

# Welcome to the Workshop

Workshop on Modern Evaporative Cooling Technologies

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# Electricity Demand: Cooling is the Culprit

- July peak demand 30- 40% above January
- Cooling loads cause the peak (duh...)
- Not enough past focus on applying public goods revenues to the cooling challenge
- Time to start thinking of cooling peak reducers as distributed generation
- Less expensive, better aligned than PV

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# Dry Climate Opportunities

- Growing recognition of climate-specific HVAC needs
- In the West we can:
  - Reduce over-dehumidification
  - Cool building mass at night
  - Reduce blowers sized for peak cooling
  - Apply direct & indirect evaporative cooling
  - Efficiently apply chilled water thermal storage

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# The Western Cooling Efficiency Center

- Launched in April 2007
- Element of new UC Davis Energy Efficiency Center (EEC)
- EEC launched in 2006 with support from the California Clean Energy Fund (CalCEF)
- WCEC following successful model of the California Lighting Technology Center
- WCEC focus is helping emerging “dry climate” cooling technologies cross the “Valley of Death”

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# WCEC Activities

- Establish demand, energy goals; track progress
- Identify/nurture promising technology options
- Partner with Affiliates to achieve goals
- Plan and manage demonstration projects
- Educate-
  - Host/support events
  - Maintain “clearinghouse” database
- Institutionalize knowledge on water use and maintenance issues

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# WCEC “Western Cooling Challenge”:

- By 2020, reduce CA’s cooling demand and energy use, from 2007 baseline, by:
  - New buildings-
    - peak demand 100%
    - energy use 50%
  - Existing buildings:
    - peak demand 50%
    - energy use 25%

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# Let the Workshop Begin!

- Goals:
  - Partner for progress
  - Avoid “preaching to the choir”
  - Build continuing relationships
  - Identify missing partners and stakeholders
  - Develop an action plan
  - Consider need for a “next event”

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