

EPA Urban Heat Islands Webcast

November 12, 2008

Slide 1: Webcast Agenda

Neelam Patel: Hello, I'd like to welcome everyone to the EPA National Urban Heat Island webcast. My name is Neelam Patel, and I recently took over management of EPA's Urban Heat Island Program. In a few moments, Lauren, our contractor from ICF, will explain how to use the Live Meeting software that you have logged into. But before that, I'd like to quickly run through the webcast agenda for this afternoon. We're going to start off with some program updates that I will give on EPA's program, and then I will follow with a quick overview of the Transportation Research Board meeting that will be in January of '09 here in Washington, DC. After that we'll have Dr. Tony Brazel from Arizona State University giving an overview of the American Meteorological Society Urban Environment Symposium, which is also in January of '09, and that will be held in Phoenix, Arizona. Then we will have Yvonne Johnson from EPA describing our Office of Air Sustainable Skylines Initiative program. And lastly we'll have Jason Ching from EPA doing a presentation on advanced modeling tools and systems for addressing urban heat island mitigation requirements. And after his presentation, and the question and answer session that will follow, we'll have updates from all of the participants. After each section of the webcast, we will have an opportunity for questions and answers. You can, during each presentation, submit electronic questions which Lauren will go over with you in a moment. And then we'll also open up the phone lines for live questions that you came up with during the presentations. So, two ways to submit questions, and we're going to make sure we address all of them. I'd like to turn it over to Lauren to go over some of the Live Meeting Logistics.

Slide 2: Live Meeting Logistics

Lauren Pederson: Great, thanks Neelam. If everyone could please mute their phone lines by pressing *6 or use your own mute button on your phone to control background noise, that would be great. In order to speak during some of the question and answer sessions, please press *7 or again press the mute button on your phone. If you want to see the presentation full screen, you can just press F5, and you will just see the slides in the presentation that are given. This might help to eliminate any distractions with the Live Meeting Console. If you have a question, you will have an opportunity to ask it after each person presents, or there's a "Feedback" drop-down menu to indicate that, and I'll go through that on the following slide. If you're interested in seeing who else is participating on the webcast, you can also view an Attendee list, and I'll show this on the next slides as well. If you run into any problems throughout the webcast, please contact Nikhil Nadkarni, and there's his email address or phone number.

Slide 3: Feedback and Questions

Lauren Pederson: So for feedback and questions, there are color indicators on the "Feedback" drop-down. If you want the presenter to slow down, or if you have a question, you can change the color and indicate that – and that's shown here with the red circle.

Slide 4: Feedback and Questions

Lauren Pederson: Next, if you have a question, click on “Question and Answer” on the menu, and type it into the drop-down box. Click “Ask” to ask the question. And then, I will be asking after each presenter, and then we’ll open this up at the end if I can answer any remaining questions.

Slide 5: Attendees

Lauren Pederson: You can also see who else is participating in the webcast by looking at the Attendees list. So you can see where that is with the red circle here.

Slide 6: Handouts of Presentations

Lauren Pederson: And also, handouts are available for you to download. The handouts consist of all of the presentations in PDF format, as well as a couple of conference opportunities, which we’ll address during the webcast. Neelam, back to you.

Slide 7: EPA Urban Heat Island Program

Neelam Patel: So I am going to go over the Urban Heat Island Program – some of our program changes that we’ve had in the past few months; as well as go over our re-launched website with you guys; and lastly talk a little bit about our Urban Heat Island Compendium and its chapters. So to start off with program changes, I’d just like to introduce myself. I think most of you know my predecessor with the Urban Heat Island Program, Eva Wong. She recently left EPA and is now living in Uganda with her family. But she spent a lot of years on establishing this program and getting it to where it’s at. As for me, before taking over the Urban Heat Island Program, I worked at EPA for four years. In my new position I’m managing the Urban Heat Island Program and also working on climate change and energy issues at the local government level. Before taking this position I worked in EPA’s Office of Water, and spent some time working on regional climate and energy issues, and also working with territorial governments. So I look forward to moving the Heat Island Program forward. In the few months that I’ve been here I do see that communities are carefully and urgently thinking about how to adapt to climate and thinking about mitigation strategies. So with that, to respond to this activity, as I mentioned we do have the Urban Heat Island Compendium. Most of these chapters are available online, and I’ll talk a little bit more about the Compendium in a few minutes. Some of the other changes we have are going to be in the way we’re communicating. Earlier this summer we—instead of working from our personal emails—we’ve created a listserv to reach out to the heat island community. And, for the people that are on this call, if you aren’t already part of that listserv, please let me know (Neelam Patel) and we can get you on it. And if there are other people that would be interested, please let them know about the listserv. We’d love for more communities and people working on heat islands to be part of our listserv. And the last thing in terms of our program – we do have the regular webcasts. We generally tend to hold quarterly webcasts. If, for future webcasts, you have ideas for presentations, information on new tools, or successful programs that are addressing the heat island impacts, please keep those in mind and send those to us so we can plan to spread the word about those programs.

Slide 8: EPA Urban Heat Island Website

Neelam Patel: So starting with our re-launched website—the Urban Heat Island website—I just wanted to go over a little bit about the structure of the website. Basically our previous website was designed seven years ago, and so we decided to revise and restructure the website to provide more up-to-date information and increase the usability, and to address current concerns related to heat islands. So the website was designed to provide information on heat island issues and connect users to resources that we have at EPA, and also resources that are available in the larger heat island community. The website goes through the heat island effect, its impacts, and strategies that communities can take to reduce urban temperatures. So what we've done to organize the website is to break it up into a few main categories. The first one is “Basic Information”—it answers questions like: what is an urban heat island, why do we care about heat islands, and what you can do—which leads into the bulk of our Compendium, which is mitigation strategies. Another important section of the website is the “Where You Live” section, and this actually houses EPA’s Urban Heat Island Community Actions Database. This is one of the key resources we provide to people interested in heat islands. The Database provides information on more than 75 local and state-wide initiatives to reduce heat islands, and also benefit from these activities in other ways. You can access into the database by focusing on location, mitigation strategy (so if you’re looking to add some more trees and vegetation to your community), or by initiative type (which is city ordinances, building codes, or outreach programs). When you do get a chance to browse through the Community Actions Database, keep in mind that the actions listed are just some of them that are available out there to cool communities while saving energy and also improving air quality. So if you know of programs or initiatives that are not within our database, please let us know. Two of the other sections on the website are the “Heat Island Impacts” section, which explains how heat islands affect energy use, air quality, human health, and water quality; and then we have our “Heat Island Mitigation” section which is where, like I said, you can find a lot of the Compendium chapters, and this section focuses on how to address how communities can reduce temperatures through energy-saving strategies that provide multiple benefits. Some of the new features on our website include a calendar of related events and conferences, so please look for that, and again if you have things that we should add let us know, and we added a new featured webcast. And then, as I mentioned, some of our key EPA resources are on the website: the database; webcasts from recent years, as well as past years where we were using the conference call format; and then lastly, our Compendium.

Slide 9: EPA Urban Heat Island Compendium

Neelam Patel: So, coming to our Compendium, just to give you an idea, our Compendium is titled “Reducing Urban Heat Islands: Compendium of Strategies.” We designed the Compendium to provide the latest information to those interested in understanding and addressing heat island impacts. And what we want to do is answer the questions that we’re being asked about heat islands in the current world of activity. We also focused on creating a bridge between the available scientific information and the programmatic people working on heat island impacts. So this will include city officials as well as state policy makers. And what the Compendium tries to do is it compiles scientific information and examples of how the latest

scientific information and technologies are actually being used. So, overall in the Compendium we strive to effectively provide mitigation strategies that are scientifically defensible—we've been really careful to make sure that the information has a scientific basis. The mitigation strategies also have sections discussing the overview of costs and benefits, and lastly we have references to examples as well as other resources. So the book is not a how-to guide, but we do want it to be a reference to answer key questions that you have as you develop your programs. So that covers all of the program changes that we had in the last few months, and updates with our exciting new resources.

Slide 10: TRB Subcommittee: Pavement Materials and the Urban Climate

Neelam Patel: The next thing I'd like to do is just quickly go over a meeting that's coming up. As I mentioned, most of the chapters of the Compendium are on the website in draft form, and are ready to use and [be] referred to (they've been peer reviewed). We're currently working on the peer review of the Pavements chapter. And with pavements the scientific information is still emerging—technologies are still emerging—and questions are still being answered. As part of addressing the question of pavements, I'd like to briefly go over the Transportation Research Board meeting that's coming up in January. A quick explanation of what the Transportation Research Board (TRB) is: TRB is one of the major divisions of the National Research Council, which is the principal operating agency for the National Academies of Science. They basically provide information to government, the public, and the scientific and engineering communities. So what Eva Wong and others, Kamil [Kaloush], at one of our universities that we work with—have created a subcommittee to look at pavement materials. The Subcommittee title is "Pavement Materials and the Urban Climate." So during the TRB meeting, which is in January of '09—and the theme of this meeting is actually transportation, energy, and climate change—there's going to be three sessions that are related to the pavements subcommittee. The first session will have four papers presented on pavement technologies, and on the next slide you'll see the title of those papers and a little bit more information about the session itself. The second meeting related to pavements is the actually Subcommittee meeting: "Pavement Materials and the Urban Climate." And the last session related to pavements is a paper session where several papers will be presented, titled "Climate Change and Design and Management of Sustainable Pavements." And this session is being sponsored by several different subcommittees.

Slide 11: Pavement Materials and the Urban Climate Subcommittee Paper Presentation

Neelam Patel: So I do encourage, for those interested in those topics, to look into attending the TRB.

Slide 12: EPA Urban Heat Island Contact

Neelam Patel: And with that, I would like to open up to any questions that we may have received online, or if there's questions from any of the participants.

Lauren Pederson: We didn't receive any questions online.

Neelam Patel: And does anyone have any questions?