

# Study says Northwest can quit coal power and save money

By DUSTIN BLEIZEFFER - Star-Tribune energy reporter | Posted: Thursday, July 29, 2010

While Congress finds energy and climate change policy too politically volatile to act upon, other forces are at work to shift the Northwest away from fossil fuels and toward energy conservation and renewable energy, according to the nonprofit Civil Society Institute.

The group released a new report this week that suggests it is technically and economically viable to retire all coal- and nuclear-based power in seven Western states, including Wyoming.

The region has more than enough renewable sources of energy and, combined with energy conservation measures, the transition away from coal and nuclear could take place over the next 30 years. In this scenario, according to the Civil Society Institute, the Northwest could retire some 11,000 megawatts of coal-fired power and add some 12,000 megawatts of onshore wind power.

"And this is a relatively modest development of the (renewable) resource in the West," said Geoff Keith, an associate at Synapse Energy Economics Inc., which conducted the analysis for the Civil Society Institute.

While the report doesn't analyze the policy path toward such a scenario, those involved say the transition makes good sense economically. And in the absence of climate and energy legislation at the national level, regional initiatives to curb carbon emissions are already nudging the market away from fossil fuels and toward renewables.

The Western Climate Initiative, which includes seven Western states -- but not Wyoming -- and several Canadian provinces, updated its economic analysis this week estimating that its voluntary cap-and-trade program could generate a cost savings of \$100 billion by 2020.

Yet not all states involved in the Western Climate Initiative are completely sold on the plan yet.

Grant Smith, senior energy adviser at the Civil Society Institute, noted in a conference call with reporters Wednesday that the cost of new coal and nuclear facilities continues to escalate with long-term associated costs. While renewable energy and energy conservation requires a large up-front investment, there's a huge cost savings in the long run.

By 2020, the Civil Society Institute scenario would cost about \$10 billion per year more than the "business-as-usual" policy, according to the report. But it could save \$5 billion per year by 2040 and even more as time goes on.

And that doesn't factor the human health and environmental cost benefits to cutting pollution from coal and coal mining, Smith said.

"These are the least-cost options," he said.

In Wyoming, the coal mining industry contributes more than \$800 million to state and local coffers, and it directly employs nearly 7,000 workers. Yet the wishes of state-level politicians have little sway, as the mining industry is reliant on the utility markets it serves outside Wyoming.

Wyoming coal production reached an all-time annual high of more than 467 million tons in 2008, according to the U.S. Energy Information Administration. Production declined 8.5 percent to 427.4 million tons in 2009.

Production appeared to continue to decline during the first part of this year.

Coal industry officials note that coal fuels "base-load" power, which means coal-fired power units are in steady operation about 80 percent of the time -- whereas wind turbines generate electricity about 30 to 40 percent of the time, depending on the regional resource.

"The mining industry is not opposed to renewables, but recognizes they have limitations as base power load and are not as affordable and reliable as coal," said Lynn Welker, assistant director of the Wyoming Mining Association.

Welker also noted that the average resident in Wyoming pays about 8.3 cents per kilowatt hour in a state that gets 88 percent of its electricity from coal. That compares to an average 19.3 cents per kilowatt hour in Massachusetts, which gets only 8 percent of its power from coal.

Coal may not enjoy being the cheapest source of fuel, however, if a price is placed on carbon emissions. Even without a price on carbon, two coal-heavy utilities have proposed huge rate increases for their Wyoming customers this year. The increases ranged from 13.7 percent to more than 25 percent, with the increasing cost of coal being a major factor.

Senate Democrats this week abandoned hope of passing a comprehensive climate and energy bill that includes a limit on carbon emissions. Instead, they're pushing a scaled-back bill to promote energy efficiency and address regulatory concerns regarding the oil and gas industry.

Under the Civil Society Institute scenario in the Northwest:

- \* Natural gas-fired generation falls 74 percent compared to 2010 levels.
- \* 1,800 megawatts of geothermal electrical capacity is added.
- \* Hydroelectric capacity increases only slightly.
- \* More than 11,000 megawatts of coal-based power is retired.
- \* 1,100 megawatts of nuclear power is retired.

Contact energy reporter Dustin Bleizeffer at (307) 577-6069 or [dustin.bleizeffer@trib.com](mailto:dustin.bleizeffer@trib.com). Go to <http://tribtown.trib.com/DustinBleizeffer/blog> to read Dustin's energy blog.

Wyoming coal facts

- \* Wyoming mines accounted for 39.5 percent of the nation's coal supply in 2009.
- \* An average 70 to 80 trains move coal out of Wyoming's Powder River Basin each day.
- \* The coal industry contributed an estimated \$852 million to local and state governments in Wyoming in 2007.

For more info

- \* Civil Society Institute, [www.civilsocietyinstitute.org](http://www.civilsocietyinstitute.org)
- \* Wyoming Mining Association, [www.wma-minelife.com](http://www.wma-minelife.com)