

Final Comments at Second Energizing Kentucky Conference

Larry D. Shinn
President of Berea College
September 19, 2008

These first two Energizing Kentucky Conferences have made clear that America's, and Kentucky's energy policies:

- (1) Are a matter of national security through energy independence;
- (2) Must include the production, use, and management of traditional energy resources in *new* ways;
- (3) Should incentivize alternative energy sources though they cannot now replace the enormous volumes of oil, natural gas, and coal used in America;
- (4) Must consider the environmental impact of all energy choices on the total ecosystem and on climate change in particular;
- (5) Must include energy efficiency and conservation as core, high priority components.
- (6) Must include collaboration of Business, Education, Higher Education, as well as representatives from Coal and Environmentalists.

Thomas Friedman, in his speech last night and in his new book *Hot, Flat, and Crowded* expands this energy conversation even further when he links the world's energy crisis with America's economic and political future. He says:

- America's problem = we have lost our way (politically we have quarreled our way into gridlock and economically have borrowed our way into unsustainable debt).
- World's problem = it is hot, flat, and crowded—and getting worse each day.
- Friedman's solution? = make the world's predicament, America's opportunity for political resurgence and economic success. Energy issues can reunite America and give us purpose. But we must move from an "energy party" to an "energy revolution."

Thomas Friedman describes in detail 5 interrelated global problems:

1. Growing demand for fewer and fewer fossil-based fuels (i.e., oil and natural gas especially),
2. Massive transfer of wealth to Middle-East and other global opponents,

3. Disruptive climate changes are becoming commonplace (c.f. Hurricane Ike this past week),
4. Because the world is flat, half the world will not allow themselves to be left behind in energy poverty,
5. The accelerating loss of biodiversity is a threat to human survival.

Simply put, there is a “perfect storm” forming around the combined forces of energy, economics, environmental degradation, and cultural conflicts throughout the world. This perfect storm of “hot, flat, and crowded” marks a new human era – what Friedman calls the “Energy–Climate Era.”

Friedman concludes,

- “Countries, communities, and companies that invent and deploy clean power technologies will have a dominant place in tomorrow’s economy.”
- Thus the Code Red of the Cold War Era in American must be replaced by Code Green in the Energy-Climate Era based upon an innovative new green economy.
- Ultimately “going green” is about America’s national security and economic power – not just energy.

Friedman’s suggestions to achieve a revised American Future?

- First, we must think systematically about the five interrelated challenges surrounding energy. As Friedman says, “the first rule of systems is that everything is interconnected. Thus our solutions must address all of the dimensions of the energy problem [i.e., decreasing fossil fuels, population growth, unwanted wealth transfer, climate degradation, and loss of biodiversity]—not just one at a time.” He argues for a nationally regulated clean energy system that will put us in the 21st century;
- Second, we must find ways to reduce our energy uses and create more efficient energy systems. Friedman argues that the cleanest energy that will move us most quickly toward energy independence is the energy we don’t have to generate;
- Third, we must preserve our natural inheritance for our health and that of our children and grandchildren. He says,

“Just as we need to develop a system for clean energy generation...we also need to develop a global strategy for the preservation of our forests, oceans, rivers, and endangered biodiversity hotspots.”

Our basic concern is not animal and plant survival, it is human survival.

So what have we heard at this conference after Friedman?

1. Throughout this conference, we have heard presentations that reveal the complexity and interrelatedness of the many considerations that go into a comprehensive energy equation. There are many elements to comprehensive policy
 - Some people propose alternative energy solutions (e.g., Ivan Urlaub and Susan Zinga)
 - We need good data to know what is effective.
 - We need ways of scaling those solutions that work.
 - We need good governmental regulations and incentives to speed up development and aid scaling.
 - Others urge the cleaner use of fossil fuels (e.g., sequestration of carbon) in Kentucky, Utah and elsewhere
 - But the cautionary voices such as Tom Kimmerer warn us that the era of inexpensive oil and coal is over – or will be soon due to expected federal “taxing” of carbon emissions.
 - Still others suggest legislative regulations and incentives (Governors Beshear and Huntsman)
 - We need good data and good governmental regulations and policies (just as Urlaub and Zinga noted above).
 - The policies need to be comprehensive and inclusive.
 - Both governors make a point that regulations and incentives will be necessary.
 - California, Colorado and North Carolina are examples of quick successes!

2. We have also heard a number of voices urge efficiency and conservation:
 - The August 15, 2008 minutes of the Kentucky Legislatures “Special Subcommittee on Energy” says, “By far the best option for reducing carbon emission is through demand-side efficiency improvements in the energy consumption of homes and buildings, vehicles, and industrial uses of energy.”
 - Most speakers support this tactic unequivocally and cite the states above as places that have created incentive program to encourage broad and sustained efforts to improve efficiency and conservation both in the home and the workplace.
 - Today we learned about the powerful example of conservation, Juneau, Alaska where, after an avalanche destroyed their hydroelectric power lines and energy costs from hydro power to diesel fuel generation went from .11cents/kw to .52 cents/kw-- a five-fold increase!! Their “Juneau Unplugged” campaign led to more than a 40% reduction in electric use in less than six weeks, and current use remains at 20% reduction even after their less expensive hydropower has been restored.

- Friedman reminded us that Denmark in 1973 imported 99% of its oil from the Middle East and then after the 1974-5 Arab oil boycott, Denmark set out on a path of alternative energy and conservation; Today Denmark imports no oil from the Middle East and is the largest exporter of clean technologies.
- Friedman also reminded us that if the United States had sustained the conservation rate that was undertaken here between 1975 and 1985, we would have no need for Middle Eastern oil today!

Juneau and Denmark are powerful examples of why Friedman, our Kentucky Subcommittee on Energy, and several panelists at this meeting have said that energy efficiencies and conservation are the quickest, least expensive way for us to gain greater energy independence and protect the environment simultaneously.

3. We have heard deep concerns about the environmental legacy we are leaving to our children and grandchildren:
 - The 17 of 25 natural systems under severe stress from challenges in the atmosphere (e.g., ozone depletion) and the oceans (overfishing and coral destruction) to water (lack of fresh water for 1/3rd of the peoples of the world) and climate (e.g., global warming).
 - Friedman's biodiversity examples appropriately cause all of us pause.
 - Every one of our presenters today linked environmental and energy concerns as two sides of the same coin.

And yet very little is being said in the current national dialogue about efficiency, conservation, or the broader environmental issues that affect human life on this planet – this is a failure not to think about energy as part of our complex natural system.

4. And finally, We have heard what it means to be a united America (from Thomas Friedman, Governor Huntsman of Utah, Maria Gladyszewsik of Juneau, Alaska, and Mayor Will Cox of Madisonville, Kentucky). Each one speaks of bringing communities together, reaching across barriers, and working to transcend politics at all levels to create a revolution.

So where do we go from here at our third conference in April and beyond?

1. It is important to keep leaders of all of the key constituencies – business, education, and public policy makers at the same table. The collective IQ of all of us is greater than the IQ of any single group or one of us.

2. Our next conference in April will focus primarily on the role of education – K-12 and higher education – as an innovative part of the energy discussion. Kentucky’s energy policy needs to utilize education at all levels as part of our Commonwealth’s energy strategy if we are to use all of Kentucky’s human capital and resources.
 - We deal with science, engineering and public policy facts.
 - We must pay attention to the best practices as universities – why not for Energy Policies too?
3. Our next conference will create a white paper that will point us to key elements that should be in any states’ energy policy – Kentucky’s included. That conference will invite business and public policy makers to join with higher education leaders to further our discussion about ways to conceive an inclusive, informed, and innovative energy policy for Kentucky that can simultaneously build on our current strengths while developing a future where clean energy and energy efficiencies and conservation are promoted in public policies in ways that create a strong economic future while protecting Kentucky’s natural wealth and beauty.
4. The media will have a key role in the education of the public to the issues, challenges, and good policies and best practices that can further our quest to Energize Kentucky. Recent editorials and the strong and quick readers’ responses make clear the important educational role of the newsprint and other media. Newspapers, TV & Radio, the internet and even weather forecasters have an opportunity to contribute to the public’s awareness of this great challenge.
5. We must be bold to seek what Jim Collins in his book *Good to Great* calls Big Hairy Audacious Goals--BHAG.
 - 1. Alternative Fuels
 - T. Boone Pickens suggests using windmills to produce 20% of America’s electric needs and then use the 20% of freed up Natural Gas to power efficient and low emission natural gas cars. This could reduce up to 25% of America’s oil imports or save 3 million barrels a day.
 - 2. Conservation
 - If we built upon Juneau Alaska’s example and reduced our consumption of energy in America by only 20%, we would eliminate the need for 4 million barrels of oil a day and nearly wean us from Middle East oil. As several conference participants have said, conservation is both the fastest and least expensive way toward energy independence. Give example of 1975-85 rate of conservation IF CONTINUED would have resulted in no need for Middle Eastern oil in America today (p.15).

- 3. Revolution
 - Whatever our bold ideas, we must put Kentucky's energy solutions in state, national, and global contexts. How can we in Kentucky set bold goals and use innovation and comprehensive planning to create a clean and abundant energy future not now imagined? What is our BHAG? Revolution – we cannot think of ONE supply alone.

These are a few of the most important lessons we have learned in order to Energize Kentucky to think beyond its past and toward an unprecedented future. We look forward to seeing you at the Third Energizing Kentucky Conference, April 15 & 16, which will focus on Education. Jared Diamond will be our speaker. More information will come.

1. Thanks to each of you for making this journey with us.
2. To quote Thomas Friedman, “We have exactly enough time – starting now!”