



Rob Penney

Senior Energy Engineer

Washington State University Energy Program

- E3T Connect is the place for peer-to-peer interaction among emerging energy efficiency technology professionals. Our goal is to share collective E3T knowledge & resources and to inform processes that foster their wider adoption & implementation.
- Funded by the Bonneville Power Administration and the Western Area Power Administration
- Launching officially later in May but register and start participating NOW

E3T Connect

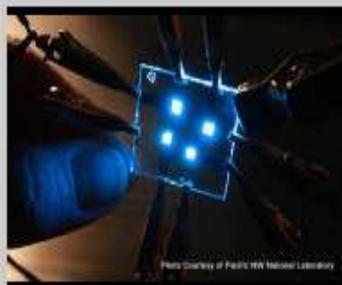
Connecting Emerging Energy Efficiency Technology Professionals

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WELCOME

E3T Connect is the place for peer-to-peer interaction among emerging energy efficiency technology professionals. Our goal is to share collective E3T knowledge & resources and to inform processes that foster their wider adoption & implementation.

PHOTOS



COMING SOON...

E3T Connect launches May 17th!

Thanks for stopping by! Feel free to share in the Forum, Blogs, Groups, etc.and **invite** your friends for a sneak preview...

MEMBERS



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FORUM



Smart Lighting Prototype now available for use in research

<http://www.bu.edu/smartlighting/research/smart-lig> team at Boston

University's Smart Lighting Engineering Research Center (ELC) has announced the

Welcome to
E3T Connect

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VIDEOS



**Deep Sea Water Air
Conditioning**

Added by Diane
Chojnowski

BLOG POSTS



Energy efficiency and Weight Watchers

Posted by **Elisa Wood** on April 29, 2011 at 10:33am



Goodbye light bulb jokes?

Posted by **Elisa Wood** on April 10, 2011 at 9:51am



US at top worldwide in EE innovation

Posted by **Elisa Wood** on April 2, 2011 at 9:32am



Technology Spotlight: Ground-source variable refrigerant flow heat pumps—Affordable heating solution

Posted by **David Shepherd-Gaw** on April 1, 2011 at 7:38am



Technology Spotlight: Hybrid Evaporative/DX Compressor Air Conditioners

Posted by **David Shepherd-Gaw** on March 31, 2011 at 11:53am

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LATEST ACTIVITY



Sean Hoynes and Dan

Tagged: [ERC](#), [Lighting](#), [Smart](#), [LED](#), [SSL](#)

Started by **Aleta Thompson** Apr 25.



Technology Assessment Projects in the Northwest

One thing that utilities in the Northwest—and elsewhere—have in common is the need to figure out which new and emerging technologies really work and are therefore worthy of promotion and incentives; the search for the holy grail of the next CFL. ...

Started by **Rob Penney** Apr 22.



Evaluation and assessment labs

Is there a list of labs or businesses that evaluate technologies prior to commercializing?

Tagged: [technology](#), [assessment](#), [evaluation](#)

Started by **David Shepherd-Gaw** Apr 5.



Looking for a replacement for chilled-water cooling systems in building complexes?

Consider this new technology available for licensing: Rapid Cooling Using Ice Slurries for Industrial and Medical Applications (excerpt) Under funding from DOE in the late 1980s and early 1990s, Argonne researchers developed ice slurry technology...

Tagged: [slurry](#), [rapid](#), [ice](#), [cooling](#), [cw](#)

Started by **David Shepherd-Gaw**. [Last reply](#) by **David Shepherd-Gaw** Apr 1.

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GROUPS



New Idea

New Ideas for Emerging T...

3 members



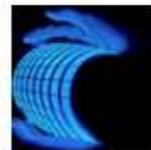
Energy Management

4 members



Data Centers

4 members



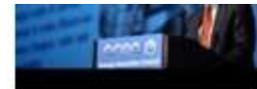
Emerging Technology Asse...

6 members



Motor & Drives

4 members



ARPA-E 2011 Keynote: Secretary Steven Chu

Added by **David Shepherd-Gaw**



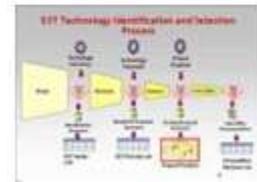
The Compact Fluorescent Light

Added by **Diane Chojnowski**



Green Tech Today 9: The California Lighting Technology Center

Added by **Diane Chojnowski**



Adaptive Lighting



Sean Hoynes
Bremerton, WA, United States
[Comment](#)



Dan Mitchell
Cleveland, OH, United States
[Comment](#)



Ann McDowall
Surrey, Canada
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Ashland, OR, United States
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Ira Krepchin
Chestnut Hill, MA, United States
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**ARPA-E 2011 Keynote:
Secretary Steven Chu**

Added by David Shepherd-Gaw



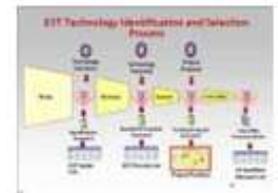
**The Compact
Fluorescent Light**

Added by Diane Chojnowski



**Green Tech Today 9: The
California Lighting
Technology Center**

Added by Diane Chojnowski





Motor & Drives

4 members

Latest Activity: Apr 19

Motors & drives - permanent magnets, switch reluctance, etc.



HVAC Technologies

8 members

Latest Activity: Apr 29

Group for discussion of emerging HVAC technologies.

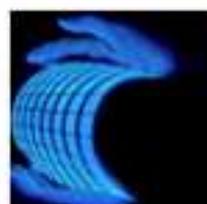


New Ideas for Emerging Technologies

3 members

Latest Activity: 10 hours ago

E3T Connect is part of a larger effort to save energy by identifying, assessing, and developing emerging energy efficiency technologies, or ETs.



Emerging Technology Assessment

6 members

Latest Activity: Apr 29

This group is for discussions of assessment strategies, frameworks, databases of technology assessments and watch lists, and the value of...



Energy Management

4 members

Latest Activity: 8 hours ago



Data Centers

4 members

Latest Activity: Apr 29



Lighting Technologies

5 members

Latest Activity: Apr 22

Group for the discussion of emerging lighting technologies.



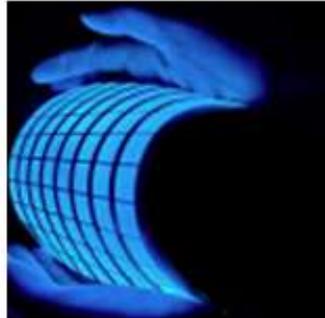
Emerging Technology Assessment

Created by E3T Connect [View Groups](#)

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INFORMATION



This group is for discussions of assessment strategies, frameworks, databases of technology assessments and watch lists, and the value of collaboration.

Members: 6

Latest Activity: Apr 29

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MEMBERS (6)



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VIDEOS



Deep Sea Water Air Conditioning

Added by Diane Chojnowski



ARPA-E 2011 Keynote: Secretary Steven Chu

Added by David Shepherd-Gaw



The Compact Fluorescent Light

DISCUSSION FORUM



Field Monitoring Protocol: Mini-Split Heat Pumps

For any of you involved in, or potentially involved in assessing Mini-split heat pumps, I thought you might be interested in this field monitoring protocol just published by NREL. Title:
Started by Jack Zeiger Apr 29.



GSA Green Proving Ground Program 1 Reply

I just ran across some information on GSA's new Green Proving Ground program. This is the first I have heard of this, but it looks quite interesting. This program has short listed 16 technologies f...
Started by Jack Callahan. **Last reply** by Rob Penney Apr 27.



Assessment Projects in the Northwest: A Projects Map to Facilitate Collaboration

One thing that utilities in the Northwest--and elsewhere--have in common is the need to figure out which new and emerging technologies really work and are therefore worthy of promotion and incentives...
Started by Rob Penney Apr 22.



Where can emerging technologies be assessed? 1 Reply

While there are plenty of technology-specific events (ASHRAE, Light Fair, etc.), there are fewer events that are broader in terms of technologies covered but more focused on emerging technologies. While it pains me to broaden my carbon footprint with air travel, I think that occasional face-to-face events are still essential for developing relationships with your peers and renewing your inspiration for your work. Here are some to consider.

Emerging Technologies Summit (<http://www.etcc-conference.com/>). This may be the best, but it was last fall and, regretably, won't come again until the fall of 2012.

Utility Energy Forum (<http://www.utilityforum.org/>). This coming up early May. It's been an annual event for 31 years, mostly at Granlibakken in Tahoe City, but this year at Asilomar, near Monterey (both sweet locations in my book). There will be a panel focusing specifically on emerging technologies. Check out presentations from last year:

[Karl Johnson](#), California Institute of Energy & Environment

[Scott McNall](#), California State University, Chico

[Omar Siddiqui](#), Electric Power Research Institute

[Micah Allen](#), E Source

[Graham Parker](#), Pacific Northwest National Laboratory

[Tom Eckman & Charlie Grist](#), Northwest Power and Conservation Council

The event also includes a trade show, where you'll get to talk to manufacturers and research in person.

Vu1.com has confirmed that they have begun shipping their new "electron stimulated luminescence" as of April 13th

(<http://www.vu1corporation.com/news/vu1-corporation-confirms-r30-ele...>). For those who have not been following this, this is potentially a game-changer. It could even be "the next CFL." These are manufactured by a small company (as lighting manufacturers go) called the Vu1 Corporation. The first lamp they put out, just now being delivered, is an R30 reflector lamp for residential and commercial downlights. The lamp is:

- Highly efficient (18 W to replace a 65 W incandescent flood lamp. this is within 10-15% of the efficiency of a CFL).
- Long lasting (11,000 hours)
- 100% mercury free
- Instant on to full brightness
- Fully dimmable with an ordinary dimmer
- Trash bin disposable

Get more information at: <http://www.vu1corporation.com/technology/>

They still have not reached the efficiency of CFLs, and they are still \$20 each, but they give superior light, and that price is lower than LEDs currently available. Has anyone actually seen these? What are your thoughts on them?

FYI: There's a new outdoor lighting testing center in Seattle, started by the Lighting Design Lab and the Bonneville Power Administration's E3T program. It's operated by the Lighting Lab and located at South Seattle Community College. It has a row of towers that are adjustable in height, movable, and have heads that can be lowered to the ground and hold several street lamp heads. Just like at the Lighting Lab, this center allows you to transcend manufacturer's brochures and data and actually drive under a new model of LED street light and experience the color temperature, brightness and possibly the glare for yourself as you drive by in the rain. That's similar to what I've appreciated for almost 20 years with the indoor lighting demonstrations and mock-up room at the Lighting Lab. And being an abandoned runway on a college campus, you don't have to worry about traffic. A light fixture may look great on a cut sheet or perform well in a modeling program, but actually sitting at a desk under it may be an unexpected experience. Michael Lane at the Lighting Lab is the guy to talk to about getting access.



Smart Lighting Prototype now available for use in research

<http://www.bu.edu/smartlighting/research/smart-light-prototype/>

The team at Boston University's Smart Lighting Engineering Research Center...

Started by Aleta Thompson



Technology Assessment Projects in the Northwest

One thing that utilities in the Northwest--and elsewhere--have in common is the need to figure out which new and emerging technologies real...

Started by you



Evaluation and assessment labs

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Started by David Shepherd-Gaw



Looking for a replacement for chilled-water cooling systems in building complexes?

Consider this new technology available for licensing: Rapid Cooling Using Ice Slurries for Industrial and Medical Applications (excerpt)...

Started by David Shepherd-Gaw

One thing that utilities in the Northwest--and elsewhere--have in common is the need to figure out which new and emerging technologies really work and are therefore worthy of promotion and incentives; the search for the holy grail of the next CFL. This is not small task, and the number of new and emerging technologies to consider grows daily. It is therefore vital that all the players involved coordinate and collaborate as much as possible, partnering and building on each other's work rather than duplicating it unnecessarily.

One resource that can help those in the Northwest to be more aware of energy efficiency emerging technology testing and demonstration projects is to use--and add to--a map of such project provided by E3T at <http://www.e3tnw.org/NWProjectsMap.aspx>. Clicking on any icon on the map will pop up a brief description of the project along with a link to additional information and project contacts if available. You can also download the projects as a spreadsheet. We hope that this map will help encourage collaboration and use of project results. If you know of other projects that should be added to the map, just click on Contact Us and let us know.



The Compact Fluorescent Light

Added by Diane Chojnowski on March 24, 2011 at 6:02pm



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A video player interface showing a man with light brown hair, wearing a dark jacket, standing at a podium. He is holding a glowing compact fluorescent light (CFL) bulb in his right hand. The background is a dark red curtain. A large play button icon is centered over the video. The video player controls at the bottom include a play button, a volume icon, a progress bar showing 0:00 / 0:00, a '+ Watch later' button, the YouTube logo, and a full screen icon.



Green Tech Today 9: The California Lighting Technology Center

Added by Diane Chojnowski on March 24, 2011 at 5:59pm



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0:00 / 0:00



Watch later



Host: Dr. Kiki Top 25 Green Tech Innovators Series: Finding better ways to light our public spaces and homes.
Guest: Michael Siminovitch, director of the Cali...



**Bi-Level Occupancy
Sensor/Switch**
by David Shepherd-
Gaw



LED Lamp
by David Shepherd-
Gaw



White LED
by David Shepherd-
Gaw



**Switch Reluctance
Motor**
by David Shepherd-
Gaw



LED Linear
by David Shepherd-
Gaw



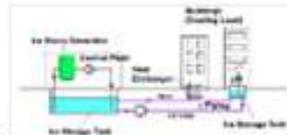
LED Street Light
by David Shepherd-
Gaw



**Facebook's Energy
Efficient Data Center**
by David Shepherd-
Gaw



OLED Lighting
by Angela Phillips



iceslurry
by David Shepherd-
Gaw



**Ductless Heat Pump
Outdoor Unit**
by Jack Callahan



**LED Parking Garage
Lighting**
by Jack Callahan



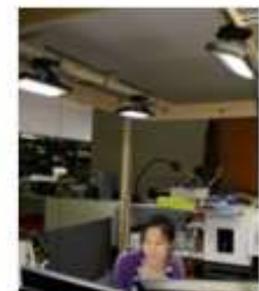
**LED Downlights and
Under-Cabinet Lights**
by Jack Callahan



**LED Freezer Case
Lighting with
Occupancy Sensors**



**Heat Pump Water
Heater**
by Jack Callahan



**Adaptive Lighting =
Smart Homes**
by Diane Chojnowski

Please Join Us Now

www.e3tconnect.org

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- (360) 956-2053