White roofs reflect sunlight to cool buildings, save energy and money, curb global warming and reduce the urban heat island effect.

by Jill Miller | 11:59 am May 3rd, 2011 | 1 Comment »

It's simple: our urban landscapes abound with flat, black roofs that absorb heat all summer long, driving up energy use, and contributing to the urban heat island effect as well as global warming. Yet flat roofs are largely out of sight, out of mind, and most Americans remain unaware of their far-reaching effects on our planet, our communities, and even our own pocketbooks.

In 2009, I set out to change that by launching White Caps, Green Collars LLC, a company devoted to coating flat roofs white in St. Louis—a city with hot, humid summers and hundreds of thousands of flat roofs. White coatings reflect 85 to 90 percent of sunlight. That blocks heat absorption to keep homes, schools and businesses comfortably cool, dramatically reducing air conditioning usage with savings of 20 to 40 percent in hot weather months.

But the benefits for our cities and planet may be even more far-reaching. Reducing electricity consumption lowers air and greenhouse gas pollution from coal-burning power plants, and U.S. Energy Secretary Steven Chu points out that because white surfaces reflect the sun's rays back into space rather than heating our atmosphere, they offset greenhouse gas emissions through the albedo effect, too. Studies have shown that cool white roofs can help reduce the urban heat island effect.

In addition to providing white roof-painting services, I've been a staunch advocate for their benefits and for stronger energy efficiency policies, and was named a "Clean Air Success Story" in 2010 by the St. Louis Regional Clean Air Council. We donate empty, 5-gallon pails to Habitat for Humanity's ReStore, and provide new job opportunities for graduates of St. Patrick Center's "Go Green!" training program. White Caps, Green Collars and several of our customers have been featured in a front-page article in the St. Louis Post-Dispatch, on KMOV-TV, in numerous articles and even a high school textbook about entrepreneurship. "Green", for me, is a roadmap for success.