

## Doctors in the dark on energy and air pollution

### ***Policy decisions should be made based on evidence, not erroneous computer models***

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CALGARY, AB/ August 11, 2014/ Troy Media/ - Recently two Alberta doctors made sweeping claims in an op-ed to the *Calgary Herald* that coal-fired power is causing millions of dollars in health costs and many deaths annually – referring to a report from last year by the Pembina Institute. Their claims were based on computer models and they dismissed critics, like me, who state that models are inaccurate.

I have frequently criticized the Pembina Institute’s use of a computer model to assess what potential health damages coal-fired plants allegedly cost Albertans. My comments are based on economist Dr. Ross McKittrick’s assessment that models are not real people and one has to ask if the results of a model make sense. Friends of Science report “Costly Misinformed Diagnosis”

lays out his argument.

In short, McKittrick found it implausible that Pembina’s math would end up attributing half the deaths of Albertans to fine particulate matter – or coal-fired power.

Based on criticisms, Dr. Joe Vipond challenged me to a public debate. I accepted and it starts right here.

In their op-ed, Vipond and Colin Soskolne claim that criticisms of the results of the Illness Costs of Air Pollution model (ICAP) are unfounded because other research supports its conclusions.

The doctors cite three papers.

The first is a 1980’s Dublin study comparing the use of coal in a residential fireplace or stove. Such coal use is far removed from the hi-tech supercritical and retrofitted Alberta power plants that pulverize coal for complete combustion and use advanced emissions scrubbers. This reference shows that the doctors are completely misinformed about modern coal-fired energy generation.

The second is a Utah study that coincides with 1990 when Alberta instituted regulations requiring the Best Available Technology Economically Achievable (BATEA) – a law that required new Alberta industrial facilities to have hi-tech scrubbers and very low emissions. Period. Alberta’s emissions regulations are far more stringent than most places in the world.

The third paper is based in Edmonton. The Villeneuve et al (2007) study tracked hospital admissions for asthma and air quality reports. It mentions industrial emitters

and coal-fired power plants – but never mentions the greatest factor in air quality in Alberta.

Wildfires.

Current evidence comes from an Aug 8, 2014 *Washington Post* report that rampant smoke from wildfires in the NWT, that have burnt some seven million acres of forest, now threatens air quality in Washington, D.C. In fact, Canada has now exported more wood as emissions to the U.S. this year than wood as lumber! It's drifting across Alberta.

Pembina's report does not mention that, in 2011, wildfires dumped 1.9 million tonnes of toxic and carcinogenic human health problems on Albertans; coal-fired plants emitted just 1,800 tonnes of PM 2.5 (particulate matter) while powering warm homes and health solutions in clinics and hospitals across the province.

According to AltaLink, a typical Alberta hospital uses "1,875,000 kilowatt hours (kWh) of electricity a month. That's enough to power more than 3,000 typical homes for a month." Right now, coal-fired plants provide some 61 per cent of the electrical power in Alberta.

Pembina and the doctors are pushing for early phase-out of coal-fired plants in the next decade – advocating an interim move to renewable energy like wind and solar.

Let's look at the costs for a moment. Health care presently eats up 42 per cent of Alberta's annual budget.

According to AESO (Alberta Electric System Operator), wind and solar can only be added to the grid if equivalent conventional power generation is added. Renewables destabilize the grid, so natural gas peaking plants must be added to ramp up and down quickly to match the erratic nature of renewables and to prevent surges or black-outs.

The marginal cost of coal is \$10 to 20/MWh. Gas is close to \$35/MWh. The early phase-out of coal-fired plants would cause healthcare power costs to double or triple.

By 2013, the EU and the UK, in their "rush to renewables, saw their electricity prices skyrocket 37 per cent over 2005 par with the U.S. Millions of people were pushed into 'heat-or-eat' poverty. Prof. John Hills' report for the UK government states: "From a health and well-being perspective: living at low temperatures as a result of fuel poverty is likely to be a significant contributor not just to the excess winter deaths that occur each year (a total of 27,000 each year over the last decade in England and Wales), but to a much larger number of incidents of ill-health and demands on the National Health Service and a wider range of problems of social isolation and poor outcomes for young people."

Early closure of Alberta's coal-fired power plants will damage human health and impose a crushing burden on healthcare.

Policy decisions should be made based on evidence, not models used by renewable activists like Pembina or doctors in the dark on modern energy generation. As for climate change issues, come to the debate.

*Michelle Stirling-Anosh is the Communications Manager of Friends of Science.*

[http://www.friendsofscience.org/assets/documents/costly\\_misinformation\\_diagnosis.pdf](http://www.friendsofscience.org/assets/documents/costly_misinformation_diagnosis.pdf)



<http://www.washingtonpost.com/blogs/capital-weather-gang/wp/2014/08/08/photos-wildfire-smoke-provided-beautiful-sunsets-on-thursday-night/>

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48297/4662-getting-measure-fuel-pov-final-hills-rpt.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48297/4662-getting-measure-fuel-pov-final-hills-rpt.pdf)

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