

A thick black L-shaped frame surrounds the text. The top-left corner is a horizontal line extending to the right, then a vertical line extending downwards. The bottom-right corner is a horizontal line extending to the left, then a vertical line extending upwards.

GETTING TO 100

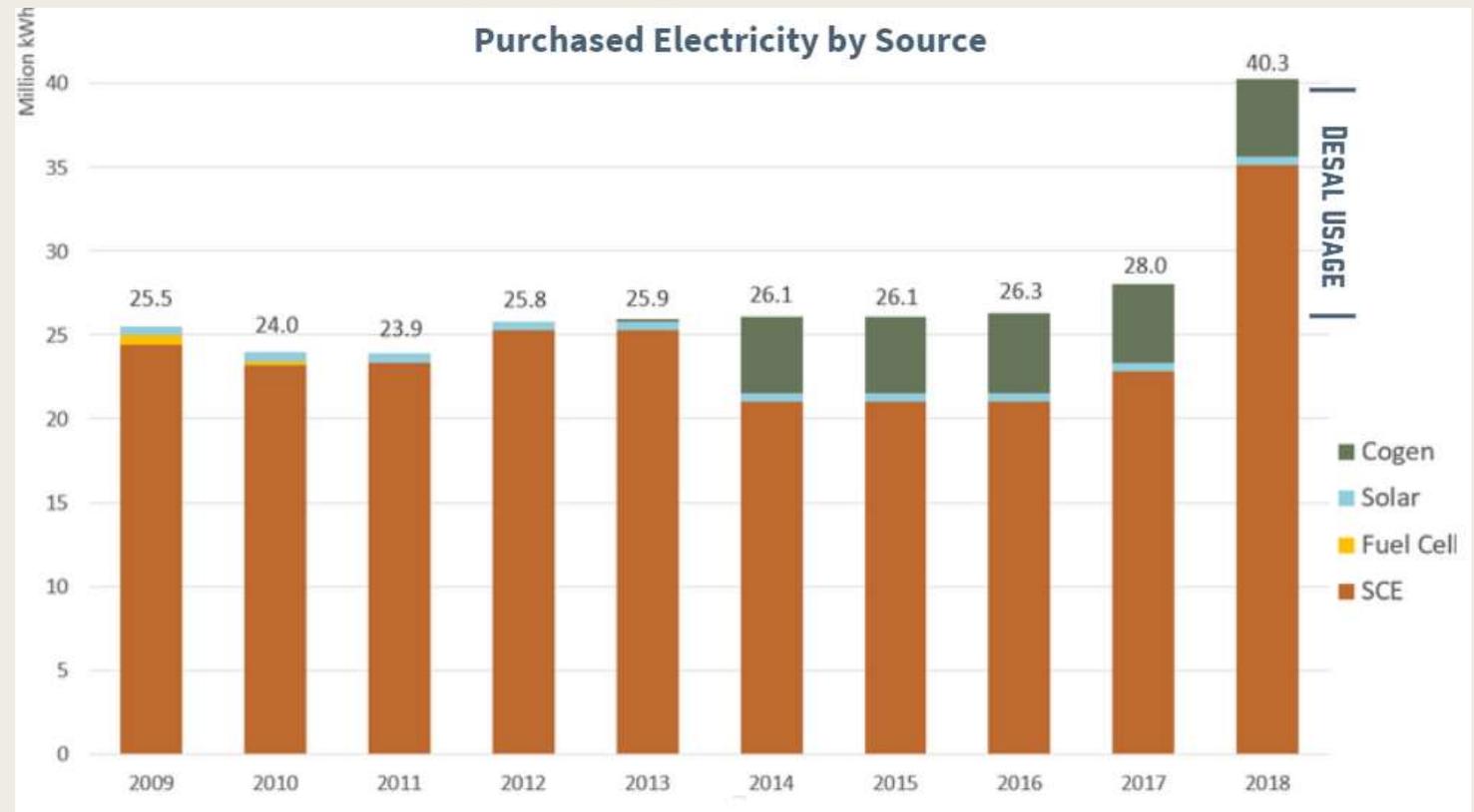
City of Santa Barbara's Quest for 100% Renewable Electricity

Introduction – Who am I?

- Alelia Parenteau – Energy Program Supervisor
- Oversee:
 - *All utilities for the general fund*
 - *Energy use, Citywide*
 - *All energy projects, Citywide*
 - *City-owned or sited renewable energy assets*
 - *Electric Vehicle Infrastructure*
 - *Energy-related legislation, policy and programming*
 - *Some climate-related actions*
 - *Energy Strategy*

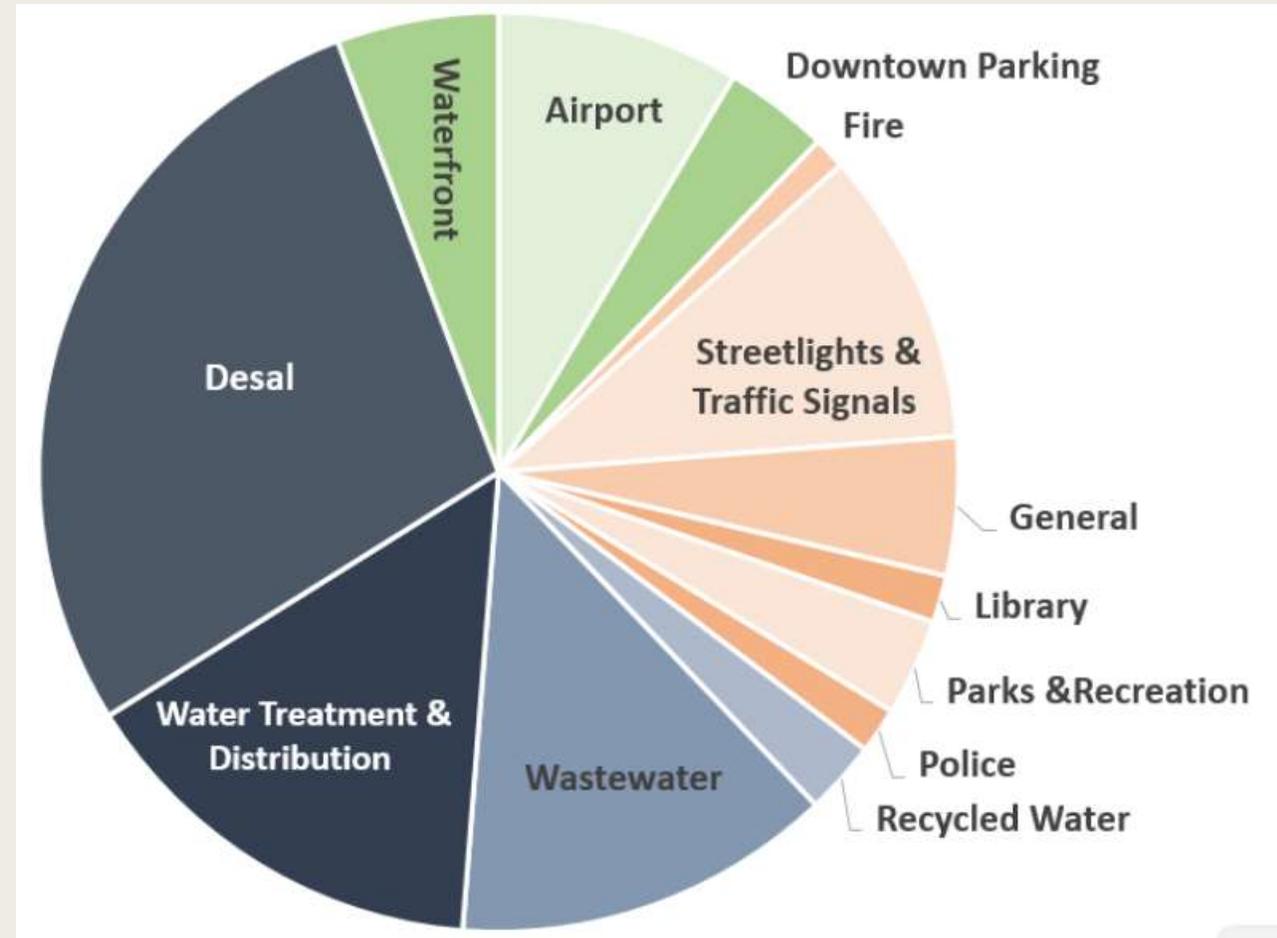
Introduction – City of Santa Barbara’s Energy

- The City’s purchases approximately 40.3 GWh annually
- Annual Electrical expense of over \$4.5 Million
- Oversee a variety of electrical loads, including office space, water treatment facilities, airport, recreational facilities and community services



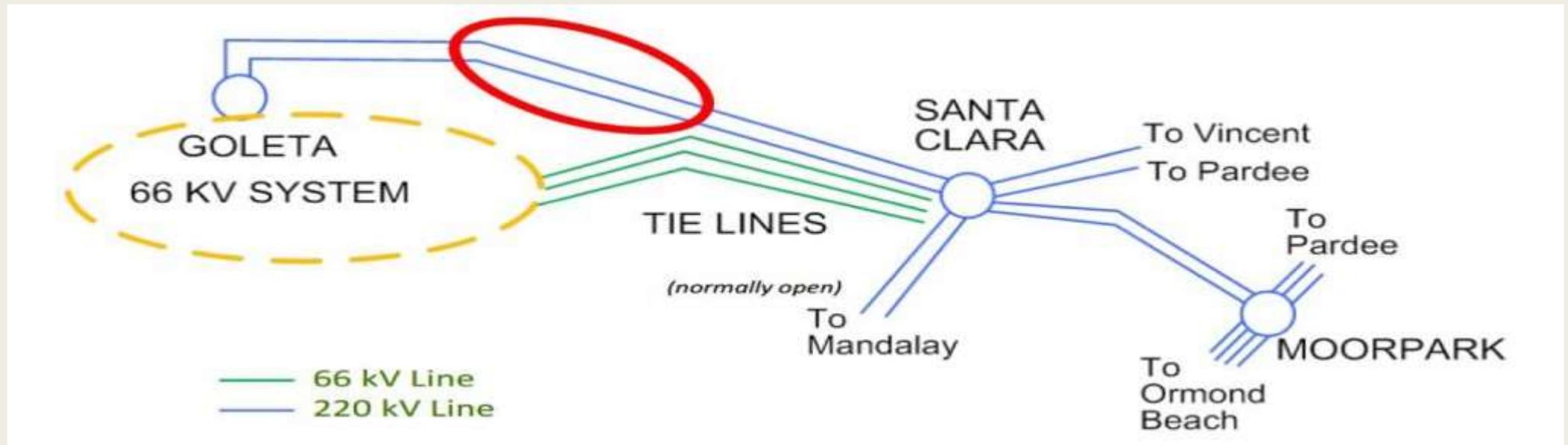
Introduction – Water-Energy Nexus

- Over 50% of Municipal electrical load is used for water treatment
- City's desalination facility produces 30% of the City's overall water supply



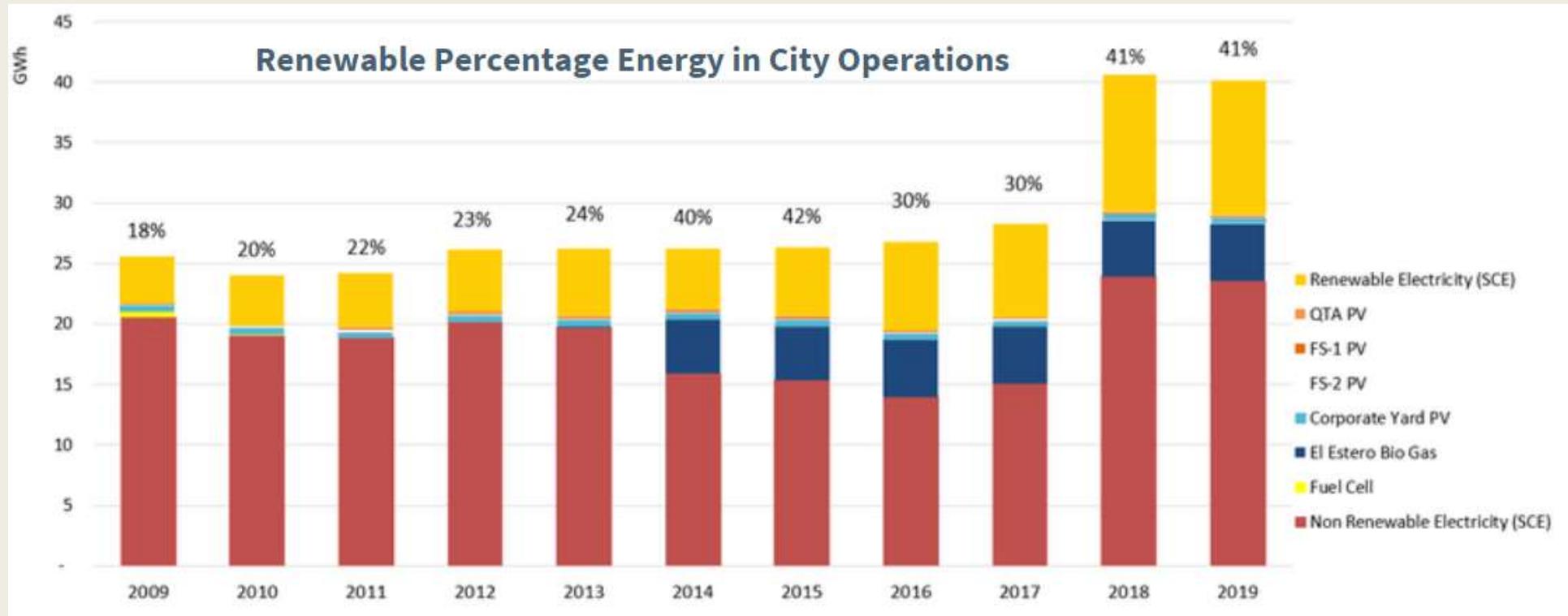
Introduction -Resilience is an Issue

- Vulnerable position at the end of SCE's transmission system
- Recent wildfires and natural disasters have intensified the vulnerability



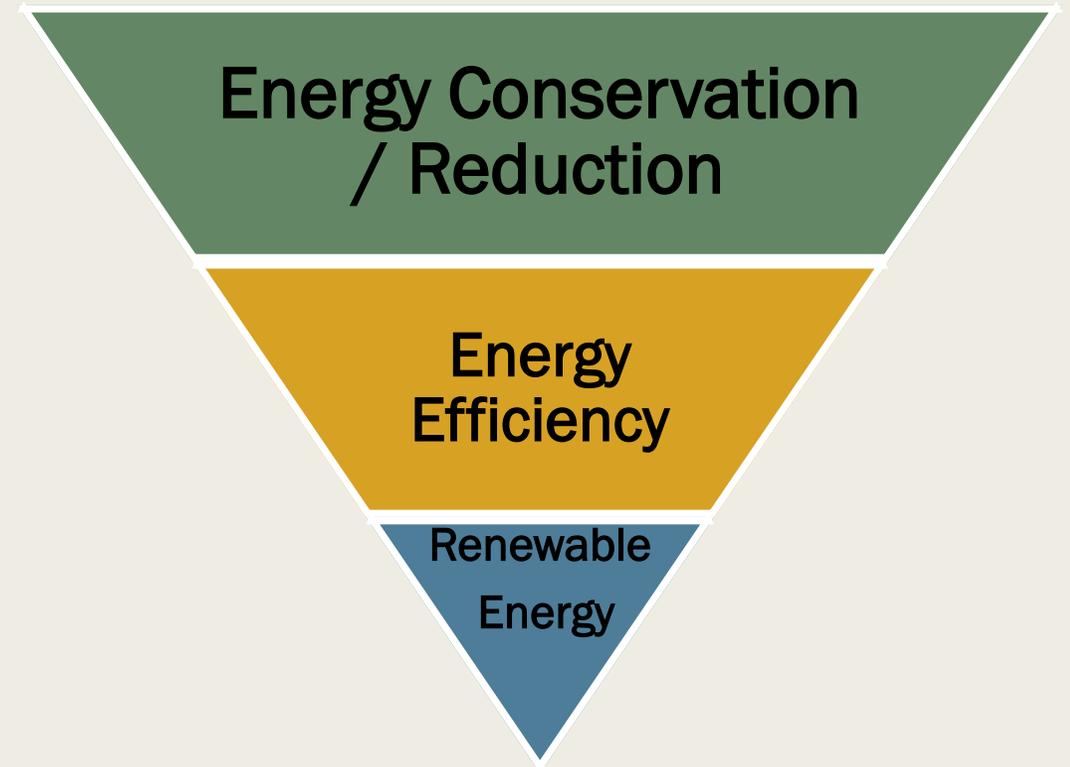
Renewable Electricity Goal

- Council passed 100% renewable electricity goal for the ENTIRE community by 2030
 - *Interim goal of 50% for municipal load by 2020*
 - *At 41% today – Utility a significant portion of that*



Council Priorities for 100% Renewable Strategy

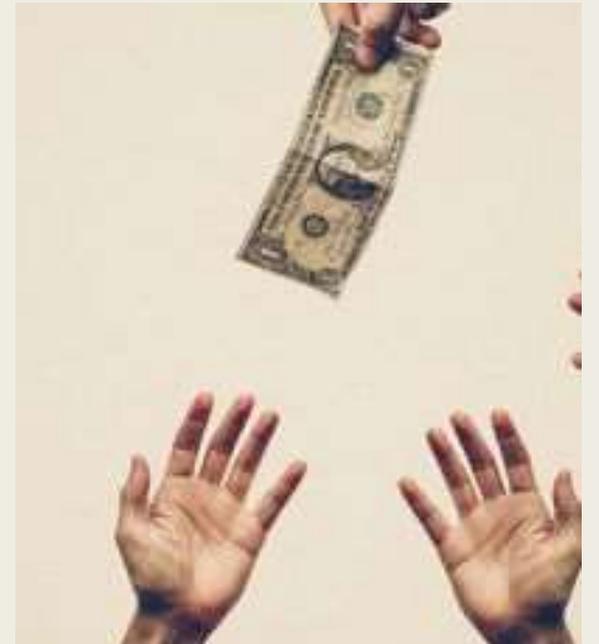
- Keep generation as local as possible
 - *No use of Renewable Energy Credits*
- Focus on reliability, resiliency and equity
- Follow the energy hierarchy
 - *Energy Conservation, Efficiency then Renewables*
- Improve economic development



Gap Analysis

(i.e. opportunities for working with the utilities)

- Education
 - *people will do what is easy and they understand*
- Infrastructure
 - *Need to build capacity locally*
- Technology
 - *New technologies are emerging and people need to learn about them and have them “tested”*
- Renters – split incentive
 - *How to motivate action*
- MONEY!
 - *Everybody loves it*



Working with the Utility (SCE)

A decade of Success

Energy Efficiency

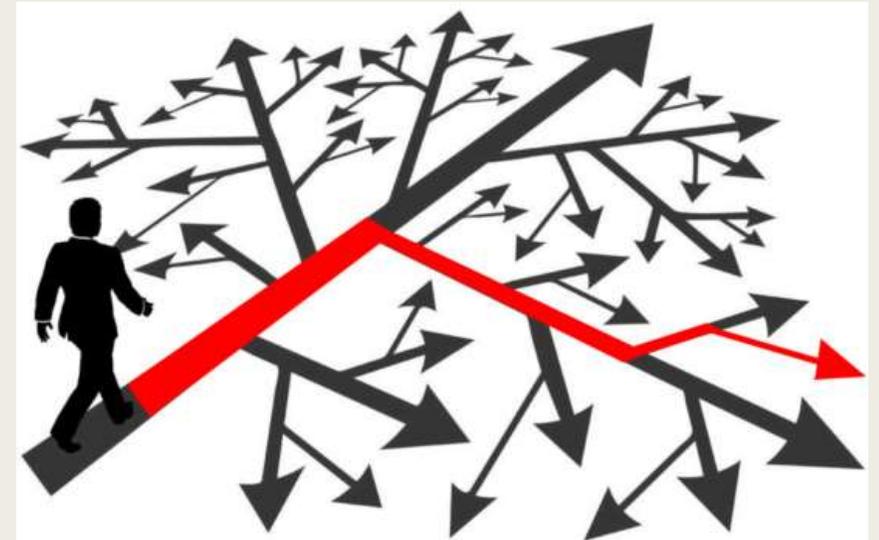
- City has had a lot of success working with SCE on EE projects
- Examples include:
 - *Streetlighting*
 - *Indoor lighting*
 - *HVAC upgrades*
 - *Controls*
 - *Motor and Pump upgrades*
- Utility incentive programs crucial to this success



Strategic Planning and Development

The City has successfully leveraged SCE's strategic planning funds to develop innovative systems

- **Energy Management System**
 - *Monitors real time energy usage, helps identify opportunities*
- **Energy Revolving Fund**
 - *Reinvests energy cost savings into a fund dedicated to energy efficiency and renewable energy projects*
- **Zero Net Energy Roadmap**
 - *Outlines a step-by-step list of actions necessary for transitioning City-owned buildings to ZNE*



Designing for Local Action

■ Green Tariffs

- *Worked with SCE to tailor their Green Tariff Program proposal to better suit our local needs as they relate to the goal.*

■ Streetlights

- *Worked with SCE under the AB719 tariff (requiring an LED option) to update all of their utility-owned streetlights to high efficiency LED*

■ Reliability RFP

- *Tried to get more local renewable generation as part of reliability project*
- *Emphasized need for renewable as opposed to fossil fuel options*



Education

In partnership with SCE we've been able to offer trainings, special programs and outreach locally:

- South County Energy Efficiency Partnership
- Direct Install
- Title 24 trainings
- Building Operator Certification
- Christmas Light Exchanges
- Refrigerator Pickups



Challenges Remain

New goals, New threats, New Rules

Flexibility is Key

■ Partnership

- *Utility almost feels like a regulator, not a partner*
- *Dream: Work toward goals together*

■ Programs

- *It is not one size fits all*
- *Need to allow for flexibility in sizing, pricing, location and information provided*

■ Tariffs

- *Our load is not in the same place as our land*
- *Feed In Tariff*



Infrastructure

- As utilities build local capacity and reliability – perfect opportunity to work with local jurisdiction to align goals
 - *We need to build local resources*
 - *City would be interested in helping to realize SCE's reliability needs*
- Significant cost and risk to both utilities and local communities due to Wildfires
 - *Work together to resilience and make all of our jobs easier*



Administrative Burden

- **Silos** – one hand does not seem to speak to the other
 - *We work in many different utility aspects: rates, generation, use, regulations, energy efficiency, reliability – all these sections don't communicate very well*
- **Transparency** – Decisions often hide behind a regulatory haze
 - *Is it a legitimate interpretation?*
 - *Do we know about it?*
- **Technology** – Web presence is key, often not functional and not user friendly
 - *It's the most accessible place for your customers to get their information*



Questions?

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