

COOL RETROSPECTIVE

Cool Surfaces in the News: 2013

The Global Cool Cities Alliance keeps a comprehensive list of media covering cool roofs, cool pavements, and a wide range of urban heat island-related issues. Periodically, we will highlight trending topics in a feature we call *Cool Retrospective*. For our inaugural issue, we look back at 2013.

2013 saw a number of cities make huge strides in mitigating the impacts of excess urban heat by adopting new cool surface policies. New studies identified the economic advantages of cool roofing and highlighted other critical benefits of reducing urban heat islands to health and to addressing environmental and social justice issues. Overall, awareness of the cool roofing opportunity continues to grow. (1)

Cities Getting Serious About UHI Mitigation

Los Angeles, CA <u>passed a law</u> requiring <u>cool</u> residential roofs – the first of its kind in the U.S. The law passed city council unanimously, in part due to The LA Department of Water and Power's newly enhanced cool roof <u>rebate program</u>. (2, 3, 4)



Credit: Shutterstock

Comparing the Economics of Roof Options

A number of outlets (including Sustainable Business and Durability and Design) covered a new study by Lawrence Berkeley National Lab. (32, 33)

Cool Surfaces as a Means to Environmental and Social Justice

New <u>research</u> highlights how vulnerable poor and minority communities are to heat. Cities such as <u>Toronto</u> and <u>Washington</u>, <u>DC</u> have identified opportunities to improve environmental and social justice by mitigating their urban heat islands. (27, 28, 29)

Sharing the Facts on Cool Roofs and Pavements

GCCA responds to a literature review of urban heat islands and cool surfaces with a point by point rebuttal. (34)

GCCA <u>issues an update</u> on the redevelopment and validation process for the Roof Savings Calculator. (35)

GCCA explains the link between <u>cool</u> roofs and global cooling. (36)

GCCA explains how <u>cool roofs can</u> work, even in cool climates. (37)

A <u>Baltimore foundation</u> lays out case for cooler roofs, and the city responds with <u>dedicated funding</u> for vulnerable populations. GCCA's Kurt Shickman explains why this is important here and here. (5, 6, 7, 8)

Dr. Catherine Hunt discusses the <u>white roofs program</u> in Philadelphia. (9)

<u>Hermosa Beach, CA</u> adopts building code that goes above state code by requiring cool roofs when re-roofing at least 50% of the building. (10)

<u>Pittsburgh</u> launches a new volunteer <u>cool roofs initiative</u> to apply reflective coatings to the roofs of city-owned buildings. (11, 12)

Research shows that when it comes to urban heat, Louisville is hardest hit among America's 50 largest cities. (13, 14)

It's hot in <u>New York</u>, but <u>NYC Cool Roofs</u> has cooled 5.7 million+ square feet of roofs so far. (15, 16)

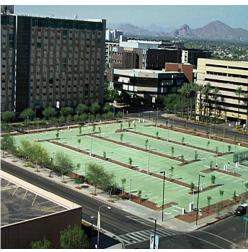
Toronto finds that excess heat hits its <u>most disadvantaged</u> citizens the hardest, and the city's <u>EcoRoof</u> program <u>gets new funding</u>. (17, 18, 19)

Melbourne, Australia is promoting cool roofs through the city's 1200 Building Projects initiative / Sustainable Melbourne Fund, which aims to retrofit two thirds of the municipality's commercial stock. (20, 21, 22)

The Intelligent Energy Europe program of the European Union (EU) put out this <u>informative video</u>, explaining the work of the EU's Cool Roofs project. (23)

Awareness of Cool Pavement Grows

A number of helpful <u>primers</u> were released this year to better understand the <u>science</u>, <u>materials</u>, <u>and impacts</u> of cool pavements. (30, 31)



Credit: Emerald Cities

Cities and UHI Mitigation Continued Japan, Malaysia, India, Hong Kong and Singapore are <u>conducting research</u> on the benefits of cool roofs. (24)

The awareness of the importance of sustainable and efficient roof choices is growing worldwide, particularly in places like <u>India</u>, <u>Mexico</u>, and <u>South</u> <u>Africa</u>, where millions of new buildings will be built over the coming years. (25, 26)







Credit: LBNL

Links Included in This Retrospective

- 1. Cool Roofs Rising http://ensia.com/articles/cool-roofs-rising/
- 2. Climate Resolve Press Release (New LA Code) http://climateresolve.org/la-becomes-first-major-city-to-mandate-cool-roofs-on-all-new-residences/
- 3. Los Angeles Becomes First Major City to Require Cool Roofs http://thinkprogress.org/climate/2013/12/18/3084181/los-angeles-cool-roofs/
- 4. LA Water & Power Rebate Program
 - https://www.ladwp.com/ladwp/faces/ladwp? afrLoop=273850458187709& afrWindowMode=0& afrWindowId=bt7jli un5 43#%40%3F afrWindowId%3Dbt7jliun5 43%26 afrLoop%3D273850458187709%26 afrWindowMode%3D0%26_adf.ctrl-state%3Dbt7jliun5_63
- 5. Abell Report Cool Roofs for a Cool Baltimore http://www.southeastcdc.org/wp-content/uploads/2013/10/Abell-Report-Cool-Roofs.pdf
- 6. Funding for Cool Roofs in Baltimore http://articles.baltimoresun.com/2013-10-15/features/bs-gr-cool-roofs-report-20131014 1 roofs-air-conditioning-baltimore-sun
- 7. Cool Roofs Work in Baltimore http://articles.baltimoresun.com/2013-10-26/news/bs-ed-cool-roofs-20131024 1 white-roofs-lower-energy-bills-savings
- 8. NPR Interview with Kurt Shickman Cool Roofs in Baltimore http://programs.wypr.org/podcast/cool-roofs-thursday-october-31st-12-1-pm
- 9. Dr. Catherine Hunt discusses Cool Roofs program in Philadelphia http://www.wisconsinjobnetwork.com/radio/details?rp_id=542&s.rc_id=5&s.ra_id=914&s.keywords=
- 10. Hermosa Beach, CA includes cool roofs in their building code http://tbrnews.com/news/hermosa beach/city-council-adopts-new-building-codes/article 07d87fda-6837-11e3-b53f-0019bb2963f4.html
- $11. \ \ Cool \ Roofs \ in \ Pittsburgh \ \underline{http://www.post-gazette.com/local/city/2013/06/12/Pittsburgh-adopts-a-cool-idea-save-energy-with-paint/stories/201306120202$
- 12. Mayor Ravenstahl's press release launch of cool roofs program in Pittsburgh http://pittsburghpa.gov/rss/print.htm?mode=print&id=2275
- 13. Urban Climate Lab maps out urban heat http://www.urbanclimate.gatech.edu/urbanclimatedata.html
- 14. Louisville America's Hottest City http://www.planetizen.com/node/63024
- 15. It's hot in New York http://newyork.thecityatlas.org/lifestyle/hotternyc/
- 16. NYC CoolRoofs Program http://www.nyc.gov/html/coolroofs/html/home/home.shtml
- 17. Toronto's heat hits disadvantaged hardest http://www.thestar.com/news/world/2013/08/17/reducing_urban_heat_island_effect_in_toronto_a_matter_of_social_just_ice_activists_say.html
- 18. Toronto's EcoRoof program http://www.toronto.ca/livegreen/greenbusiness_greenroofs_eco-roof.htm
- 19. New funding for Toronto's EcoRoof program http://www.dcnonl.com/article/id56663
- 20. Cool roofs in Melbourne http://sourceable.net/brighten-up-white-roofs-to-cool-and-conquer-climate-change/
- 21. Melbourne's 1200 Buildings initiative http://www.melbourne.vic.gov.au/1200buildings/Pages/Home.aspx
- 22. Sustainable Melbourne Fund http://www.sustainablemelbournefund.com.au/euf/1200
- 23. Intelligent Energy Europe video http://www.youtube.com/watch?v=rQ4c4nDJkGI
- 24. APEC nations explore cool roofs http://climatetechwiki.org/technology/cool-roofs
- 25. Cool Roofs in India http://www.thenatureofcities.com/2014/01/29/efficient-roofs-for-efficient-buildings-building
- 26. Cool roofs taking off from Mexico to South Africa http://www.cleanenergyministerial.org/Blog/ArtMID/1441/ArticleID/15/GSEP-Is-Spreading-the-Word-on-Cool-Roofs-and-Pavements
- 27. Study connects urban heat and social justice http://ehp.niehs.nih.gov/1205919/
- 28. Toronto's heat hits disadvantaged hardest http://www.thestar.com/news/world/2013/08/17/reducing urban heat island effect in toronto a matter of social just ice activists say.html
- 29. Study shows cool roofs can save lives in Washington, DC http://retrofitmagazine.com/study-reflective-roofs-can-save-lives-keeping-washington-d-c-cool/
- 30. Cool pavements primer _ http://www.durabilityanddesign.com/news/?fuseaction=view&id=9972
- 31. Cool pavements (includes informative video) http://grist.org/list/weve-got-white-roofs-so-how-about-pastel-pavement/
- 32. Comparing cool roof options http://www.sustainablebusiness.com/index.cfm/go/news.display/id/25492
- 33. Study: White roof beats green and black http://www.durabilityanddesign.com/news/?fuseaction=view&id=10912
- 34. GCCA Responds to *Unintended Consequences* http://www.coolrooftoolkit.org/knowledgebase/gcca-responds-to-asu-paper-unintended-consequences/
- 35. GCCA updates Roof Savings Calculator http://www.coolrooftoolkit.org/knowledgebase/roof-savings-calculator-rsc-development-update/
- 36. GCCA cooling brief http://www.coolrooftoolkit.org/forums/topic/cool-roofs-and-global-cooling-issue-brief/
- 37. Cool roofs work in cool climates http://www.coolrooftoolkit.org/forums/topic/responding-to-ballast-cooler-than-youthink/