Marin Clean Energy
A not-for-profit, community renewable energy provider
About MCE

2008: Marin Clean Energy formed

2010: Customer service start

2015: Serving 165,000 customers including Marin County, Richmond, San Pablo, Benicia El Cerrito and unincorporated Napa County

Highlights to-date:

• 59,421 tons of greenhouse gas reductions

• $5.9 million customer savings in 2014

• $516 M committed to new CA-built renewable energy projects
MCE Board of Directors

- 17-Member Board of Directors
- Local government elected officials
- Public oversight of rates, power sources and policies
- Report to California Public Utilities Commission, California Energy Commission, and customers
Customer Choice

- **PG&E**
  - Light Green
  - 50% Renewable
  - 22%* Renewable
  - *Most recently reported by PG&E

- **MCE**
  - Deep Green
  - 100% Renewable

- **MCE Local Sol**
  - 100% Local Solar
## 2013 Electric Power Content Mix

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioenergy</td>
<td>22%</td>
<td>51%</td>
<td>100%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>4%</td>
<td>6%</td>
<td>0</td>
</tr>
<tr>
<td>Small hydroelectric</td>
<td>5%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Solar</td>
<td>2%</td>
<td>12%</td>
<td>0</td>
</tr>
<tr>
<td>Wind</td>
<td>5%</td>
<td>&lt;1%</td>
<td>0</td>
</tr>
<tr>
<td>Large Hydroelectric</td>
<td>10%</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>28%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nuclear</td>
<td>22%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unspecified</td>
<td>18%</td>
<td>39%</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2012 GHG Emissions</strong> (lbs CO2e/MWh)</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>445</td>
<td>380</td>
<td>0</td>
</tr>
</tbody>
</table>
### Residential Cost Comparison

<table>
<thead>
<tr>
<th>Example Monthly Residential Electric Charges*</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>MCE Local Sol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E Electric Delivery (all customers)</td>
<td>$37.30</td>
<td>$37.30</td>
<td>$37.30</td>
<td>$37.30</td>
</tr>
<tr>
<td>Electric Generation (all customers)</td>
<td>$45.12</td>
<td>$37.97</td>
<td>$42.60</td>
<td>$65.75</td>
</tr>
<tr>
<td>Additional PG&amp;E Fees (MCE customers only)</td>
<td>-</td>
<td>$5.71</td>
<td>$5.71</td>
<td>$5.71</td>
</tr>
<tr>
<td>Average Total Cost</td>
<td>$82.42</td>
<td>$80.98</td>
<td>$85.61</td>
<td>$108.76</td>
</tr>
</tbody>
</table>

- **PG&E**
- MCE Light Green
- MCE Deep Green
- MCE Local Sol

*The above comparison is based on a typical usage of 463 kWh at PG&E’s rates effective as of March 1st and MCE’s current rates for the April 2015 to March 2016 fiscal year under the Res-1/E-1 rate schedule. Costs shown are an average of summer and winter rates in baseline territory X with gas heating; actual differences may vary depending on usage, rate schedule and other factors.

**Most recently verified.

- Delivery rates stay the same
- Generation rates vary by service option
- PG&E assesses additional fees for MCE customers
- **Light Green is less expensive than PG&E service**
### Commercial Cost Comparison

<table>
<thead>
<tr>
<th>Example Monthly Commercial Electric Charges*</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>MCE Local Sol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E Electric Delivery (all customers)</td>
<td>22% ** Renewable Energy</td>
<td>$127.29</td>
<td>$127.29</td>
<td>$127.29</td>
</tr>
<tr>
<td>Electric Generation (all customers)</td>
<td>50% Renewable Energy</td>
<td>$122.75</td>
<td>$98.62</td>
<td>$110.72</td>
</tr>
<tr>
<td>Additional PG&amp;E Fees (MCE customers only)</td>
<td>100% Renewable Energy</td>
<td>$127.29</td>
<td>$13.31</td>
<td>$13.31</td>
</tr>
<tr>
<td></td>
<td>Average Total Cost</td>
<td>$250.05</td>
<td>$239.22</td>
<td>$251.32</td>
</tr>
</tbody>
</table>

*The above comparison is based on a typical usage of 1210 kWh at PG&E’s rates effective as of March 1st and MCE’s current rates for the April 2015 to March 2016 fiscal year under the Com-1/A-1 rate schedule. Costs shown are an average of summer and winter rates; actual differences may vary depending on usage, rate schedule and other factors.

**Most recently verified.

- Delivery rates stay the same
- Generation rates vary by service option
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Cost Savings to Cities & Special Districts

• **City of San Rafael**
  ~$30,000 (2013)
  ~$47,000 (2014)

• **City of Richmond**
  ~$107,000 (2014)

• **West Contra Costa Unified School District**
  ~$66,000 (2014)

• **City of Novato**
  ~$9,000 (2013)
MCE customers receive the exact same savings from these programs as PG&E customers. CARE and FERA are programs which discount electricity for households with limited income. Medical Baseline is a program which effectively discounts electricity for customers with necessary medical equipment consuming electricity. Both are state programs administered by PG&E. They will continue to provide the same discount on MCE customer bills.

Current charges include a discount of $12.54 for CARE.
Local Generation Opportunities

- **Feed In Tariff (FIT)** – a standard offer 20 year contract for renewable projects <1 MW located within MCE’s service territory.

- **Net Energy Metering (NEM)** – MCE serves 3,800 rooftop solar customers, totaling 35.2 MW.
# Feed-In Tariff (FIT)

Prices Shall Apply Under the Following Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Peak Energy Prices (20-year Term, $/MWh)</th>
<th>Baseload Energy Prices (20-year Term, $/MWh)</th>
<th>Intermittent Energy Prices (20-year Term, $/MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 1</td>
<td>$137.66</td>
<td>$116.49</td>
<td>$100.57</td>
</tr>
<tr>
<td>Condition 2</td>
<td>$120.00</td>
<td>$105.00</td>
<td>$95.00</td>
</tr>
<tr>
<td>Condition 3</td>
<td>$115.00</td>
<td>$100.00</td>
<td>$90.00</td>
</tr>
<tr>
<td>Condition 4</td>
<td>$110.00 <strong>Yellow</strong></td>
<td>$95.00</td>
<td>$85.00</td>
</tr>
<tr>
<td>Condition 5</td>
<td>$105.00</td>
<td>$90.00</td>
<td>$80.00</td>
</tr>
</tbody>
</table>

San Rafael Airport 972kW Feed in Tariff Project, 2012
Customer-Sited Solar

$50,000 towards residential solar rebates for low-income customers

Generous Net Energy Metering

• Premium credits (retail rate + 1¢/kWh)
• Credits never zero out
• Annual cash out payment for over-generation
Local MCE Programs and Pilots

- Energy Efficiency program, funded by Public Goods Charge at $2 million + per year
- Electric vehicle charging stations installed
- Home Area Network pilot program with Bidgley complete
- Commercial customer battery storage pilot program with Tesla in process
- Residential load-shifting pilot program with Schneider Electric in process
Energy Efficiency Programs Highlights

• No-cost energy assessments for multifamily properties and businesses: Valued at $3,000 - $5,000

• No-cost direct installs for multifamily tenant units

• On-bill financing loans with River City Bank

• Behavior-based residential efficiency program

• Cash rebates (30-55% of project costs) for commercial and multi-family customers
Thank you! Questions?
mceCleanEnergy.org | 1 (888) 632-3674