

American Solar Transformation Initiative

Program Overview



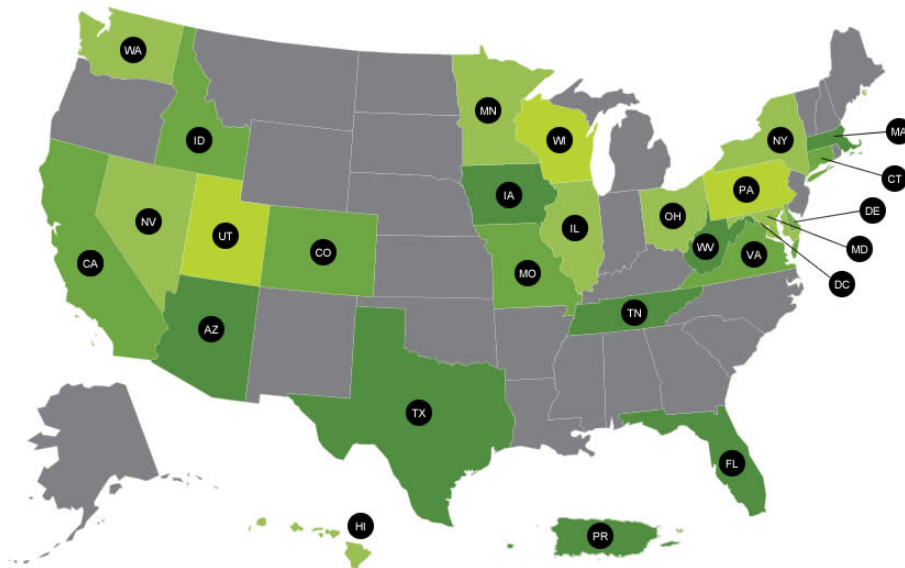
Tyler Espinoza
Senior Project Manager, Optony Inc.
MWCOG BEEAC Meeting - October 17, 2013



American Solar Transformation Initiative (ASTI)



DOE-supported initiative to **reduce the total installed costs** of solar PV systems and **increase deployment** of solar across the US by lowering barriers to adoption in targeted focus areas



FOCUS AREAS

- Local Permitting Process
- Planning & Zoning Regulations
- Utility Interconnection
- Education and Outreach
- Financing Tools and Resources
- Innovative Deployment Programs



ASTI Supporters and Partners

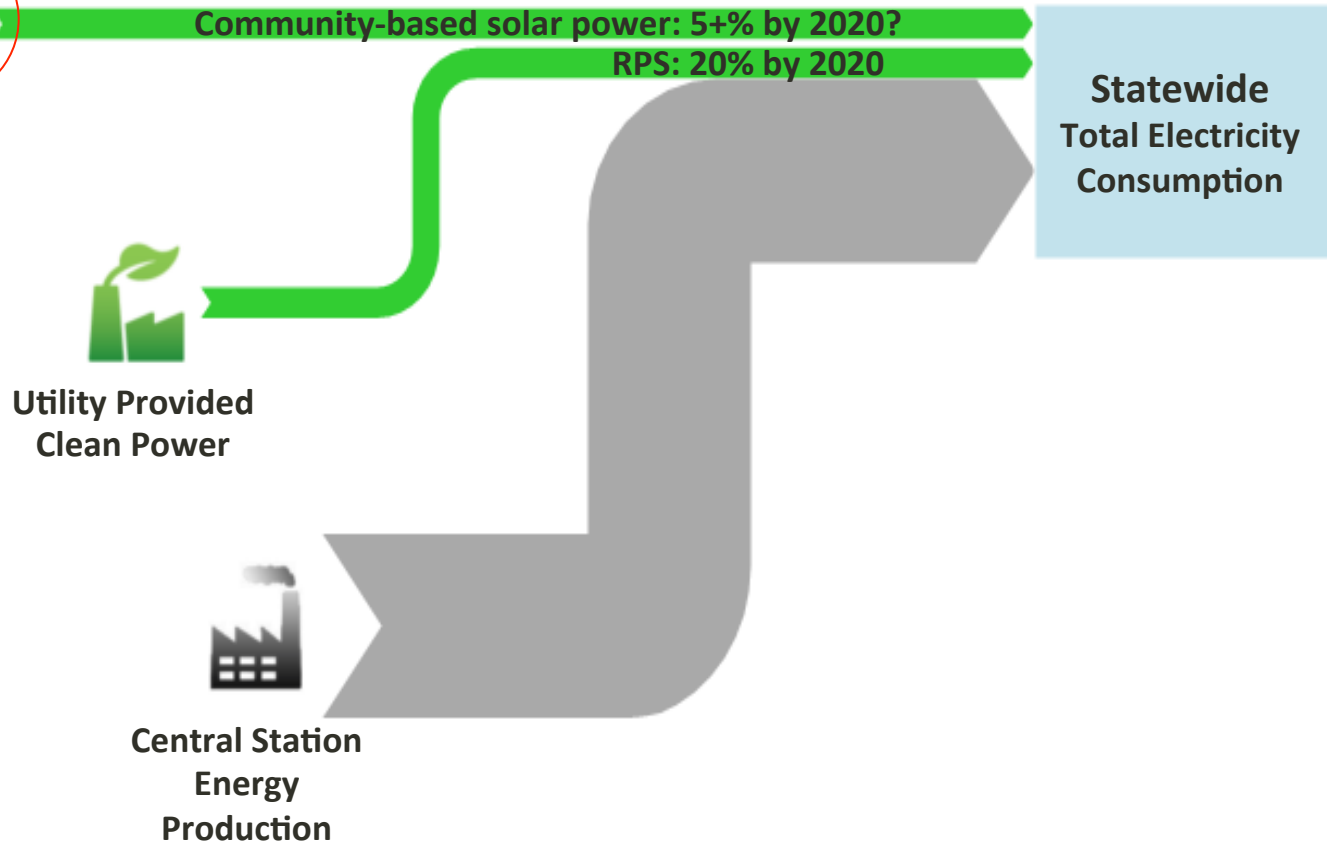
The ASTI program has broad support and is coordinating with regional organizations to ensure the maximum impact to each participating agency and relevancy to local and national goals.



Targeting Distributed Solar Generation Potential

Distributed Solar Generation Creates

- New Jobs
- Economic Activity
- Environmental Benefits
- Community Engagement



Goals, Objectives and Benefits

GOAL

Make it easier, faster and more cost-effective to “go solar” by providing coordinated technical assistance and resources to individual jurisdictions and regionally via the Solar Roadmap platform.

OBJECTIVES

- **Assess and benchmark** current solar processes
- **Assess solar market potential** to estimate economic and environmental impact
- **Create customized interactive roadmap** with vetted resources
- **Set goals and take action with support** from team of experts, peers and partners

BENEFITS

- **Receive assistance** to convene working groups and organize trainings
- **Coordinate efforts regionally** for maximum impact
- **Increase solar market activity** and strengthen the local economy and environment
- **Be recognized** locally, regionally and nationally
- **Community engagement** through educational resources
- **Provide resources** to consumers and installers to reduce complexity and transaction costs



Realize Regional Economic Potential (CA example)

	Solar Viable Residences	Res. Market Potential (MW)	Community Elec. Offset Potential (%)		Solar Viable Residences	Res. Market Potential (MW)	Community Elec. Offset Potential (%)
Arvin	1,781	9.1	10	Madera	7,092	36.2	13
Atwater	3,378	17.2	13	Mendota	910	4.6	9
Clovis	14,051	71.7	16	Merced	9,157	46.7	13
Delano	4,308	22.0	9	Modesto	29,002	147.9	16
Fresno	57,251	292.0	13	San Joaquin	362	1.8	10
Hanford	7,382	37.7	15	Turlock	10,616	54.1	17
Livingston	1,593	8.1	13	Visalia	18,256	93.1	16
				TOTAL	165,138	842.2	13

Regional Economic Impact: \$1.56B
Annual Clean Energy Production: ~1 Billion kWh

Additional opportunities in the commercial, government, and utility sectors

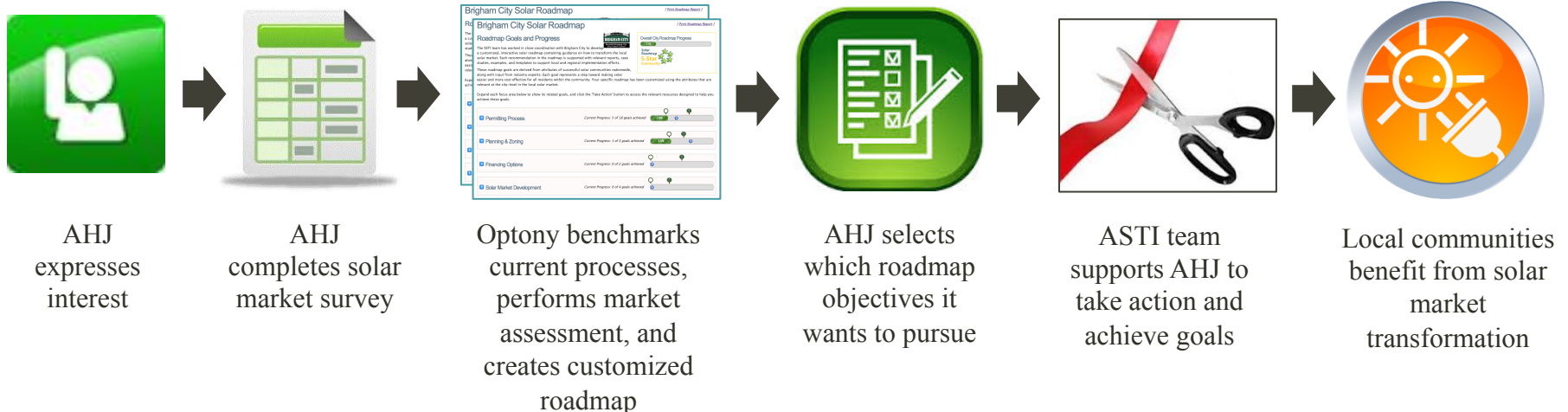


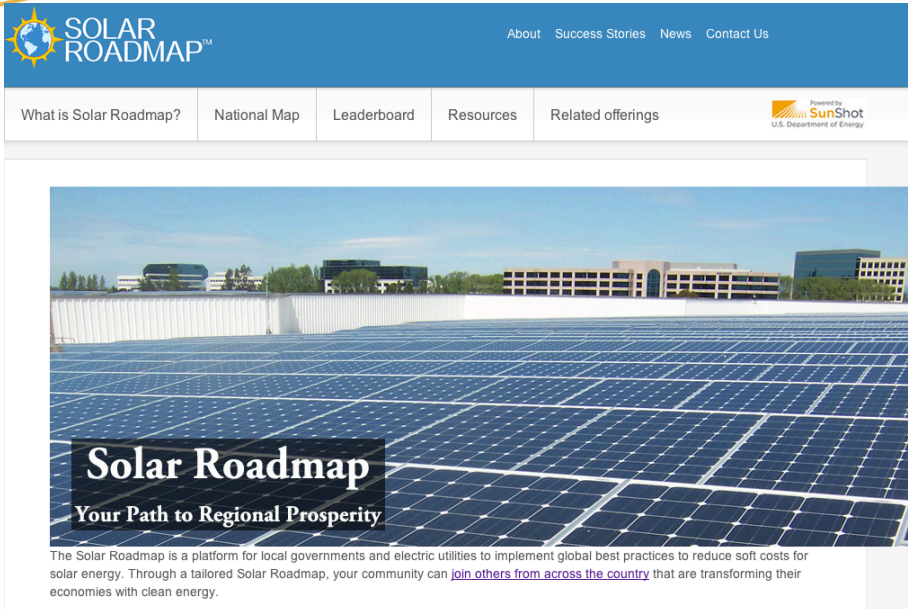
Onboarding Process

EXPECTATIONS

- Collaborate with city staff to complete solar market survey (data from current processes related to permitting, planning/zoning, and financing)
- Secure letter of support from CAOs
- Commit to setting goals and taking action in any of the focus areas with support from ASTI team, peers, and partners

GET ON THE SOLAR ROADMAP

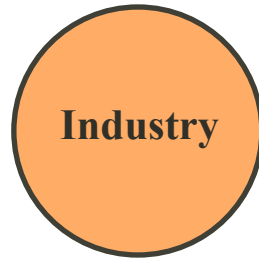




Hundreds of resources from leading organizations



U.S. DEPARTMENT OF ENERGY



City/County Landing Page

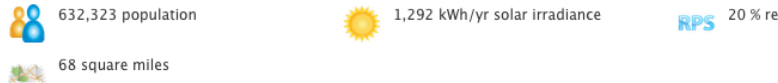
Washington, D.C.

This webpage has been created to provide local solar market conditions and share the latest industry information to residents and stakeholders in the District. Below you will find key solar market indicators and essential resources for residents, businesses, solar industry and government officials. There is also a direct link to the District's interactive policy roadmap designed to increase local solar installations by making it easier and more cost-effective to 'go solar'.



Washington, D.C. is surrounded by the states of Virginia and Maryland, and contains the historic area which was formerly part of those two adjacent states before they respectively ceded it for the nation. It is a good area for solar due to annual irradiance levels slightly above the national average.

Key Market Information



Local Impact of 5 % from Solar Power

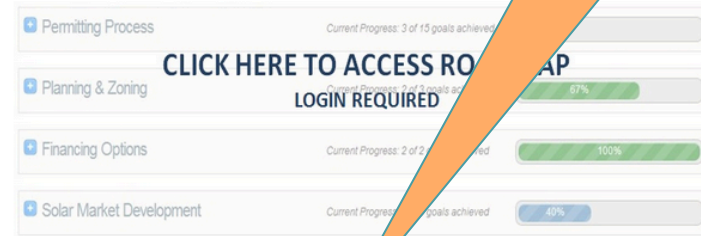


Residential Solar Potential



Resources & Partners Local & General Resources

Roadmap



Resources



Regional Partners



Solar 101



City/County Landing Page Community Stats & Market Potential



Customized Interactive Roadmap

Brigham City Solar Roadmap

[\[Print Roadmap Report \]](#)

Roadmap Goals and Progress



Overall City Roadmap Progress



The SSTI team has worked in close coordination with Brigham City to develop a customized, interactive solar roadmap containing guidance on how to transform the local solar market. Each recommendation in the roadmap is supported with relevant reports, case studies, examples, and templates to support local and regional implementation efforts.

These roadmap goals are derived from attributes of successful solar communities nationwide, along with input from industry experts. Each goal represents a step toward making solar easier and more cost effective for all residents within the community. Your specific roadmap has been customized using the attributes that are relevant at the city-level in the local solar market.

Expand each focus area below to show its related goals, and click the 'Take Action' button to access the relevant resources designed to help you achieve these goals.

- + **Permitting Process**
Current Progress: 5 of 18 goals achieved 28% [→](#)
- + **Planning & Zoning**
Current Progress: 1 of 3 goals achieved 33% [→](#)
- + **Financing Options**
Current Progress: 0 of 2 goals achieved [→](#)
- + **Solar Market Development**
Current Progress: 0 of 4 goals achieved [→](#)

Customized Roadmap
Interactive & Updated Real-time

Expand each focus area below to show its related goals, and click the 'Take Action' button to access the relevant resources designed to help you achieve these goals.

- + **Permitting Process**
Current Progress: 0 of 2 goals achieved [→](#)
- **Planning & Zoning**
Current Progress: 1 of 3 goals achieved [→](#)
 - [Z4] Solar Planning Guidelines
 - Initial Status:** Solar is not addressed in standards for new construction and solar access.
Guidance: Consider adoption of solar specific language in general construction and solar access.
 - [Z5] Solar Related Zoning and Regulations
 - Initial Status:** Solar is not addressed in zoning ordinances
Action Taken: City is considering the addition of solar standards
Guidance: Consider adoption of zoning codes that have solar specific language.
 - [Z6] Minimize Restrictive Ordinances for Solar
 - Initial Status:** No ordinances creating a barrier to solar
Action Taken: The City does not have ordinances which create a barrier to solar
Guidance: City currently at market best practice.
Goal Achieved!
- + **Financing Options**
Current Progress: 0 of 2 goals achieved [→](#)

Essential Resources

1. **Solar Access Benefits for Cities and Counties**
Author: US Department of Energy
2. **Model County Zoning Ordinance**
Author: Maricopa County
3. **Model Municipal Planning and Zoning Code**
Author: City of Madison [Take Action](#)
4. **Model Solar Standards for Lots and Setbacks**
Author: City of Eugene [Take Action](#)
5. **Sample Solar Definitions for Planning and Zoning Codes**
Author: Garfield County
6. **Sample Solar Zoning Ordinance and Design Standards**
Author: City of Aurora, CO [Take Action](#)
7. **National Guidelines for Installing Solar Panels in Historic Districts**
Author: National Alliance of Preservation Commissions [Take Action](#)
8. **Case Study, Building a Solar-Powered Home in a Historic Neighborhood**
Author: Build San Antonio Green

Resources for Taking Action
Organized by Goal & Available for Download



Solar Roadmap Leaderboard

Solar Roadmap Leaderboard
View by Region, Pop., Type, Progress, Awards

Click on a community's name to visit their customized Solar Roadmap.

Progress	Name	State	Population	Type	Recognized Achievements
80% P Z F M	City of Madera	CA	61,416	City	
79% P Z F M	City & County of San Francisco	CA	805,235	County	
76% P F M	City of Fresno	CA	494,665	City	
74% P Z F	Inyo County	CA	18,546	County	
65% P F M	City of Hanford	CA	53,967	City	
64% P Z M	City of Visalia	CA	124,442	City	
62% Z F M	City of Turlock	CA	68,549	City	
61% P Z	City of Modesto	CA	201,165	City	
60% P F M	City of Clovis	CA	95,631	City	
60% Z M	Esmeralda County	NV	783	County	



Next Steps

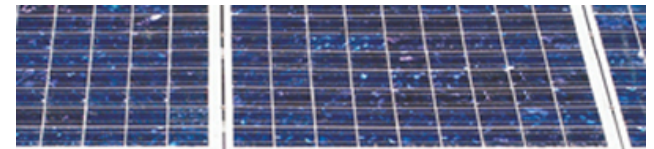
- Review Solar Roadmap website and materials
- Signal intention to join by October 25, 2013
- Complete DOE SM3 solar market survey
- Schedule interview to start building roadmap
- Work with MWCOG, Optony and regional partners to set goals and plan for implementation

TO LEARN MORE:

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OR VISIT:

www.solarroadmap.com



THANK YOU!

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About Optony

Optony develops and deploys solar best practices across the entire solar project lifecycle for government agencies, schools and commercial organizations.

Working with clients across all phases of solar projects creates deep insight into true performance drivers which is used to reduce costs and improve performance at any stage in the process.

www.optony.com



“Optony’s consulting service is a must-have for any organization considering an investment in solar. Based on Optony’s comprehensive analysis and recommendations, we now have a low-risk, high-return solar strategy.”

