We Mean Business!
2014 Energy Summit

January 17, 2014
Presentation to WIDRC
Thank You!
2014 Summit: By the Numbers

- 211 Attendees
- 50 Sponsors
- 13 Projects/People/Orgs recognized
- 6 Policy Briefs & Breakouts
- 3 Outstanding Keynotes
- 3 Business & Policy Panels
- 1 social gala with beer & skewered chicken
Where We’re At

- Wind: 648 MW (20th Nationally)
- Solar: 14 MW (24th Nationally)
- Bioenergy: ~150 biodigesters (ag, industrial/food, municipal, landfill) + Many co-fired generators (including 50 MW Domtar)
But....

Data from LBNL; Graphic courtesy Jesse Durst, RENEW WI intern
When I requested the trip to come to Madison in January, I got no concerns from the Dept. of Energy about it being a boondoggle.

3 Main Points:

• There is tremendous potential
• We need to invent the future we want
• The pace of the transformation of our energy system does matter. If we want to make a difference, we have to start now, and be aggressive.
Business Panel

Matt Neumann
SunVest
(Pewaukee)

Melissa VanOrnum
DVO
(Chilton)

Joe Sullivan
Wind on the Wires
(Midwest Rep)
Secretary Ben Brancel (DATCP) was slated to appear but was ill.
Million Watt Club 2013 Inductees

- Galactic Wind
- GreenWhey Digester
- Forest County Potawatomi Digester
- Dane County Community Digester
- Rosendale Dairy Dig.
- Jefferson Solar
Awarding Renewable Energy Leaders

- Roger Kasper
- Milwaukee Shines
- Metcalfe’s Market
- City of Monona
- Solar Connections
- Falcon Energy Services
- Lee Cullen
“America’s policy has been to buy electricity as cheap as we can get it, no matter what it costs. We can’t do that anymore: we can no longer afford cheap energy."

How we work:
- Collaborate & Cooperate
- Communicate & Convince
- Construct & Coalesce around ecosystems
- Copy (when appropriate) and create anew (when necessary)
- Convene around a vision

Be Mammals, not Dinosaurs

“The technology has improved, the opportunity has improved, the understanding has improved.”

Karl Rábago
• Value of Solar
  – Three concepts to distinguish: price, cost, and value
  – Austin: “What is ‘indifference’ price at which we don’t care if people install solar?”
  – Include all positive & negative attributes
  – “Close to retail”
  – That led to a tariff for residential customers – “buy all, sell all” that “could get us past the problems of net metering”
  – Minnesota Study & ALJ Decision
Research, Innovation, & Jobs

Gary Radloff
UW Energy Institute

Mike Bull
Center for Energy & Environment

Alan Perlstein
M-WERC
Michael Noble

- Transforming the U.S. electricity system has been appropriately likened to trying to rebuild an airplane in mid-flight. – Lena Hansen, RMI
  - Wisconsin will buy solar power at 1/10\textsuperscript{th} the price Germany did
  - Wind power offers the opportunity to lock in low rates for 20 years
Price of solar cells dropped 99 percent since 1977.

Source: Bloomberg New Energy Finance
Figure 14. Actual module average selling price reduction vs. average analyst expectations

Sources: Barclays (05/01/09, 11/15/10, & 04/11/11); Citigroup (05/01/12); Deutsche Bank (05/27/08, 01/21/09, 05/06/10, & 01/05/11); Goldman Sachs (10/17/11, 02/29/12, & 06/26/12); Lazard (11/04/08, & 04/02/09); Stifel Nicolaus (07/15/11, 01/25/12, & 04/20/12); Thomas Weisel (10/06/09, & 04/08/10); UBS (08/22/10, 03/08/11, and 10/10/11)

Thank You!

Questions

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