



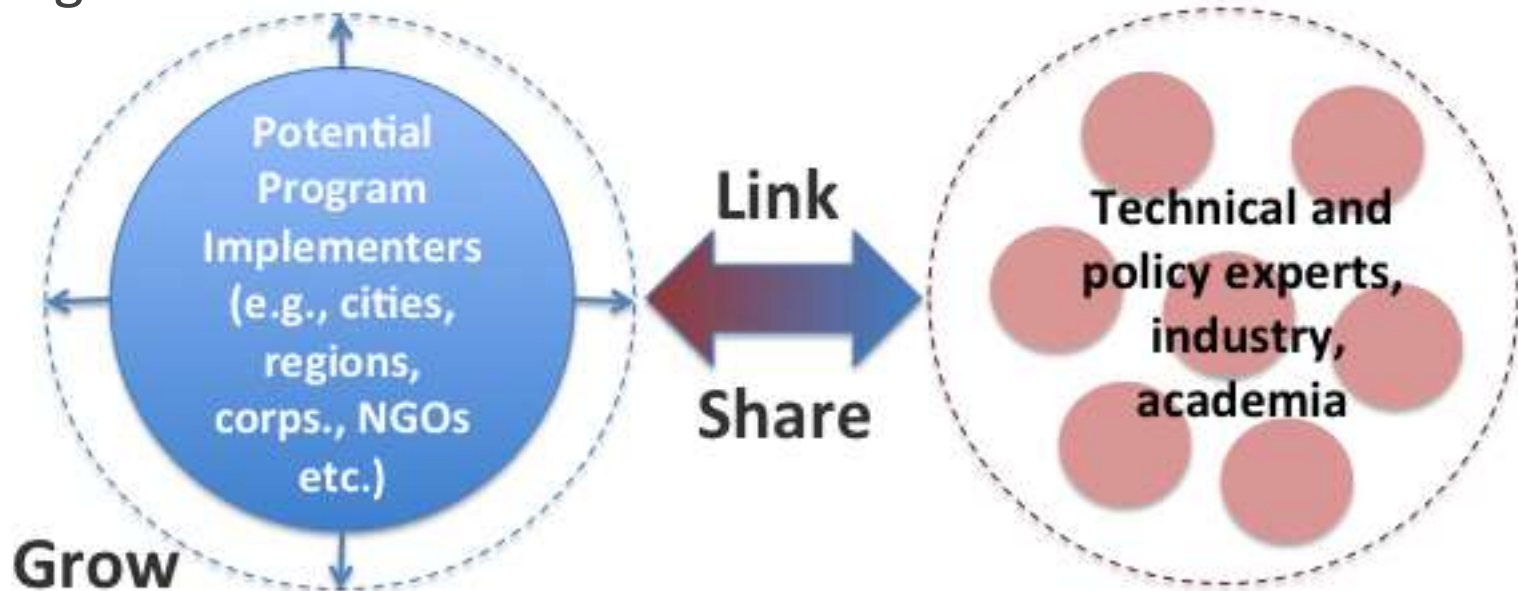
Cool Roofs and Pavements Working Group

Cool Surfaces for Energy Efficient Buildings Conference
Mexico City, Mexico
February 28, 2012



Global Cool Cities Alliance (GCCA)

The Global Cool Cities Alliance is dedicated to advancing policies and actions that increase the solar reflectance of our buildings and pavements as a cost-effective way to promote cool buildings, cool cities, and to mitigate the effects of climate change through global cooling.



GCCA Objectives & Programs

- Outreach to cities, regions, national governments, businesses and others
- Launched Cool Roofs and Pavements Toolkit – www.coolrooftoolkit.org
- Disseminating new research – *(comprehensive knowledge base coming soon)*
- Policies, codes and programs



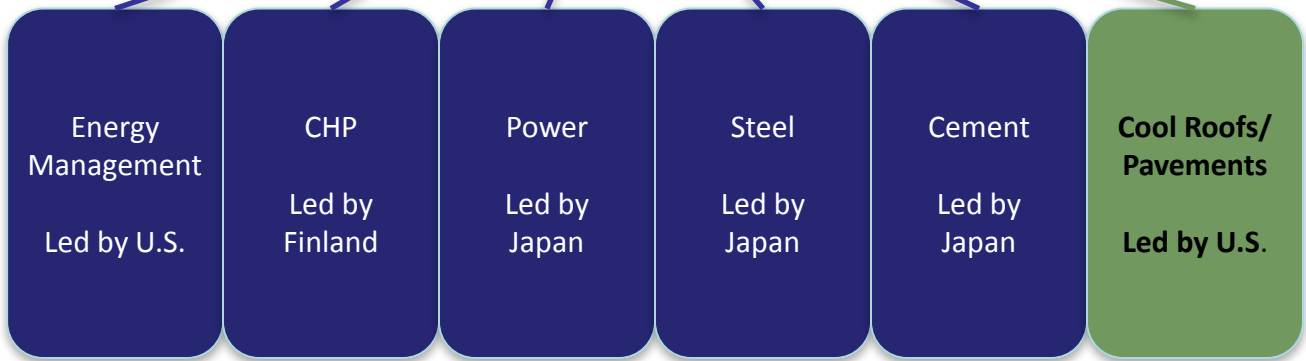
Cool surfaces are a high-impact, cost-effective investment that:

- Improve buildings by cutting net energy use, help roofs and the equipment on them last longer, and improve the comfort of unconditioned buildings.
- Generate significant economic and societal benefits by reducing heat and pollution related illness, shaving peak electricity demand, and improving the quality of life in urban areas.
- Help us both mitigate and adapt to climate change risks.

Global Superior Energy Performance Partnership



GSEP consists of 6 working groups



GCCA is U.S. DOE's Operating Agent for the Working Group

The Cool Roofs and Pavements Working Group

- First met in September, 2011.
- Four official members – India, Japan, Mexico, and the U.S.
 - Active participation from Brazil and South Africa
- Working Group governments represent 8 of the 20 largest cities.
- Robust participation from industry, NGOs, and technical experts

Participants

- AGC Chemicals America
- American Council for an Energy Efficient Economy
- Arkema, Inc
- Asahi Glass Co.
- Brazilian Association for Standardization (ABNT)
- Bureau of Energy Efficiency, India
- CEMEX
- Center for Environmental Innovation in Roofing
- Concordia University, Canada
- Council of North American Insulation Manufacturers Association
- The Dow Chemical Company
- Glazing Society of India
- Global Cool Cities Alliance
- International Institute for Information Technology – Hyderabad
- Japan Paint Manufacturers Association
- La Asociación de Empresas para el Ahorro de Energía en la Edificación, Mexico
- Lawrence Berkeley National Labs
- Ministry of Economy, Trade and Industry (METI), Japan
- National Center for Research and Technological Development (CENIDET), Mexico
- The National Commission for Energy Efficiency, Mexico
- National Energy Efficiency Agency - South Africa
- New Energy and Industrial Technology Development Organization, Japan
- Oak Ridge National Lab
- Panache/Aesthetic Solutions, India
- Polyisocyanurate Insulation Manufacturers Association
- Reflective Roof Coatings Institute
- U.S. Department of Energy
- University of Santa Catarina, Brazil
- WinBuild
- World Business Council for Sustainable Development

Working Group Initial Objectives

- Collect information and tools of existing working group partners in an accessible repository. Draft case studies and identify best practices of cool roof and pavement development efforts.
- Promote cool roofs and pavements and identify or develop local champions to drive development and implementation.
- Develop projects with partners to demonstrate the efficacy of cool roofs and pavements.
- Provide technical assistance to develop code infrastructure.

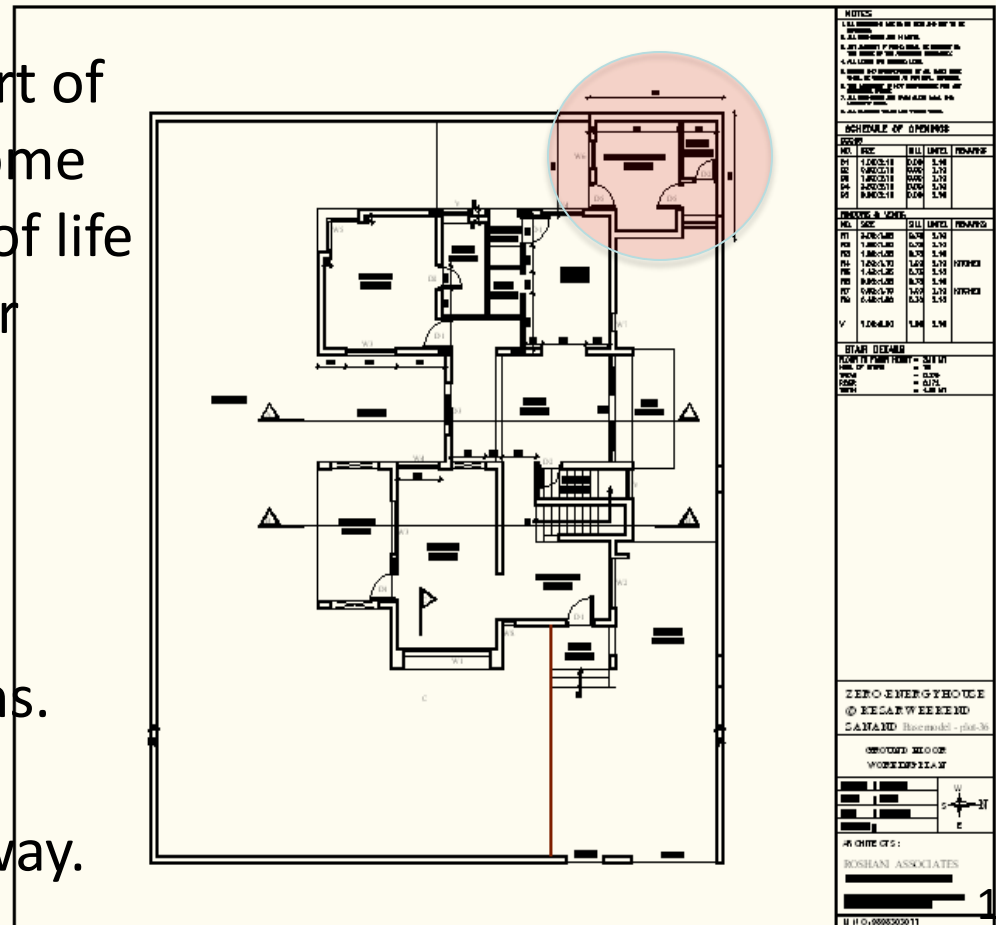
Three Emerging Working Group Themes

- Low-Income Housing
- Cool Pavements
- Product Testing, Rating, and Labeling – i.e., “code infrastructure”

Theme: Low-Income Housing

Cool Roof Test on Indian Low Income Housing Units

- Improve the thermal comfort of new and rehabbed low-income housing to improve quality of life and forestall the need for air conditioning.
- Major area of construction growth. Often built to a common set of specifications.
- Pilot project in India underway.



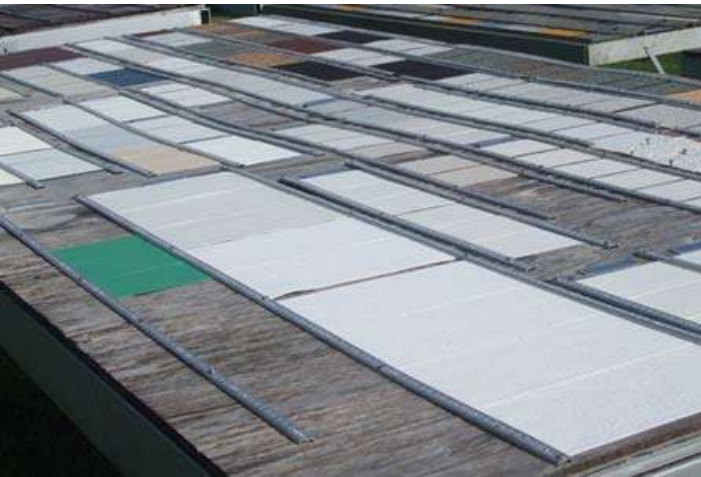
Cool Pavements

- Pavements are a major part of the urban fabric – nearly 40%.
- Research ongoing on permeable and high-albedo pavement materials and technologies. Forum will catalog existing research and facilitate data sharing.



Code Infrastructure – Testing, Rating, and Labeling

- Market confidence in product quality and performance is key to effective codes.
- Working Group currently engaged in India and Brazil.



Opportunities for Participation

- Mexican government and private sector stakeholders are key to making progress on Working Group themes.
- Knowledge sharing, technical resources, financial support, joint research, demonstration projects etc., implementation support.
- Periodic conference calls with an in-person meeting annually.



Thank You!

Kurt Shickman

Executive Director

Global Cool Cities Alliance

GlobalCoolCities.org / CoolRoofToolKit.org

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