



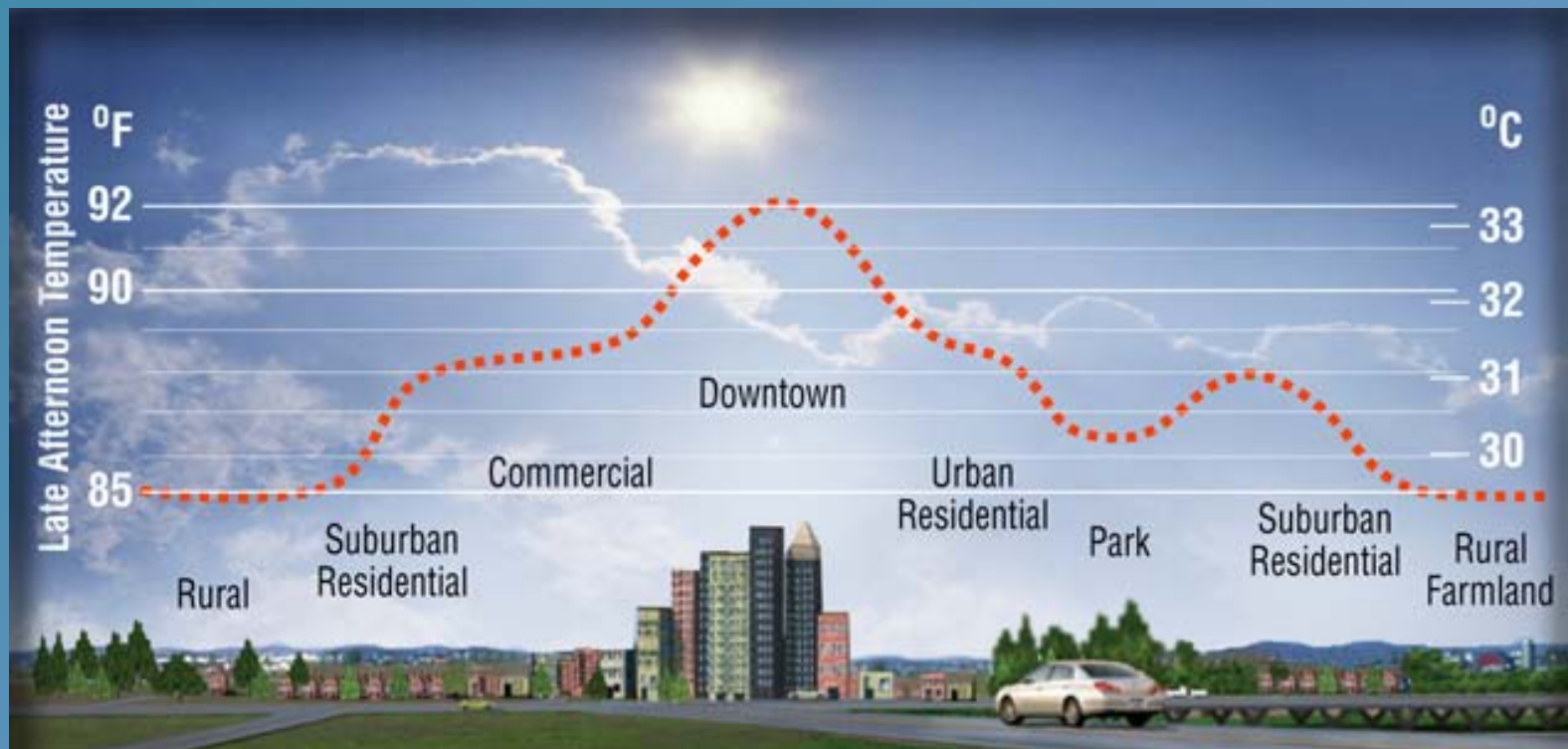
# San Jose Cool City Pilot Project

Partnership on Heat Islands and  
Urban Sustainability



# WHY?

To accelerate the use of “cool” surface technologies in cities & communities in order to mitigate urban heat islands, save energy, reduce greenhouse gases, and improve urban livability



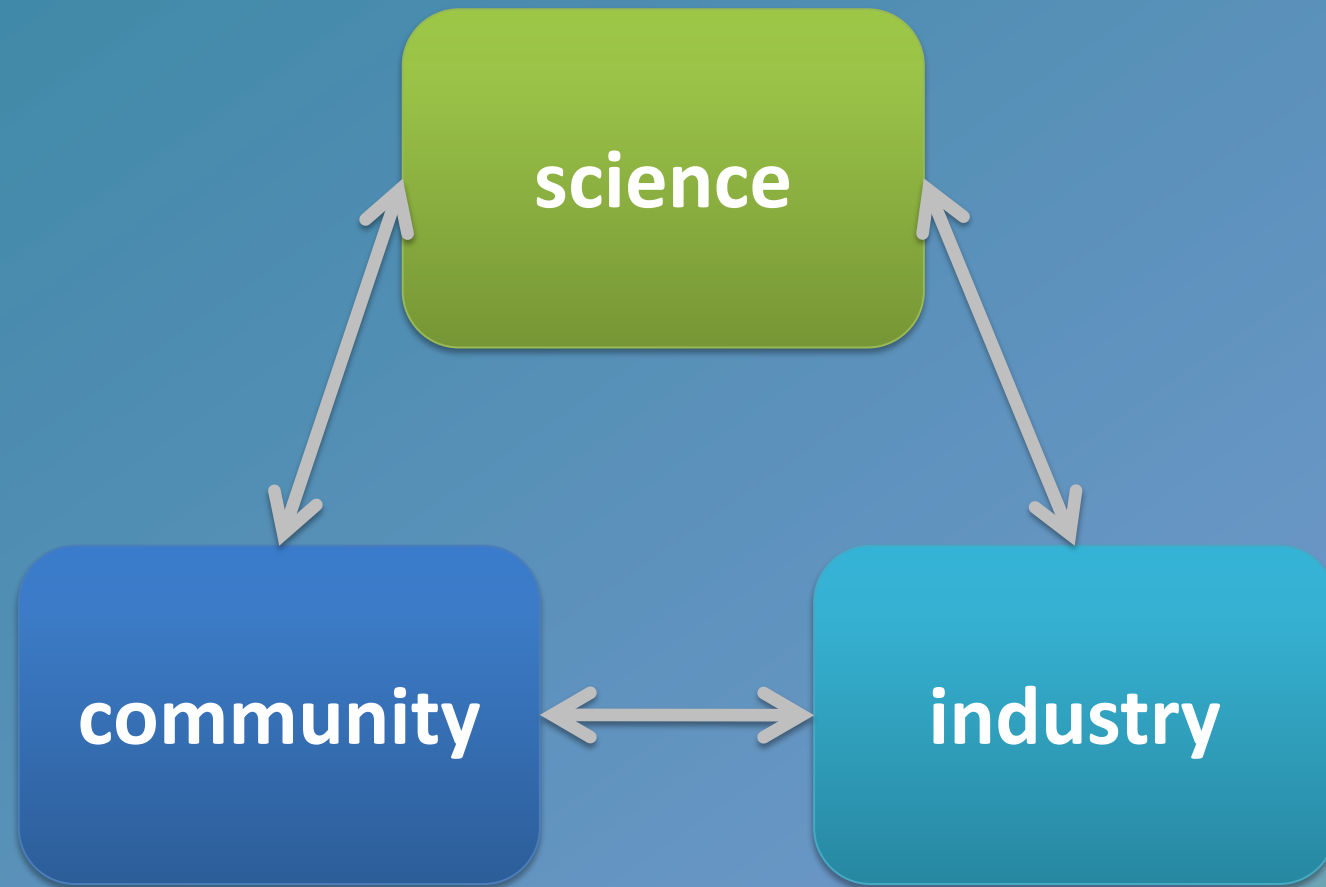
# Founding Partners

- Lawrence Berkeley National Laboratory
- City of San Jose
- Global Cool Cities Alliance (GCCA)
- U.S. Environmental Protection Agency



City of San Jose

# Partner Framework



# Vision

- Create an urban-scale innovation platform addressing Urban Heat Islands and Sustainable Urban Development in the following areas:
  - **Urban Livability, Public Health, Energy Efficiency**
  - **Emerging Technology Testing and Demonstration**
  - **State & Local Policy and Incentives Development**
  - **Workforce Development**
  - **Community and Market Transformation**

# Roles to achieve vision

- LBNL

- Research & monitoring
- Contact for industry technology testing & demonstration

- GCCA

- National/international communications with cities/communities
- Contact for developing city planning tools/resources

- San Jose

- “Cool zone” implementation
- Public/private outreach & engagement in San Jose
- Integration of workforce development & training

- U.S. EPA

- National communications with cities/communities



# Objectives and Timeline

	Short –Term (1-2 YR)	Mid-Term (3-5 YRS)	Long-Term (6-10 YRS)
<b>GOAL</b>	<i>Establish City-Based Testing Infrastructure for Implementing Cool Surface Technologies, Practices, and Planning</i>	<i>Develop Economic, Policy, and Market Case for Wide-Scale Implementation of City Cooling Infrastructure Programs, and Establish a Proving Ground for Next Generation Systems</i>	<i>Measure Atmospheric and Climate Change Effects of City Cooling, Develop City Planning Approach to Sustainable Infrastructure Development</i>
<b>Science</b>	<ul style="list-style-type: none"> <li>- Pilot Site Selection &amp; Inventory</li> <li>- Scoping and Research Planning</li> <li>- Baseline Measurement &amp; Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>- Begin Air Monitoring</li> <li>- Begin Zone Modeling</li> <li>- Advanced Materials Research</li> </ul>	<ul style="list-style-type: none"> <li>- Begin Atmospheric Monitoring</li> <li>- Climate Effects of Albedo &amp; ETo Changes</li> <li>- Incorporate Water, Energy, Transportation Factors</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>- Community Awareness Plan</li> <li>- Engage Community Partners</li> <li>- Policy and Incentives Review</li> <li>- Identify Candidate Cool Zone Technology Demonstration &amp; Testing Sites</li> </ul>	<ul style="list-style-type: none"> <li>- Policy and Incentive Rollout</li> <li>- Cost/Benefit Assessments</li> <li>- Develop City Partner Network to Share Practices and Tools</li> </ul>	<ul style="list-style-type: none"> <li>- Sustainable City Planning Framework</li> <li>- Integrated Climate Action and Sustainability Programs</li> <li>- Perceived Human Comfort &amp; Safety Assessments</li> </ul>
<b>Market</b>	<ul style="list-style-type: none"> <li>- Engage Industry/Technology Partners</li> <li>- Integration of workforce development and training partners</li> </ul>	<ul style="list-style-type: none"> <li>- Pre-Market Material Demonstration</li> <li>- Construct Cool Surface &amp; Technology Demonstrations</li> </ul>	<ul style="list-style-type: none"> <li>- Expand Cool Surface Demonstrations</li> <li>- Expand Technology Demonstrations</li> </ul>



# A Platform For Collaboration

- Brings together Research, Government, and Industry roles in creating a low-carbon Urban Infrastructure
- Long-term monitored urban district is a proving ground for technology, community engagement, and environmental and economic benefits
- Will produce critical information and guidelines for an integrated approach to Urban Planning and Sustainability



# Team Investment So Far

- Established 4-way Partnership via MOU between LBNL, San Jose, EPA, GCCA
- Planning and outreach/feedback sessions
- Inclusion of San Jose in DOE and CEC funded Heat Island and Cool Roofs research efforts

# Join us!

- Industry collaborative
- Cool surface & technology demonstration partners
- Research consortium
- Community implementation team

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