## SHORT-CIRCUITING THE FUTURE

## Fracking is a bridge to nowhere.

Will our fossil-fueled economy make humans go the way of the dinosaurs?

There are plenty of reasons to think so. Coal, oil, and gas continue to account for 87 percent of global energy consumption despite scientific consensus that drastic change is essential for avoiding a climate catastrophe.



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So, we'd better heed one of Barack Obama's most memorable declarations in his State of the Union address:

"When our children's children look us in the eye and ask if we did all we could to leave them a safer, more stable world, with new sources of energy, I want us to be able to say yes, we did," he proclaimed.

But wait. Will he be able to say that to his own grandkids?

Moments earlier, Obama cheered the fact that our country is back to producing more oil at home than it imports for the first time in two decades. And he boasted about his efforts to expedite the construction of power plants that will run on fracked natural gas, eliciting the sound of one hand clapping from the assembled lawmakers.

U.S. oil and gas production are certainly booming due to our perilous experiment with fracking, which Obama calls a "bridge" to a future powered by cleaner energy. But given the environmental perils associated with the hydraulic extraction of fuels using vast quantities of water and toxic chemicals, it's just a bridge to nowhere.

Meanwhile, major lobbying and advertising campaigns are trying to crush the opposition to building a coal export terminal in Washington state and the Keystone XL tar sands pipeline across Nebraska.

Yet a greener future is growing roots. Worldwide solar power consumption soared by 58 percent and installed wind-power capacity grew by nearly 20 percent in 2012.

"Every four minutes, another American home or business goes solar; every panel pounded into place by a worker whose job can't be outsourced," as Obama poetically put it.

The U.S. solar industry is truly thriving, thanks to sharply declining costs for photovoltaic panels. Sun-generated power grew by 27 percent overall last year, including a 52 percent expansion for residential use of this renewable energy alternative. And our country is now the world's top wind power market.

Accordingly, investors who can stomach the extreme volatility of investing in the wind and solar industries are being richly rewarded. Solar stocks skyrocketed in 2013, far outperforming benchmarks like the S&P 500 Index. Shares in many solar companies haverisen by more than 200 percent in the past 12 months.

And everyone will benefit from alternative energy's real return on investment — cheaper power, vast reductions in pollution, and the potential to rein in climate change.

Even though Obama embraces nuclear reactors as part of his "all-of-the-above" solution to weaning the nation off imported oil and gas, the world may already be on the brink of phasing out this dangerous energy source. In the two years following Japan's Fukushima nuclear disaster, nuclear energy use underwent record declines, capping two decades of shrinking market share.

Nuclear reactors now generate only 10 percent of the planet's power, down from 17 percent in 1993, according to a global team of experts.

And Ford is touting a partially solar-powered concept car. The C-Max Solar Energi hybrid is the first vehicle designed by a major automaker that harnesses the sun's power for propulsion.

Can the Energi and other innovations enable us to reverse course in time? Not if our nation and the world stick with Obama's all-of-the-above policy.

"If he actually took climate change seriously, he'd understand that more oil means higher temperatures," said 350.org founder Bill McKibben."That's just how physics works."