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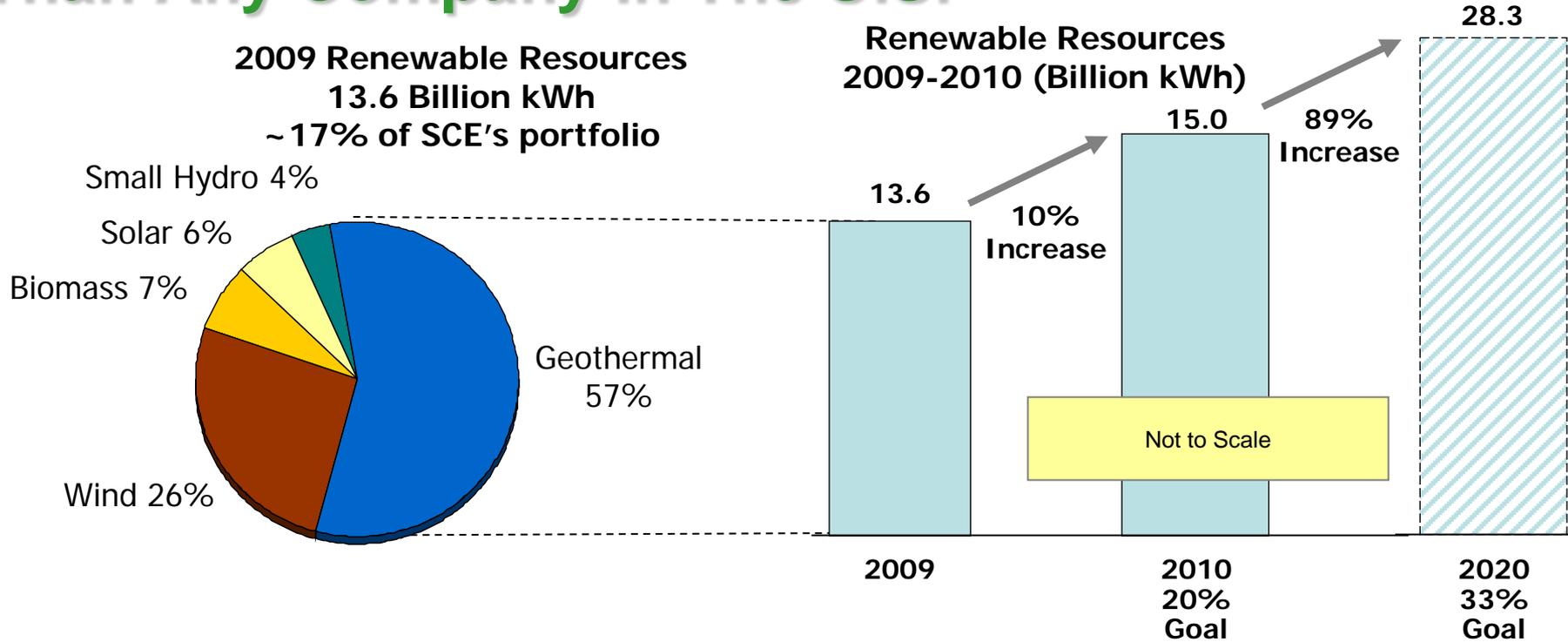


Agenda

- ❑ SCE's Renewable Energy Portfolio
- ❑ How SCE Procures Renewable Energy
- ❑ Costs of Renewable Energy
- ❑ RPS Principles
- ❑ Challenges



SCE Delivers More Renewable Energy Than Any Company In The U.S.



SCE's Role in U.S. Renewables Market

In 2009, SCE purchased roughly:

- 80% of all U.S. solar generation
- 50% of renewable energy generated in California
- 60% of total wind energy in California
- 60% of total geothermal energy in California



SCE's Recent Renewable Energy News

2010 Accomplishments

- Signed 58 contracts for 852 MW of renewable energy
- Began deliveries from 300 MW of Alta Wind facilities via new Tehachapi transmission line
- Contracted 50 MW through its Solar Photovoltaic Program
- Had 50 contracts totaling 2,163 MW approved by the CPUC

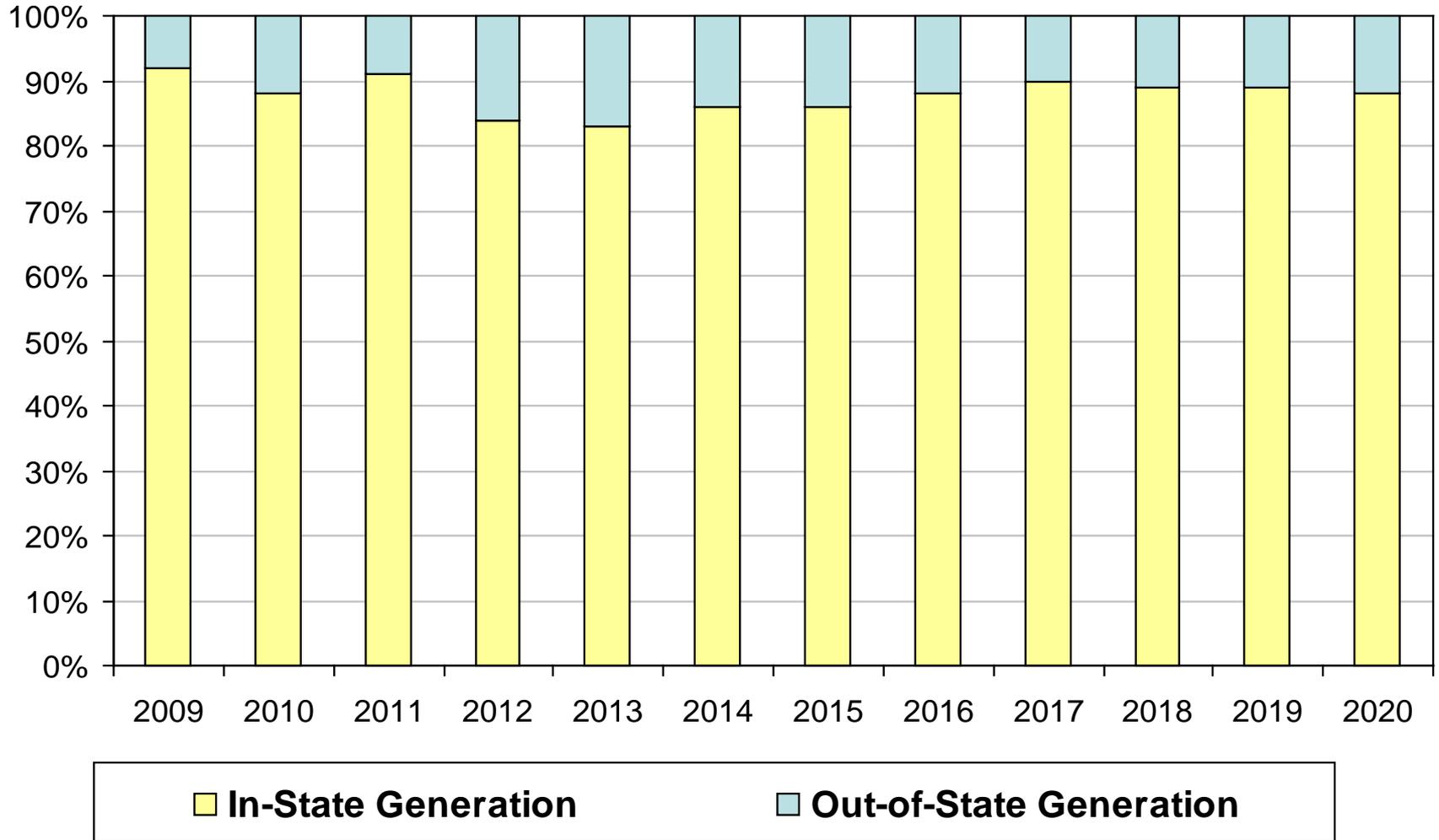
Early Progress in 2011

- Executed two contracts for 386 MW of solar generation in California
- Submitted 20 contracts totaling 239 MW executed under SCE's Renewable Standard Contract program to the CPUC for approval

In 2010, SCE expects over 19% of energy deliveries to come from renewable resources and is on track in procuring towards 33%



The Majority of SCE's Renewables Procurement Is From In-State Generators



■ **In-State Generation**

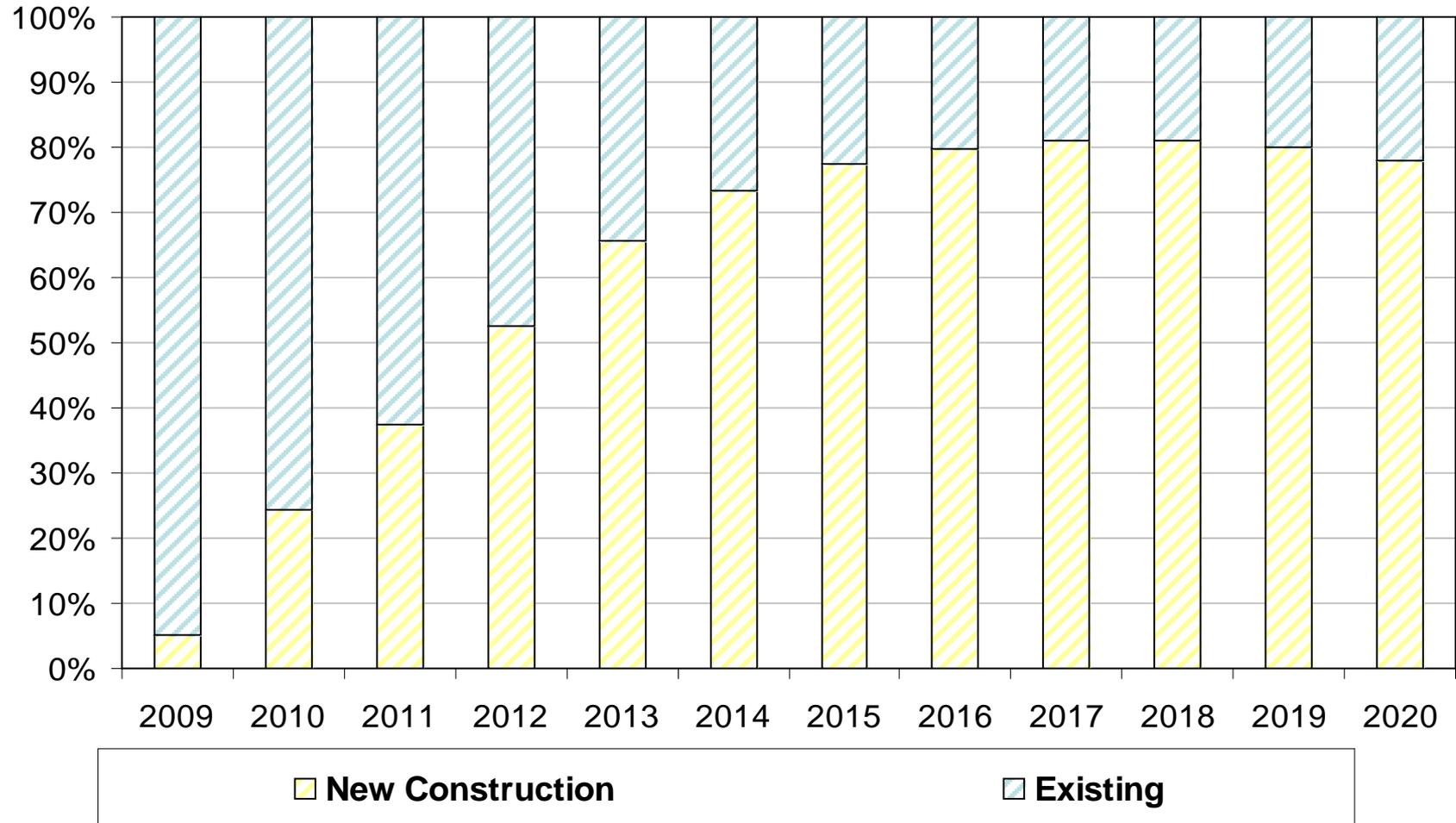
■ **Out-of-State Generation**

Notes

- Out-of-state energy consists of forecasts from projects located outside California and not directly connected to CAISO



SCE's Procurement Is Primarily From New Renewable Energy Facilities

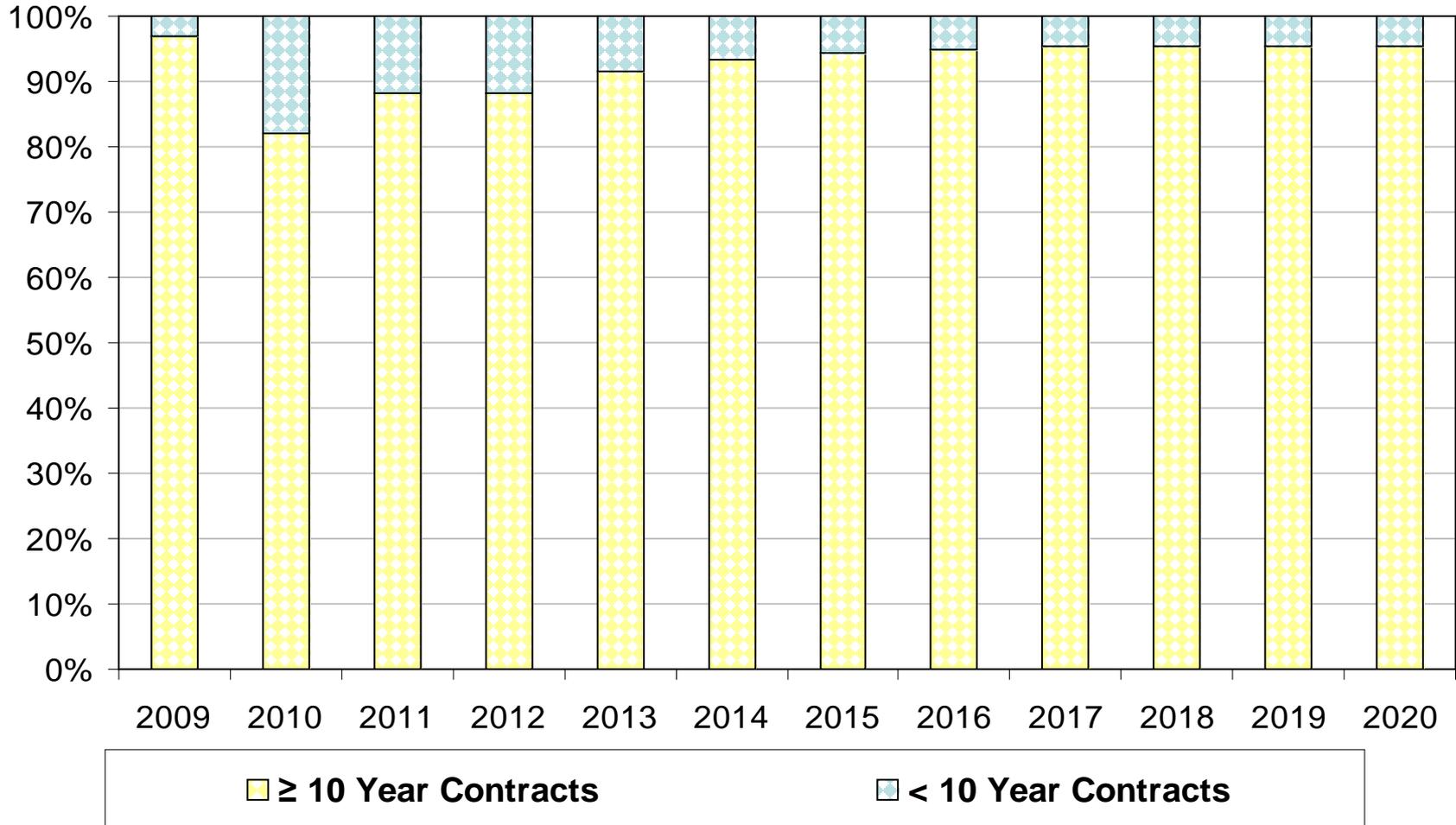


Notes

- Projects signed during the 2002 to 2010 time period. Based on maximum potential energy.



SCE Procures Most of Its Renewable Energy Through Long-Term Contracts

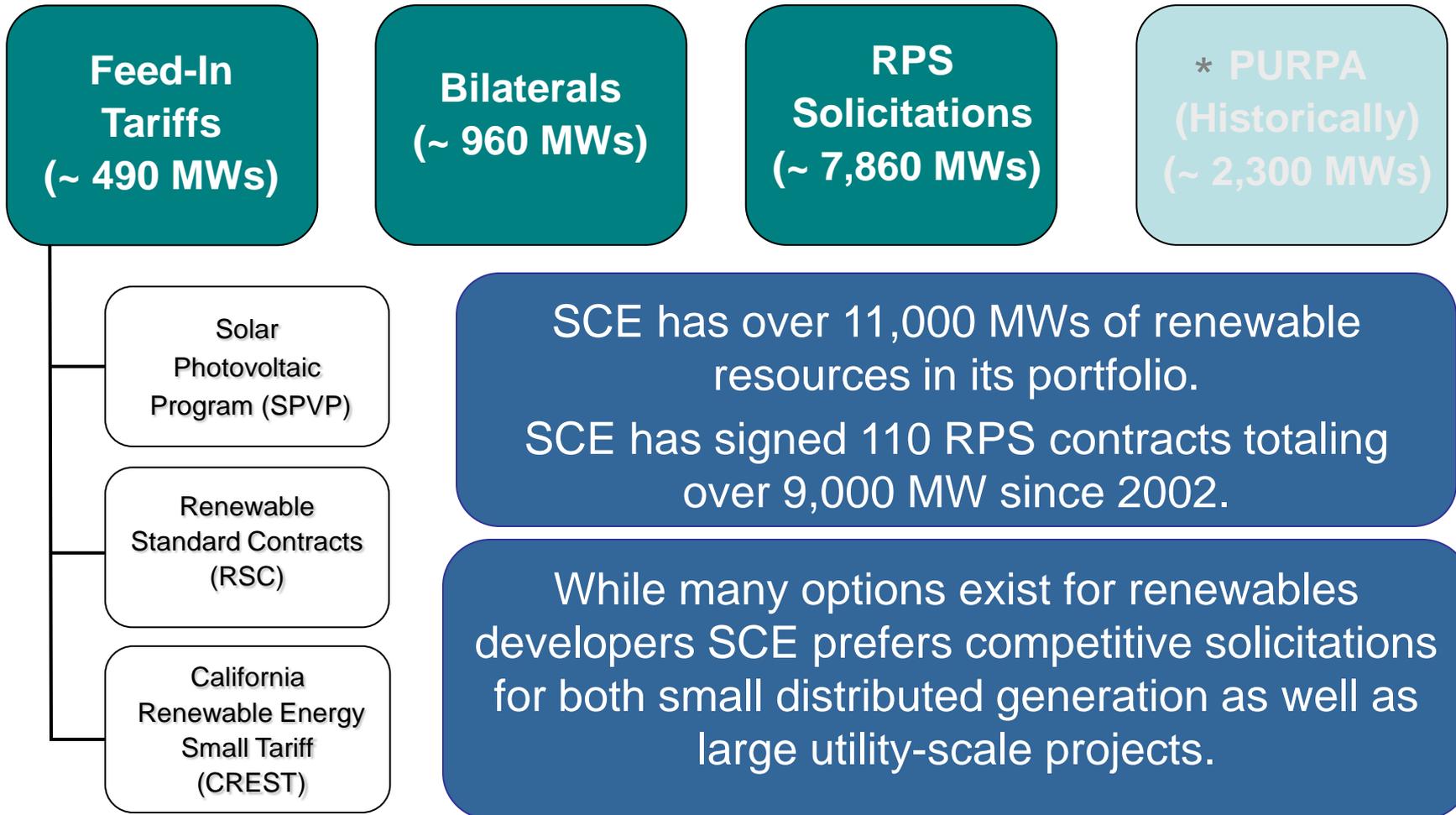


Notes

- Projects signed during the 2002 to 2010 time period. Based on maximum potential energy.



How SCE Procures Renewable Energy



*PURPA - Public Utility Regulatory Policies Act



Various Feed-in Tariff Programs Accommodate Smaller Projects

Solar PhotoVoltaic Program (SPVP)

- ❑ Solar technology
- ❑ Total program cap of 250 MW auctioned over 5 years
- ❑ Most installations on rooftops
- ❑ 1-2 MW contracts
- ❑ CPUC mandated

• 29 Contracts
• 51 MW DC

Renewable Standard Contracts (RSC)

- ❑ All renewable technologies
 - ❑ Contracts up to 5 MW or up to 20 MW
 - ❑ Voluntary, SCE designed
- Changing to Renewable Auction Mechanism program established by the CPUC

• 37 Contracts
• 445 MW

California Renewable Energy Small Tariff (CREST)

- ❑ All renewable technologies
- ❑ Total program cap of 248 MW
- ❑ Feed-in Tariff up to 1.5 MW
- ❑ Legislative/regulatory mandate

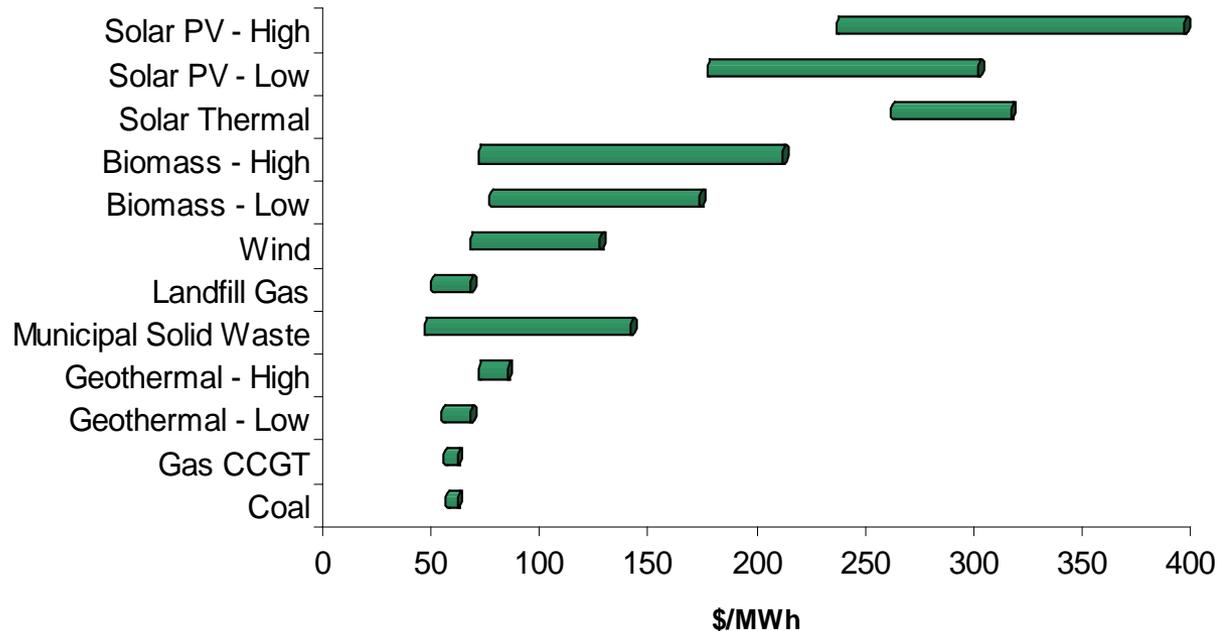
• 1 Contract
• 1.1 MW



Costs of Renewable Energy

- The costs of renewable energy significantly exceed those of conventional resources

Levelized Cost of Energy by Technology, Q4 2009



- SCE exhausted its Above MPR Funds for the RPS on September 24, 2009, but continues to voluntarily procure renewables

Competitive processes help SCE contain the cost of renewables



SCE's Principles for RPS Reform

<p>Broad Markets</p>	<p>A robust product pool makes more renewable resources available, thus lowering overall program costs for customers</p>
<p>Flexible Compliance</p>	<p>Banking and other mechanisms allow quick adjustments to market conditions, encouraging overprocurement in times of abundance and protecting against high prices in times of scarcity</p>
<p>Cost Containment</p>	<p>Meaningful cost containment provisions are necessary to shield customers from potentially unreasonable resource prices</p>
<p>Equal Rules</p>	<p>All electricity providers must meet the same rules and standards to ensure that all Californians contribute to RPS goals</p>



The Package of RPS Rules Matters





Challenges to the RPS Program

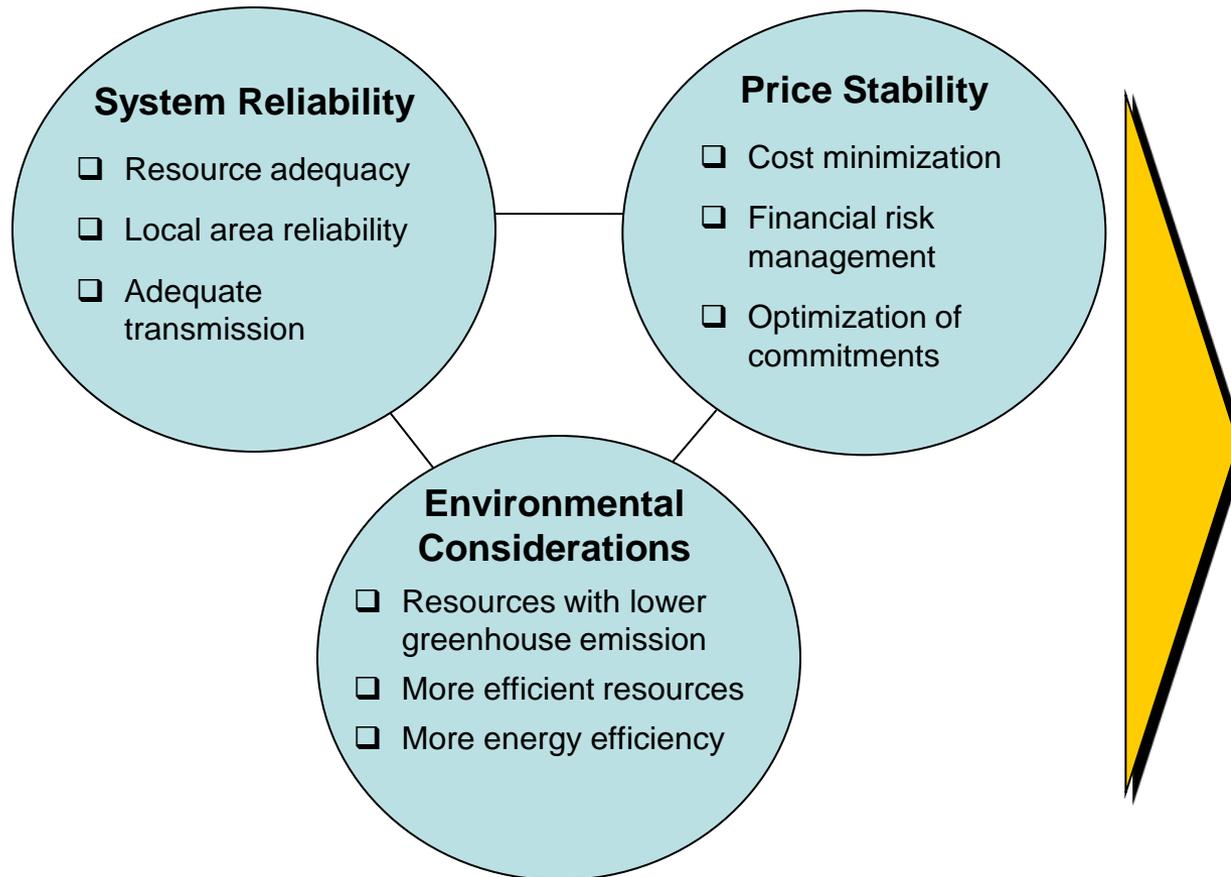
- Product Restrictions (e.g., Renewable Energy Credit limits)
- Permitting and siting
- Transmission delays
- Project failure (e.g., lack of financing, decertification of previously eligible resources)
- Changing policy initiatives
- Overly prescriptive program
- Integrating intermittent renewable resources onto the grid
- Rate impact to retail customers (e.g., purchase costs, integration costs)



Appendix



SCE's Procurement Objectives



Balance objectives through CPUC/CEC's* loading order:

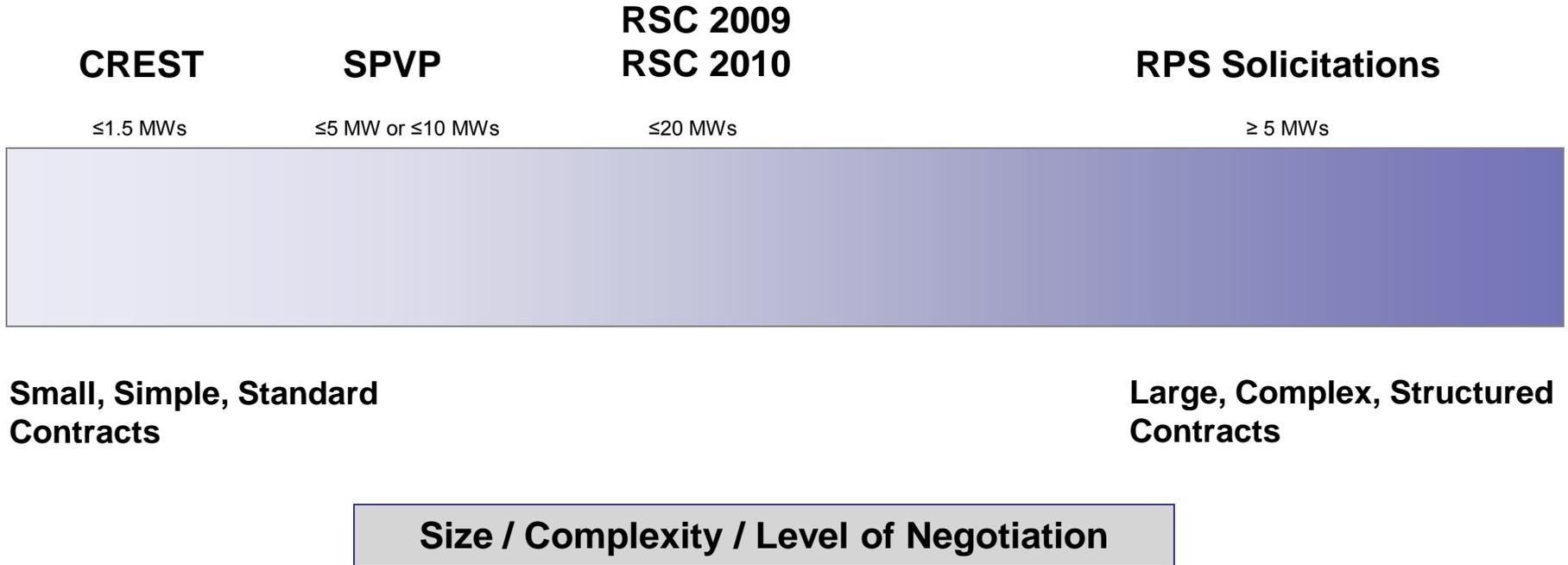
- 1. Energy efficiency**
- 2. Demand response**
- 3. Renewable resources**
- 4. Distributed generation**
- 5. Clean and efficient fossil-fired generation.**

*California Public Utilities Commission

*California Energy Commission



Spectrum of Renewable Transactions



SCE's Experience with Feed-in Tariffs (FITs)

Price

- SCE has offered FITs under both...
 - 1) Competitive offers (reverse auction)
 - 2) Fixed price set annually by SCE

Competition

- Feed-in-Tariffs can undermine competitive pricing
- Unsuccessful bidders from 2009 RPS solicitation applied for RSC
- Developers get squeezed by manufacturers

Interconnection Matters

- Interconnection can happen via...
 - 1) Fast-Track screening, or
 - 2) Normal study / interconnection process

Terms & Conditions

- Parties are willing to sign up to the SCE Pro Forma PPA Terms
- Feedback from entire market on PPA terms helps improve the success

Feed-in Tariffs can be administratively simpler for both buyers and sellers and a good complement toward reaching goals but FIT design is critical (e.g., fixed-price vs. auction)

Renewables Max Capacity

