



## Is the World's Biggest Machine Breaking Down?

Posted by [Prof. Goose](#) on January 14, 2007 - 12:00pm

Topic: [Supply/Production](#)

Tags: [cascade](#), [electric grid](#), [electricity](#), [nuclear](#), [photovoltaics](#) [[list all tags](#)]

Jason Godesky at Anthropik offers "[The World's Biggest Machine is Breaking Down](#)":

Many of the so-called "alternatives" to fossil fuels rely on the electrical grid. We have seen the problems that [nuclear](#) and [photovoltaics](#) will face even delivering on their production promises, but even if they were to somehow solve those problems, there is still the problem of the grid itself. Most of the energy sources offered are simply means of generating electricity; this is applied to necessities like transportation through innovations like hydrogen batteries or electric cars. Even so, the electricity itself must be transported from the nuclear power plant, PV cell, or other means by which it is produced, to the car it will power, or the home it will heat, or whatever other task the energy is needed for.

That transportation is provided by the electrical power grid. Sometimes called "the world's biggest machine" by engineers, most of the energy "alternatives" proposed will require it to not only continue supplying us with the energy we use now (and the energy we'd need for economic growth anyway), but additionally to also carry the energy load we will need to replace our fossil fuel usage. This will be an impossible feat, since the current load alone is already breaking down "the world's biggest machine" under the weight of its own complexity.

A few other goodies under the fold as well...

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As soon as I get some time and get back from traveling, Don and I are working on a "concept map" of peak oil. Then again, this [really great interactive 'periodic table' of visualization methods](#) suggests myriad options of visualizing relationships and data. Or perhaps we should just hire [Edward Tufte](#) (a.k.a., "the man") to do it for us, eh?

I wonder how many "imponderables" folks can come up with from ideas related to peak oil to add to [this extant list](#)?

I haven't given my "everyone in the world needs to watch [Al Bartlett's wonderful lecture on exponential growth and sustainability](#) to understand that "The greatest shortcoming of the human race is our inability to understand the exponential function." rant in a while. Consider it given.

I think this piece (and the pieces it links to) called [The Importance of Zero in Destroying The Scarcity Myth Of Economics](#) is a really interesting set of thinking about abundance and scarcity. The idea that scarcity doesn't exist in the digital world no doubt affects our mindset. However, last I checked, geology doesn't function in the digital world.



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