



SOLAR FINANCING & STATE POLICY

Presenter Information

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Agenda

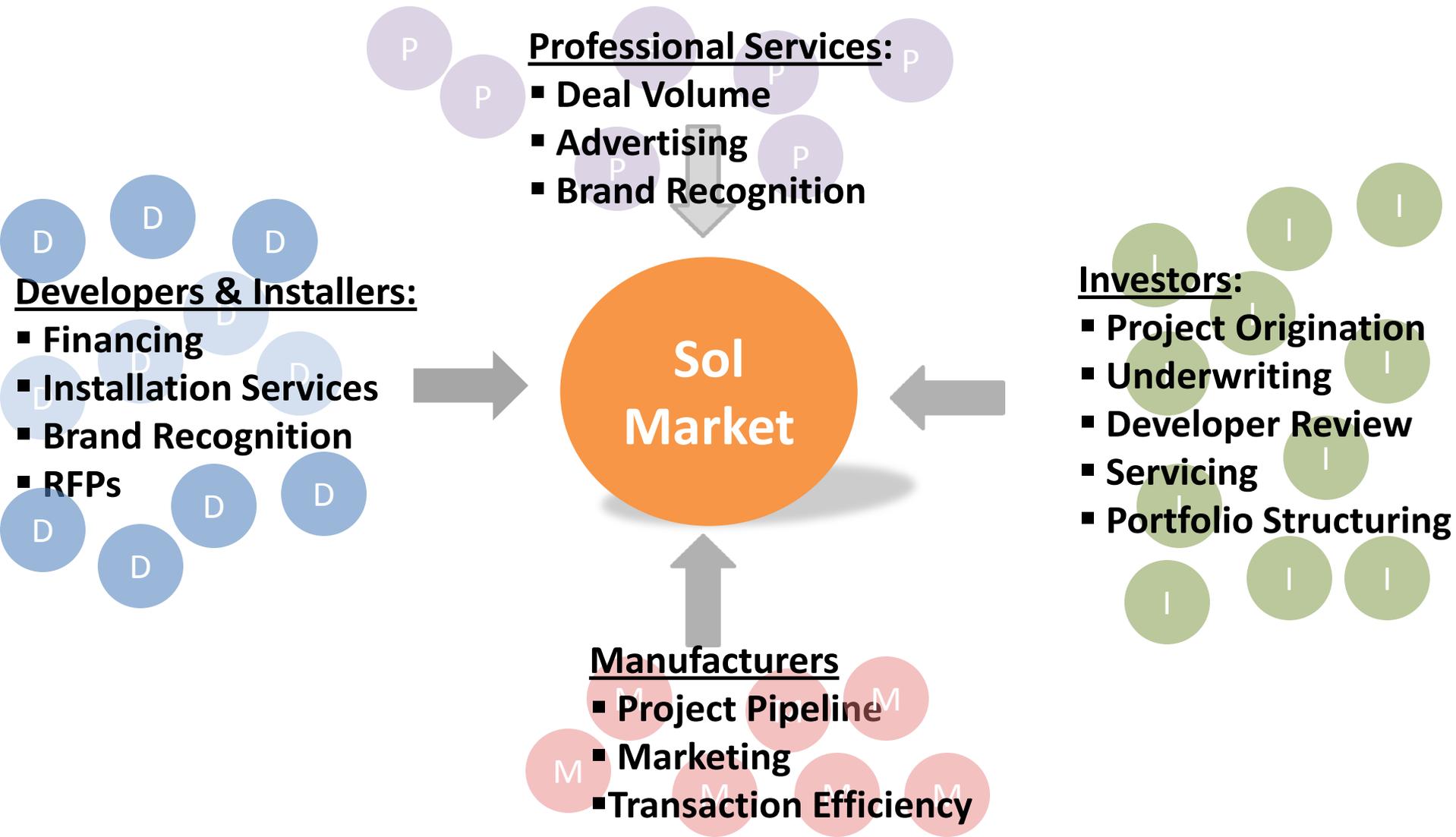
- 1. Sol Systems Overview**
- 2. State Policies**
- 3. Financing Mechanisms**

Sol Systems Overview

Solar Energy Finance Firm

- Founded in 2008 with a mission to make solar energy more affordable and accessible
- Oldest and largest SREC aggregator in the U.S.
- 2,300+ customers in 13 states
- 250+ partnerships with solar installers and developers, 170 of which are exclusive
- Manage 22 MW+ of solar capacity
- Facilitated over \$100 million in project financing through SREC business

2011 Launch: SolMarket



State Policies

- 1. Renewable Portfolio Standards**
- 2. Feed In Tariffs**
- 3. State Grants**

Renewable Portfolio Standards (RPS)

Feed In Tariffs
State Grants

Defined

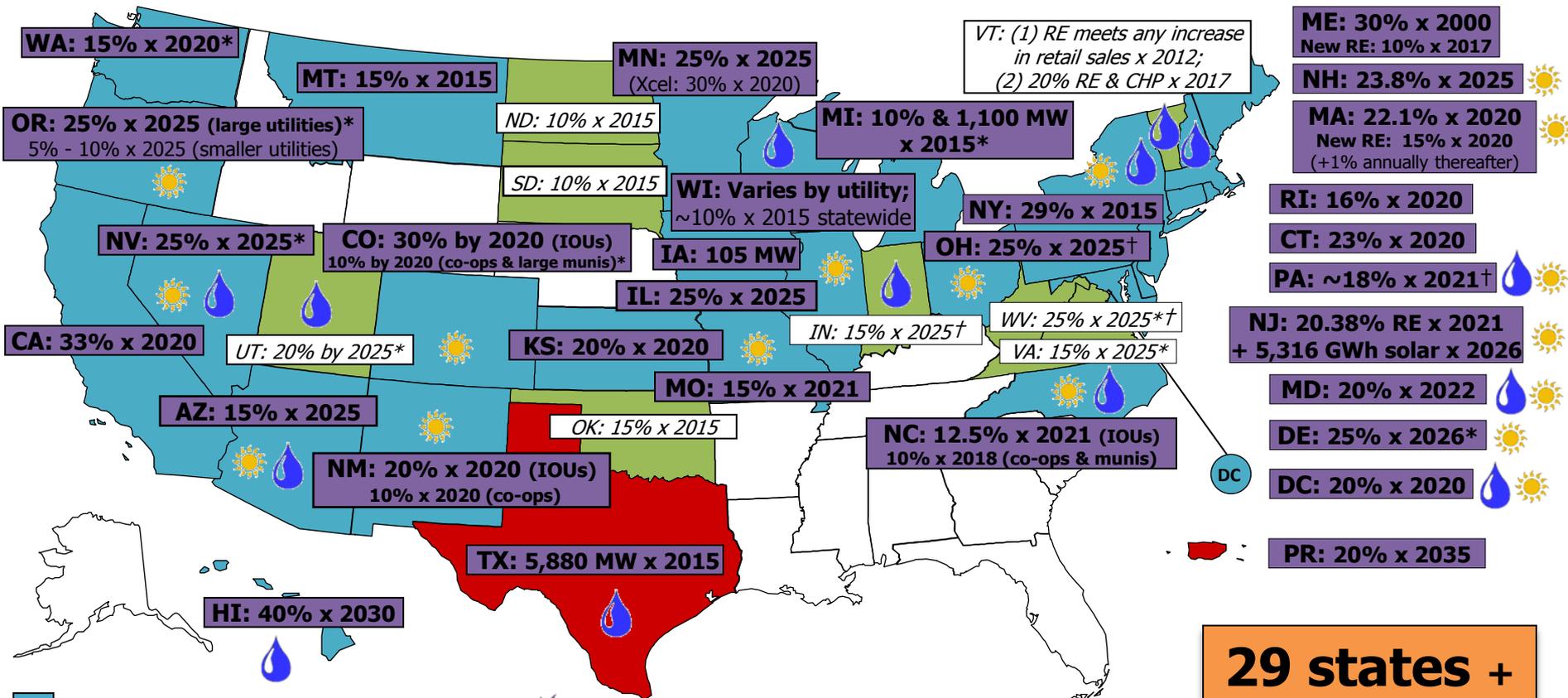
Requirement that a certain percent of energy delivered into a state be produced from renewable energy sources, tracked through renewable energy credits (RECs). Many RPS structures require a carve-out for solar.

Pros

- Market based mechanism that allows incentives to mature with technology
- Caps total exposure by setting a fee for compliance multiplied by requirement
- Tends to be more responsive to technological change

Cons

- Lack of market transparency
- Volatility may make financing difficult



Renewable portfolio standard

Renewable portfolio goal

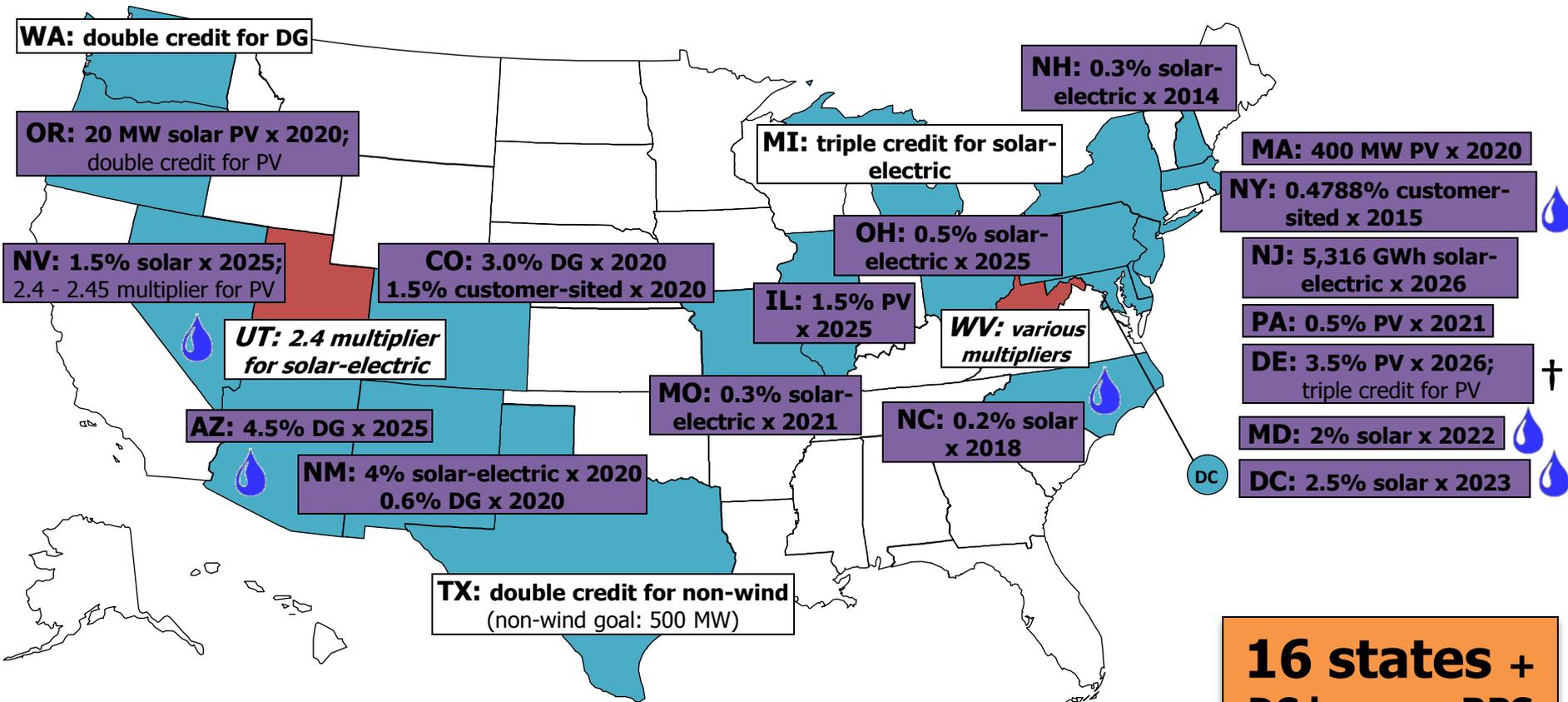
Solar water heating eligible

Minimum solar or customer-sited requirement

Extra credit for solar or customer-sited renewables

Includes non-renewable alternative resources

29 states + DC and PR have an RPS
(8 states have goals)



■ Renewable portfolio standard with solar / distributed generation (DG) provision

■ Renewable portfolio goal with solar / DG provision

💧 Solar water heating counts toward solar / DG provision

† Delaware allows certain fuel cell systems to qualify for the PV carve-out

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

Renewable Portfolio Standards (RPS)

Feed In Tariffs

State Grants

Defined

Qualified solar energy projects are paid a premium over the price of retail electricity for energy they produce

Ex. Instead of receiving \$0.08 per kWh produced, the solar energy system owner will receive \$0.18 per kWh produced. Equivalent to \$100 additional per MWh.

Pros

- The set premium provides price certainty for investors and developers
- The program ties the subsidy to the actual amount of energy produced

Cons

- A successful program can be difficult for a state to financially support without explicit capacity limits
- It can be difficult to set the premium at the correct level given the decreasing cost of solar
- The premium can be a political target should energy prices spike

State Grants

Defined

States can offer cash directly to solar project owners. The amount of money is often related to the size of the system. Legislators typically set limits on how much money can be spent under these programs each year.

Pros

- The set cash schedule provides a great deal of clarity to investors
- These rebates can get a lot of solar installed quickly

Cons

- Creates a gold rush scenario, with many applicants holding spaces for projects they cannot actually install
- Creates spits of development if the money runs out each year
- Rebate levels are often difficult to adjust and could be artificially elevated given the decreasing cost of solar
- Rebate programs can be more costly to administer than RPS
- Rebate program monies can be re-allocated in times of need

Financing Tools

Power Purchase Agreement

Lease
Upfront SREC Financing

How it Works

1. Third party investor purchases and installs solar energy system at host site
2. Host site pays third party purchases for the electricity it uses from the solar energy system at the (PPA Rate)

Pros

- The PPA rate is usually at a 15-20% discount off of retail electricity rates.
- The host site can utilize solar energy without the high upfront capital expenditure
- The PPA provider often maintains and repairs the system

Cons

- The host does not own the solar energy system
- The host site often receives a smaller return with electricity savings than it would have had it purchased the system directly.

Power Purchase Agreement

Lease

Upfront SREC Financing

How it Works

1. Third party investor purchases and installs solar energy system at host site
2. Host site pays third party purchaser a monthly charge to lease the solar energy system (Lease Payment)
3. Host site uses the electricity from the solar energy system at no charge for the electricity explicitly

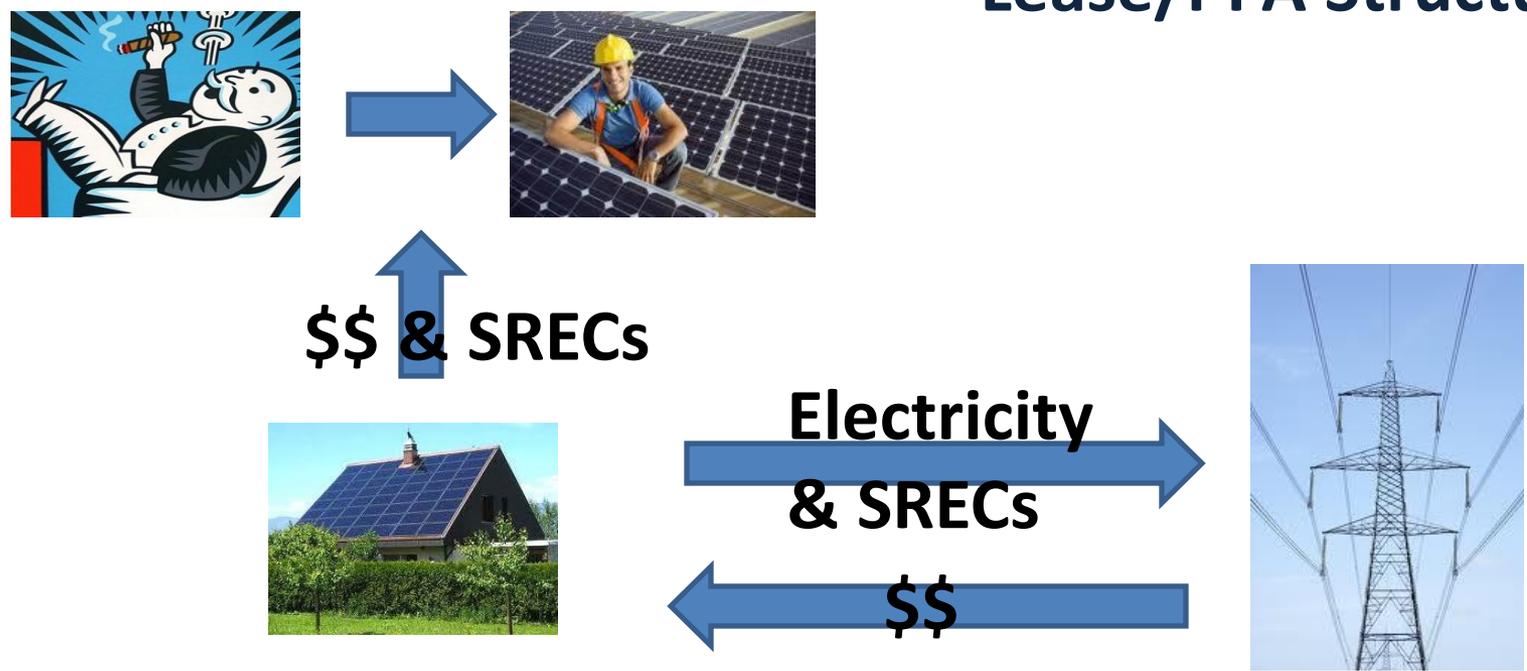
Pros

- The Lease rate is usually at a 15-20% discount off of retail electricity rates.
- The host site can utilize solar energy without the high upfront capital expenditure
- The lessor often maintains and repairs the system

Cons

- The host site does not own the solar energy system
- The host site often receives a smaller return with electricity savings than it would have had it purchased the system directly.

Lease/PPA Structures



Power Purchase Agreement
Lease

Upfront SREC Financing

How it Works

1. The system owner enters into a contract with an SREC investor to sell the right to their SRECs for a term in exchange for a one time upfront payment for those SRECs.
2. Those monies are then used to pay for the cost of the system at or before installation.

Pros

- The system owner transfers all regulatory and market risk to the SREC investor
- The system owner receives cash at a time that correlates well with their cash needs to pay for and install the system

Cons

- The offer to purchase SRECs upfront is often discounted to account for regulatory and market risk as well as private capital return requirements
- The system owner could be selling SRECs at a price well below future SREC prices.

Upfront SREC Structures



SRECs



**Electricity
& SRECs**

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