

VERGE Conference, Boston
Where Tech meets Sustainability

The VERGE Conference was recently held in Boston Monday and Tuesday, May 13-14. The Conference was put on by GreenBiz Group with the topic of utilizing and enhancing technology to advance sustainability and in turn, solve some of our global problems.

“Better Battery”

One topic that I thought was very interesting was the “Better Battery”, presented by Don Sadoway, a Professor of Materials Chemistry at the Massachusetts Institute of Technology (MIT). The usefulness of a new and “Better Battery” cannot be overstated. A large scale “Better Battery” could cut down on transmission line congestion, aid in storage of energy for a micro grid (think of a community size, possibly self-sufficient energy grid, that incorporates multiple energy sources) and could assist in the hard problem of integrating wind and solar as a base load for power.

I enjoyed Professor Sadoway’s pragmatic approach to his battery. “Think different. If you want it simple and dirt cheap, make it out of dirt!” However, Professor Sadoway’s MIT team couldn’t make it out of dirt, so they took this approach: Molten Magnesium top layer, Electrolyte center, and Molten Antimony bottom. There are no layers of lead plates spaced apart, the materials actually touch and are encased in a refractory lining all stored, theoretically, inside something the size of a large shipping container. Learn more about the “Better Battery” at www.ambri.com

Energy Managers

A panel of managers from MGM Resorts International, Harvard and Khol’s Department Stores discussed *The Changing Face of Energy Management* and the need of energy managers. In the past, energy managers mainly paid the energy bill and interfaced with the electric company. In today’s world, an energy manager can see in real time what, in their organization, is using energy and how much it is consuming. This means that the manager can attempt to reduce consumption or increase efficiency and in turn save their organization money, something that everyone wants. This approach requires that a company be aware of their energy usage so they can find out what is driving up their energy costs. Something as simple as changing the type of light bulb used can save a large organization tons on their monthly energy bill. The overriding message: Be Smart about your Energy.

Puck Mykleby on Regional Clusters

The highlight of the day came in the form of a retired Marine Corps Colonel, Mark “Puck” Mykleby. Puck is a coauthor, with Navy CAPT Wayne Porter, of A National Strategic Narrative. The Narrative is an opportunities based approach to sustainably increasing America’s security and prosperity by addressing our investment priorities, underpinning matters with our values, encouraging just competition and keeping an eye to the future.

Puck discussed *regional clusters* with Joel Makower, Chairman and Executive Director of the GreenBiz Group. Regional clusters, the best I understand it, can be thought of as connecting dots that don't normally get connected for the betterment of what you are clustering. Think of the food you eat, like a salad. Now think of all the different people it took to get that salad to your table: The farmer, the picker and packer, the trucker, the investor that funded it all, the researcher finding better ways to grow food, everyone. Now think about getting a representative of all those groups in a room together to discuss how or what they need to do their job better and more sustainably. Connecting those dots and linking them to one other can increase efficiency, reduce materials consumption, and encourage investment.

Food is just one part of the full spectrum sustainability concept that a regional cluster would address. The homes we live in, communities we grow in, energy we generate and consume, the industrial commons we share, the policies that dictate our operating parameters, and many more all need to be addressed if we are to leave a better planet for our children.

I have been following Wayne, Puck, and A National Strategic Narrative for some time now and one thing that always sticks with me is their eye for the future. "It is right there in the Preamble to the Constitution." they would say. "Secure the blessings of liberty to ourselves and our **posterity**". We have a finite amount of raw natural resources to use and they are fast dwindling. If we are to secure the blessings of liberty to our future leaders, our young people and generations to come, we must embrace the concept of full spectrum sustainability.

The VERGE Conference by GreenBiz Group in Boston, 2013, well worth the drive.

May 17, 2013 Video — VERGE Event, GreenBiz.com interview with Mark Mykleby, [Sustainability as Strategic Imperative](#)