

# HIRI NEWS

# "Kool Kids" curriculum grant proposal accepted; Sustainable Building Strategies Guidebook coming soon

#### **Call participants**

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#### Urban Heat Island Pilot Project (UHIPP) Updates

#### Salt Lake City

#### "Kool Kids" Curriculum

Camille Russell (Utah Office of Energy Services) reported that the "Kool Kids" proposal submitted by the Office of Energy Services and Tree Utah was funded by the Utah Power Earth Stewards Program. The proposal is based on implementing strategies and mechanisms that offset and mitigate CO<sub>2</sub>. The Salt Lake City (SLC) Cool Communities Steering Committee will be developing an urban heat island curriculum for sixth graders in 10 SLC schools.

The curriculum will be designed as an interactive program that will provide students with an opportunity to go out onto school grounds and take temperature measurements. Members (e.g., roofing manufacturers) of the SLC Cool Communities Steering Committee will bring in different products for which students can measure the temperature. The Steering Committee plans to work closely with teachers to integrate the course into the students' core curriculum.

The first planning meeting will be held during the week of February 8, 1999. The curriculum will be implemented in the Fall of 1999, and will continue for one year.

The SLC Cool Communities Steering Committee will send out press releases to publicize the project, and plans to ask a journalist to write an article about the curriculum. The Outreach and Education Subcommittee of SLC Cool Communities Steering Committee will focus on providing this information to the community.

#### Utah Transit Authority (UTA)

Camille reported that the Steering Committee is continuing to work with UTA, which is developing a light-rail system, called "Tracks." The park-n-ride parking lots are currently designed with asphalt. Camille and Meryl Redisch (Tree Utah) recently met with UTA officials and asked them to consider using concrete and to significantly increase the amount of vegetation in the parking lots. UTA agreed to this proposal, and plans to collaborate with the Office of Energy Services and Tree Utah on a grant proposal to offset the costs of using concrete.

Camille reported that the Steering Committee is also working with a local American Portland Cement Association (APCA) representative, who developed a cost analysis pro bono to determine the amount of funds that the Steering Committee should apply for. Virginia Gorsevski (EPA) asked for a copy of the cost analysis, and said that this analysis might be useful for other cities.

Eventually, these park-n-ride sites could become demonstration areas, in which the temperatures

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UTA, the Office of Energy Services, and Tree Utah are applying for T21 funds, which are transportation enhancement funds available to each state. The proposal is due in one month. Camille noted that under T21, a lump sum is available to each state through the Metropolitan Planning Organizations (MPOs) for transportation enhancements. A government agency must be the lead for the projects that receive this funding, but non-profit organizations can be partners.

#### University of Utah Architecture Department

Camille stated that the Steering Committee has been focusing on providing students in the Architectural Department at the University of Utah with information about heat island reduction strategies. They recently gave a presentation on these strategies to the students in the Architecture Department and plan to pursue the development of line-item curriculum to include in future courses.

#### Green Industry Conference

Camille also gave a presentation at the Green Industry Conference, which was attended by landscape architects and others. Heat island reduction measures were discussed.

#### School Debate on Air Quality

Each year, the students in each elementary and junior high school in Utah participate in a debate on various topics. The debate this year is based on whether state agencies should implement strategies that improve air quality. Camille and others will be presenting heat island reduction strategies to the students as one method for mitigating ground level ozone concentrations.

## American Planning Association (APA) Conference

Camille also noted that she, along with Maury Estes (NASA), and possibly Virginia, will be attending the APA conference in April, in Seattle, WA. They will be giving presentations and submitting a paper about the EPA and DOE Heat Island Reduction Initiative (HIRI) and efforts in Salt Lake City to implement heat island reduction strategies.

The APA is a trade association for regional and urban planners, and Camille noted that this conference is a useful mechanism for meeting state and local officials and obtaining feedback from them. Over 2,500 people are expected to attend the conference. Registration information is available on the APA Website at http://www.planning.org.

#### Cool Roof Rating Council (CRRC)

Camille mentioned that she recently joined the CRRC. The CRRC was formed to develop a standard on measuring reflectivity and albedo. Their goal is to identify a comprehensive methodology for determining what components make a surface "cool." The CRRC is comprised of cool roof manufacturers and environmental groups.

#### ENERGY STAR<sup>®</sup> Roof Products Program

Gary Gero (Environmental Affairs Department, Los Angeles, CA) asked whether the ENERGY STAR® Roof Products Program would consider adopting the standards that the CRRC develops. Virginia replied that as other entities develop more useful measurements, the ENERGY STAR® program would likely consider adopting and incorporating them into the existing Roof Products Program, which is going to be formally launched during the week of February 8th, in Phoenix, Arizona.

Alan Hirsch (Sacramento Tree Foundation) noted that he would be interested in receiving more information about the ENERGY STAR<sup>®</sup> program in general. Virginia said that she will send him some information and that information about the products that are labeled with the ENERGY STAR<sup>®</sup> logo are available on the EPA Website at http://www.epa.gov/energystar. However, since the Roof Products Program is new, there is no information about it on the Website yet. (Please see the attached brochure for more information on the Roof Products Program.) Alan also expressed interest in obtaining roofing and paving material samples from manufacturers. Camille noted that some manufacturers are willing to provide samples of their products and that she can share the information she has about this.

#### Los Angeles

#### T21 Enhancement Funds

Gary noted that the City of Los Angeles Urban Greening Unit is applying for T21 enhancement

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funding to plant trees along roadways both to enhance shading and create greenways. The proposal identifies several high-use, high-profile areas for demonstration tree-planting projects.

#### Air Quality Credit Methodology

Gary reported that the Environmental Affairs Department received four proposals from technical consulting firms to coordinate the effort to develop a quantification methodology for issuing air quality credits to entities implementing heat island reduction strategies. The Department plans to hire one of the consulting firms by early March.

The purpose of this project is to develop quantification methodology for the air quality credit rule that the air district has adopted - but not implemented because the district does not have a methodology for quantifying the benefits for implementing heat island reduction strategies. This methodology would describe how to calculate the correlation between a certain number of square feet of highly reflective roofing or paving material and the corresponding reduction in ground level ozone concentrations. Once the methodology is developed, the air district, the State of CA, and the EPA must all accept it. Virginia noted that EPA is currently developing a list of potential options for developing this type of methodology.

#### Guidebook on Sustainable Building Strategies

Gary reported that the *Guidebook* on *Sustainable Building Strategies* will be available soon. It includes a section on light colored roofs and other cool community strategies. Eventually, this guidebook will be available on the Environmental Affairs Department Website at http://cityofla.org/dept/EAD/index. htm. The Department is initiating several related efforts to promote the strategies in the guidebook.

#### Atlanta

Lucy Griggs (Atlanta, GA) provided a brief background on the status of the heat island reduction efforts initiated in Atlanta. Lucy is the Chair of a Steering Committee to implement heat island reduction measures in Atlanta. Metropolitan Atlanta is comprised of 13 counties, and no single government body has jurisdiction over the entire metropolitan area, which makes it difficult to obtain support from local governments.

Lucy noted that most of the support she has received for implementing heat island reduction measures has been from non-profit organizations, the EPA, and the U.S. Forest Service. She said that recently, a representative of the Metropolitan Chamber of Commerce has been particularly helpful in providing contact names of key stakeholders.

### Statewide Heat Island Reduction Efforts

Because of the difficulty in obtaining local support, the Steering Committee has submitted a proposal to the Governor to implement heat island reduction measures as a statewide initiative. This initiative would focus on all government buildings and developments, which could then filter down into the counties, metropolitan areas, and communities.

The Steering Committee's proposal would implement tree planting, paving, and roofing strategies. The focus of this proposal is on the air pollution benefits, primarily because Atlanta is currently a non-attainment area. In addition, other cities in the State are approaching nonattainment rapidly. Therefore, air pollution is a high-priority for many of the cities in Georgia.

The Steering Committee plans to develop guidelines to show builders and building owners how developments should incorporate these strategies. Eventually, the Steering Committee would like to develop incentives (e.g., tax credits) for entities implementing these strategies. Virginia noted that other cities would probably like to explore this idea, too.

Lucy met with the Georgia Pollution Prevention Assistance Division and Environmental Protection Division this week, and so far the project has been well received. A second proposal will be submitted at the end of February. The Steering Committee also plans to continue its smaller, grass roots efforts.

#### GA Model Energy Code

The Steering Committee succeeded in amending the Georgia model energy code to recognize reflective roofing as one option for reducing energy costs of commercial buildings. Georgia is the first and only state to include this option in its code, which took the Steering Committee two years to implement.

This amendment is an incentivebased, voluntary option; it is not

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required. If building owners decide to use a high albedo roof coating, they are given a tradeoff in their R value for insulation. This code also defines what the criteria are for different areas of the State. The steering committee plans to expand the code to make it stronger.

#### Sacramento

Alan reported that the Sacramento Tree Foundation is waiting to receive the air quality results from LBL. He is also in the process of planning a Green Facilities Conference with participants from the local government and the regional MPO. The Sacramento Tree Foundation is writing a twoyear strategic plan to solicit longterm funding from private industry and state and local agencies.

#### Future UHIPP Conference Calls

UHIPP coordinators agreed to continue scheduling conference calls for the first Thursday of every month from 4:00 to 5:00 p.m.

Virginia will send out an agenda one week before future conference calls to raise specific issues for discussion and solicit written updates from each of the cities. This will also provide an opportunity for UHIPP coordinators to add topics to the agenda.

#### **Closing Remarks**

Lucy noted that even though the science of measuring the benefits of implementing heat island strategies is still emerging and incomplete, it is important to recognize and communicate the positive trends that do exist to potential stakeholders. It will be critical to use the data that we have and not to ignore opportunities simply because the science is not "perfect" yet.

Participants agreed that while discussing the activities of the cities is important, they also would like to discuss what should be done, what barriers prevent cities from what they would like to do, how EPA can help, and what cities and EPA should focus on to implement some of the heat island reduction measures. For example, Virginia noted that she will pursue an idea that Lucy mentioned regarding developing a list of key experts and contacts who might be useful for cities trying to obtain scientific information about urban heat islands and mitigation strategies.

The next EPA/Pilot City conference call is scheduled for Thursday, March 4, 1999, from 4:00 to 5:00 p.m. EST. The call-in number is (202) 267-8330, access code 1474#.

#### February 4, 1999