

The Cost of Alternative Fuels

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Why Do Conservative Public Policy Organizations Care About the Global Warming Debate?



Individual Liberty, Free Markets, and Peace



Why Energy Costs Matter: Micro



Why Energy Costs Matter: Micro

In 2014 I published data for The Heartland Institute showing electricity prices in states with renewable power mandates rose 50 percent faster than states without renewable power mandates.

In individual states that enacted renewable power mandates:




- Kansas households paid an extra \$130 per year in electricity costs
- Ohio households paid an extra \$190 per year
- North Carolina households paid an extra \$190 per year
- Colorado households paid an extra \$350 per year
- New Mexico household paid an extra \$400 per year

Why Energy Costs Matter: Micro



News - Ohio Renewable

heartland.org/news-opinion/news/ohio-renewable-mandates-driving-up-electricity-prices?source=policybot

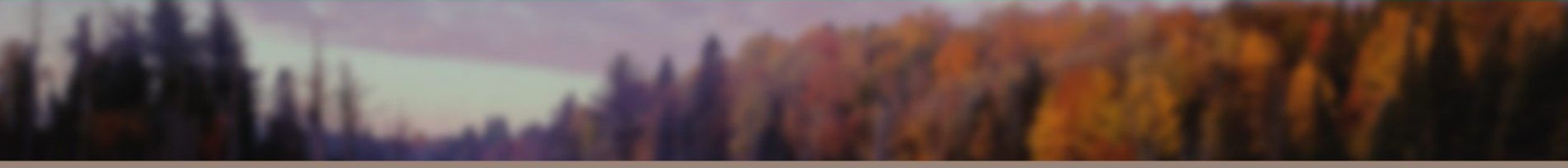
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OHIO RENEWABLE MANDATES DRIVING UP ELECTRICITY PRICES

JANUARY 27, 2014
By James M. Taylor


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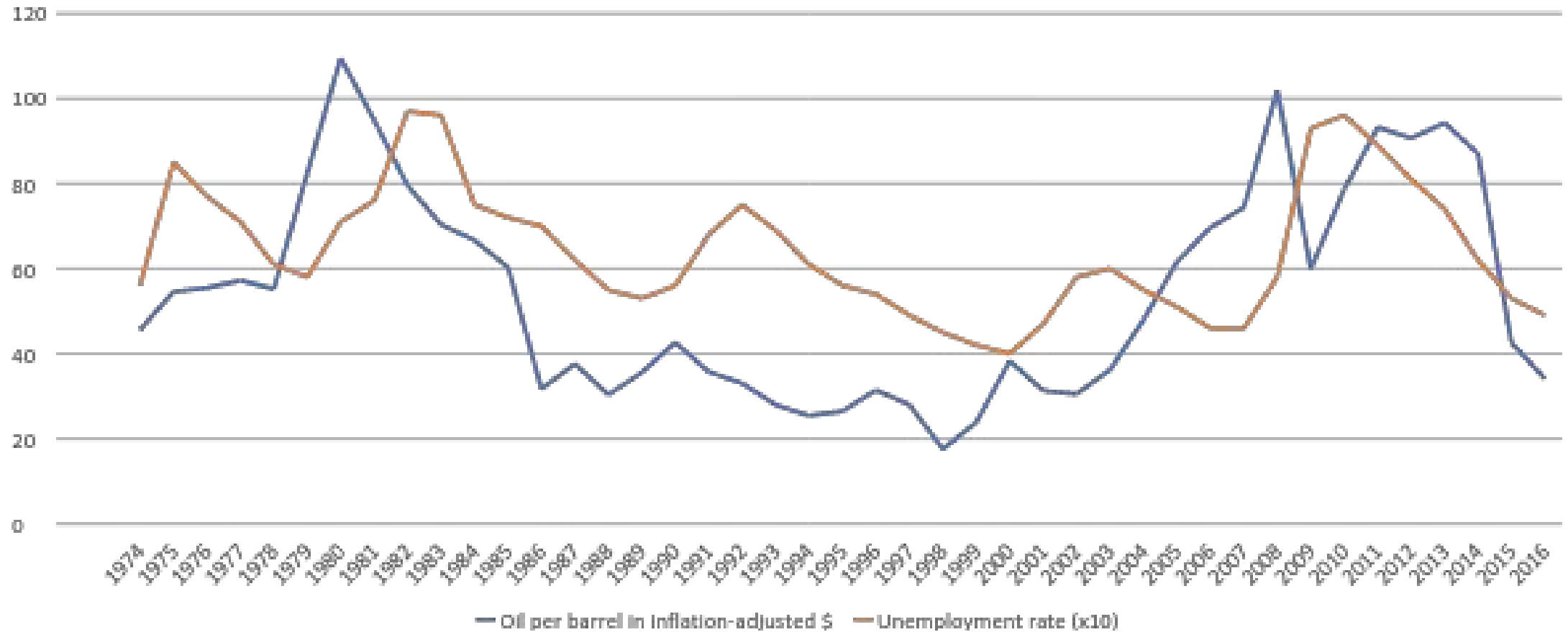


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Legislative Pulse: Net-Metering Reform and Other Indiana Energy Issues

Why Energy Costs Matter: Macro

Sources: U.S. Energy Information Administration and U.S. Bureau of Labor Statistics



Why Have Coal and Oil Dominated Energy?

- Prior to the 2006 mid-term elections, projected power costs largely determined the electricity mix in most states.
- Oil and coal were the dominant energy sources through 2006 because they were the most affordable energy sources.

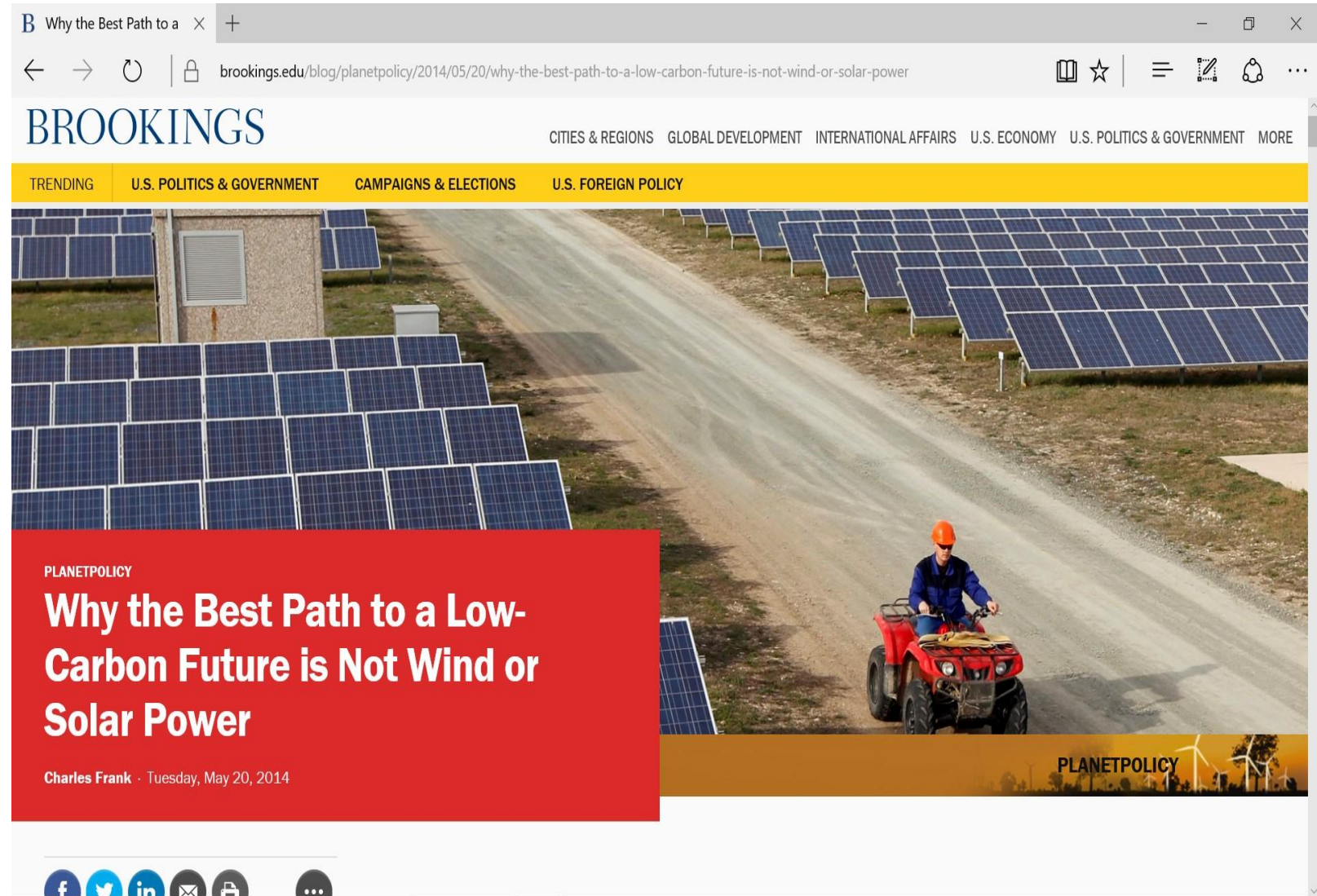
How the 2006 and 2008 Elections Changed Energy Policy

- The Democratic wave elections of 2006 and 2008 dramatically changed electricity policy.
- The Energy Independence and Security Act of 2007 imposed a *de facto* 10% ethanol mandate on transportation fuels. Fortunately, oil-derived gasoline and diesel still power nearly 90% of transportation.
- By 2008, a majority of states imposed renewable power mandates.
- At the federal level, the Obama administration implemented unprecedented environmental restrictions aimed primarily at coal power.

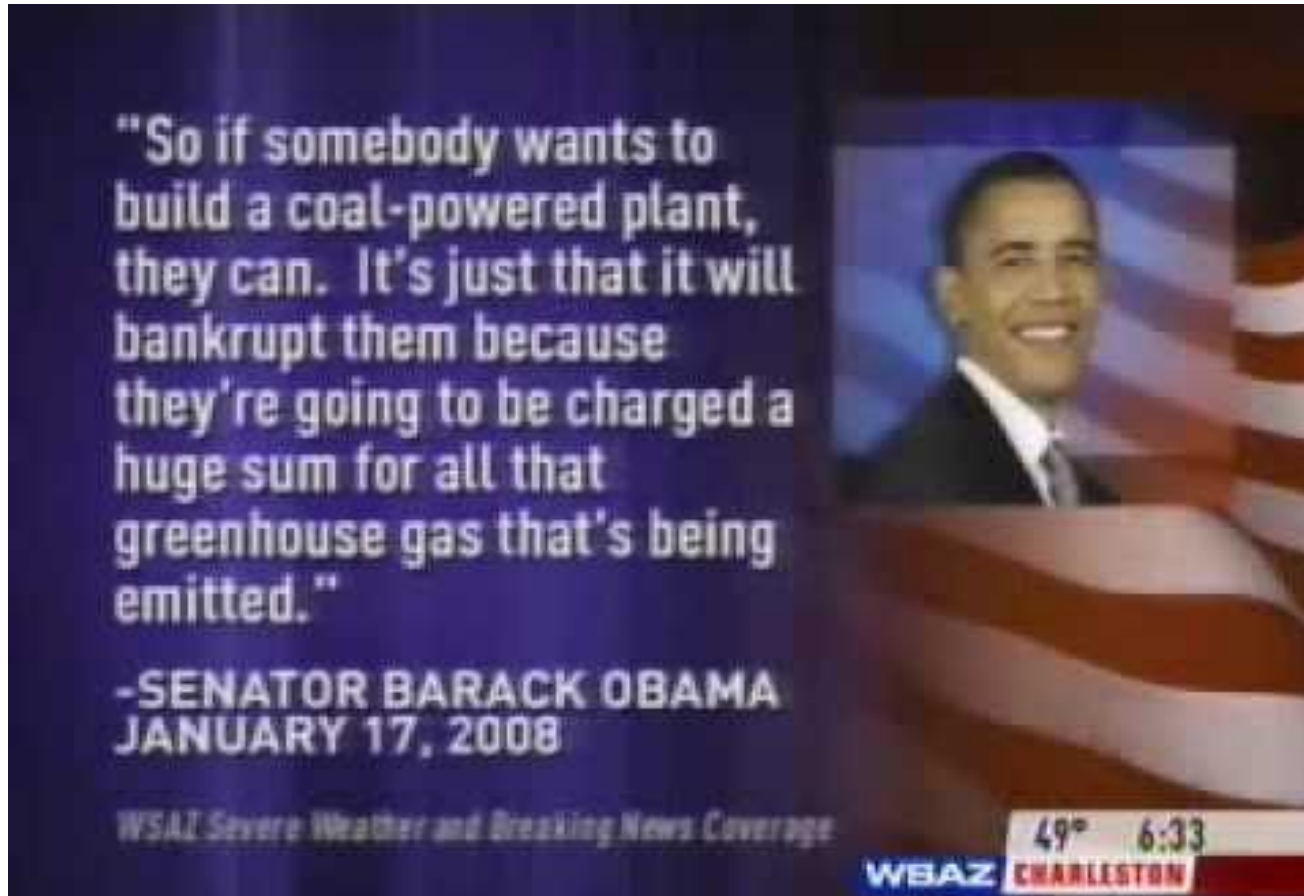
Energy Costs, Ask the Left...

The Brookings Institution – a left-of-center public policy organization – published a 2014 study on comparative energy costs. Brookings conceded replacing coal power with:

- wind power raises electricity prices by 50%
- solar power causes electricity prices to triple



What the Left Intended



Barack Obama, January 2008:

- “If somebody wants to build a coal-powered plant, it will bankrupt them.”
- Obama pledged that under his plan to reduce carbon dioxide emissions, “electricity rates would necessarily skyrocket.”
- Electricity rates would “skyrocket” because coal was easily the least expensive power source.

What Actually Happened

Real World, December 2016:

- Coal's share of electricity dropped from 48% to 30%.
- Yet the inflation-adjusted price of electricity has **declined** since 2008.

Why Prices Defied Obama

The Fracking Revolution! Since 2008...

- New discoveries of vast natural gas deposits locked in shale formations
- New fracking and directional drilling technologies to recover the shale gas inexpensively
- Abundant natural gas reserves and inexpensive recovery costs have made natural gas power cost-competitive with coal.
- Natural gas' share of electricity climbed from 21% to 35%.

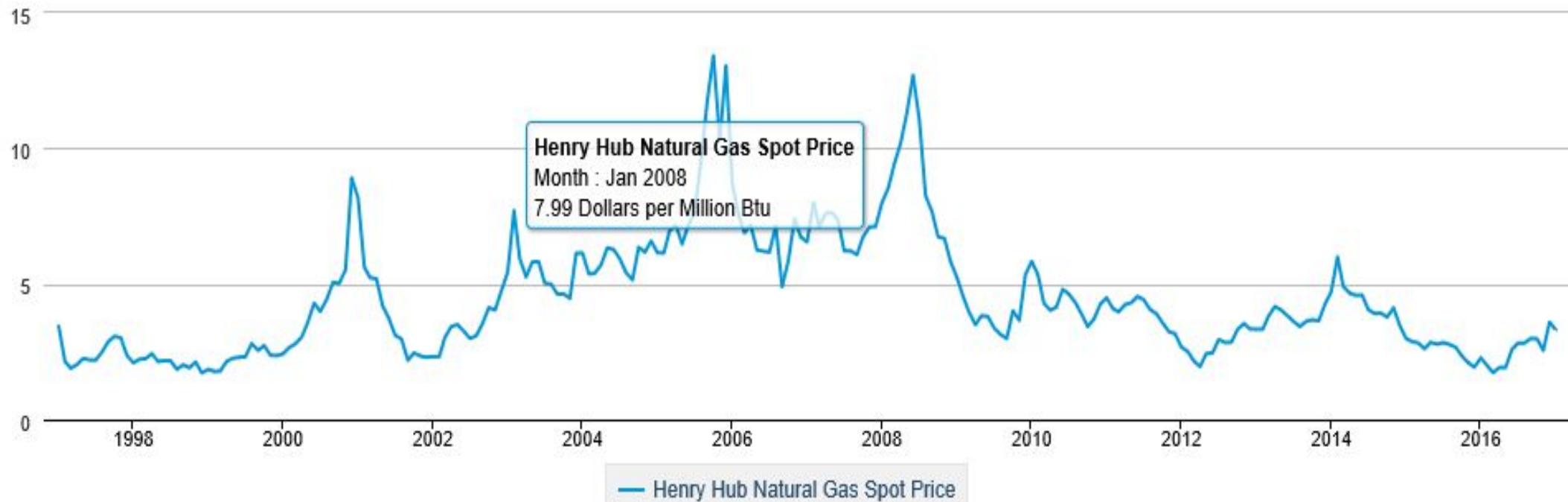


Natural Gas Rescues our Energy Economy

Henry Hub Natural Gas Spot Price

 [DOWNLOAD](#)

Dollars per Million Btu

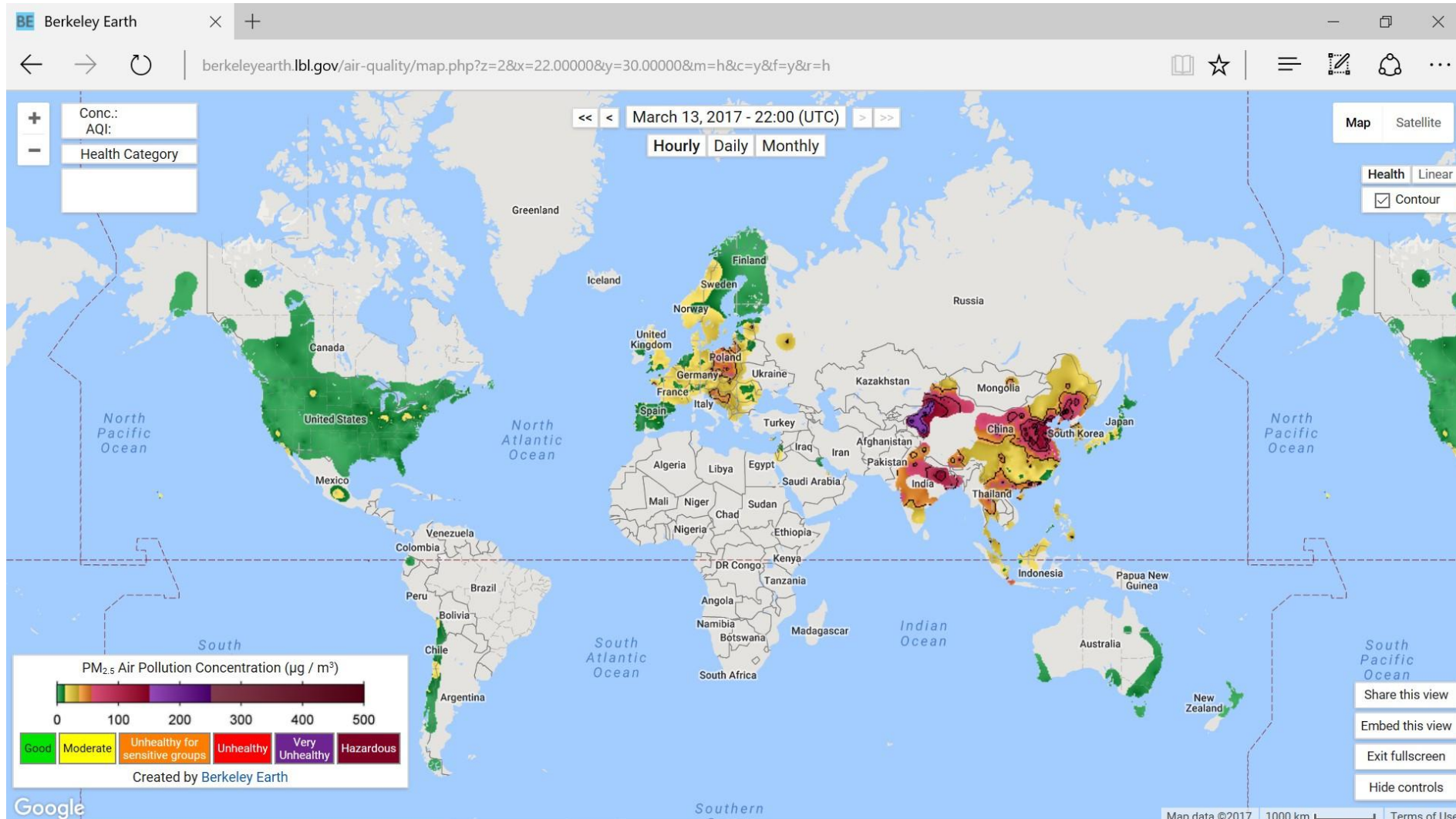




Oil Remains the Only Option for Transportation

- Ethanol is costly, environmentally harmful
- Why not algae?
- Electric vehicles may someday be an option, but battery technology needs substantial advances

Environmental and Economic Opportunity



“Renewable” Is a Non-Issue

We have centuries of oil, coal, natural gas, uranium (nuclear), and methane hydrate resources. We will not run out any time soon. Going “renewable” merely to save incredibly abundant resources makes little economic or environmental sense. Renewable is not, in and of itself, “green” or even very environmentally beneficial.

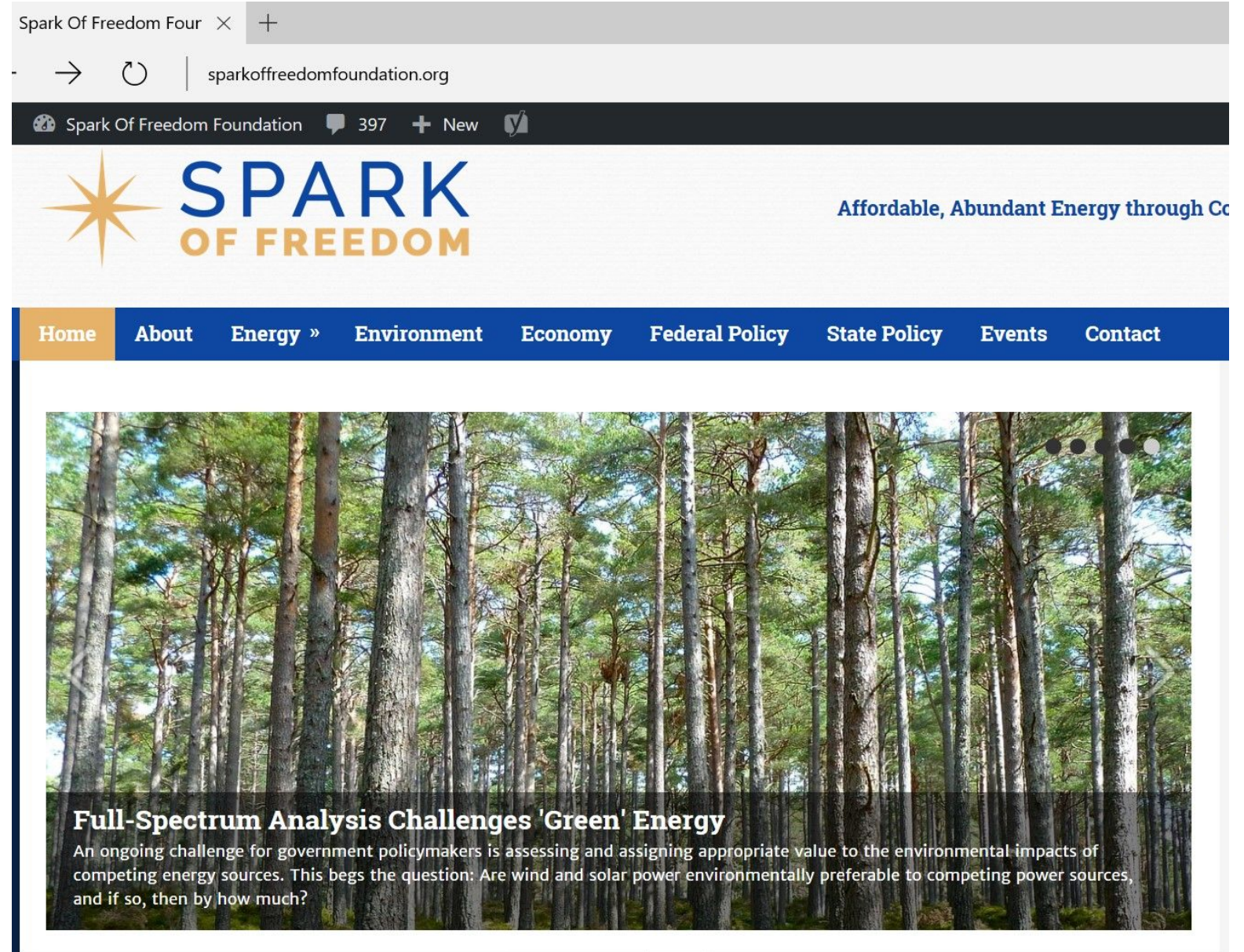
Renewable Is Not Necessarily Green





Emissions Are Not the Only Green Consideration

- For a good summary of comparative environmental impacts of energy sources, see my Forbes.com article, "Full-Spectrum Analysis Challenges 'Green' Energy." (Also available at SparkOfFreedomFoundation.org.)
- Solar, hydro, nuclear and natural gas score well environmentally. Wind power and coal do not. But at least coal has historically given us many economic benefits or that environmental cost.



Looking Forward: Let the Market Work! Allow Wind and Solar to Compete in a Free Market

Price chart courtesy of Brookings Institution

Net Cost Of Replacing Baseload Coal And Peak Load Gas Simple Cycle					
	Wind	Solar	Hydro	Nuclear	Gas CC
Net Energy Cost per MW	(\$74,412)	(\$50,938)	(\$141,991)	(\$217,162)	(\$46,099)
Net Capacity Cost per MW	\$200,626	\$305,725	\$130,493	\$298,937	(\$210,544)
Total Net Cost per MW per Year	\$126,214	\$254,787	(\$11,498)	\$81,775	(\$256,643)
MWH per Year	2,236.9	1,359.6	3,496.5	7,852.8	8,059.2
Net Cost per KWH (cents)	5.64	18.74	(0.33)	1.04	(3.18)

Thank you!

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