

Is Coal Cheap? Surprising New Study Says “No”

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A new analysis of nationwide energy data released this week casts serious doubt on the popular image of coal as “cheap power,” according to the non-profit Ground Truth Trekking. No evidence was found for the common industry assertion that building coal-fired plants would reduce electricity prices for consumers.

The study draws on 20 years of electricity generation and price data, as well as other Department of Energy (DoE) and U.S. Energy Information Administration (EIA) data.

Results of this study and other related work show:

- State by state, increasing or decreasing coal usage has no consistent effect on electricity prices.
- The price of electricity from a newly constructed coal plant is comparable to that from most renewable sources (other than solar). These alternative approaches also have fewer costs to public health and the environment.

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- A review of studies of externalities (costs that don't appear in the sticker price) of electricity generation shows that coal has extremely high external costs. If these hidden costs are considered, coal is far more expensive than the alternatives.

One the most striking results of this study is that, with respect to building new power plants, coal is economically questionable to pursue - even _without_ including external costs. This result surprised even the researchers.

“I came into this expecting to see coal look costly only when external costs were applied. I’d accepted the widespread belief that coal did make cheap electricity if those externalities were ignored. But it turns out that’s not true,” said Dr. Bretwood Higman, geologist, co-founder of Ground Truth Trekking, and lead author of the study. “When we looked in detail at the data, a very different story emerged. There are ways to dramatically reduce dependence on coal without increasing electricity prices.”

An advanced interactive graph, custom-built and used in the analysis, has been made available online: .

Background: The United States is the world’s second largest coal consumer, after China, with nearly half our electricity produced in coal-fired power plants. Additionally, the United States possesses a significant portion of the world’s coal. Coal’s power potential, environmental impact, carbon footprint, and domestic availability places it at a critical nexus in the national

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debate over energy security, environmental degradation, climate change, and our future as an energy-intensive, technological society.

Full Report:

Additional Links:

- Levelized Cost of New Generation Resources in the Annual Energy Outlook 2011 (EIA)

http://www.eia.gov/oiaf/aeo/electricity_generation.html (http://www.eia.gov/oiaf/aeo/electricity_generation.html)

- “ExternE” (External costs of Energy) European Research Network

<http://www.externe.info/> (<http://www.externe.info/>)

- “Full cost accounting for the life cycle of coal”

http://www.chgeharvard.org/sites/default/files/epstein_full%20cost%20of%20coal.pdf (http://www.chgeharvard.org/sites/default/files/epstein_full%20cost%20of%20coal.pdf)

- True Cost of Coal (Ground Truth Trekking)

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Ground Truth Trekking is a non-profit organization based in Seldovia, Alaska, Ground Truth Trekking's mission is to promote responsible and sustainable choices about natural resource issues, combining in-depth research with on-the-ground expeditions. The authors of this study are Bretwood Higman (PhD), Erin McKittrick (M.S.), David Coil (PhD), and Niki Hoagland. <http://www.groundtruthtrekking.com> (<http://www.groundtruthtrekking.com/>)

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