Incentive and Tax Credit Programs

Council of Development Finance Agencies
Intro Energy Finance Course
July 31st – August 1st, 2012
Washington, D.C.

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AGENDA

- Introduction
- Tax Credit Overview
- Energy Credit Market
- Renewable Energy Tax Credits
- Tax Credit Investment Structures
  - Partnership “Flip”
  - Sale/Leaseback
- Current Trends and Market Needs

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TAX CREDIT OVERVIEW

- What are Tax Credits?
  - Enacted at the state and federal level as a method of providing stimulus to industries in which job creation and investment are important to economic development
  - Generated from film production, renewable energy, and various types of real estate development (New Markets, Historic & Brownfield)
  - Credits traditionally come in two forms: Certificate based credits and credit streams where credits are allocated over a specified period of time
- Types of Credits
  - Brownfield
  - Film Production
  - Historic Rehabilitation (“RTC”)
  - Low-Income Housing (“LIHTC”)
  - New Market (“NMTC”)
  - Investment Tax Credit (“ITC”)/Renewable Energy (“RETC”)
  - Tax Credit Memorandums

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New Investment in U.S. 2011

UNITS	Asset Finance	Public Markets	VC/PE	Grand Total
Wind	14.9	0.4	0.8	16.1
Solar	2.6	1.0	1.9	5.5
Biofuels	0.2	0.3	0.7	1.2
Biomass	1.3	0.1	0.05	1.4
Geothermal	0.6	.6	0.01	0.7

Bloomberg New Energy Finance

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RENEWABLE ENERGY TAX CREDITS

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RENEWABLE ENERGY TAX CREDITS

- Benefits to Tax-Equity Investor
  - 30% federal tax credit on total eligible project cost
  - 5 year MACRS (Modified Accelerated Cost Recovery System)
  - Cash revenue from utility payments (Power Purchase Agreement – “PPA”)
  - “Green” public relations, branding and marketing opportunities

- Investment Tax Credit (“ITC”) and Depreciation
  - Authority – 26 USC § 48. For a taxable year, a credit is allowed for 30% of the basis of each energy property placed in service during such taxable year
    - Related: Per the 2009 American Recovery and Reinvestment Act, a taxpayer may elect a treasury grant under § 1603 in lieu of the credit
  - Basic rules
    - 30% of eligible renewable energy expenditures generate the federal tax credit
    - Credit is generated 100% in the year the energy property is placed in service
    - Credit may be carried back one year and may be carried forward 20 years
    - Five-year recapture period that lapses 20% each year

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RENEWABLE ENERGY TAX CREDITS

- Depreciation
  - Energy property depreciated using five-year MACRS
  - 50% Bonus Depreciation through December 31, 2012
  - Basis Reduction
    - 85% of energy property basis depreciable over five years
- Creating Transparency – Reporting
  - A complete set of reports that facilitate the analysis of key investment performance metrics such as the timing and proof of yield-based structures and enable tests for tax compliance requirements. Example reports include:
    - Asset Depreciation
    - Loan Amortization Waterfall
    - Partnership Minimum Gain and Shares
    - Partners' Capital Account
    - Partners' Shares of Liabilities
    - Partners' Tax Bases
    - Proof of Yield
    - Hypothetical Liquidation at Book Value ("HLBV") method for GAAP purposes

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APPLICABLE RENEWABLE ENERGY TECHNOLOGIES

Specified Energy Property	Credit Termination Date	Applicable Percentage of Eligible Cost Basis
Large Wind	Jan 1, 2013	30%
Closed-Loop Biomass Facility	Jan 1, 2014	30%
Open-loop Biomass Facility	Jan 1, 2014	30%
Geothermal under IRC sec. 45	Jan 1, 2014	30%
Landfill Gas Facility	Jan 1, 2014	30%
Trash Facility	Jan 1, 2014	30%
Qualified Hydropower Facility	Jan 1, 2014	30%
Marine & Hydrokinetic	Jan 1, 2014	30%

*Geothermal Property that meets the definitions of qualified property in both § 45 and § 48 is allowed either the 30% credit or the 10% credit but not both.
**For fuel cell property the maximum amount of the payment may not exceed an amount equal to $1,500 for each 0.5 kilowatt of capacity.
***For microturbine property the maximum amount of the payment may not exceed an amount equal to $200 for each kilowatt of capacity.

APPLICABLE RENEWABLE ENERGY TECHNOLOGIES

Specified Energy Property	Credit Termination Date	Applicable Percentage of Eligible Cost Basis
Solar	Jan 1, 2017	30%
Geothermal under IRC sec. 48	Jan 1, 2017	10%*
Fuel Cells	Jan 1, 2017	30%**
Microturbines	Jan 1, 2017	10%***
Combined Heat & Power	Jan 1, 2017	10%
Small Wind	Jan 1, 2017	30%
Geothermal Heat Pumps	Jan 1, 2017	10%

*Geothermal Property that meets the definitions of qualified property in both § 45 and § 48 is allowed either the 30% credit or the 10% credit but not both.
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"TRADITIONAL" SOLAR POLICY OPTIONS

State Financial Incentives

- Rebate Programs
- Production Incentives
- Corporate Tax Credits
- Personal Tax Credits
- Grant Programs
- Ind. Recruitment/Support
- Loan Programs
- Property Tax Incentives
- Sales Tax Incentives

State Regulatory Policies

- Public Benefits Funds ("PBFs")
- Renewable Portfolio Standards ("RPSs")
- Solar/DG Carve-Outs
- Net Metering
- Interconnection Standards
- Solar Access Laws
- Contractor Licensing

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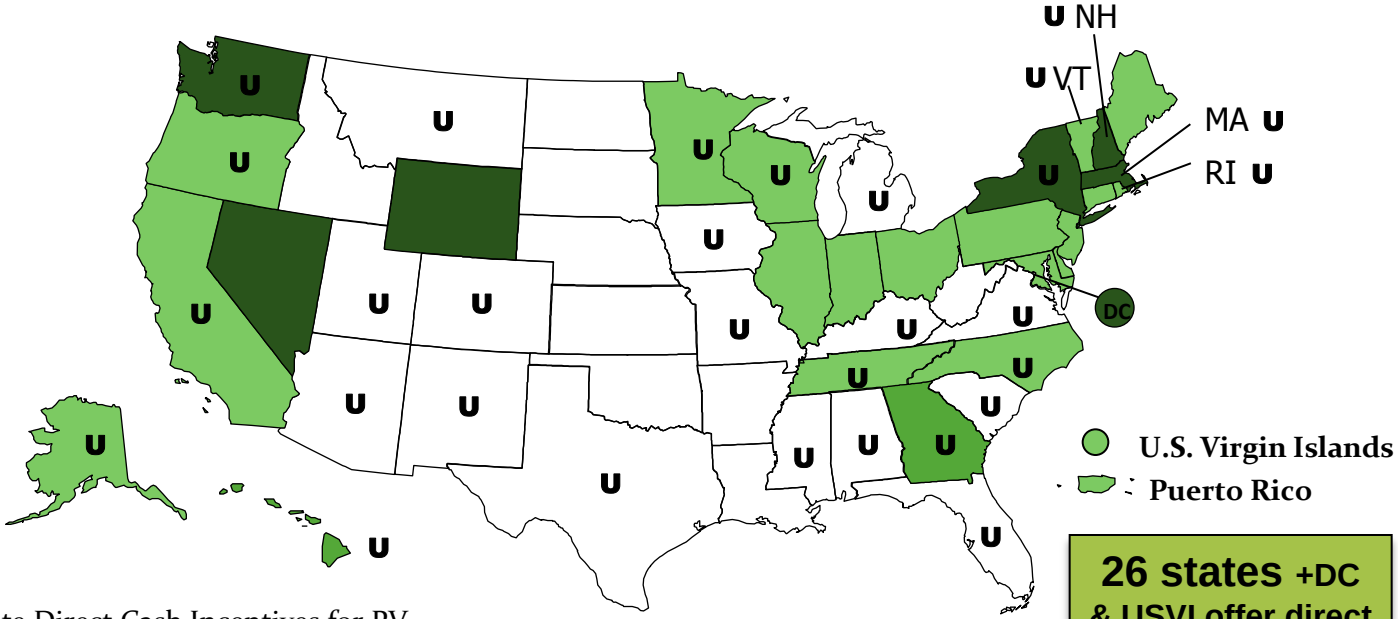
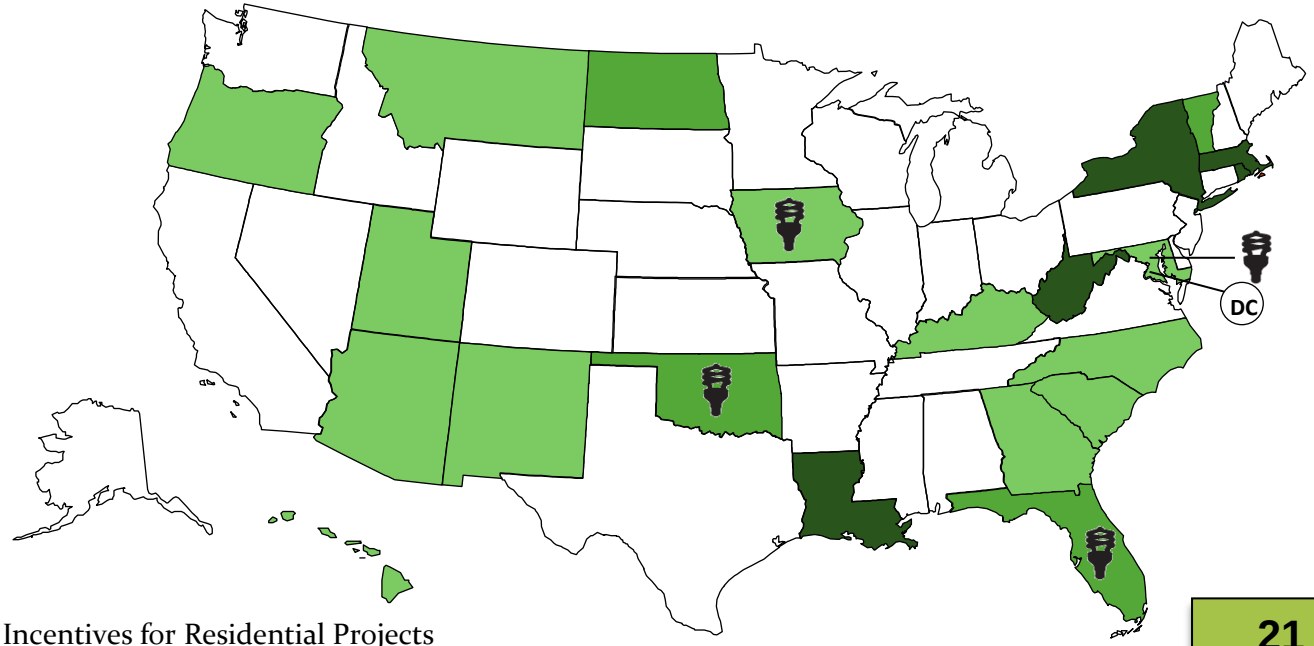
DIRECT CASH INCENTIVES FOR SOLAR PROJECTS



26 states +DC & USVI offer direct cash incentives for solar projects

- State Direct Cash Incentives for PV
- State Direct Cash Incentives for Solar Water Heating
- State Direct Cash Incentives for both PV and Solar Water Heating
- U Utility Direct Cash Incentive(s) for PV and/or Solar Water Heating

STATE TAX CREDITS FOR SOLAR PROJECTS



Incentives for Residential Projects

Incentives for Commercial Projects

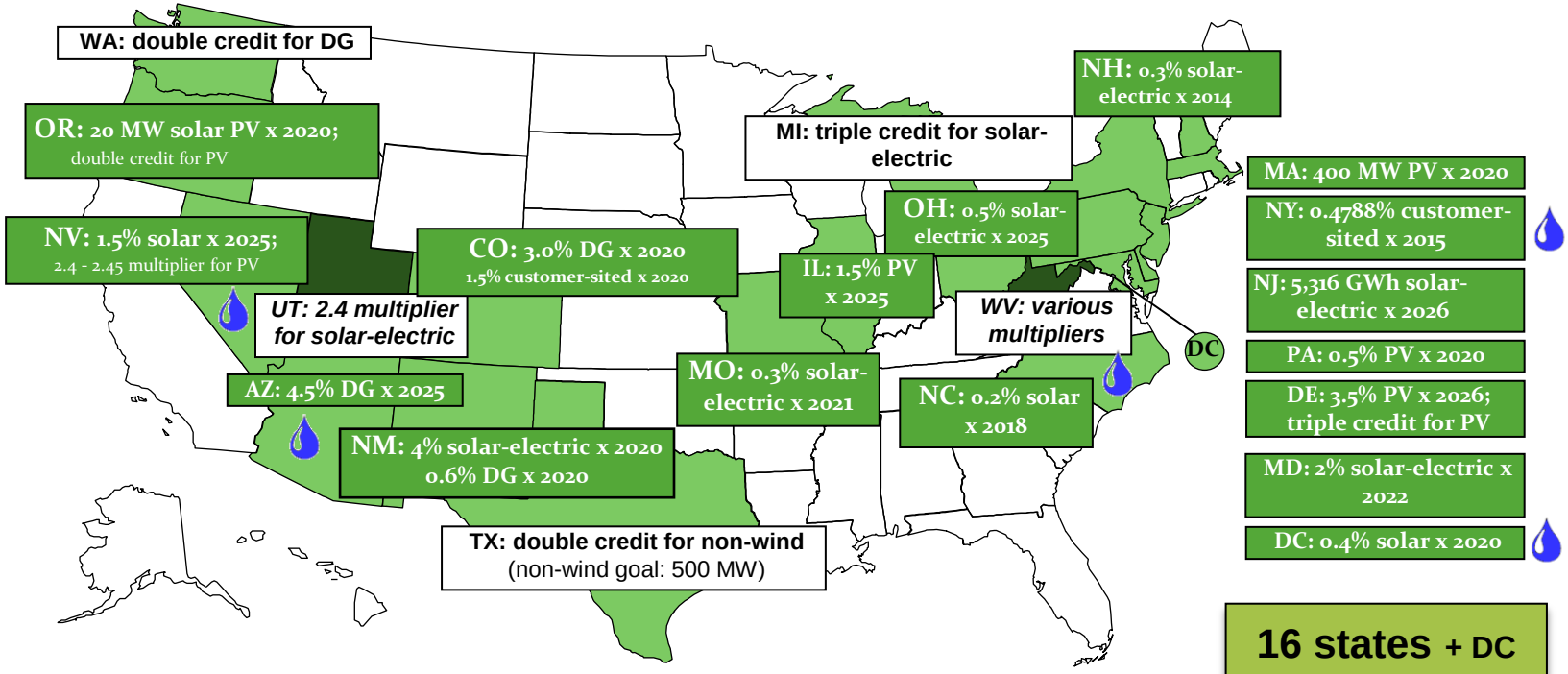
Incentives for Residential and Commercial Projects

Applies to Solar Electric only

Puerto Rico

21 states + PR offer tax credits for solar projects

RPS POLICIES WITH SOLAR/DG PROVISIONS



16 states + DC have an RPS with solar/DG provisions

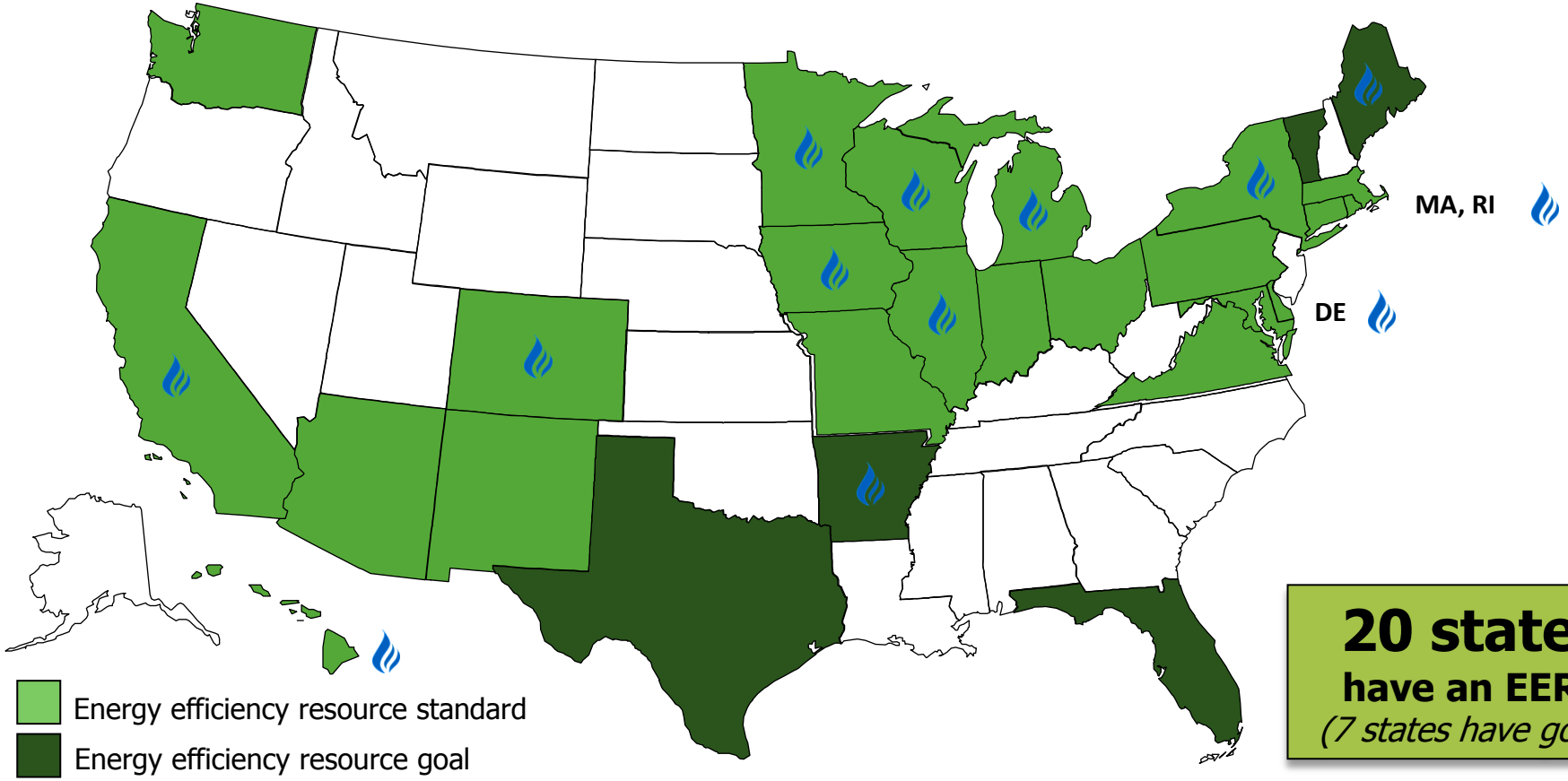
State renewable portfolio standard with solar / distributed generation (DG) provision

State renewable portfolio goal with solar / distributed generation provision

Solar water heating counts toward solar provision

www.dsireusa.org / June 2012

Energy Efficiency Resource Standards (EERS)



20 states
have an EERS
(7 states have goals)

Energy efficiency resource standard

Energy efficiency resource goal

Policy includes natural gas savings requirements or goals

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FINANCIAL INCENTIVES FOR ENERGY EFFICIENCY

- California
  - 1 Corp Tax Utility Incentive
  - 1 State rebate
  - 76 Utility rebates
  - 1 State & 3 Utility grants
  - 1 State & 10 Utility loans
- New York
  - 1 State Prop tax incentive
  - 7 State & 31 Utility rebates
  - 3 State & 1 Utility loans
- Pennsylvania
  - 18 Utility rebates
  - 5 State & 1 Utility grants
  - 5 State & 1 Utility loans
- New Jersey
  - 9 State & 1 Utility rebate
  - 1 State & 2 Utility grants
  - 1 State & 1 Utility loan
- Illinois
  - 2 State & 24 Utility rebates
  - 4 State grants
  - 2 State loans
  - 1 State bond
- Texas
  - 1 State sales tax incentive
  - 53 Utility rebates
  - 1 Utility grant
  - 2 State & 1 Utility loan

Reference: www.dsireusa.org

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CURRENT TRENDS – “RECs”

- REC = Renewable Energy Certificate
- 1 REC – 1,000 kilowatt-hours (1MW) of electricity placed on the grid
- Can be sold separately from the underlying physical electricity associated with a renewable-based generation source
- If the physical electricity and the associated RECs are sold to separate buyers, the electricity is no longer considered “renewable” or “green.” The REC product is what conveys the attributes and benefits of the renewable electricity, not the electricity itself.
- REC’s currently used in 14+ states that have RPS policies
- Variability in pricing, creating supply/demand inconsistency
- REC contract length impacts financing viability of many projects
- Need for greater liquidity; potential for National REC market?
- **Financing: Determine length and price of REC contract**

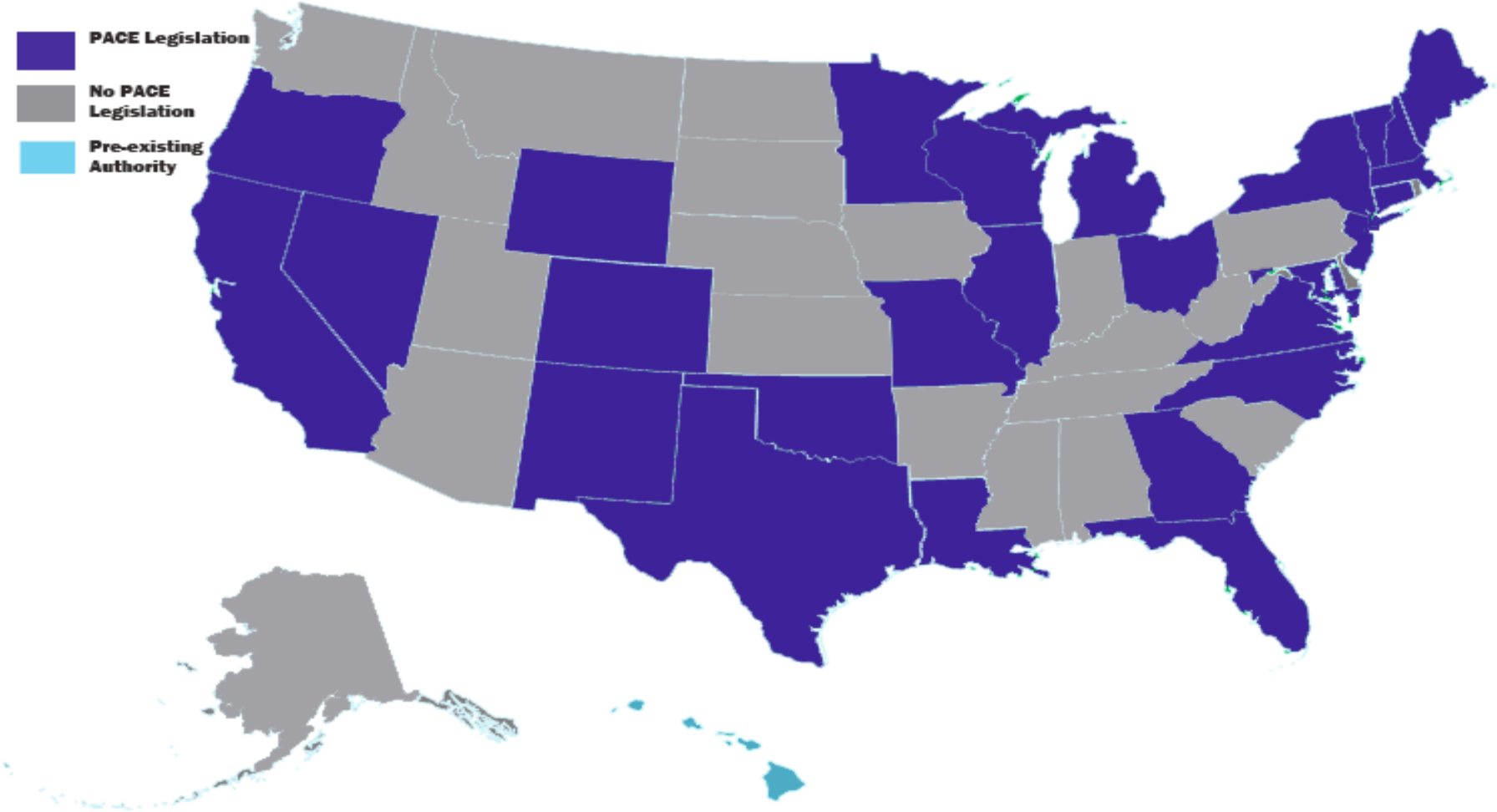
CURRENT TRENDS – PACE FINANCING

- PACE financing = Property Assessed Clean Energy financing
- Property owners borrow money from the local government to pay for renewable energy and/or energy efficiency improvements
- Loan typically repaid on property tax bill (or water, sewer, utility)
- Loan legally transfers with property
- Opt-in special assessment feature
- Loan secured by lien on property
- Administered by local government, but generally requires state authorization
- 28 States + D.C. authorize PACE

http://www.pacenow.org/

http://www.renewableenergyworld.com/rea/video/pace-programs-picking-up-steam-but-issues-remain

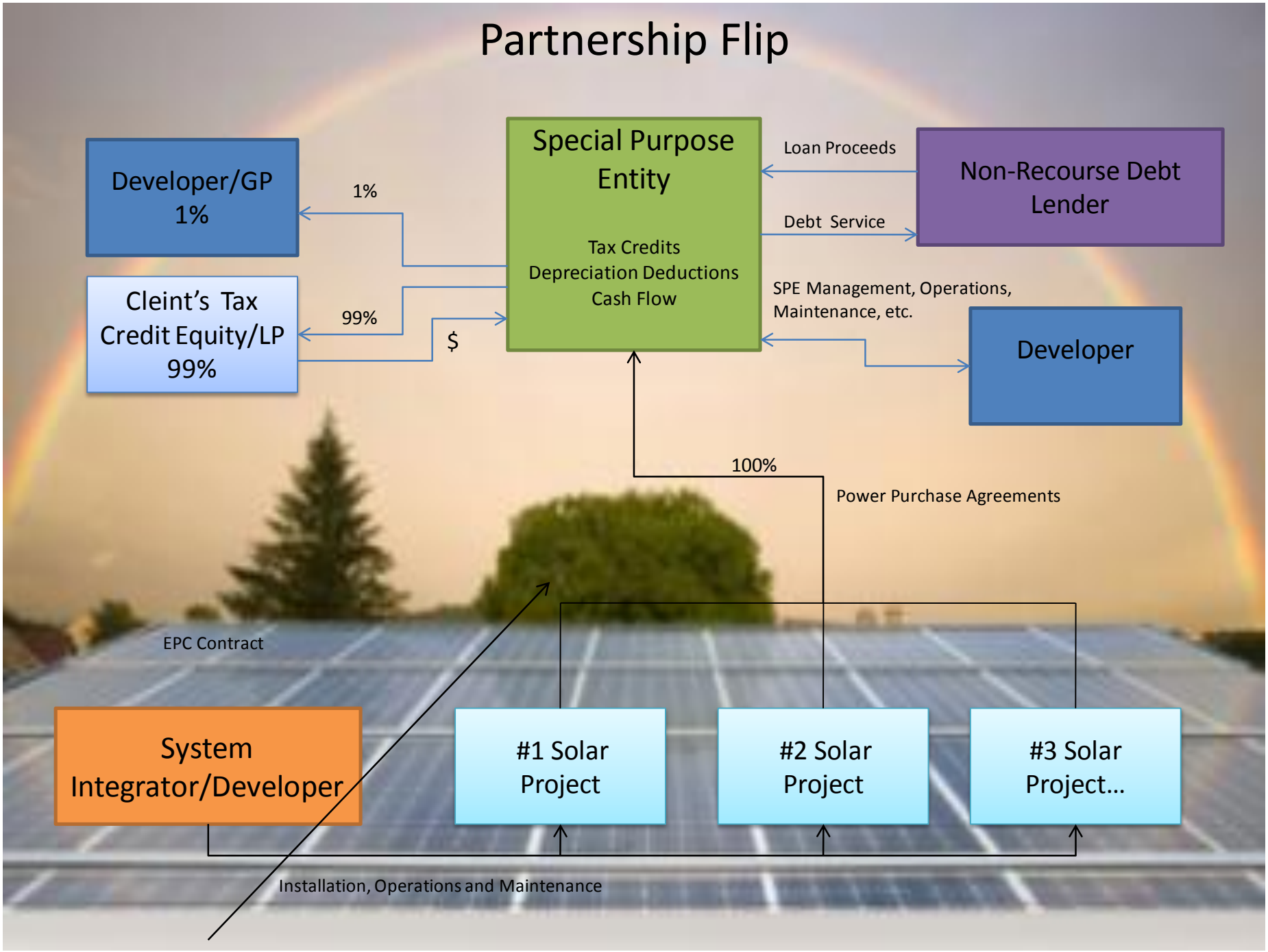
CURRENT TRENDS – PACE FINANCING



Tax Credit Investment Structures

- Partnership “Flip”
- Sale/Leaseback

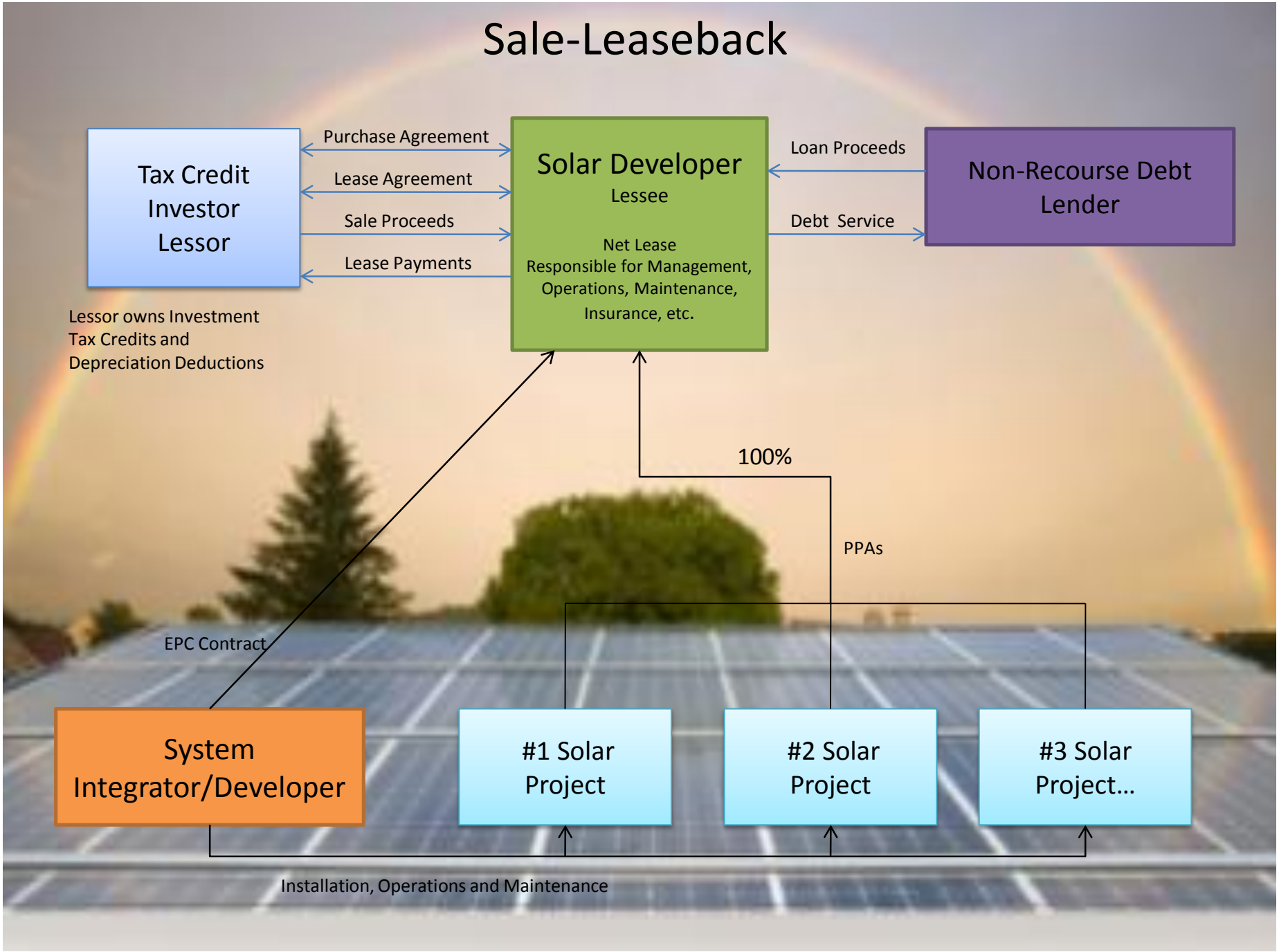
Partnership Flip



"Flip" Structure

- Advantages
  - Typically, less expensive than a lease
  - Less default risk than in a lease
  - Appeals to short-term minded tax equity investors (5-7 years)
- Disadvantages
  - Transaction must be closed and investor must have funded before the facility is placed in service.
  - Management rights and powers must be negotiated.

Sale-Leaseback



Sale/Leaseback

- Advantages
  - Can be closed up to 90 days after project is placed in service
  - 100% financing available at full value; generally, little to no investment required from developer
  - Lessor received a predictable rent stream
- Disadvantages
  - Lessee purchase option is more expensive than in partnership
  - Document and time intensive
  - Requires appraisal, in partnership appraisal is optional

Who's Investing Tax/Equity?

- Bank of America
- Citibank
- Credit Suisse
- GE
- Google
- JPMorganChase
- Key Bank
- Northern Trust
- PG&E
- PNC
- SunTrust
- U.S. Bank
- Union Bank
- Wells Fargo

Financing Challenges Despite Availability of Incentives

- Demand for tax/equity far outstripping availability
- An investors perspective:
  - Projected Future Cash Flows
  - Commercial Terms and Creditworthiness of the PPA
  - An Engineering, Procurement and Construction “EPC” contract
  - Percieved Technology Risk
  - Availability of Federal & State tax and non-tax incentives

CONCLUSIONS

Trends/Issues

- Dominance of RPS policies
- Adjusting to loss of 1603 Grant
- Surging interest in Feed in Tariffs ("FITs")
- Adoption of PACE financing
- New financial & policy models
- Calibrating state/federal policy
- Distributed v. centralized PV
- Increasing policy complexity

Need for Improvement

- Utility rate structures
- Renewable Energy Credit ("REC") markets
- Incentives for non-taxpayers
- Financing models to assist individual taxpayer participation
- National market coordination
- Legal clarification: 3rd party sales, PACE financing
- Bureaucracy
- Stability of financing sources

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