrial building owners within Austin Energy's service territory creates another tool for the utility to incentivize energy efficiency and potentially solar PV projects. PACE financing complements the rebates that Austin Energy currently offers to customers to help reduce upfront costs.



*The North Central Texas Council of Governments recommends to have an energy audit done by the State Energy Conservation Office to establish where solar might fit into overall energy efficiency improvements and energy saving potential. For more information on the SECO Technical Assistance Program, please visit: <http://seco.cpa.state.tx.us/energy-reporting/gov-assist.php/>*

The North Central Texas Council of Governments is working under contract with the State Energy Conservation Office (SECO) to expand best management practices for solar photovoltaic systems throughout the State of Texas. For more information about solar in Texas, please visit: [www.GoSolarTexas.org](http://www.GoSolarTexas.org).