



Governor's
Energy Office

*Capitalizing on Incentives for On-Site Renewable
Energy Projects*

December 5, 2007
EPA Climate Leaders Meeting
Boulder, CO

State of Colorado leading by example...



COLORADO STATE CAPITOL COMPLEX - Division of Central Services Performance Contract



Phase I (Cost \$9,058,949)

- Payback 19 years
- Energy Savings of \$631,009/yr escalating at 2.5 %/yr

Phase 2 (Cost \$4,370,511)

- Payback 19 years
- Energy Saving of \$294,376/yr escalating at 2.5%/yr

- 16 Buildings located in the Denver metro area, and 1 Building in Grand Junction.
- 1.8 million square feet.
- Building age from 1890's to 1970's
- Existing HVAC Equipment dating back to the 1930's.



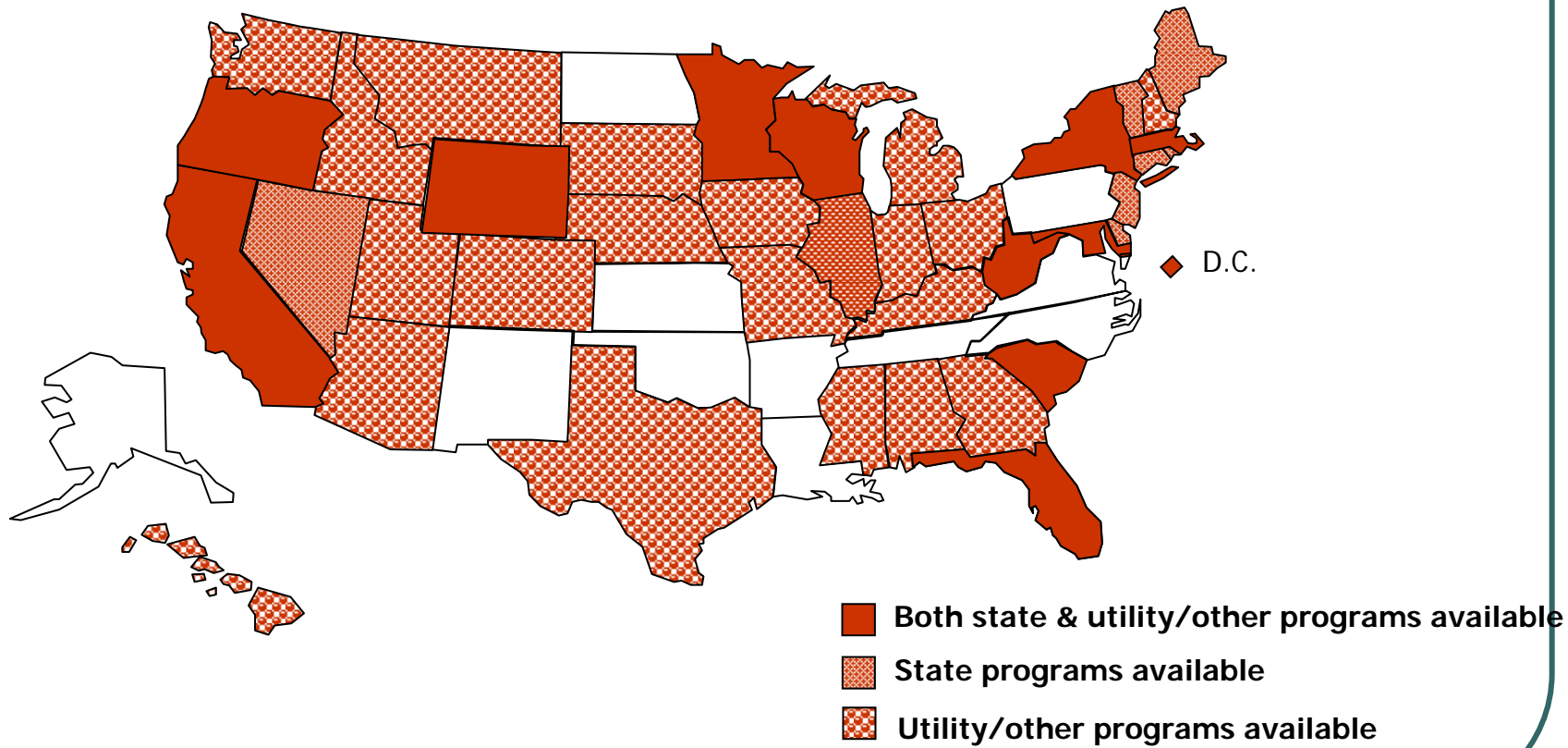
Large Commercial Solar Sites

Organization	System Size	Annual Reduction of CO2 Emissions
Serpa Power Plant, Portugal	11,000 kW	30,000 tons
Bavaria Solarpark I, Germany	10,000 kW	11,000 tons
Target Stores, USA	3,515 kW	1,100 tons
County of Alameda, California	3,226 kW	1,000 tons
Las Vegas Valley Water District, USA	3,100 kW	5,000 tons
Bavaria Solarpark II, Germany	3,000 kW	4,000 tons
Lowe's Home Improvement Stores, California	2,406 kW	1,000 tons
Johnson & Johnson, USA	1,920 kW	835 tons
Lennar Homes, California, USA	1,400 kW	585 tons
United States Navy, USA	1,300 kW	500 tons

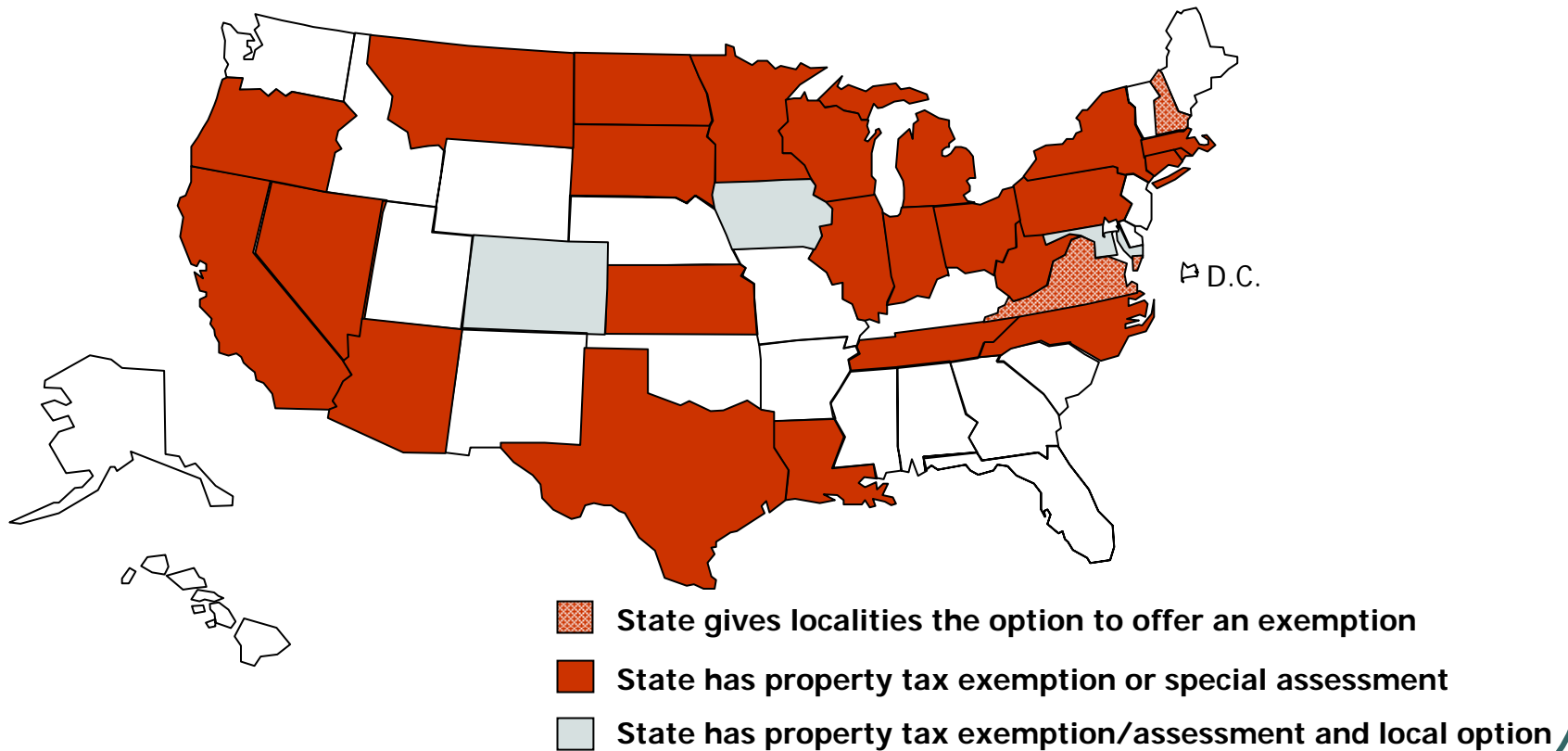
State Level Policy Matters

- Rebates
- Renewable Energy Standard (preference for solar or consumer-sited?)
- Taxes:
 - Investment Tax Credits
 - State and local Sales and Property Tax Credits or Exemptions

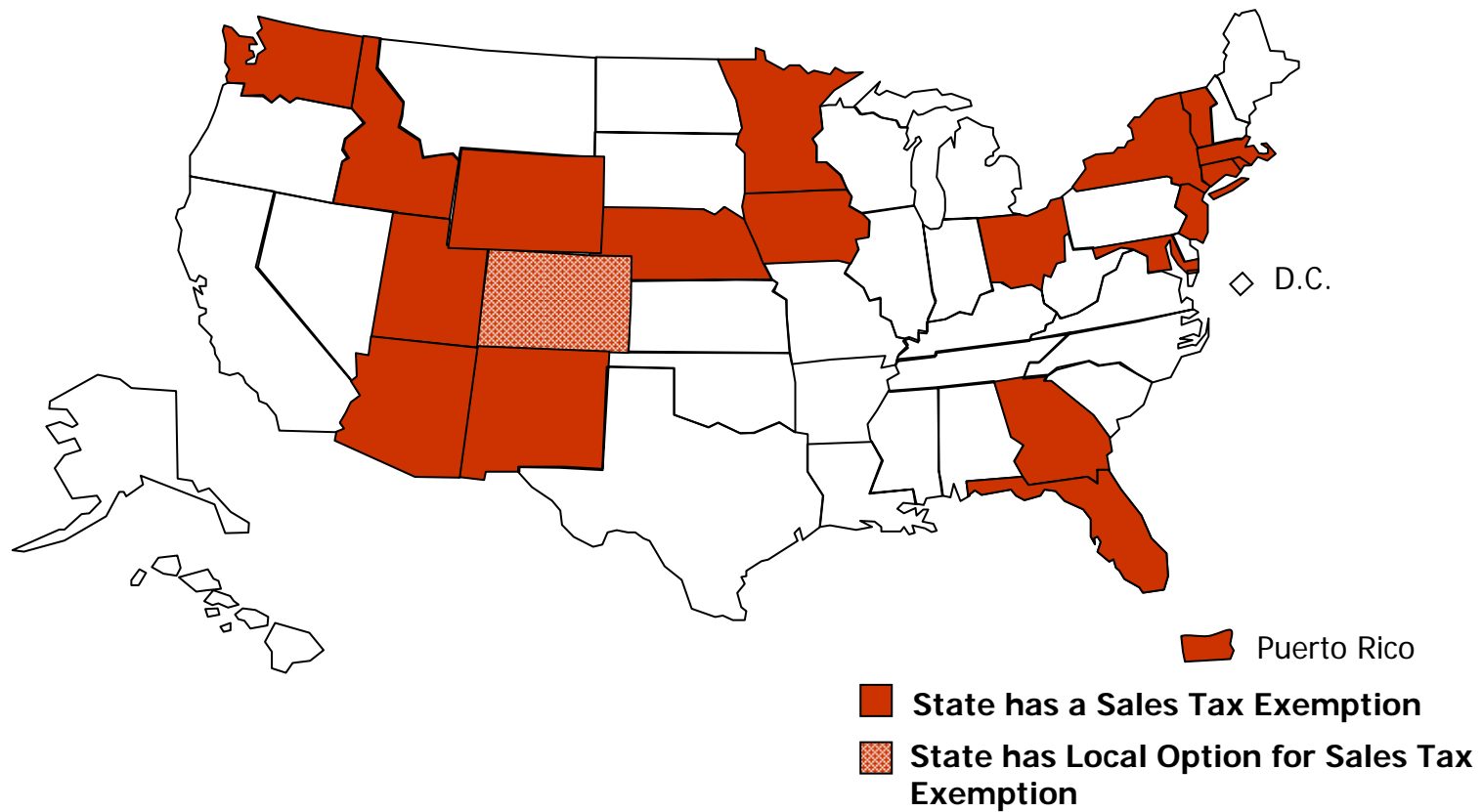
Rebate Programs for Renewable Energy Technologies



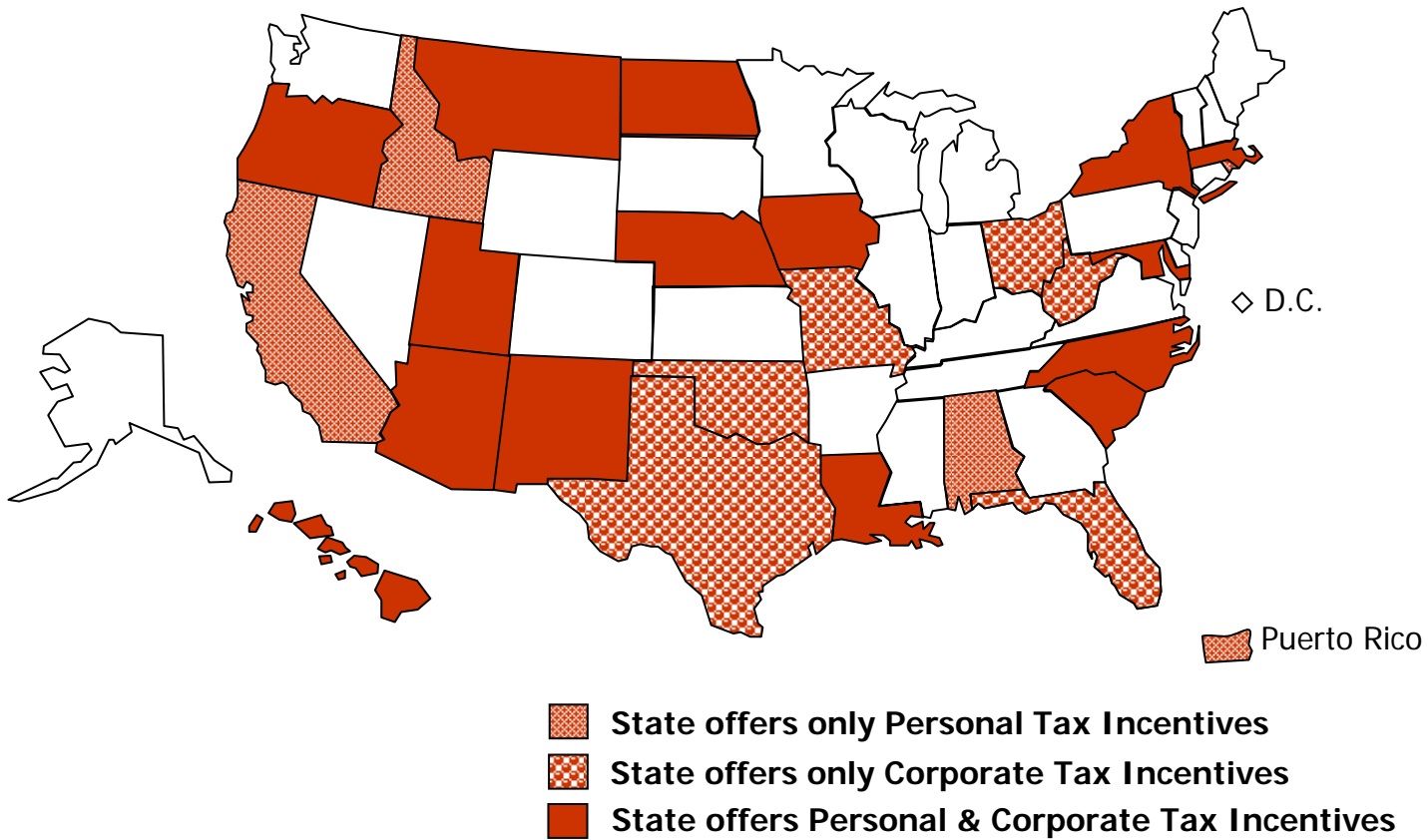
States with Local Property Tax Exemptions for Renewables



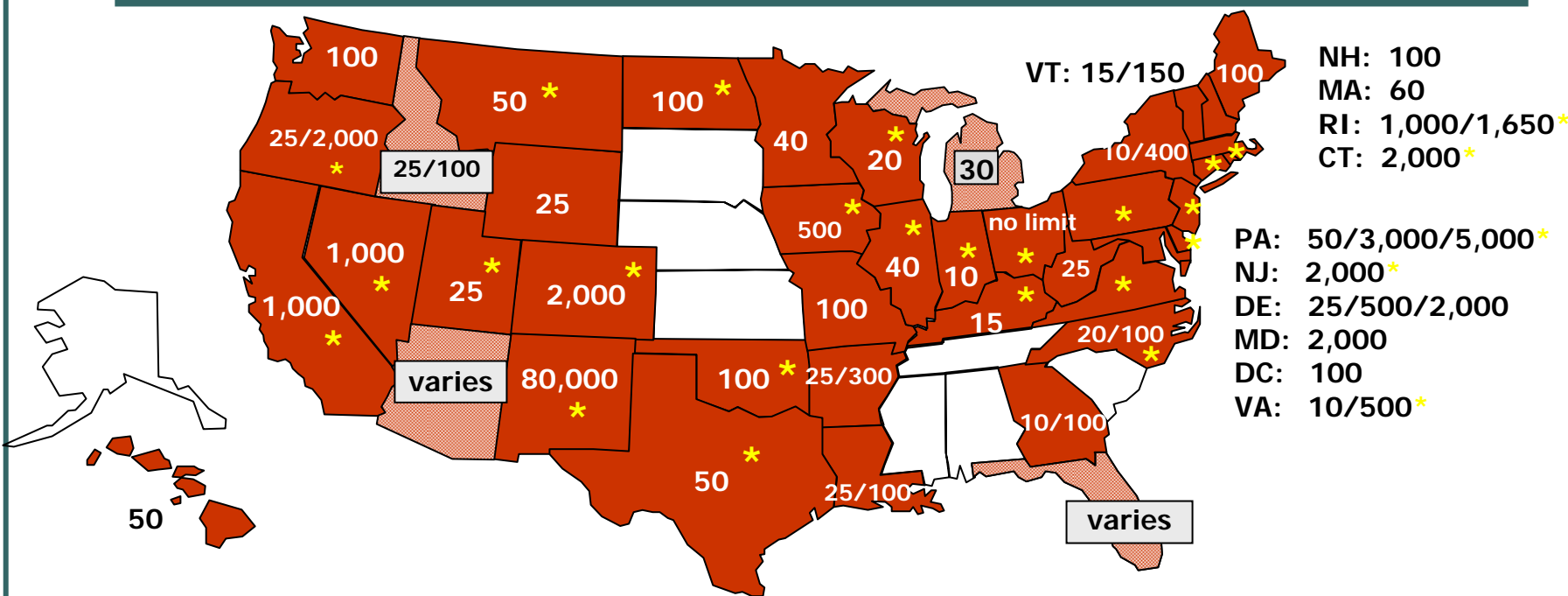
State Sales Tax Exemptions for Renewables



State Tax Credits & Deductions for Renewables



Net Metering

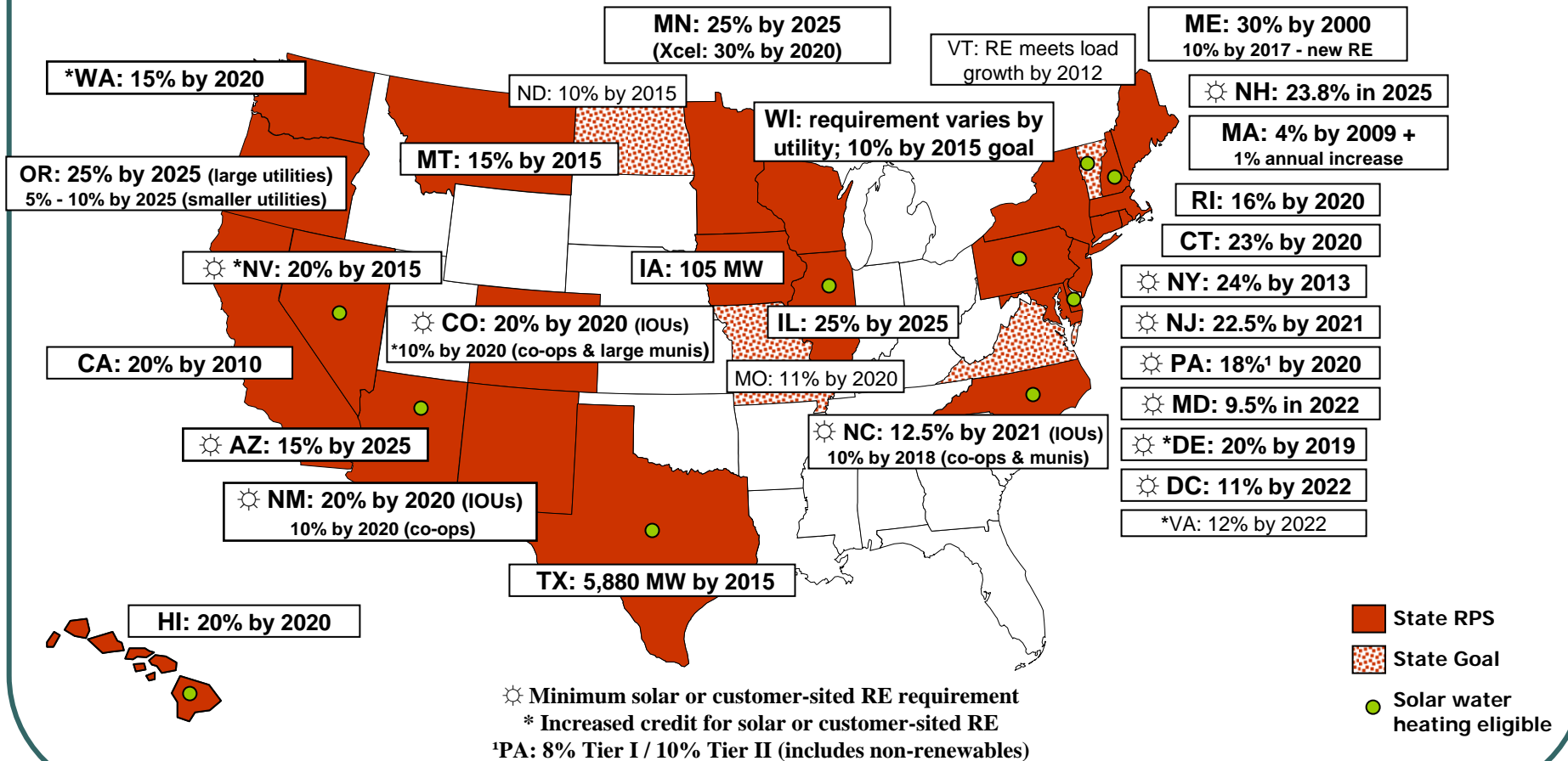


- State-wide net metering for all utility types
- State-wide net metering for certain utility types (e.g., investor-owned utilities only)
- Net metering offered by one or more individual utilities

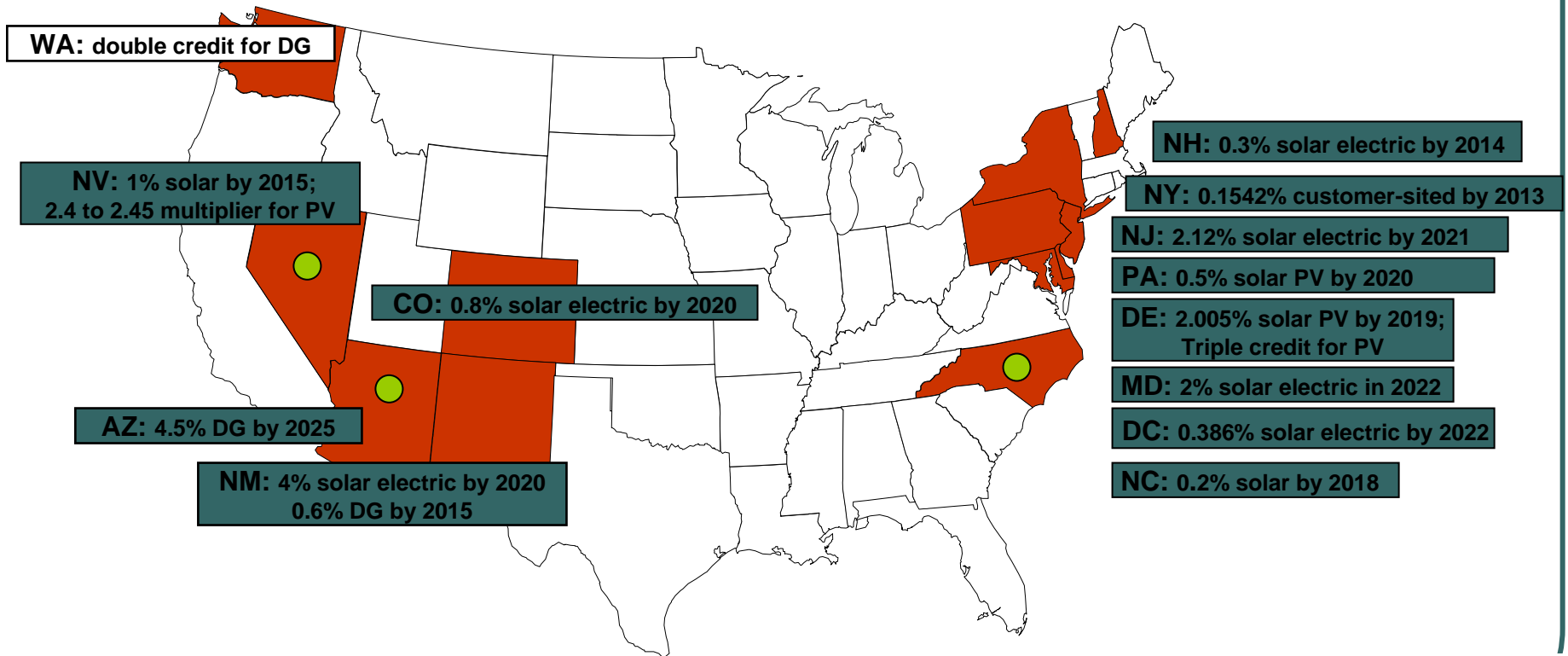
(Numbers indicate individual system size limit in kilowatts. Some states' limits vary by customer type, as shown)

Net metering is available in 42 states + D.C.

Renewables Portfolio Standards



Solar/DG Provisions in RPS Policies



DG: Distributed Generation

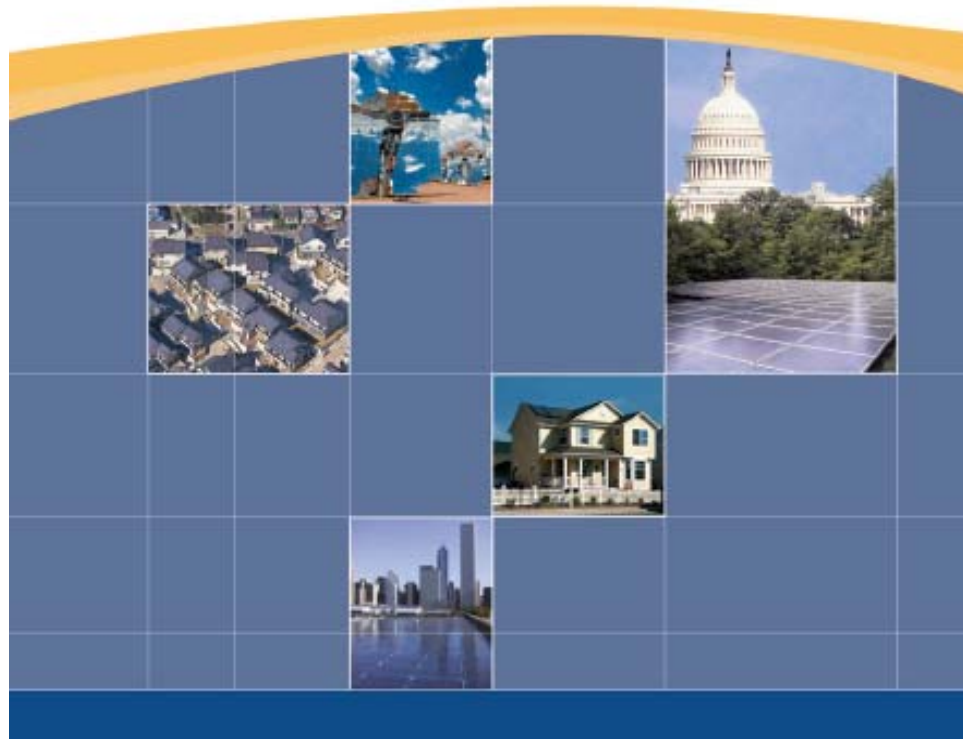
● Solar water heating counts towards solar set-aside



SOLAR ENERGY
INDUSTRIES
ASSOCIATION

Guide to
**Federal Tax Incentives
for Solar Energy**

VERSION 1.2



<http://www.seia.org/taxmanualdownload.php>

WRI Green Power Market Development Group

12 leading corporations working to develop 1000 MW of new, cost competitive green power by 2010.

Case studies on:

- Direct Use of Landfill Gas (Johnson & Johnson; Interface; General Motors)
- Innovative Solar Financing (Staples)

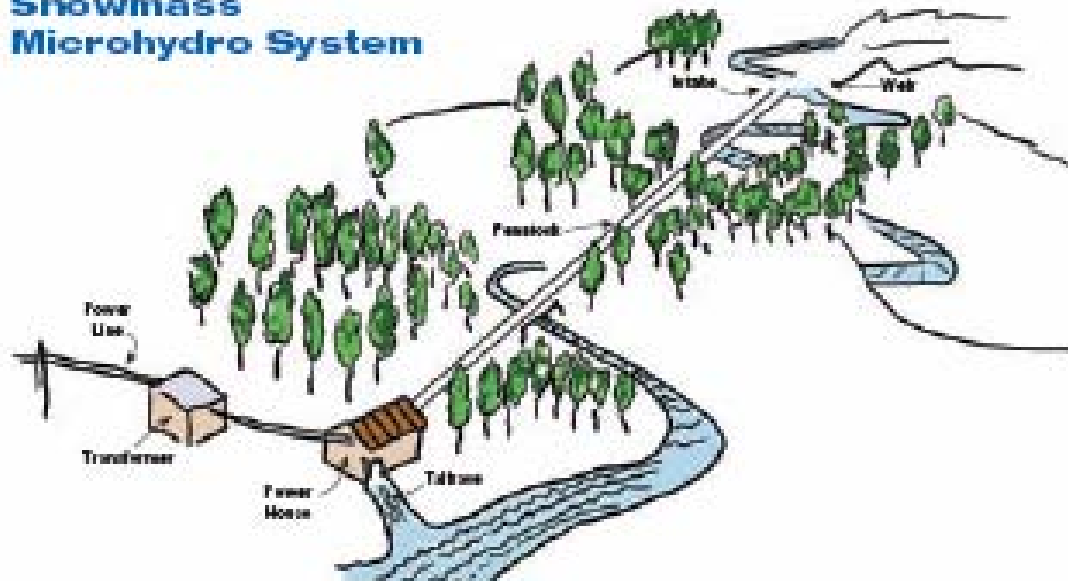
<http://thegreenpowergroup.org>

Landfill Gas at Johnson & Johnson (WRI case study)

- ALZA Pharmaceuticals facility adjacent to Shoreline Landfill.
- Gas from landfill powers three 970kW generators on-site, avoiding 7,256 tonnes/year CO₂ associated with gas and electricity purchases

MicroHydro at Snowmass Resort

**Snowmass
Microhydro System**



http://www.aspensnowmass.com/environment/images/Snowmass_Micro_Hydro.pdf

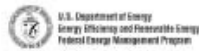
EPA Purchasing Guide

http://www.epa.gov/greenpower/documents/purchasing_guide_for_web.pdf



Guide to Purchasing Green Power

Renewable Electricity, Renewable Energy Certificates
and On-Site Renewable Generation



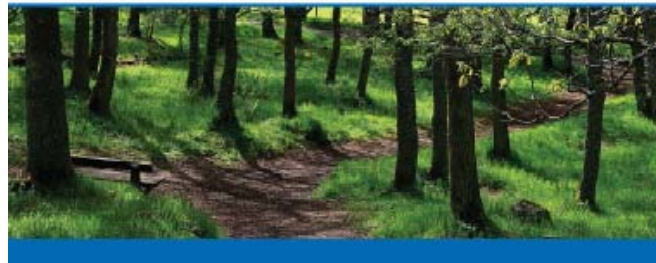
U.S. Department of Energy
Energy Efficiency and Renewable Energy
Federal Energy Management Program



World Resources Institute
Sustainable Energy Program



Center for Nonprofit Solutions
Green+Renewable Energy
Certification Program



EPA Green Power Partnership

Recognition for renewable energy purchases, on-site generation

www.epa.gov/greenpower



Colorado Carbon Fund

This new voluntary carbon offset program is being established to advance the following objectives:

- Develop a funding source for community-based clean energy and climate mitigation projects
- Direct investment monies towards CO-based projects
- Support Colorado's climate change mitigation objectives
- Provide high quality, credible offsets for individuals, businesses and government agencies interested in mitigating their carbon footprint

The Governor's Energy Office seeks partners to support this program – project developers and offset purchases can contact:

Susan Innis, Colorado Carbon Fund Program Manager

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Governor's **Energy Office**

Please contact us with questions, suggestions, feedback on energy and climate issues

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