

LET'S PUT SOLAR TO WORK!

WILDCATting
THE

SUN

Oil wildcatters
in the 20th
century got
rich building
the Texas
economy.

21st century
solar
wildcatters
will do the
same.

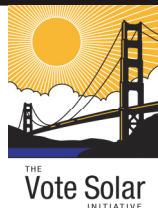
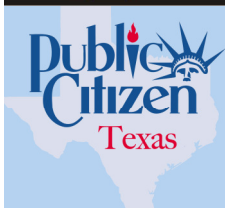
INSIDE:

**WHY TEXAS SHOULD
LEAD THE SOLAR
ENERGY REVOLUTION**

**HOW TEXAS COULD
GAIN 21,500 JOBS**

**SOLAR POWER:
CAN IT REDUCE PEAK
ENERGY COSTS?**

**HOW THE
TECHNOLOGIES OF
TODAY WILL BUILD
THE ECONOMY OF
TOMORROW**





SOLAR REBATE PROGRAM

Polls show that 81% of Texas voters are willing to pay up to a dollar per month to encourage solar power. A statewide solar rebate program will help property owners harness the sun, and capture the economic and environmental benefits of solar energy.

Helping Texans Go Solar!

Policy Goal: 2,000 MW of distributed solar by 2020, the equivalent of solar on 500,000 homes

JOBS

-As many as 21,500 jobs could be created, bringing significant economic development to the state. However, the program must be large and extended enough to convince businesses that capitol investment in new manufacturing facilities in Texas would be justified.

STABILIZING ENERGY PRICES

- Not only does going solar lock-in cheap, fixed energy prices for system owners, solar also benefits all utility customers. Solar energy shines down on the state during 'peak energy' times, when utilities have to bring online the most expensive and often dirtiest power sources. Reducing peak power demand means more stable energy bills for all customers.

CLEAN AIR

- Would avoid 29 million tons of climate change inducing pollution.

Emissions avoided from 2000 MW in TX

Job Type	Direct Jobs	Indirect/ Induced	Total	CO ₂ Avoided (tons)	Methane Avoided (tons)	NOx Avoided (tons)
Manufacturing	2,700	9,400	12,100			
Installation	2,100	7,200	9,300	29,072,576	523	29.336

Program Costs:



The average impact of a 10-year solar rebate program is approximately one-half of one-percent increase; or an extra \$0.98/month to a customer's bills. A **2007 poll** by Baseline & Associates showed that **81% of Texas voters are willing to pay up to a dollar per month** to encourage solar developments.

The market would grow from 25 megawatts installed in 2010 to 375 megawatts in 2019, leading to a cumulative capacity of 2000 megawatts by the end of the program.

Resource Highlight: Photovoltaics **Simplicity • Versatility • Reliability • Scalability**

Solar PV panels convert the sun's light directly into electricity. There are two main types of PV technology: crystalline silicon and thin-film. Both types can convert sunlight directly into electricity without any moving parts and are scalable from a small home roof top installation to a large commercial array. PV systems often generate enough power during daytime hours to supply excess power to the grid. By delivering an extra boost of electricity when demand tends to be highest, PV helps lower electricity costs and improve grid reliability for all energy consumers.



DIVERSIFIED RENEWABLE ENERGY GOAL

Build a Stronger Electricity Grid by Adding Renewable Energy

Policy Goal:
**Add 4,000 MW of diversified clean energy
to the grid over the next 10 years.**



The state legislature helped create a boom for wind power in Texas by passing a renewable energy goal in 1999. The state has easily met its renewable energy standard through large-scale wind farms. Now it's time to turn Texas into a solar, biomass, and geothermal powerhouse by creating an additional diversified renewable energy goal of 4,000 megawatts of power by 2020.

Resource Highlight: Concentrated Solar Power Plants Solar Energy at Utility Scale



Used for large utility-scale electricity generation, CSP focuses and collects the thermal energy of sunlight. CSP creates far more heat than a magnifying glass, concentrating sunlight up to 10,000 times its initial intensity.

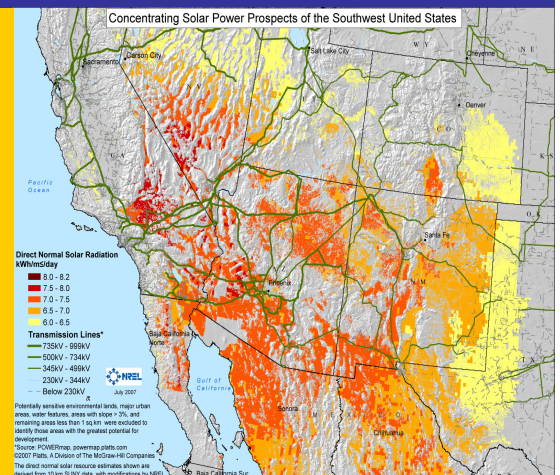
This thermal energy is used to generate steam to drive large, heat engines. Heat can be stored easily and relatively cost-effectively, making CSP a unique solar technology that can provide electricity even during cloudy weather and after sunset.

CSP plants are already being built across the Southwest.
It's time for Texas to start reaping the benefits.

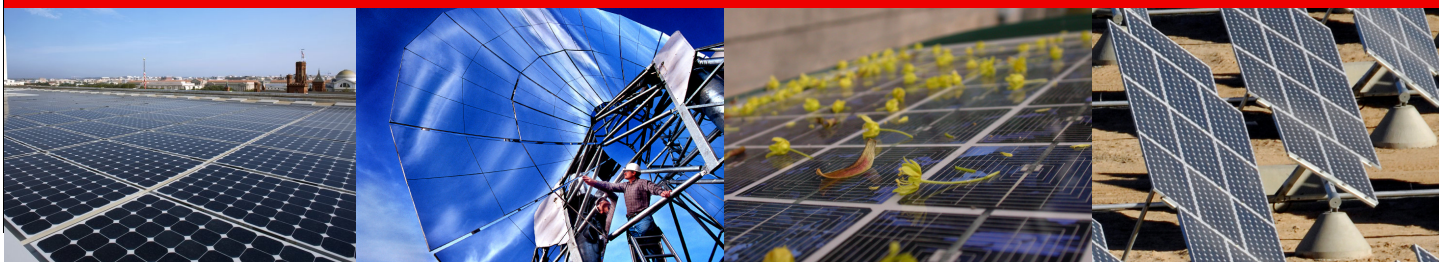
Case Study: CA and AZ Generating Jobs, Generating Power

As a result of proactive state policies, almost 4,800 MW of large-scale solar projects have been announced in California and Arizona alone. This includes 4,000 MW of Concentrating Solar Power and Photovoltaic projects.

Over the 30 year life of those plants, the two states will create **154,000 jobs**, **\$10.1 billion in earnings** and **\$25.4 billion in economic output**.

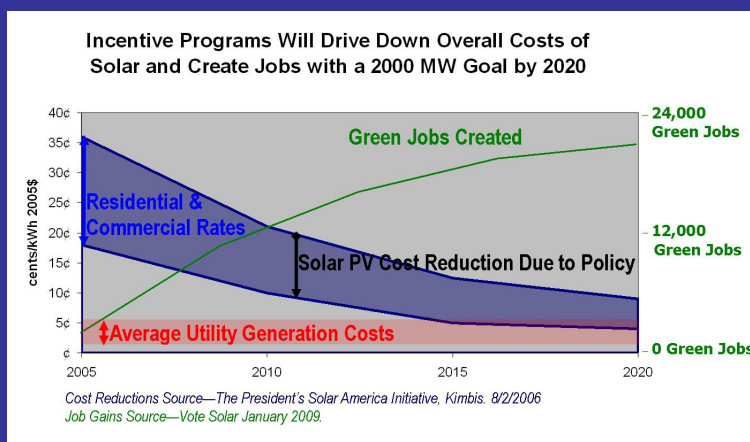


POLICY RECOMMENDATIONS



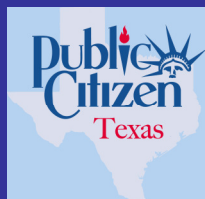
Texas can spur the development of solar power by adopting the following public policies:

1. Expand the non-wind renewable energy goal to 4,000 MW within Texas' existing and highly successful Renewable Portfolio Standard.
2. Create a small scale renewable rebate program. A declining rebate should be planned over 10-year period to give the industry confidence to invest in production, research and development.
3. Create fair buyback rates for small scale renewable power.
4. Promote new ways to store the excess energy produced by the sun for later use, such as thermal storage technologies, flywheels, batteries, and compressed air energy storage.
5. Ban Homeowner's Associations from denying homeowners the right to install PV panels.



TEXAS SHOULD ADOPT THESE POLICIES TO ENCOURAGE SOLAR DEVELOPMENT!

Texas Solar Roadmap report developed by:



To download the full report and our additional recommendations, visit:
www.cleanenergyfortexas.org or www.environmenttexas.org or
<http://www.votesolar.org/state-initiatives/texas.html>

COVER ART BY JEFF PENDLETON