

**Howard Choy  
Consulting, LLC**



ICF

The  
Energy  
Coalition

EES  
Consulting



## **The Changing Electric Utility Industry – Roles & Opportunities for Local Governments**

**Statewide Energy Efficiency Coordinator  
Conference, Sacramento, June 21-22, 2018**

# Presenters



- Howard Choy Consulting, LLC – Moderator (blurb)
  - Randy Britt, Vanir (Vanir blurb)
  - Gene Rodrigues, ICF (ICF blurb)
  - Craig Perkins, The Energy Coalition, (TEC blurb)
  - Anne Falcon, EES Consulting, (EES blurb)
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THIS IS NOT A COMMUNITY  
CHOICE AGGREGATION  
PRESENTATION

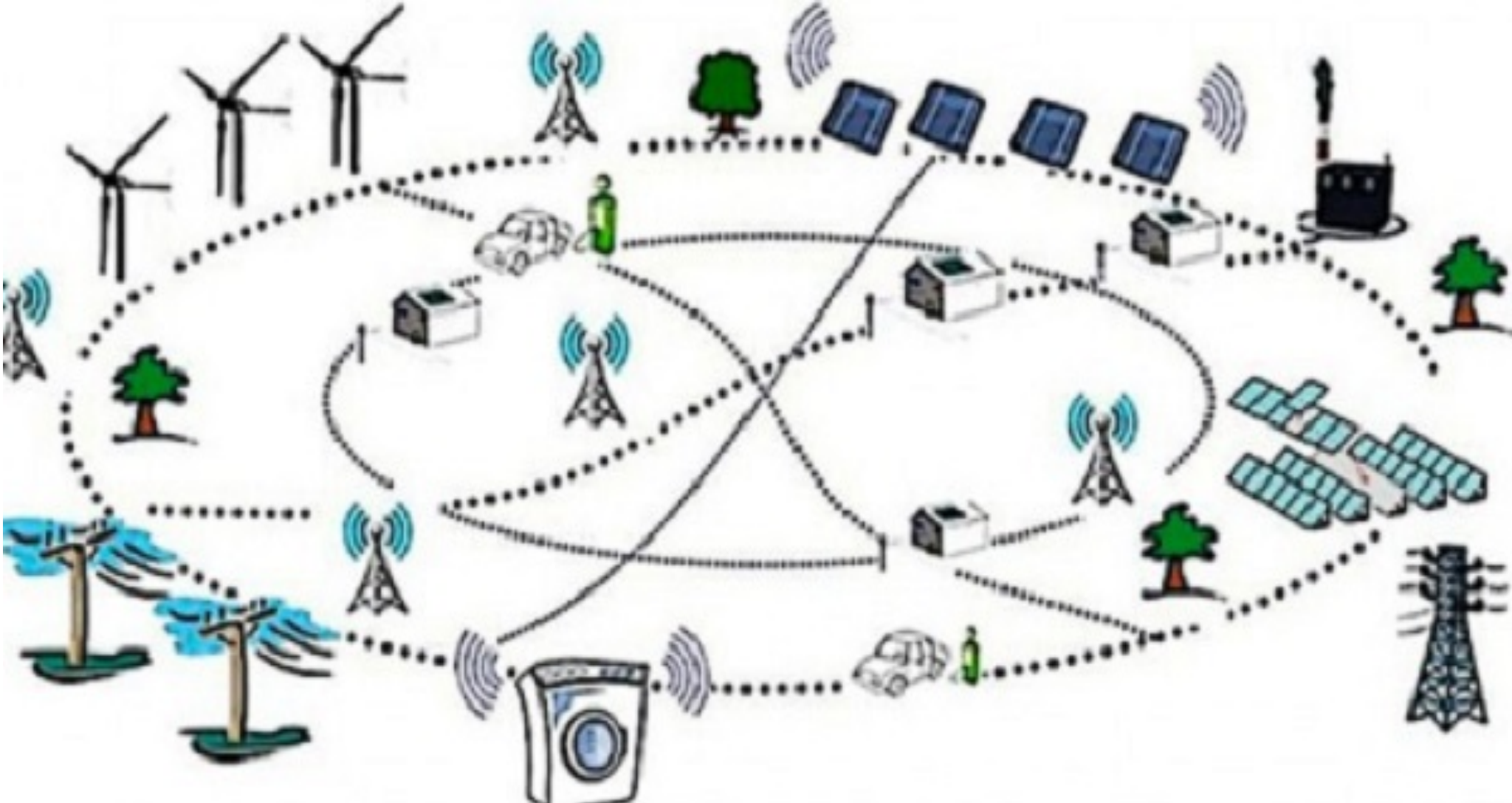
(You're welcome!)



# The Vertically Integrated Utility Model...



is changing rapidly!!



# Policy, Regulatory, Markets, Technology are the Drivers



## NEW PROVIDERS, NEW SOURCES

IOUs, CCAs, Direct Access  
Solar, Storage Cost Competitiveness  
CA Carbon Free Policies  
CCA Policies  
Distributed, Local Generation  
Load Serving Entities  
Procurement Options



## GRID RELIABILITY, RESILIENCE

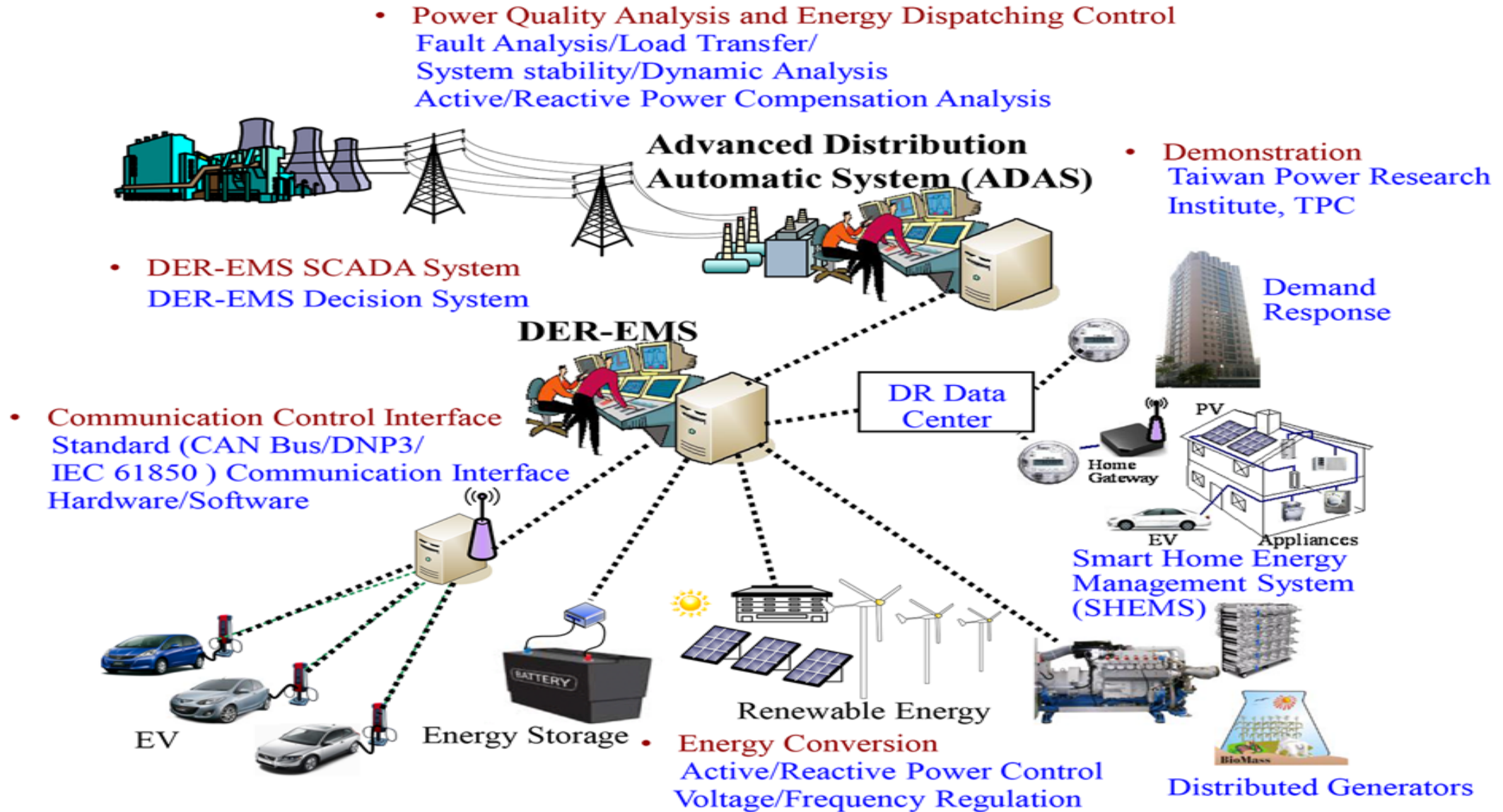
Regional, Local Focus  
Distributed Generation/Resource  
Advancements  
Grid Need Procurement Programs  
CA Carbon Free Policies



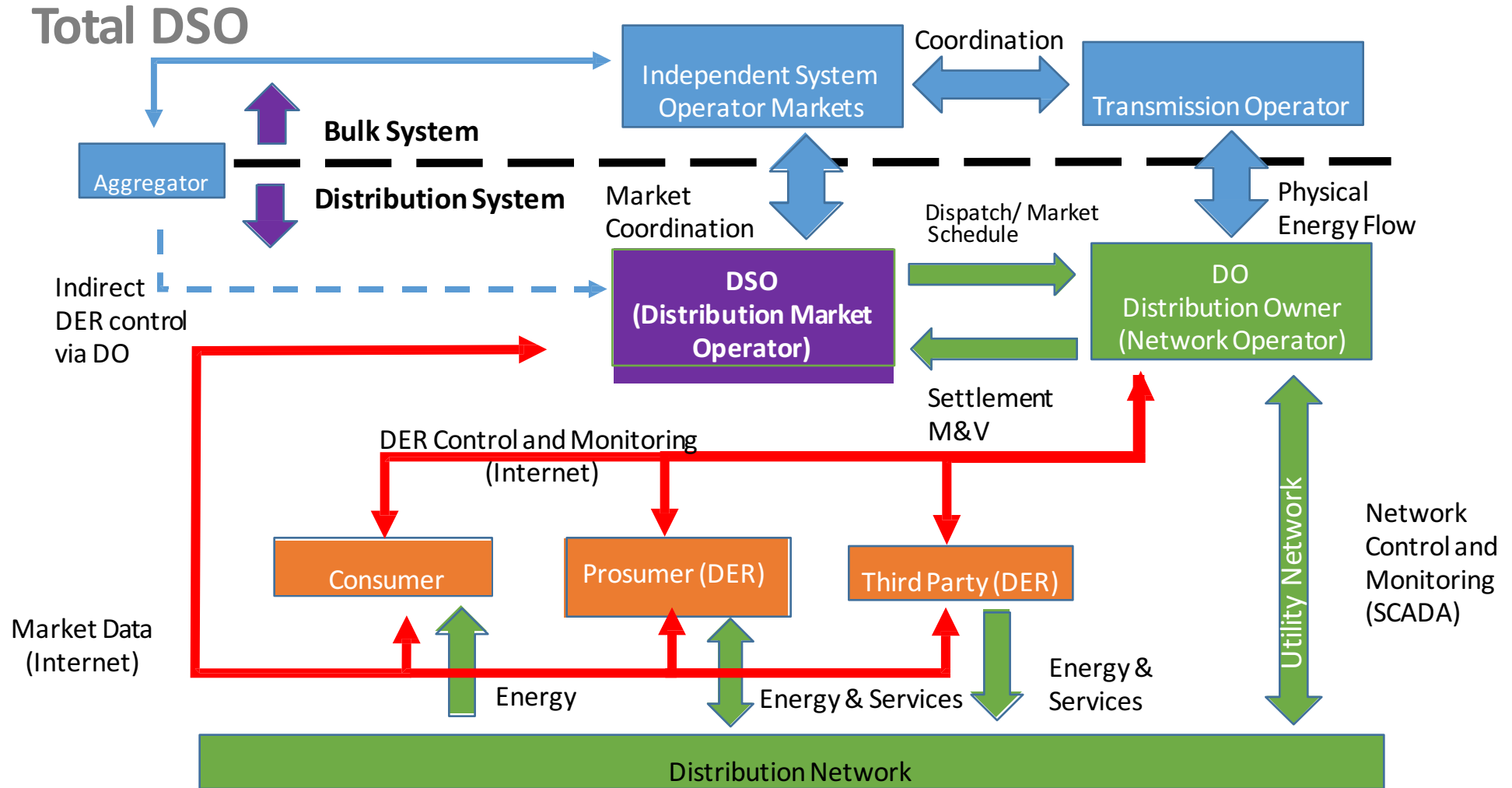
## CUSTOMER CHOICES

Customer Provider Options  
New Customer Technologies  
- EV, DG, Storage, EE,  
microgrids, smart buildings  
Carbon Free Choices  
Regional/Local/Community Focus

# Where Are We Headed Technologically?



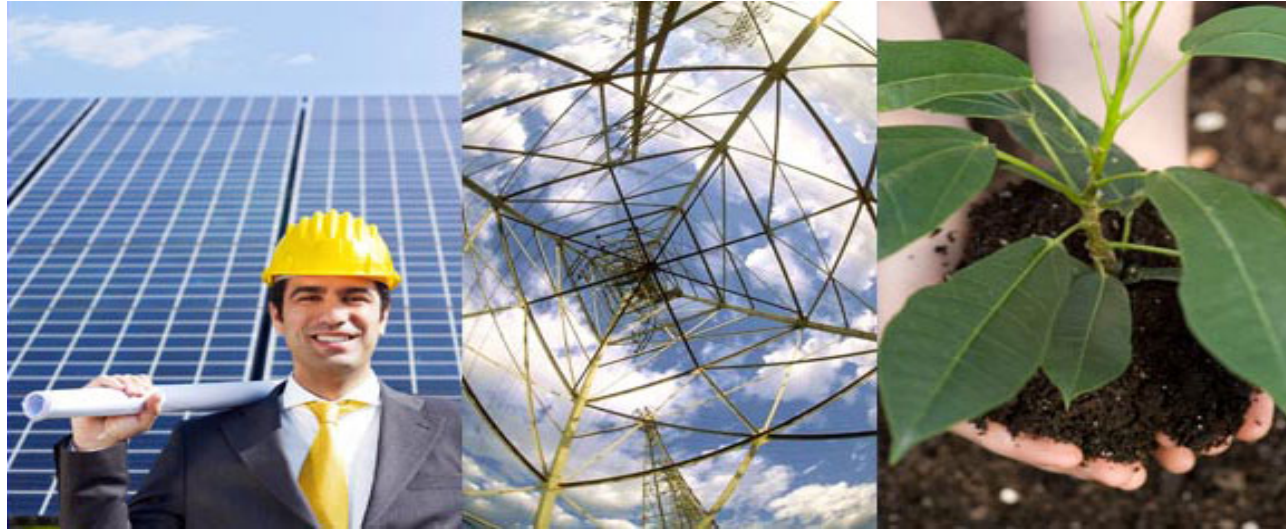
# Where Are We Headed Market-wise?



\*Simplified version of PNNL "Grid Architecture 2", January 2016



# New Local Government Priorities in Community Energy?

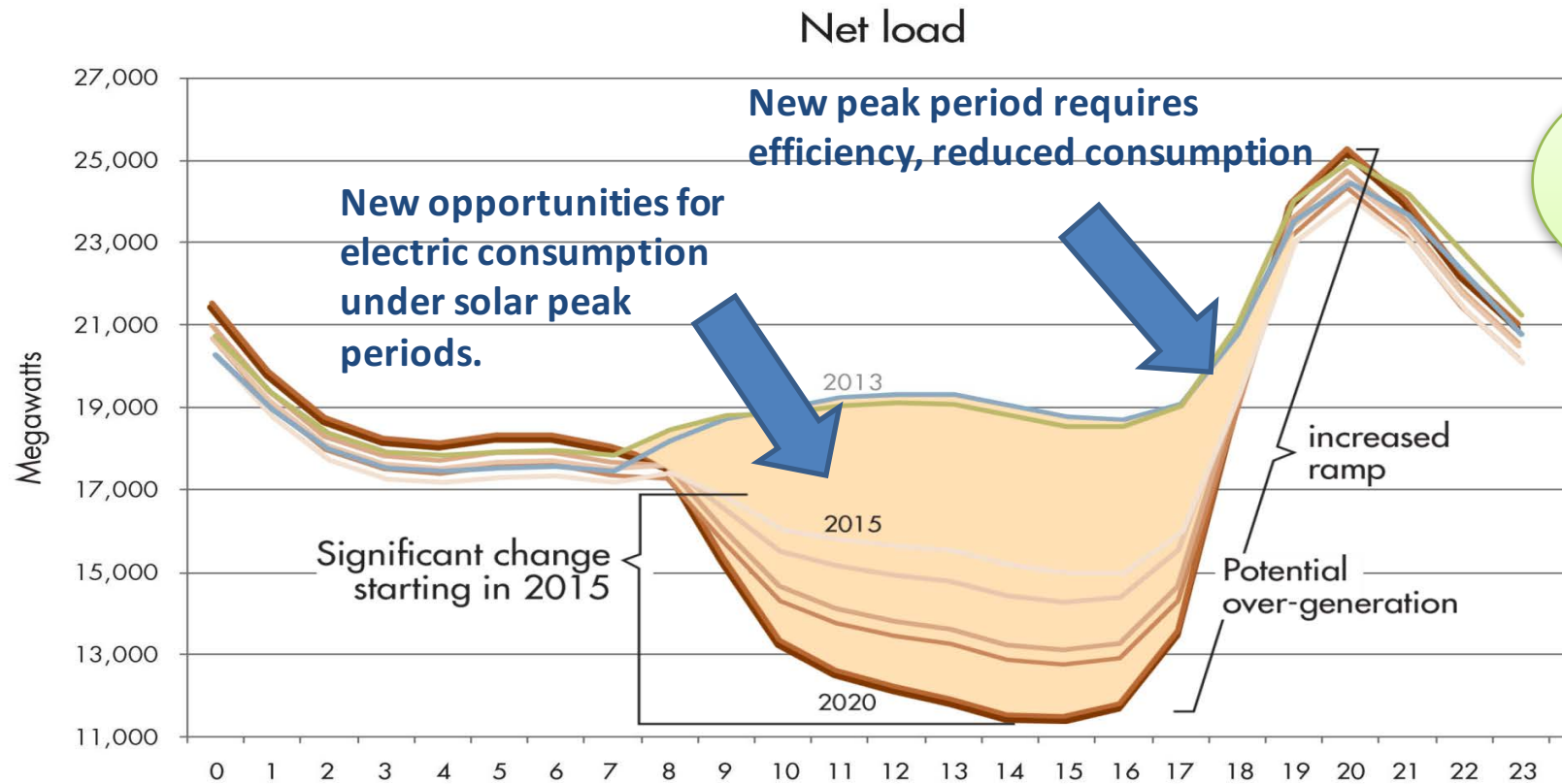


**Decarbonize Everything - Grid Resilience for Buildings, Campuses, Communities, Regions - Avoided Fossil Fuel Generation Grid Reliability Infrastructure Development (in your communities!)**

**Energy Supply Management Decisions (local vs. centralized) - Local Policy and Decision Making**

# One Outcome of This Evolution & Opportunity

## Growing need for flexibility starting 2015



# What Local Gov't Resources Are Available?



# The Hard Part – Where are the Opportunities?



**KEEP  
CALM  
AND  
LEARN A  
FOREIGN LANGUAGE**

## GENERATION

IOU Long Term Procurement Plans, CCA Wholesale Procurement Plans, Load Serving Entity Integrated Resource Plans

Will all include procurement of DERs as part of portfolios

## GRID

Local Capacity Restriction Request for Offers/Proposals

Preferred Resource Pilots

Distributed Resource Programs

Demand Response Auction Mechanism

All seek DER implementation, locational specific

## END USERS

New Time of Use Tariffs

Rolling Portfolio for EE

New RENs, CCA EE Programs

CEC EPIC and AEC Grants

DER Grid Programs, EV Charging

## REGULATORY

Integrated Demand Side Management,  
Integrated DERs  
Planning,  
Transportation  
Electrification,  
Storage Multiple Use,  
Time of Use Rates

# Synthesizing: The Bottom Line



**No More Fossil Fuel in California? See: Puente Power Plant, Ellwood Peaker Plant**

**Massive DERs to Mitigate Diablo Canyon**

**San Onofre and Aliso Canyon Mitigated by DERs**

**Grid Operator Upgrades VS. DERs Conflict Being Mitigated?**

**DERs Enhanced by New Technologies**

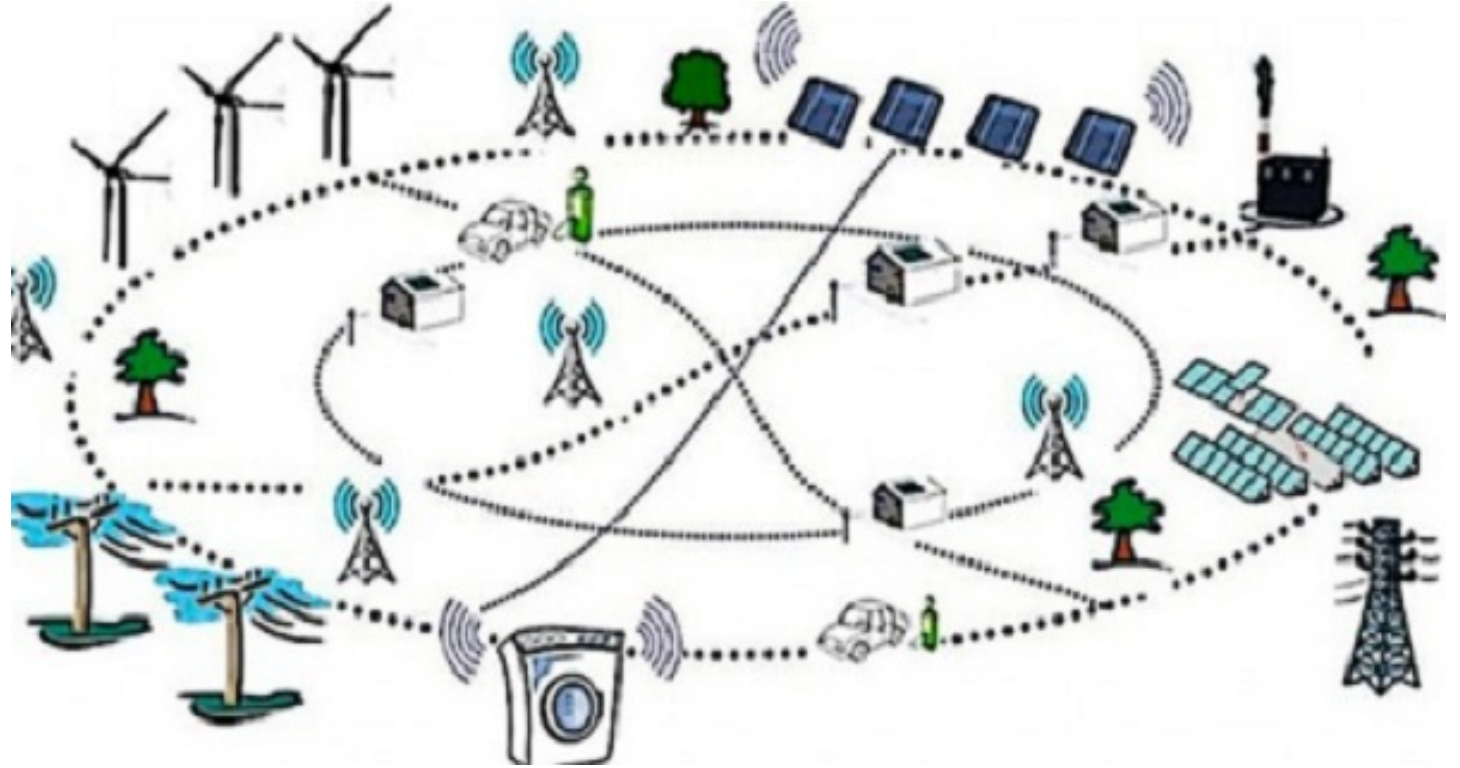
**DERs Going In IFOM and BTM**

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# Why is This Important to Local Governments?



**NIMBY!!!**



**YIMBY!!!**

# Let's Talk CCAs – Are They the Answer?

**WE CAN DO IT!**



## How Far Can Local Control Go?

**What is the definition of “local?”**

**Procure DERs under Procurement, Resource Plans  
locational-specific**

**“Local Rates” as DERs incentives?**

**Customer behavior through rate design?**

**Support programs in locational-specific communities**

**Partner w/ IOUs on Grid Needs Programs**

**Partner with Others (LGs too!)**

**Acquire Other Funds**

# Well It's Happening!



Oakland Clean Energy Initiative,  
Local Business Development Plan

RCEA administers all of the region's energy programs

Transportation Electrification, Fire Impacted Carbon Free Redevelopment



Local solar ordinances, transportation electrification, CPUC EE Funding



Local Distributed Generation, CPUC EE Funding





# OK, Let's Call Out Our IOU Partners as Well!



SOUTHERN CALIFORNIA  
**EDISON**

LCR RFP  
Moorpark/Goleta  
Encouraged bids to  
coordinate with LGs



Proposal to City of  
San Diego for 100%  
Renewable Energy  
Supply

Oakland Clean  
Energy Initiative



# Time to Transition



**“We (Local Governments) don’t have the: re\$ource\$, expertise, time, ETC”**

**“The IOUs won’t let us...”**

**“It’s not a priority for our electeds...”**

**You have re\$ource\$, expertise in CCAs, RENs, LGSEC**

**Engage your financially sustainable sources of expertise**

**Get involved in current opportunities, can be a revenue source**

**Work together on a Vision with clear CCA roles, local government and others’ roles**



# Thank You!

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