

DSIRE™

Database of State Incentives for Renewables & Efficiency

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



DSIRE Database Intro & Local Government Policy Options

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Energy Efficiency &
Renewable Energy

IREC
INTERSTATE RENEWABLE ENERGY COUNCIL

**NORTH CAROLINA
Solar Center**

Background

The screenshot displays the DSIRE website interface. At the top, it features the DSIRE logo and the U.S. Department of Energy logo. Below the header is a navigation bar with links for Home, Glossary, Links, FAQs, Contacts, and About Us. The main content area includes a search bar with the text 'Search DSIRE' and a 'View Federal Incentives' button. A map of the United States is shown with state abbreviations. On the left side, there is a 'Resources' sidebar with links for RPS Data, Summary Maps, Summary Tables, Library, What's New?, and Search. Below the sidebar is a 'myDSIRE' section with the text 'customize DSIRE for your organization'.

- Created by the NC Solar Center in 1995
- Funded by the US DOE (EERE)
- Administered by NREL
- Approximately 2,600 entries
- Renewable energy and energy efficiency
- Rules, regulations, policies, and incentives
- Approximately 170,000 unique visitors/month

Database Content

- All **State** incentives and policies – including DC and territories
- All **Federal** incentives and policies
- Most **Utility** incentives
- Some **Local** policies and incentives – examples and largest cities/counties

Database Content

Incentives

Green Building Incentives
Industry Recruitment/Support
Leasing Programs
Rebate Programs
PACE Financing
Production Incentives (RE)
Property and Sales Tax Incentives
Grants Programs
Loan Programs

Rules, Regulations, Policies

Appliance/Equipment Efficiency Standards
Building Energy Codes
Contractor Licensing
Energy Efficiency Resource Standards
Energy Standards for Public Buildings
Generation Disclosure Requirements
Interconnection
Net Metering (RE)
Public Benefits Fund
Renewables Portfolio Standard
Solar/Wind Access Policy
Solar/Wind Permitting Standards
Line Extension Analysis

Not Found in DSIRE

- Private foundation grant opportunities
- Research and development (R&D) incentives
- Commercialization incentives
- Demonstration projects
- One-time grants or RFPs



Tips

- Click on a state to browse
- Use the search function to find a specific incentive type
- Always check expiration dates, date of last review, and the program website

The screenshot shows the DSIRE website search interface. At the top, there is a navigation bar with links for Home, Staff, Glossary, Links, and FAQs. Below this is a search section with a title 'SEARCH' and a description: 'Create a custom summary of incentives using the search criteria below. Fill in the menus to make a selection under each category.' There are two checkboxes for 'Renewable Energy' and 'Energy Efficiency', both of which are checked. Below these are five dropdown menus: 'Select an Eligible Sector:' (All), 'Select a State/Territory:' (All), 'Select a Technology:' (All), 'Select an Implementing Sector:' (All), and 'Select Incentive/Policy Type:' (All). A 'Click Here to Search' button is located at the bottom of the search section. On the left side of the page, there is a 'Resources' section with links for RPS Data, Summary Maps, Summary Tables, Library, and What's New?. Below the resources is a 'myDSIRE' section with a 'customize' link.

RESULTS!

- Search for Incentives for Renewable Energy and Energy Efficiency in “District of Columbia” for “Local Governments”
- Pare down the list by further limiting the criteria to efficiency or renewables or for a specific technology (e.g., PV, Lighting)

DSIRE SOLAR
solar policy information

Resources

- RPS Data
- Summary Maps
- Summary Tables
- Library
- What's New?

Search

myDSIRE

DISTRICT OF COLUMBIA
Incentives/Policies for Renewables & Efficiency

- [See Federal Incentives](#)
- [See All Summaries](#)
- [See Residential Incentives Only](#)

Financial Incentives

Federal Grant Program

- [USDA - High Energy Cost Grant Program](#) *Federal*
- [USDA - Rural Energy for America Program \(REAP\) Grants](#) *Federal*

Federal Loan Program

- [Clean Renewable Energy Bonds \(CREBs\)](#) *Federal*
- [Qualified Energy Conservation Bonds \(QEGBs\)](#) *Federal*
- [U.S. Department of Energy - Loan Guarantee Program](#) *Federal*

Performance-Based Incentive

- [District of Columbia Public Service Commission - Solar Renewable Energy Certificates](#)

Rules, Regulations & Policies

Interconnection

- [Interconnection Standards](#)
- [Interconnection Standards for Small Generators](#) *Federal*

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[Home](#)

[Team](#)

[Glossary](#)

[Links](#)

[FAQs](#)

[Contacts](#)

[About Us](#)



DSIRE

renewables & efficiency



Resources

[Solar Policy News](#)

[Solar Policy Guide](#)

[Policy Comparisons](#)

[Summary Maps](#)

[Library](#)

[Search](#)

myDSIRE

customize DSIRE for your business



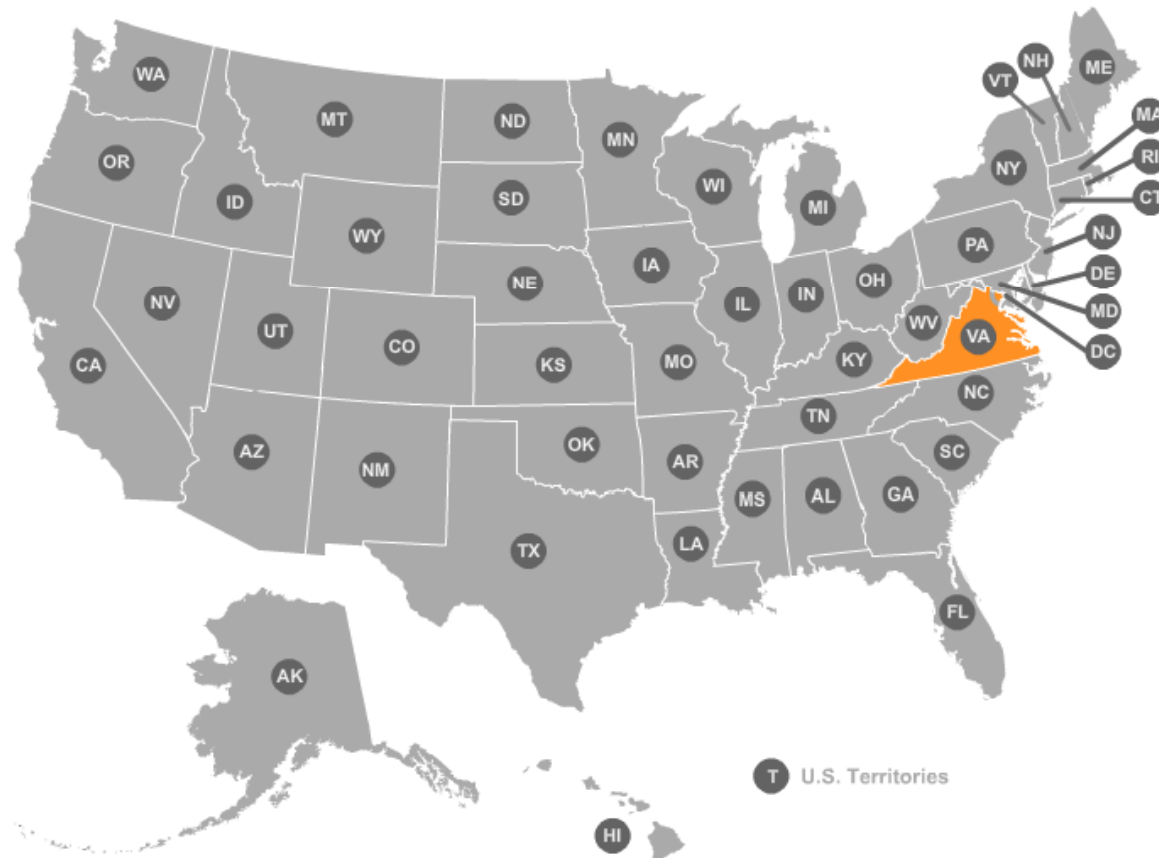
DSIRE Solar provides comprehensive information on state, local, utility, and federal incentives and policies that promote solar energy. Funded by the U.S. Department of Energy's Solar Energy Technologies Program, DSIRE Solar provides solar-specific policy information to consumers, policy makers, businesses, utilities, researchers and other stakeholders.

Search for incentives for one or both:

Solar Electric Solar Thermal



[View Federal Solar Incentives](#)



Direct Incentives for Local Governments

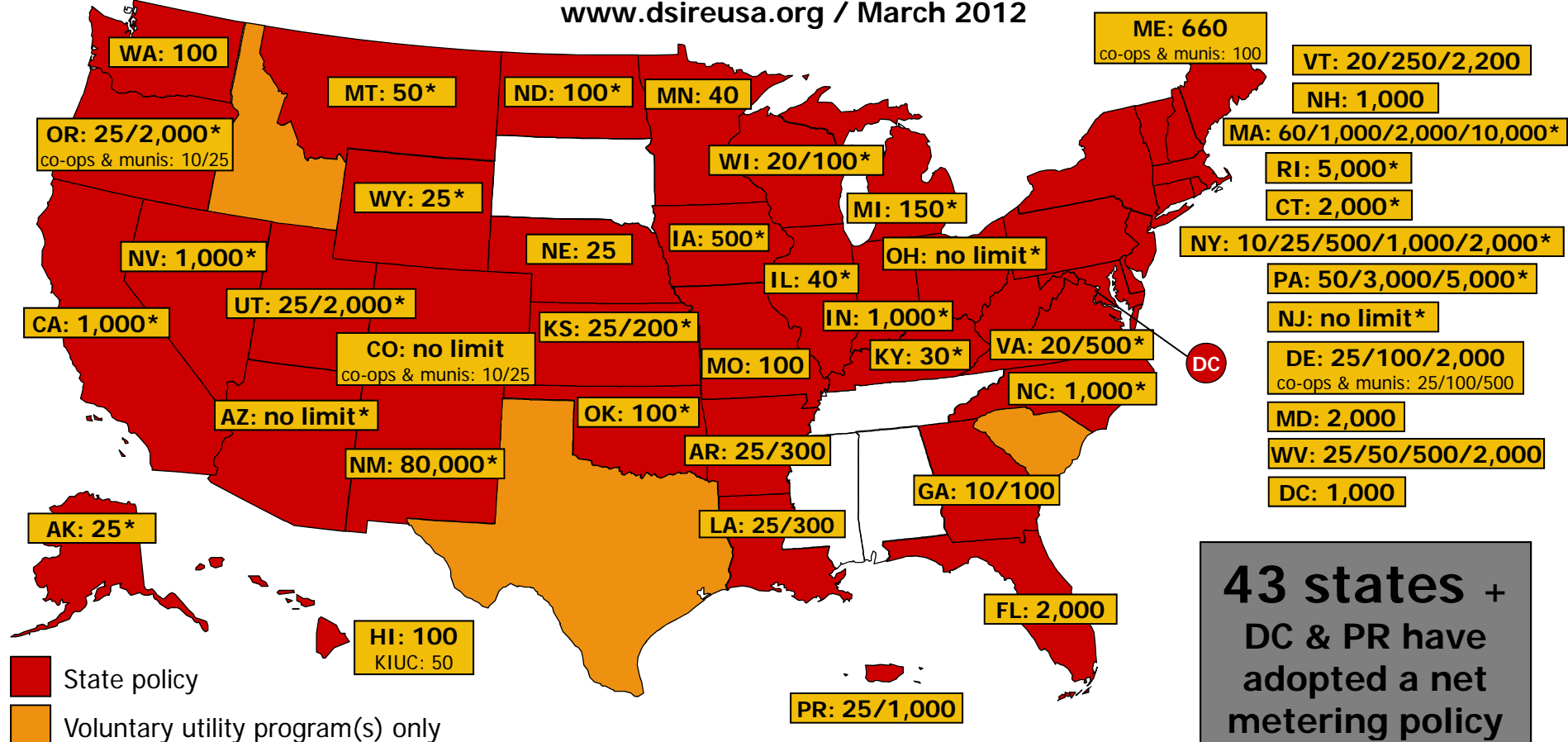
- Local governments are eligible for any programs for electric or gas ratepayers (SBC, EEPS, RPS charges)
- Renewable energy programs sometimes offer higher incentives to offset lack of access to tax credits (not EE programs)
- RE Structure: \$/W, \$/kWh, \$/Annual kWh (or therms)
- EE Structure: \$/system or \$/Annual kWh (or therms)
- Many programs offer technical assistance services, subsidized energy audits, special assistance for small projects.

Loans for Local Governments

- Many states have revolving loan programs specifically for units of government
- Programs often provide a combination of technical assistance and financing, and can be used in conjunction with energy savings performance contracts (ESPCs)
- Renewables may be tough to integrate into a loan package due to loan limits on payback
- Some utility programs exist, but not common

Net Metering

www.dsireusa.org / March 2012



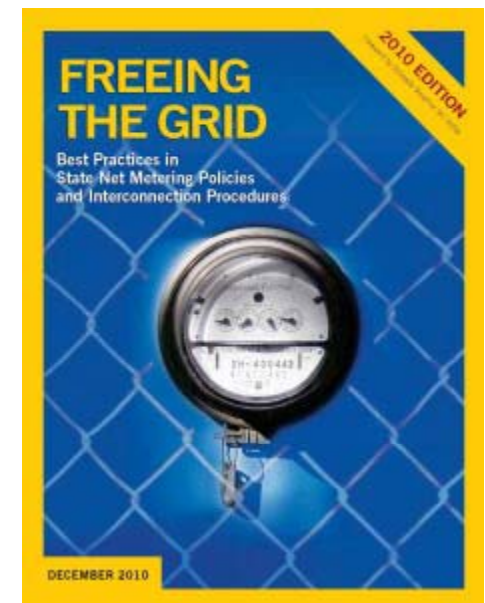
**43 states +
DC & PR have
adopted a net
metering policy**

* State policy applies to certain utility types only (e.g., investor-owned utilities)

Note: Numbers indicate individual system capacity limit in kW. Some limits vary by customer type, technology and/or application. Other limits might also apply.
This map generally does not address statutory changes until administrative rules have been adopted to implement such changes.

Net Metering

- Net metering: Allows for electricity to flow to and from the customer
- Not all policies are created equal
- In some cases local governments are permitted to use arrangements not available to other customers (e.g., meter aggregation).



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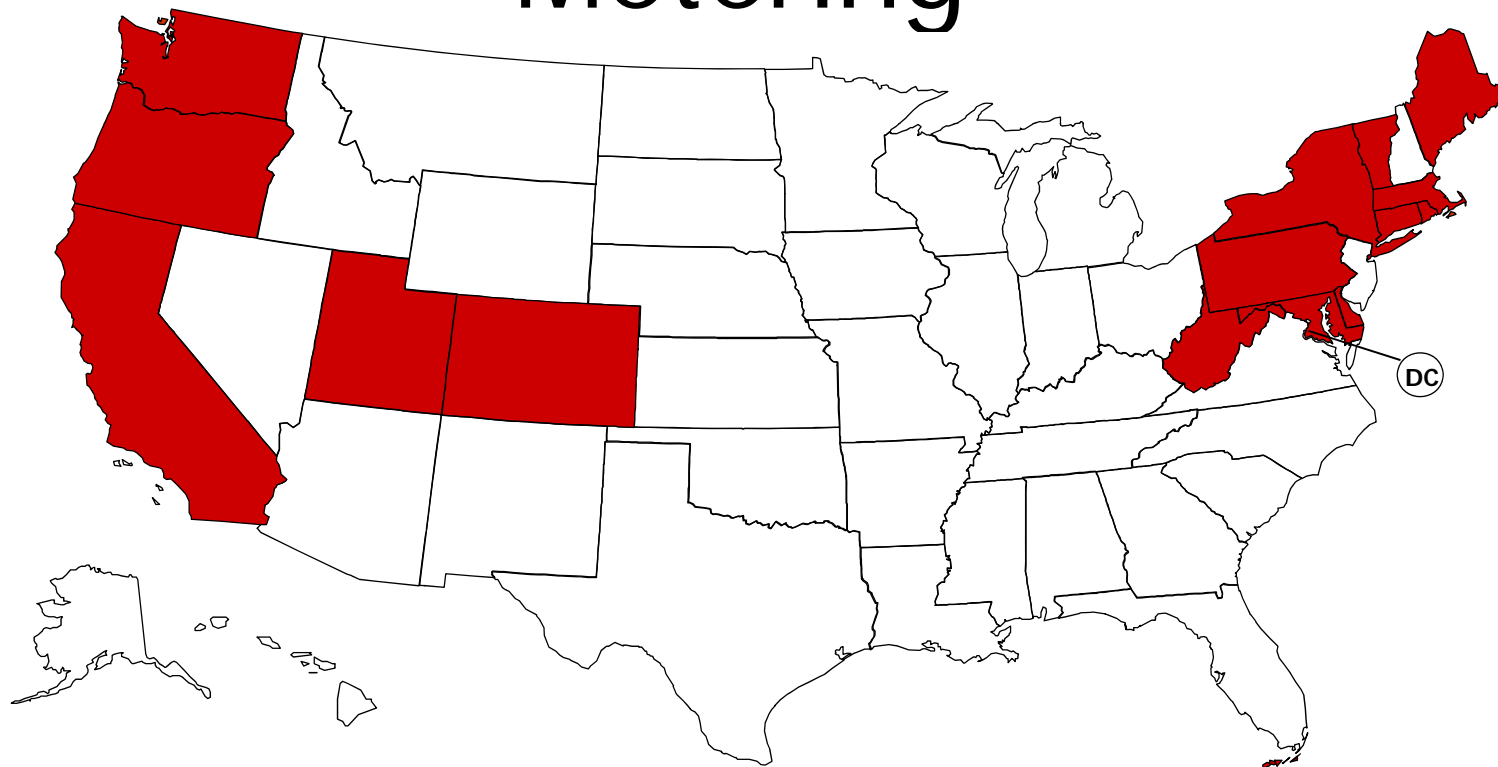
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Meter Aggregation/Virtual Net Metering



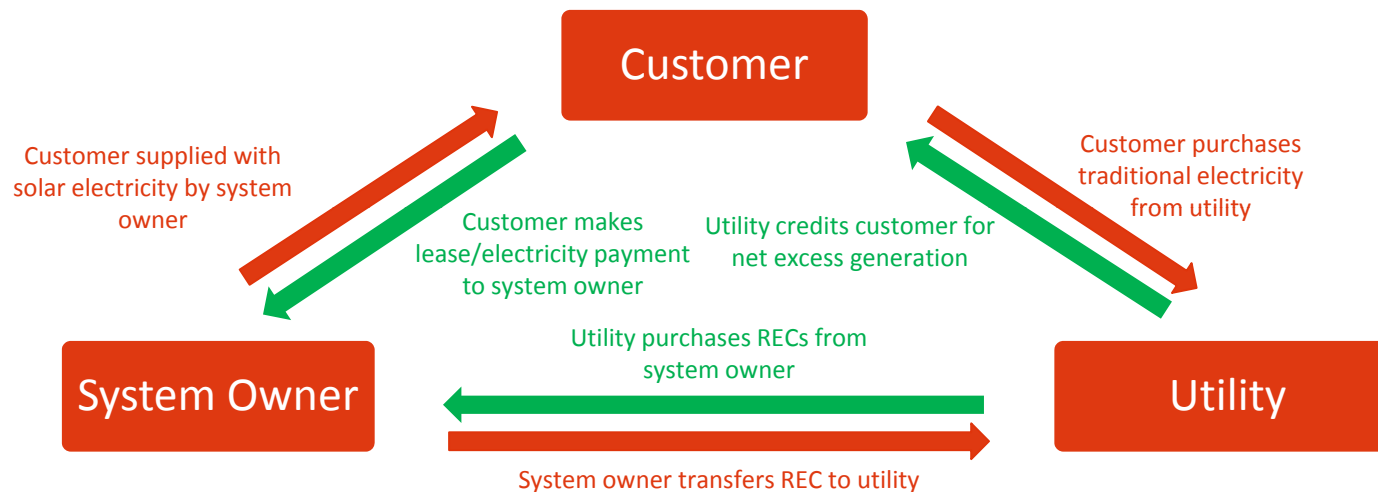
 Aggregation of some from authorized by state

Variations

- Ownership requirements
- Contiguous vs. non-contiguous properties
- Multiple customers
- Multiple generators
- Modified system/aggregate system size limits
- Rollover rates
- Distance limitations
- Number of accounts
- Addressing multiple tariffs

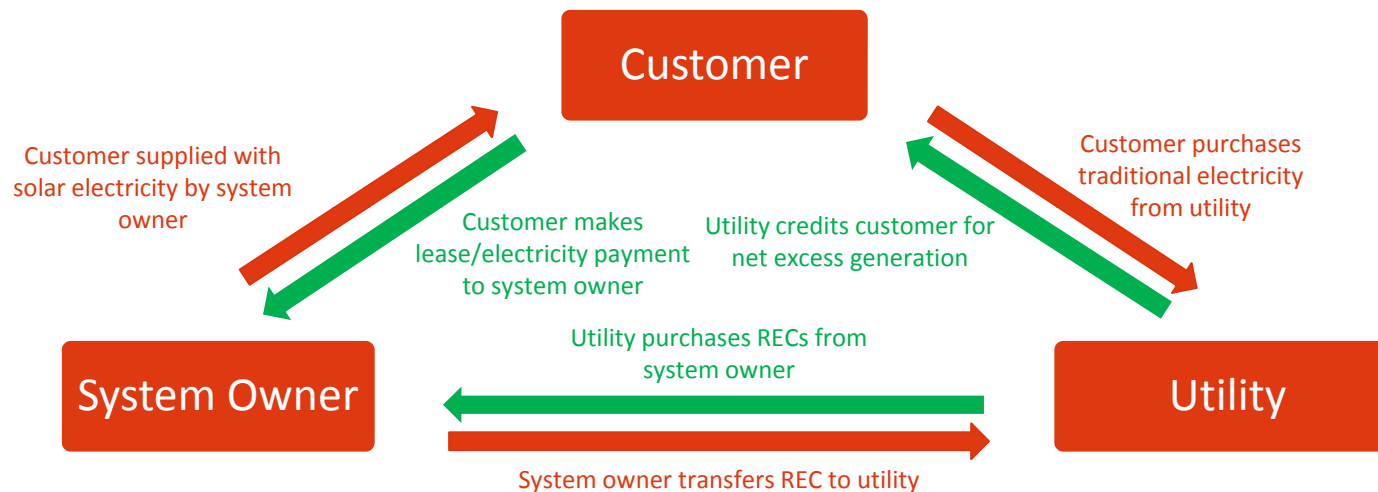
(Almost) Universal Restriction: Accounts must be located in same utility service territory

Third-Party Ownership Options



- Solar power developer finances, owns and operates the system
- Customer receives benefits of on-site electric generation (i.e., lower electric bill) and compensates the owner through electricity purchases or lease payments
- Benefits: Tax incentive utilization, up-front costs reduced/eliminated, lower “hassle factor”
- Property leases are a distinctly different option.

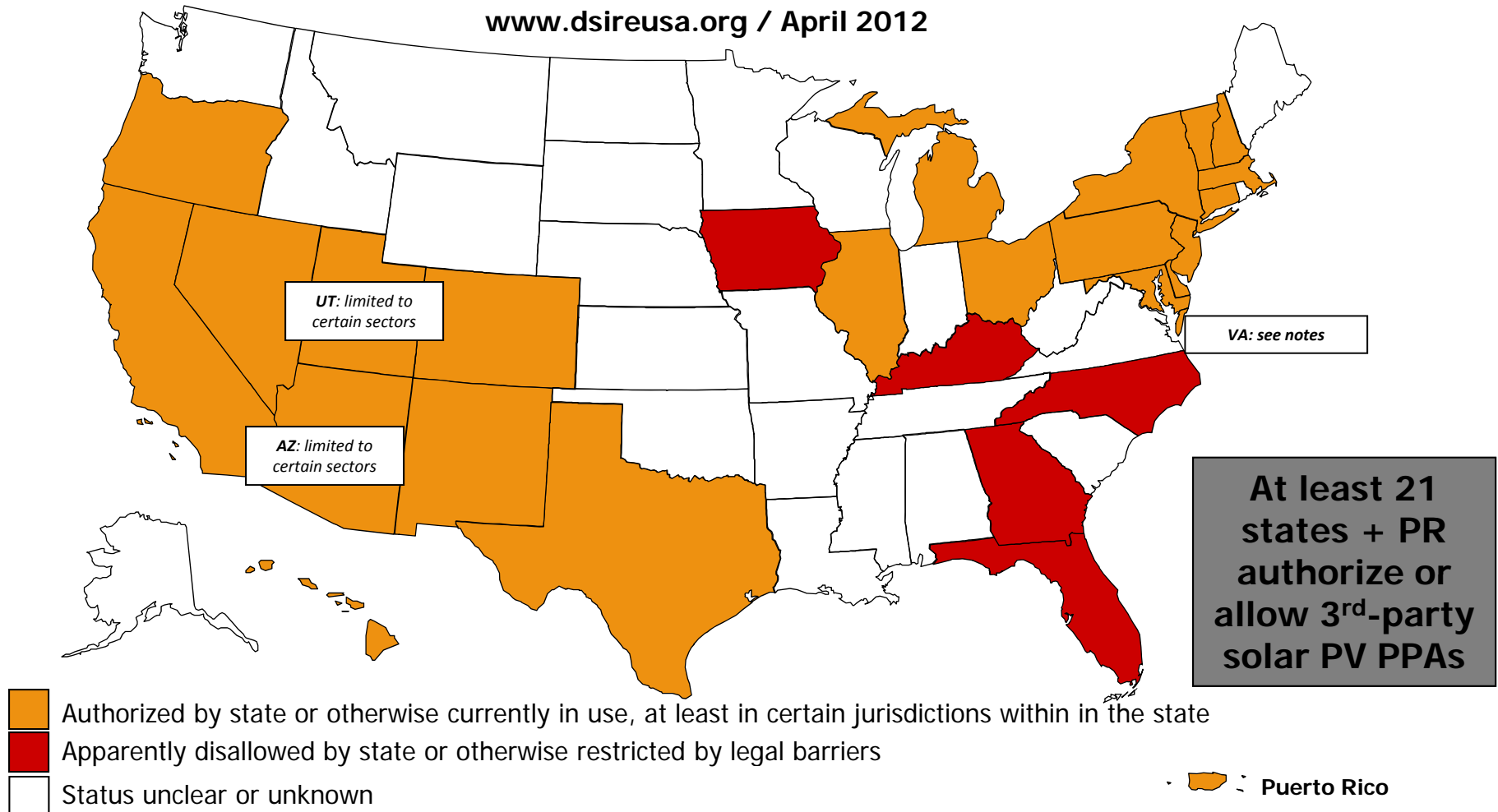
Third-Party Ownership Options



- Lower, predictable energy costs
- Might be packaged together with an energy service performance contract (ESPC)

3rd-Party Solar PV Power Purchase Agreements (PPAs)

www.dsireusa.org / April 2012



Note: This map is intended to serve as an unofficial guide; it does not constitute legal advice. Seek qualified legal expertise before making binding financial decisions related to a 3rd-party PPA. See following slides for additional important information and authority references.

Additional Resources

- ESPC Financing Options:
http://www2.presidentsclimatecommitment.org/documents/ccitoolkit/Energy_Performance_Contracting_Financing_Options.pdf
- NREL PPA Checklist of Local Governments:
<http://www.nrel.gov/docs/fy10osti/46668.pdf>
- DOE Solutions Center, ESPCs:
http://www1.eere.energy.gov/wip/solutioncenter/buildings/performance_contracting.html
- Energy Services Coalition: <http://www.energyservicescoalition.org/>
- Solar Powering Your Community - A Guide for Local Governments:
http://www4.eere.energy.gov/solar/sunshot/resource_center/sites/default/files/solar-powering-your-community-guide-for-local-governments.pdf

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Questions??