ADAPTING TO CLIMATE CHANGE IN CHULA VISTA

California Climate Action Planning Conference
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NO MONEY

NO EXPERIENCE
Climate Adaptation Planning

Review of “risk” & potential adaptation strategies

Stakeholder-driven planning process
## Climate Adaptation Planning

### Chula Vista Climate Change Impacts & Adaptation Options

#### ENERGY

<table>
<thead>
<tr>
<th>IMPACT TO SAN DIEGO REGION</th>
<th>VULNERABILITY</th>
<th>ADAPTATION OPTIONS</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pressure on Local Systems &amp; Services</td>
<td>Risk*</td>
<td>City Jurisdiction?</td>
</tr>
<tr>
<td>A</td>
<td>Higher peak demand and transmission inefficiencies in summertime (when cooling needs are greatest) make stable and adequate supplies increasingly challenging</td>
<td>HIGH</td>
<td>YES</td>
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<td></td>
<td>Average annual temperatures 1.5-4.5°F hotter, additional summertime warming</td>
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<tr>
<td>B</td>
<td>Increasingly expensive energy costs expose vulnerable populations to expend higher proportion of income on energy</td>
<td>MEDIUM</td>
<td>NO</td>
</tr>
</tbody>
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### IMPACTS & RISK

- **Pressure on Local Systems & Services**
- **Risk**:
  - **Low**: Likelihood: 1, Consequence: 2, Total: 7
  - **Medium**: Likelihood: 3, Consequence: 3, Total: 15
  - **High**: Likelihood: 5, Consequence: 5, Total: 25

### Adaptation Options

1. **Adopt a building energy rating and disclosure program**<br>YES YES YES
2. **Require LEED or equivalent standards for residential, commercial, industrial projects to increase energy efficiency**<br>YES YES NO (Duplicative)
3. **Promote on-site generation or energy storage (including thermal) to offset peak energy needs**<br>YES YES NO (Duplicative)
4. **Establish a building retrofit program to reduce energy consumption during periods of peak demand**<br>YES YES NO (Duplicative)
5. **Implement time-of-use or peak demand energy pricing (SDG&E already does for commercial and industrial customers)**<br>NO YES YES
6. **Enroll all municipal facilities in demand response programs (if applicable)**<br>YES YES YES
7. **Identify emergency centers as priorities for onsite renewable energy sources to reduce susceptibility to lapses in the conventional energy supply**<br>YES YES YES
8. **Update emergency response plans to account for increased potential for black outs in summertime**<br>YES YES YES
9. **Develop outreach and incentives appropriate for energy efficiency/renewable energy upgrades in the rental market where there are split incentives for property-owner and electricity rate payer (renter)**<br>YES YES NO (Duplicative)
10. **Target outreach of existing efficiency upgrade programs and incentives to low-income neighborhoods and small businesses**<br>YES YES NO (Duplicative)
11. **Target urban heat island mitigation programs in low-income neighborhoods, who have proportionately harder time cooling homes**<br>YES NO YES

*Risk = Likelihood of an Impact X Consequence of the Impact; each factor scored from 1 to 5 and overall risk was categorized as “Low” (1-7 total score), “Medium” (8-15 total score), and “High” (16-25 total score).
Climate Adaptation Strategies

- Cool Paving & Roofs
- Shade Trees
- Water Reuse
- Extreme Heat & Wildfires
- Open Space Mgmt
- Sea Level Rise
Mainstreaming Adaptation?

- City Goals & Policies
- Business Outreach
- HR Employee Training
- CIP Design Guidelines
- Housing Element
- Building Codes & Standards
- Community Awards
Initial Implementation

Sea Level Rise Policies

• *Bayfront Master Plan/Port of SD*
  CEQA review

• *Grading Ordinance*
  Tidally-influenced areas
  Accommodate 50 yrs of SLR

• *Subdivision Manual* (5 yr updates)
  Highest high tide
  + 16” of sea level rise
Collaborations & Partnerships

- Climate Collaborative
- San Diego Region
- The Climate Registry
- ICLEI
- Local Governments for Sustainability
- California Climate Action Registry
- Mayors for Climate Protection
- Clean Cities
- U.S. Department of Energy
- GCC
- Beacon Award
- Green Power Partnership
- City of Chula Vista
Lessons Learned

• Avoid analysis paralysis
• Make a plan that can actually be implemented
• Regular updates to leaders
• Celebrate successes!!!
THANK YOU!

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