Community Choice Capturing Community Benefits

Local Clean Energy and Distributed Energy Resources



center for climate protection

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Ensuring CCE Success



- California's CCE revolution amazing progress!
- 2018-2020 a pivotal time for CCAs

 Premise – Integrated Distributed Energy Resources (DER) will be a critical success factor for CCAs, and help bring the promised benefit their communities

- Modest investments can have outsized impact
 - Webinar Series, Online Clearinghouse of DER knowledge (CPX)



What is DER?



 Distributed Energy Resources (DERs) are technologies and programs that displace the need to use energy generated from remote sources

- Some DERs generate and store energy locally
- Others reduce the demand for energy, or demand peaks
- Others make the energy supply more resilient
- At the heart of our distributed energy transformation
- Planning a strategy or "roadmap" is important for success



DER Options - Examples

- Local Renewable Energy Generation
- Local Energy Storage
- Micro Grids
- Electric Vehicles and Charging Systems
- Electrification (switching buildings from gas to electric)
- Energy Efficiency & Demand-Response measures
- Data Analytics & Management
- Smart Control Technology for connecting all the parts

Why is early DER effort strategic?





- Robust DER understanding enables CCEs to plan, hire, and position for future trends & capture community benefits:
 - Enables further reductions of GHG emissions & peak demand
 - Stimulates local economic development and jobs
 - Facilitates development of innovative pilot projects
 - Increases public visibility of and support for CCE
 - Helps to differentiate CCE programs from those of IOU
 - Promotes local energy resilience

How can CCAs invest in DER deployment?



- Hire experienced staff and consultants with DER knowledge
- Build understanding of the power of DER among key stakeholders
- Identify local priorities and criteria for future programs
- Develop pilot projects to test concepts
- Use DER to build brand within the community!
- Develop a three to five year DER rollout strategy
- Include DER in Integrated Resource Plan
- Engage member cities in the DER process (share management and resources, align with climate action plan)

Your Status & Plans?



- As of today:
 - Is there good support for DER in principle? Hiring factor?
 - How would you assess the current knowledge level about DER and its benefits for the CCA?
 - CCE staff, board members, advisory committee members?
 - Is a timeline defined for starting DER planning efforts?
 - Current approach for pursuing DER activities?
 - Roadmap? Pilots? Climate Action Plan Alignment?
 - Is there a budget defined?
- Best way to continue our dialogue?

Topics of Interest?





- Possible Webinar Topics:
 - CCAs + DER: The Case for Why (Aug 22nd, 11-12, recorded)
 - The How & Why of a Local Resources Dev Plan (EBCE roadmap)
 - Inspiration/Success Stories, Approaches Used, Lessons Learned
 - Tech topics: Grid assessment, and location value of resources
 - Specific programs of interest: EV programs, Solar+ Storage, Electrify Everything, etc.
 - The value of partnerships & regional collaboration
 - Engaging local cities Climate Action Planning in the DER process
- Online Resources:
 - DER options, Actual projects (CCA, Muni, IOUs), Case Studies, Lessons/Best Practices

CCP's Goals





- Project Goal: To share DER expertise and resources to help accelerate the **impact** of our local CCAs by helping to:
 - Efficiently get information about Distributed Energy Resources
 - Build awareness of the importance and value-add of DER
 - Minimize risks to long-term viability in a dynamic environment
 - Identify the community's strategy & priorities
 - Plan, hire and budget accordingly
- Long Term Vision: CCE programs become real game changers!
 - Stimulating local economic development
 - Managing the grid more effectively
 - Creating a model for carbon reduction, emulated nationwide.

Project Outputs





- Our project's services will be offered to CCE Boards, Staff, and Advisory Committees, including:
 - A shared database of resources and best practices
 - Webinars on DER topics of most interest 1st Webinar 8/22
 - Individualized work sessions with CCAs & their advisors

- We will support planning and accelerate advancement of DER within Bay Area CCE programs
 - San Jose, Silicon Valley, Monterey, Peninsula, East Bay



Resources

- Business of Local Energy Symposium, June 4th 5th.
 - Slides & Recordings available here: https://climateprotection.org/2018-symposium-presentations/
- Webinars/Events
 – ongoing, excellent resources we recommend:
 - Clean Coalition http://www.clean-coalition.org/newsroom/upcoming-events/
 - Center for Climate Protection http://cleanpowerexchange.org/webinars/
 - Municipal Sustainability & Energy Forum http://mseforum.com/free-webinar/
 - LEAN http://www.leanenergyus.org/news-events/
 - East Bay Local Dev Plan Webinars https://ebce.org/local-development-

Range of CCA Customer Programs

	CleanPowerSE	Lancaster Choice Energy	Peninsula Clean Energy	MCE	Sonoma Clean Power	Apple Valley	East Bay Community Energy	Silicon Valley Clean Energy	Pioneer	PRIME	RCEA	Solana Energy Alliance	MBCP	Clean Power Alliance	San Jose Community Energy
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Budget Billing	In dev.	√			In dev.						In dev.				
Battery Storage Rate				√											
Customer Load Shifting				√	✓										
Demand Response			In dev.	In dev.			In dev.	✓			✓				
EV Rate	✓	✓	✓	✓	V			✓		√	√	✓	V	✓	2019
EV Bus Program		✓													
EV Incentives		In dev.	In dev.	✓	V								In dev.		2019-20
EV Load Shifting				√	V										
Energy Efficiency		In dev.		√	✓					In dev.	√				
Low-Income & Multifamily EE				√						✓	V				
Feed-In Tariff	In dev.			√	V						In dev.		In dev.		
Fuel Switching				√	V			In dev.			✓		In dev.		2019-20
Low Income Solar Incentives	✓		In dev.	√			2019			✓					
Net Energy Metering	✓	√	✓	√	V	V	2019	V	✓	√	√	✓	V	✓	2019
On Bill Repayment	In dev.			√	In dev.						✓				
Community Outreach Grants			✓												
Community Energy Grants			In dev.											8	
PACE Program									✓						

Thank you!

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