Donations help us make more and better videos more quickly. Thank you!



News. September, 2013. Issue #18. 15,000 ESB video views.

Those who are lifting the world upward and onward are those who encourage more than criticize.

- Elizabeth Harrison

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News About EnergyShouldBe (ESB)

A personal note from Ken Regelson:

Update on The Campaign For Local Power - From Boulder, Colorado

In <u>August's ESB News</u> I reported on New Era Colorado's crowdfunding campaign and video about Boulder's fight to move to a clean electricity future with competitive rates & reliability by taking over our electric system from Xcel - 80% fossil fueled - Energy.

The response has been nothing short of astounding. Almost a million views of the video. Donations from 32 countries, 49 states, 1,000 cities, and 5700 supporters. Emails from around the world asking "How can I do this in my Community?" If you haven't already, check out the excellent video at (G):

http://www.indiegogo.com/projects/campaign-for-local-power/x/2458211

Electricity

Underseas Kite Generates Electricity From Tides

Novel technology. Its a bird, Its a plane. Its a kite. Underwater. It may be able to make electricity cheaply. (G)

http://www.renewableenergyworld.com/rea/news/article/2013/08/seeing-deep-green-with-low-velocity-tidal-power

Baseload is a Myth. Intermittent Renewables to 100% Practical & Affordable

Analysis from down under. The future of civilisation and much biodiversity hangs to a large degree on whether we can replace fossil fuels – coal, oil and gas – with clean, safe and affordable energy within several decades. The good news is that renewable energy technologies and energy efficiency measures have advanced with extraordinary speed over the past decade. (G)

http://theconversation.com/baseload-power-is-a-myth-even-intermittent-renewables-will-work-13210

Disrupting Energy - How Silicon Valley is Making Coal, Nuclear, Oil, & Gas Obsolete This is the working title of a book being written by Stanford energy expert Tony Seba. *Utilities as we know them are over. They are the land line telephone companies of 20, 30 years ago* (article G)

http://www.energypost.eu/index.php/how-solar-and-evs-will-kill-the-fossil-fuel-dinosaurs

Geothermal Worldwide: 12 GW in Operation by End 2013. 12 More GW in Development An update on world geothermal electricity generation projects.

 $\underline{\text{http://www.renewableenergyworld.com/rea/partner/geothermal-energy-association-4102/news/article/2013/09/global-market-for-geothermal-continues-upswing}$

Electricity Storage to Take Off in California - 1.3 GW by 2020

Storing electricity is one of the key technologies needed to allow lots of intermittent renewable electricity to be installed. So far costs for storage have been high.

One of the barriers to large-scale sales, and the price reductions that come with mass manufacturing, has been the silo nature of electricity generation tariffs. Energy storage provides many benefits across different tariffs (capacity, energy storage, peak reduction, balancing, power quality, etc.) - but PUC regulations often allow only one tariff to apply when considering a storage investment. California's PUC is now taking the lead to recognize the total value of storage, and to rapidly push forward storage manufacturing. (G) http://www.esnaexpo.com/press/release/6

German Support for Residential Electricity Storage

New research has predicted that the German government's measures to support energy storage uptake – namely its relatively new solar storage subsidy program – could trigger a boom in the market similar to that once witnessed in the solar PV industry. (G)

http://reneweconomy.com.au/2013/german-energy-storage-plan-could-trigger-new-market-boom-47150

Transportation

Miles Driven per Acre of Land - Solar & Wind Win

Mark Twain said "Buy land. They aren't making it anymore." When it comes down to it, how we use land effectively is critical to understanding which technologies will win, and which will lose.

In 2006, I wondered about biofuels and electricity. Suppose we had a Prius-class car that could run on electricity, ethanol, or bio-diesel. How many miles could we drive that car from the electricity, bio-ethanol, or bio-diesel that could be created from an acre of land. I put together the graph below (PG).

http://fivestarconsultants.com/Clients_&_Projects_files/yield%20in%20miles%20driven.pdf

Recently I came across a blog post where the author wondered the same thing, and quite independently, came up with very similar answers. With the exception of algae based fuels, solar and wind generate much more miles driven than biofuels. And algae has yet to be proven at any kind of scale (as far as I know, there has yet to be even a 1 acre sized algae farm developed). (PG)

www.renewableenergyworld.com/rea/blog/post/2013/08/fueled-vs-electric-cars-the-great-race-begins-10

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