



THE GRAPEVINE

ACEEE Summer Study at Asilomar, California

Thursday, August 17, 2006

Has the Fruit Ever Tasted This Sweet?

by R. Neal Elliott and Anna Monis Shipley



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Ah, summer...flip flops, sun-screen, long sunlit days, and the bounty of fresh food from gardens and farms make the cold, dark winter quickly recede. Juicy peaches and plums, berries and melons. Smell their sweet perfume. Savor their honeyed taste.

Summer is indeed upon us, friends: after more than a decade of relatively low interest in energy issues by industry, we are finally seeing renewed interest in energy efficiency and conservation. During this time, some industrial leaders had argued that all of their cost-effective energy efficiency projects had been completed. They said that they were operating at optimum efficiency and "no, nothing more can be done." However, those of us working in the energy efficiency community knew better than this. As leaders in the field, we are used to having to wait for others to join our efforts.

And join us they have. Last year, DOE launched its "Save Energy Now" campaign. The Department has assessed the energy consumption of over 100 industrial

facilities. The results of the program thus far have revealed over 25 trillion BTU in annual natural gas savings—the equivalent annual consumption of roughly 340,000 homes. Even the facilities of firms typically at the forefront of industrial energy efficiency, such as 3M, Alcoa, DuPont, and Weyerhaeuser are finding significant additional savings. What the assessments show is that even in well-managed facilities, there is always some cost-effective improvement to be made, and even more in the rest of the market.

This is no surprise to us at ACEEE. We have already seen some structural shifts in the industrial sector due to a now almost 5-year trend of increasing energy prices. The typical responses to such volatile markets in the past were to switch fuels or rely on long-term fuel price contracts. Those options are now dying off as fuel prices across all markets (coal, electricity, petroleum, and natural gas) are nearing or are at historical inflation-adjusted highs. One of the primary ways industry can respond effectively to these market changes is by increasing the efficiency of their technologies and systems. New production facilities and new product lines will continue to be developed in the industrial sector, and with them we will encounter renewed opportunities for more efficient energy use. We expect that the energy intensity within the sector will continue to improve with time, and that recent price pressures on oil and natural gas markets will provide additional motivation to undertake these improvements.

We are no longer just plodding along and picking the low-hanging fruit. The time has come for us to reach for the prime specimens. Go on, take your pick. The taste has never been this sweet.

Today's Informal Sessions

2 pm - 3 pm

The Thermostat of the Future— Enabling Technology or Draconian Measure

Mark Martinez, David Wylie
Location: Oak Knoll

Better Modeling to Promote Better Energy and Climate Policy

Bill Prindle, Skip Laitner
Location: Toyon

3 pm - 4 pm

IEA's Quantitative Assessment of Market Barriers to Energy Efficiency

Bill Prindle
Location: Toyon

Energy Star Market Share Tracking

Scott Dimetrosky
Location: Marlin

Thermal Energy Storage: Can We Resurrect This Technology in California?

Mark Martinez, David Wylie
Location: Oak Knoll

2 pm - 4 pm

Water Heating: The Next Generation

Harvey Sachs
Location: Oak Shelter

How Do We Promote the Value of High-Performance Homes?

Tracy Dixon, Colby Swanson
Location: Sanderling

Energy and Water: Beyond Pumps

Neal Elliott, Ed Osann
Location: Curlew

Rooftop HVAC Research—What's Next?

Charlie Grist, Reid Hart, Mark Cherniack
Location: Dolphin

2003/2007 CBECS: New 2003 Data; 2007 User Needs

Marilyn Worthy, Alan Swenson
Location: Triton

STAC Heat Pump/AC Research and Crawlspace Research

Ken Eklund, Mike Lubliner
Location: Kiln

How to Harness the 25 Billion kWh/year That Sleeping Computers Could Provide

Dave Korn, Mike Walker
Location: N. Longview

The Land Use/Energy/Climate Change Connection

Joe Di Stefano
Location: S. Longview

Innovation in Pool Pumps

Gary Fernstrom
Location: Crocker Dining Hall Area

The Art of Translation— Making Our Messages Meaningful to Multiple Audiences

Margie Harris
Location: Manzanita 1

20- and 30-Somethings Only: How We're Creating the Future We Must in These Interesting Times

Audrey Parker
Location: Manzanita 2

Spectrally Enhanced Lighting— Is It Ready for Prime Time?

Jim Mapp
Location: Willow Inn 1

The World Business Council for Sustainable Development and the Business-LED Energy Efficiency in Buildings Project

Christian Cornwall, Bill Sisson
Location: Nautilus

Solar Decathlon 2005: A Solar Village on the National Mall Documentary Film and Discussion

Tor Allen
Location: Chapel

Sufficiency

Tom Princen
Location: Heather

High Performance Schools Protocols —National Programs

Brian McCowen, David Hewitt
Location: Willow Inn II

Got Something to Report?

If you have any announcements, updates, or important information related to events here at ACEEE, drop them off at the Grapevine Office (Room 509 in the Pirates' Den) or email them to ekarl@homeenergy.org.

Cars on a Low Carbon Diet

Electric? Biodiesel? Hybrid? What makes your car (and your conscience) a little less carbon heavy? We want to hear all the details. We'll publish the stories in Friday's issue of the *Grapevine*. Drop us a note at the Grapevine Office (Room 509 in the Pirates' Den) or e-mail your stories to ekarl@homeenergy.org.

Some Like it Hot

LBNL's Rick Diamond and Chris Calwell of Ecos Consulting gathered a group of eager participants yesterday morning in Fred Farr Forum for some hands-on experience with the power of the sun. The assignment: heat water in a test tube using less than \$10 worth of aluminum foil, foam board, trash bags, rubber bands, and other common household items. Participants had 45 minutes to create the solar water heater, and 30 minutes of partly cloudy sky to show if it was made of the right stuff. An international group of 24 ACEEE participants, in groups of 3, took the challenge. All had a great time and water was actually heated—in one case to a few degrees above body temperature and in another case to over 140°F, hot enough to satisfy the sanitary needs of an average-sized mouse. Amazing!



A wide variety of designs attempted to make best use of direct and diffuse solar radiation, as well as look stylish.



Top honors go to Jim Gunshinan, Diane Francoeur, and Christopher Dymond for their 140.6°F achievement.



Frances Sprei, Louise Roux, and Luis Martinez were hard at work on RD&D for their 135.2°F prototype.

Invade Antarctica

Steve Schiller sent us the following list, which was part of his Tuesday session "Incorporating Efficiency as a Greenhouse Gas Mitigation Strategy." While the session focused on climate change issues for the energy sector and the role and issues of efficiency, he interjected the serious topic with this bit of humor.

Top Ten George W. Bush Solutions For Global Warming (courtesy of Late Show with David Letterman)

10. NASA mission to turn down the sun's thermostat
9. Federal subsidies to boost production of Cool Ranch Doritos
8. Fast track Rumsfeld's "Colonize Neptune" proposal
7. Convene Blue-Ribbon Committee to explore innovative ways of ignoring the problem
6. Let Hillary worry about it when she takes over
5. I dunno—tax cuts for the rich?
4. Give the boys at Halliburton \$90-billion contract to patch hole in ozone
3. Switch to Celsius so scorching 98 becomes frosty 37
2. Keep plenty of Bud on ice
1. Invade Antarctica

Today's Poster Panels 4 pm - 6 pm Merrill Hall

From Soup to Wire Nuts: Lighting Guide Helps Home Builders Crack New Code Requirements

Melissa Blevins

BEopt (Building Energy Optimization): Residential Applications

Craig Christensen

Effectiveness at a Community-Wide Outreach Program in Achieving Energy and Demand Reduction Goals: Evaluation of the San Francisco Peak Energy Partnership

Kevin Cooney

The Database for Energy Efficient Resources

Gary Cullen

Capturing the Carbon Cap—Relating the Cap-and-Trade System to New Construction Programs

James Edelson, Kathy Higgins

Step Right Up! Test Your Strength in CFL Knowledge

Kathleen Gaffney

Local Government Partnerships for Efficiency

Steve Grover

Development of a High Performance Lighting Guide for Homes

John Holton

The Worldwide Status of Energy and Environmental Standards for Buildings

Kathryn Janda

Get Real: Incorporating Energy Efficiency as a "Real Resource" with Supply-Side Options

Paul Meier

Energy Efficiency at Enron Energy Services: A Surprising Place for a Success Story

Steven Meyers

The Tax Credit for the Installation of Energy-Efficient Windows

Harry Misuriello (and Nils Petermann)

Energy-Efficient Demonstration Projects

Judi Quach

DSMdat: Who's Doing What in DSM Programs—A Comprehensive Database of DSM Programs in the United States and Canada

Michael Shepard

Experiences from Energy Efficiency Policies in Sweden During the Last 30 Years—Looking at the Building Sector

Frances Sprei

A Study to Estimate the Cost-Effectiveness of Low-Temperature Heat Pumps

Jay Stein

NEBs from Zero- and Low-Energy Homes in New Zealand: Perceived Value and Lessons

Albrecht Stoecklein (and Lisa Skumatz)

Energy Star Products Good for the Pocket Book? Evaluating the Cost-Effectiveness of Energy Star Specifications

Marla McWhinney Sanchez

Application of Old and New Ideas in Water Heating

Larry Weingarten

Evaluation of Retrocommissioning Projects with Web-based Data Collection

Eric Swan

Is Certified Installation Better?

John Proctor

Ride Board

Be sure to check the board at the ACEEE headquarters at Surf and Sand if you can offer a ride or need a ride to nearby airports.

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Jobs, Jobs, Jobs

The **Southwest Energy Efficiency Project (SWEET)** is seeking either a program associate or senior associate in its Boulder, Colorado, office. For more information, visit www.swenergy.org or talk to Howard Geller while you're at ACEEE. He can be reached at (720) 313-9337.

The **Energy Trust of Oregon** seeks candidates for a manager of planning and economic analysis position. For more information, visit www.energytrust.org or see Fred Gordon while you're at ACEEE.

See other job postings in the ACEEE office at Surf and Sand.