

Coal Plants and Climate Change

A Starter Kit

Just add time, effort and like minded folk and you too can have a coal plant campaign!

*There are a lot of things we need to do to address climate change, but the first thing we need to do is to **not** build another generation of coal plants. This sheet should help you get started with your own coal plant campaign. If you get stuck, just get in touch with me. Be persistent—my inbox is completely jammed these days! Good luck. Leslie (lglustrom@qwest.net)*

Some Environmental Issues

Climate Change: In addition to what you already know, you may want to use some of the graphics available from the Intergovernmental Panel on Climate Change at <http://www.ipcc.ch/present/present.htm> . Try determining how many tons of carbon dioxide your proposed or existing coal plant will emit and then do a per capita calculation for your state to help put it in perspective. If you want to convert tons of CO₂ to barrels of CO₂ gas (which is a good way to get folks attention) either see your local chemistry teacher or contact me.

Mercury: Two good organizations to get started with are Clear the Air and Physicians for Social Responsibility. The links are : <http://www.cleartheair.org/mercury/> and <http://www.envirohealthaction.org/index.cfm> .

Water: Coal plants use monumental amounts of water. For a general overview, see "The Last Straw" by Western Resource Advocates available at <http://www.westernresourceadvocates.org/media/pdf/WaterBklet-Final.pdf> . Also, the quantity of water is often expressed as acre-feet per year. Try converting acre-feet per year to gallons per day (1 acre-foot= 325,851 gallons) and then compare it to other large water users in your area.

Other Pollutants: Coal plants produce massive quantities of pollution, including SO₂, NO_x, particulates, volatile organic compounds and hazardous pollutants like lead and arsenic. Consult with your local air pollution experts to learn more about all of these. Also, check out the amount of ash produced (e.g. bottom ash and fly ash) and what is planned for its disposal.

Some Economic Issues

Cost of Coal: Don't let your utility claim that coal is cheap. Check out what is going on with coal prices at <http://www.eia.doe.gov/cneaf/coal/page/coalnews/coalmar.html> . As with all fossil fuels, the price of coal is going up—sometimes dramatically—but the key point is that we don't have a clue what the future price will be and coal plants are a 50 year commitment. By comparison, clean energy technologies like wind, solar and efficiency provide important protection from fuel cost increases.

Cost of Construction Materials: Coal plants take a lot of steel, concrete and other construction materials. You can get information about the cost of these materials from the U.S. Department of Labor Producer Price Index <http://data.bls.gov/cgi-bin/surveymost?wp> . To begin with look at the price of Materials for Construction and Iron and Steel. You can also get the data graphed which really helps get the point across.

Cost of Carbon Control: No one really knows what the cost of carbon control will be as we move through this century, but you can start with the economic analyses done by the Pew Center on Climate Change <http://data.bls.gov/cgi-bin/surveymost?wp> and the prices found on the Chicago Climate Exchange <http://www.chicagoclimatex.com/> .

Other Cost Issues: Coal plants are very capital intensive and are typically a 50 year commitment. This means that ratepayers will be responsible for construction cost overruns and operating and maintenance expenses for the next 50 years. That means our children and grandchildren will be "on the hook" for these costs and more.

Some Alternatives

Energy Efficiency: Energy efficiency is almost always the cleanest, cheapest way to address energy needs. A watt saved is a watt that doesn't have to be generated with fossil fuels or any other generation source. Two good places to get started are with the Rocky Mountain Institute and the American Council for an Energy Efficient Economy. The links are <http://www.rmi.org/> (look under Energy) and <http://www.aceee.org/>.

Wind Energy: The wind doesn't blow all the time, so wind energy can't fully replace a base load coal plant, but it does provide clean cheap energy. To get started learning more, go to the American Wind Energy Association website at <http://www.awea.org/>.

Solar Energy: Germany, which is hardly the sunshine capitol of the world, installed 300 MW of photovoltaic panels in 2004 alone. Chances are your state has at least as much sunshine as Germany! Photovoltaic panels are more expensive now, but since a coal plant is a 50 year commitment, there is an excellent chance that not too many years from now, solar will be fully cost competitive with fossil fuel generation (not even considering the consequences of climate change for the only planet we know that supports life ...) If you live in the Southwest, be sure to learn more about concentrating solar technologies. They have great potential and the California utilities are already signing large, long term contracts for centralized concentrating solar power plants. One good place to start is with the work of the Western Governors Association Solar Task Force report available at <http://www.westgov.org/wga/initiatives/cdeac/Solandraft9-15.pdf>.

Biomass: I don't know many details about biomass, but if you want to present it as an alternative to a coal plant you'll find lots of information on the internet. You might bring the best sites you find to my attention. Thanks.

Some Contacts

Western Resource Advocates: <http://www.westernresourceadvocates.org/> 303-444-1188

Environmental Defense: www.environmentaldefense.org

Sierra Club: www.sierraclub.org

Local and Statewide Environmental Organizations: There are coal plants being proposed (and fought) all over the country, so just start looking and you'll find lots of resources and like-minded allies. Also try to forge an alliance of different kinds of groups, including health based groups like Physicians for Social Responsibility and the American Lung Association. The broader the coalition, the more likely the success.

Starter kit prepared by Leslie Glustrom, 4492 Burr Place, Boulder, CO 80303 303-245-8637 lglustrom@qwest.net
October 2005