

# The Writing's on the Wall

## Recent Cool Wall Research and Measures

February 22, 2018

Hosted by:

U.S. EPA Heat Island Reduction Program



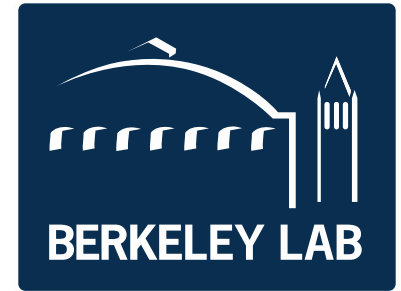
# Existing Cool Wall Codes and Programs

Haley Gilbert

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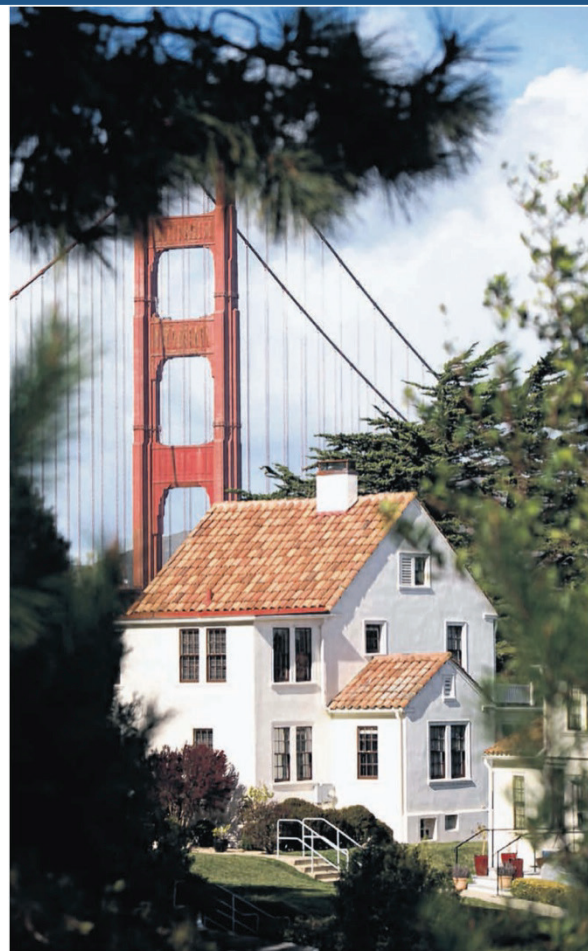


# LBL Heat Island Group



## Existing cool wall codes and programs

Haley Gilbert ([HEGilbert@LBL.gov](mailto:HEGilbert@LBL.gov))  
22 February 2018,  
EPA Heat Island webcast

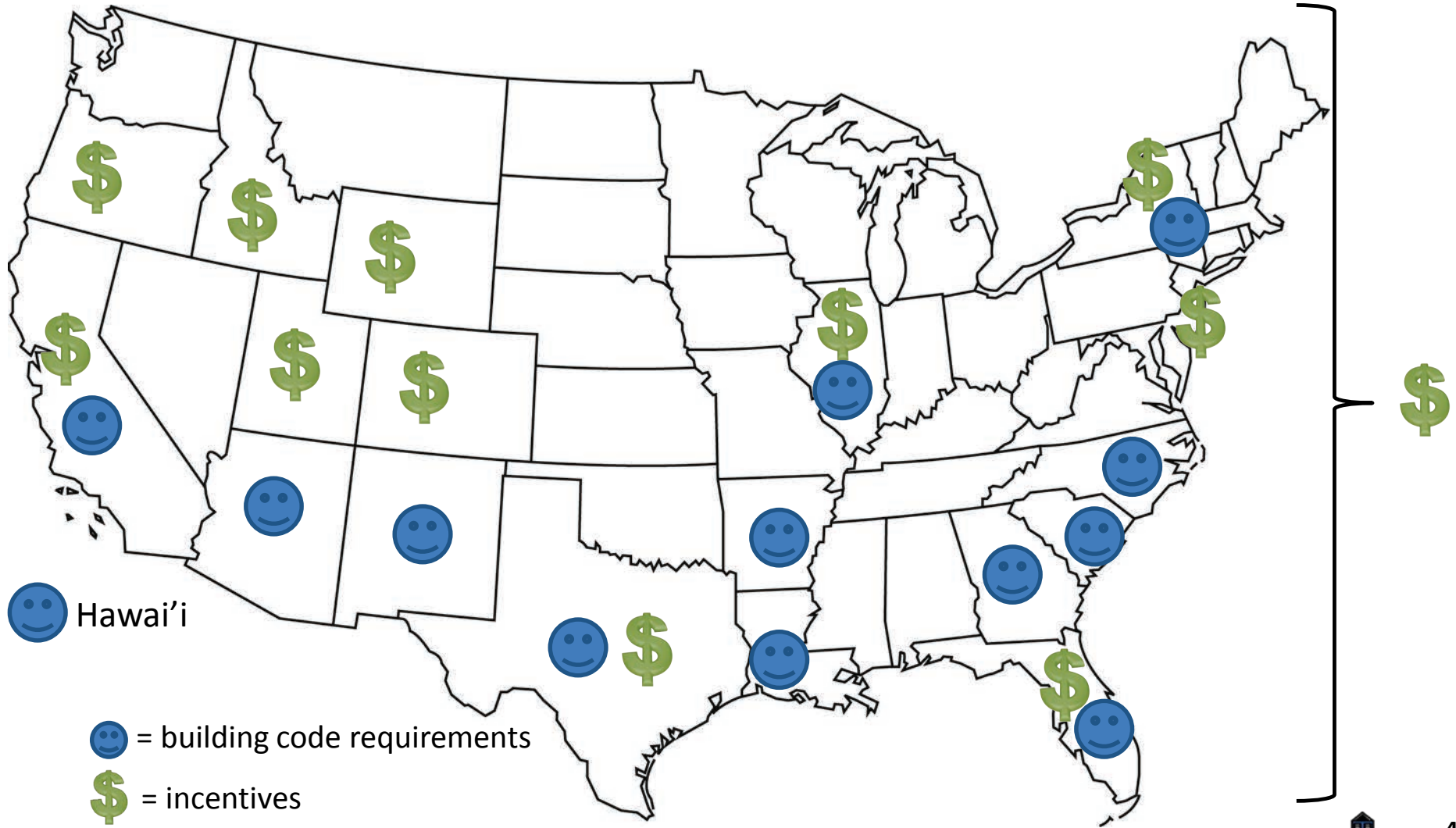


Source: Lea Suzuki, San Francisco Chronicle,  
10 February 2013

FUNDING PROVIDED BY THE  
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ENERGY  
COMMISSION**

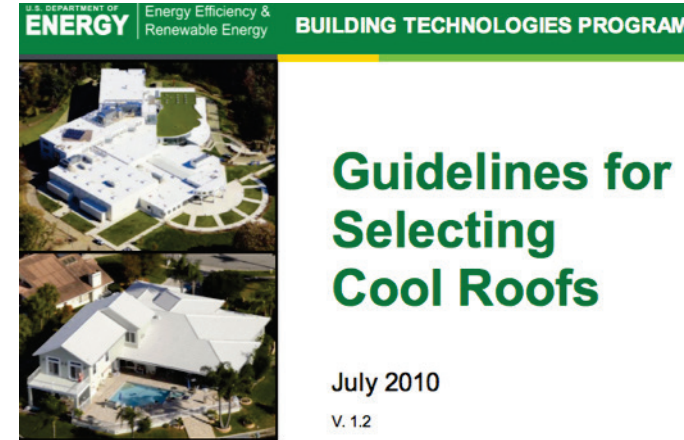


# Cool roofs are prescribed and incentivized across the U.S.



We seek to replicate the cool roof model by advancing the building and climate-appropriate adoption of cool walls

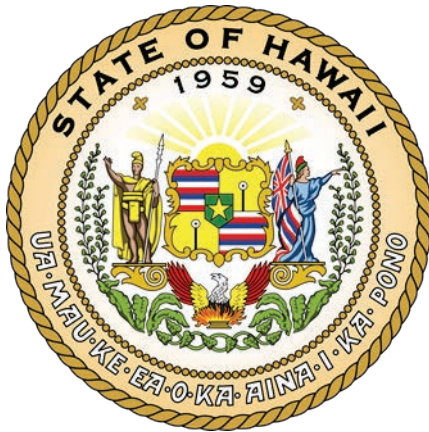
- Create **design guidelines**
- Develop language for **building codes, programs, and incentives**
- Investigate feasibility of a **cool wall rating program**



Cool walls are currently found in codes/standards and green building programs



90.1 ▪ 189.1



# We're working to expand & enhance those cool wall provisions

## Example

- ASHRAE 90.1-2016 recognizes cool walls in climate zone 0 (hot & tropical; Bangalore, India)
- Seek to
  - Extend cool walls to zones 1 – 3
  - Enhance code language



We're also working to develop new cool wall measures in codes/standards and green building programs



**U.S. Green  
Building  
Council's LEED**



**California's  
Building Energy  
Efficiency  
Standards  
(Title 24)**



**International  
Energy  
Conservation  
Code**





# We're investigating options to incentivize the use of cool wall products



Property Assessed Clean Energy (PACE) programs to finance cool wall installation

An energy efficiency utility rebate

ENERGY STAR certification for cool wall products



# We are developing cool wall guidelines for building owners/operators and communities



Building energy,  
energy cost,  
and emission  
savings



Air temperature &  
pedestrian comfort



Solar availability

# Establishing a cool wall product rating system is key

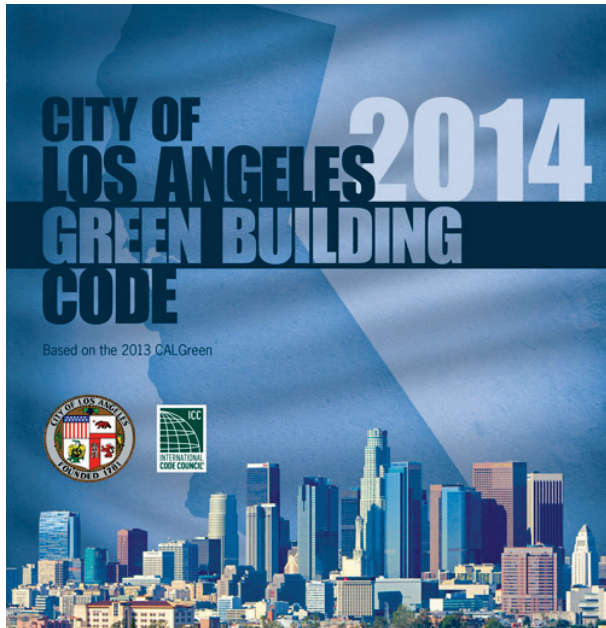


- Develop credible methods to evaluate and label products
- An independent rating system give confidence to measures in building codes/ incentives
- Model on or expand existing programs



# Cool walls can easily be implemented at the local level (i)

1. Incentivize through the use of financing programs and/or rebates



2. Include cool wall measures in local municipal building codes



# Cool walls can easily be implemented at the local level (ii)

3. Lead by example with municipal buildings
4. Feature in targeted communications for residents
5. Include in programs for weatherization or low-income household retrofits



Los Angeles City Hall



# Connect with the Heat Island Program

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202-343-9291



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