WHAT IS CCA?
Established by State law, CCA allows cities and counties to pool their residential, business and municipal electricity loads, and to purchase power (and/or generate it*) on their behalf. Energy transmission, distribution, repair and customer service functions remain with the incumbent utility. *Where allowed by state CCA law
A HYBRID APPROACH

Roughly 70% of U.S. electricity is supplied by vertically integrated investor-owned utilities (IOUs), with much of the balance coming from publicly-owned municipal utilities. CCA offers a third, hybrid option, where key energy functions are split between a public entity and the IOU.
WHERE IS CCA NOW?

- Active CCAs: California, Illinois, Ohio
- No active CCAs: All other states

Legend:
- Green: Active CCAs
- Orange: No active CCAs
POTENTIAL FOR EXPANSION
Influenced by Electricity Markets

- Deregulated (13)
- Suspended (7)
- Regulated (30)
COMMON FEATURES

- Enabled by State Legislation
- Opt-out program
- Local governments as decision-makers
- Utilities as delivery and billing partners
- Existing regulations and environmental mandates apply (e.g. RPS, RA)
- Not taxpayer funded
DIFFERENCES BETWEEN STATES

✓ Local referendum vs. vote of elected board or Council
✓ City as contracting agent vs. JPA/intergovt. entity
✓ Statutory requirements and implementing regulations vary
✓ Procurement, program, and asset development approach varies
✓ Utility relationships and service agreements vary
WHY DO IT?
#1: STABLE RATES & COST SAVINGS

IL: Average 25% savings off ComEd and Ameren rates

MA: Average 6% lower rates for default supply; small premium for 100% green

CA: Competitive rates for 50% - 100% green supply; small premium for 100% green

RI: Over $28 M saved by 37 municipal accounts
WHY DO IT?

#2 GHG EMISSIONS REDUCTION

Our Plan to Reduce Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Local Actions</th>
<th>Metric Tons of CO₂e Reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage Transit-Oriented Housing</td>
<td>23</td>
</tr>
<tr>
<td>Increase Walking and Biking for Local Trips</td>
<td>524</td>
</tr>
<tr>
<td>Increase Public Transit Use</td>
<td>535</td>
</tr>
<tr>
<td>Increase Ridesharing</td>
<td>311</td>
</tr>
<tr>
<td>Accelerate Adoption of Electric Vehicles</td>
<td>731</td>
</tr>
<tr>
<td>Improve Energy Efficiency in Residential Buildings</td>
<td>954</td>
</tr>
<tr>
<td>Improve Energy Efficiency in Commercial Buildings</td>
<td>296</td>
</tr>
<tr>
<td>Reduce Energy Use in New Residential Buildings</td>
<td>116</td>
</tr>
<tr>
<td>Reduce Energy Use in New Commercial Buildings</td>
<td>13</td>
</tr>
<tr>
<td>Install Solar Energy Systems in Residential Buildings</td>
<td>1,294</td>
</tr>
<tr>
<td>Install Solar Energy Systems in Commercial Buildings</td>
<td>560</td>
</tr>
<tr>
<td>Marin Energy Authority</td>
<td>6,053</td>
</tr>
<tr>
<td>Divert All Food Waste from Landfills</td>
<td>395</td>
</tr>
<tr>
<td>Reduce Solid Waste Disposal to Landfills</td>
<td>443</td>
</tr>
<tr>
<td>Reduce Hot Water Use in Community</td>
<td>922</td>
</tr>
<tr>
<td>Community Participation in Carbon Offset Programs</td>
<td>812</td>
</tr>
<tr>
<td>Increase Tree Stock</td>
<td>2</td>
</tr>
<tr>
<td>Improve Government Operations (see below)</td>
<td>254</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>14,238</td>
</tr>
<tr>
<td>State Actions</td>
<td>6,176</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20,414</td>
</tr>
</tbody>
</table>

Excerpt from Town of San Anselmo, CA -- Climate Action Plan
## WHY DO IT?

### #3 REDIRECTED REVENUES

Economic Projections for CCA programs in Northern CA Cities and Counties

<table>
<thead>
<tr>
<th>Area</th>
<th>TOTAL LOAD</th>
<th># OF ACCOUNTS</th>
<th>EST. RATEPAYER REVENUE (in Millions)</th>
<th>NEW RENEWABLE estimated at 50% of load by 2020</th>
<th>COMPLIANCE COST SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marin</td>
<td>150 MW</td>
<td>90,000</td>
<td>$90-100 M</td>
<td>65 MW</td>
<td>$263 M</td>
</tr>
<tr>
<td>Sonoma</td>
<td>350 MW</td>
<td>170,000</td>
<td>$170 M</td>
<td>175 MW</td>
<td>TBD</td>
</tr>
<tr>
<td>San Francisco Phase I</td>
<td>30-40 MW</td>
<td>75,000</td>
<td>$31.2 M</td>
<td>30-40 MW Phase 1 @ 100% renewable</td>
<td></td>
</tr>
<tr>
<td>San Francisco Full Load</td>
<td>450 MW</td>
<td>350,000</td>
<td>$328 M</td>
<td>225 MW</td>
<td></td>
</tr>
<tr>
<td>San Joaquin</td>
<td>260 MW</td>
<td>112,000</td>
<td>$52 M</td>
<td>130 MW</td>
<td></td>
</tr>
<tr>
<td>East Bay Cities</td>
<td>540 MW</td>
<td>275,000</td>
<td>$230 M</td>
<td>270 MW</td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>1730 MW</td>
<td>977,000</td>
<td>$855 M</td>
<td>865 MW</td>
<td></td>
</tr>
</tbody>
</table>
WHY DO IT?

#4 ECONOMIC DEVELOPMENT

Jobs from Renewables

- Solar
- Wind
- Coal
- Natural Gas

Jobs per Megawatt

- Blue: Construction, manufacturing and installation
- Green: Ongoing maintenance and fuel

Putting Renewables to Work: How Many Jobs Can the Clean Energy Industry Create? (UC Berkeley)
Local Ownership Boosts Jobs from Renewables

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Jobs per Megawatt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>12</td>
</tr>
<tr>
<td>Wind</td>
<td>4</td>
</tr>
<tr>
<td>Coal</td>
<td>1</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>1</td>
</tr>
</tbody>
</table>

Legend:
- Blue: Construction, manufacturing and installation
- Green: Ongoing maintenance and fuel

WHY DO IT?

#4 ECONOMIC DEVELOPMENT
WHY DO IT?

#5 CONSUMER & COMMUNITY BENEFITS

CCA offers consumers an energy choice that reflects their goals and values without the tax burden of maintaining an aging delivery system.

CCA allows communities to choose their electricity supply, use/build local generation, and set rates locally.

CCA allows for local program optimization: integration of solar PACE, energy efficiency, net metering, feed-in-tariff, solar shares, green business programs, etc.

CCA helps communities meet State regulations and environmental mandates.
WHAT ARE THE RISKS...
And how are they mitigated?

Utility **Opposition/Opt Out Risk** (in certain states)

Price **Risk** (natural gas; expiring contracts)

Political **Risk** (local officials must be engaged early on)

Regulatory **Risk** (especially with utility opposition)

Operations **Risk** (in states that form a separate JPA)
GETTING STARTED

✓ Education and assistance: Ask for help!

✓ Understand your State regulatory, compliance and political environments; find champions/build bi-partisan support.

✓ Be clear about how CCA meets State and local objectives; Remember: It’s more than just price!

✓ Once State legislation is enacted, CCA efforts go local.

“CCA is not a liberal or conservative thing-- It’s a business tool that reflects the values of the region.” – D. Orth, Kings River Conservation District
CCA CASE STUDY - Marin Clean Energy

- First and only operating CCA program in California
- 50 – 100% renewable power available to customers
- Currently serving approximately 14,000 customers
  - Expanding to approximately 95,000 in July 2012
- Currently reducing 15,420 tons of annual GHG reductions
  - After July enrollment reductions will increase to 39,027 tons annually
- Reinvesting in local community by providing funding for installing electric vehicle charging stations, energy efficiency rebates, solar rebates, and supporting local nonprofit organizations
CCA CASE STUDY - Marin Clean Energy

- 2010 – MEA exceeded California’s Renewable Portfolio Standard by 33%
- 2011 – 27.8% renewable content. Reports are due on March 1
- EPA Green Power Partner & Green Power Leadership Club in 2010 and 2011
- Investing in new renewable energy projects
  - 45 MW new solar in California planned for operation in 2014
  - 3.2 MW of new biogas in California planned for operation in 2013

### Renewables Portfolio Standard/MEA Procurement – 2010

![Renewables Portfolio Standard/MEA Procurement Chart](chart.png)
CCA CASE STUDY - Marin Clean Energy

Portfolio Highlights:
1) 66.1% Carbon Free/Neutral
2) 27.8% RPS-Eligible Renewable
3) 35.8% Renewable
4) Exceeded current CA RPS by nearly 39%
5) Portfolio currently exceeds CA’s 2017 RPS requirement (27%)

MCE 2011 Resource Mix

- Large Hydro - Tri Dam, San Joaquin CA
- Biogas - High Desert, CA
- Wind - Big Horn Wind, WA
- Wind - Klondike Wind Power III LLC, OR and Others
- System - Fossil Fuel
- Biomass - Sierra Pacific Burlington, WA
- System - Large Hydro
- Biogas - Columbia Ridge, OR
- Wind - Nine Canyon, WA
- Solar - Schulz Solar Farm, Stanislaus CA
- System - Renewables

- 33.9%
- 19.4%
- 6.4%
- 8.2%
- 1.6%
- 1.1%
- 9.3%
- 3.3%
- 3.3%
- 10.7%
- 0.7% 2.1%
Questions?

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