

What's Next For White Roof Paint?

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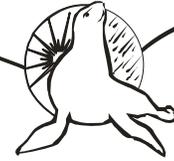
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What's next for NYC CoolRoofs, the City's white roof painting project, after the Bloomberg Administration?

A few years back, John Kolp and I promoted white roof painting as a volunteer project at Sierra Club's NYC Group, and inspired the formation of White Roof Project, which has been much more successful in attracting volunteers than we ever were. After painting 30 buildings in 2012, [they](#) plan to go national.

During the time I spent [pitching white roof painting to the commercial building community](#) through my day job at LIC Partnership, I learned a few things. The cost of the expensive, highly reflective coating can be paid off through lower air conditioning costs in about three years, for a few buildings that meet certain criteria: owner-occupied commercial buildings of one or two stories that had black tar roofs and were not very energy efficient. For other types of buildings, it would take much longer for the investment in coating to pay for itself.



Business owners are more willing to invest in energy efficiency programs with a return on investment within three years, and more reluctant the longer it takes to get return on their investment. I can attest that as a voluntary program for building owners, despite the offering of free volunteer labor to paint the roof, NYC CoolRoofs had limited appeal. There was not enough in it for them.

Even if nonprofit organizations were more environmentally concerned, they were even more reluctant to pay for the paint. Sometimes NYC CoolRoofs could sweeten the deal by bringing in corporate sponsors willing to pay for the coating in addition to the free volunteer labor already offered by the City.

While that was an easier sell, even free paint, free labor and a green marketing opportunity did not guarantee the consent of nonprofit groups to having strangers tramping on their roof and hopefully not causing any damage. Using my day job connections in the western Queens business community, I was able to contact many nonprofit facilities, and [referred about 20 buildings to NYC CoolRoofs](#).

How much rooftop space has been painted white?

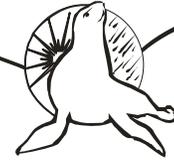
According to the NYC CoolRoofs [2011 annual report](#), since the program's launch in 2010 it has coated 2.5 million square feet of rooftop across 288 buildings. **In 2011, 1.3 million square feet was coated.** Building owners coating their own roofs accounted for about 600,000 s.f. of 2011's figure. Cause for enthusiasm?

How much of the City's total rooftop space is that?

Columbia's Urban Design Lab, looking at [available space for rooftop agriculture](#) (p. 40), found that NYC has approximately 1 million buildings, with a total of 38,256 total acres of rooftop area. Columbia University's study on green roofs and stormwater retention cites a figure of **about 1 billion square feet of rooftop space in NYC**.

So to put things in perspective, **NYC CoolRoofs has been able to coat around 1/1000th of the City's roof space white each year.** It's fair to say that it's more important as an educational and organizing tool than a mainstay of the City's energy conservation efforts. Recognizing that reality can help guide NYC's white roof painting efforts, and the work of its advocates.

As a voluntary program, white roof painting has a very limited impact: it's like pushing a rope. It will only appeal to a small number of volunteers and businesses large enough to be concerned about promoting their image as a green company. As I explain in my report "[Engaging Community Groups to Promote Energy Efficiency, Solar Power and Local Agriculture](#)," it's easier to promote voluntary sustainability initiatives if they provide financial benefits to New Yorkers. When sustainability initiatives don't provide those benefits, they must be required by law in order to be adopted as standard practice.



White Roof Project will certainly be able to find some building owners willing to benefit from free labor and free coating – and enough painting volunteers and donors to keep its program going in 2013. But after the Bloomberg Administration, I would bet on the program being entirely modified or scrapped altogether. White Roof Project and other advocates have an opportunity to think ahead and come up with improvements to the program before then -and lower the risk that the program will disappear.

Next steps to maximize white roofs as an organizing tool and to reduce carbon emissions

Advocates can promote 2013 white roof projects not just to volunteers from outside the neighborhood, but to other community groups within the neighborhood. Use projects to talk not just about white roof painting, but other energy conservation and building resilience options. Keep connecting the dots between climate change, Hurricane Sandy, and lowering energy use. Make it tangible by encouraging nearby tenants and owners to paint their own buildings, and get energy efficiency surveys. Partner locally with outreach reps from Con Ed, NYSERDA, and other groups offering these services.

Ask volunteers and fans of roof painting to call for minimum standards for roof reflectivity in NYC building codes. Since the program impacts only 1/1000th of the City's rooftop space a year, the strategy of the current voluntary white roof program is flawed. Its volunteer advocates can take the lead in reconfiguring it.

A few game-changing questions around NYC roofs

Where and how can NYC building codes can be modified to require building owners installing or repairing their roofs to meet a minimum standard for rooftop reflectivity?

What are comparative costs of rooftop treatments of varying degrees of reflectivity?

What more expensive rooftop treatments will the real estate industry be willing to accept, and which will it vigorously oppose?

How can the City craft tax incentives for installing highly reflective roof surfaces which are appealing enough to a critical mass of property owners?

Which elected officials and organizations within the real estate community could be supporters to such new requirements?