

## Benefits of coal-fired power plants outweigh nominal health risk

### *Phasing out coal supply would cost Alberta \$11.4 billion*

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CALGARY, AB/ October 28, 2014/ Troy Media/ - I was at the University of Calgary recently to hear Dr. Joe Vipond give a presentation on why he and his group, the Canadian Association of Physicians for the Environment (CAPE), think it is necessary and possible for Alberta to phase-out coal-fired power plants over the next 10 years. Ontario, he pointed out, had done it.

It is best to remember, however, that Ontario's power prices have spiked 27 per cent, and hospitals administrators are now looking at cutting services . . . or staff.

Vipond's analysis was based on a Pembina Institute report which claims Alberta could save \$300 million dollars and 100 lives if coal-fired power plants were phased out early and replaced with natural gas-fired power plants and renewables like wind and

solar.

But Evan Bahry, Executive Director of the Independent Power Producers Society of Alberta which represents conventional and renewable power producers in the province, strongly disagrees. When I contacted Bahry recently he was quite clear that a 10-year phase-out would be phenomenally expensive and is unrealistic. "The prospect of forcing the retirement of Alberta's coal fleet in 10 years would entail significant complications, mainly the need to replace 40 per cent of our fleet in short order, which is the percentage that coal generation currently represents," he said.

Wind power currently accounts for only 4 per cent of power in Alberta, and provides power only 33 per cent of the time. Wind power cannot be 'dispatched' (powered up or down on demand). In fact, wind and solar need 24/7 conventional coal, natural gas or hydro back-up to be part of the grid.

Bahry also addressed the timing and financial complications of phasing out coal-fired plants. (It) "would require compensating the development of new supply to ensure it was built in time and compensating those who are forced to retire. It would likely require building new transmission (lines) too, especially if you want to engineer the replacement power to be renewables and not just gas plants."

By financial compensation Bahry means you and I – the taxpayer – would have to pay out a lot of money to coal-fired plant owners and their employees and shareholders whose business case was founded on agreed-upon energy policies. Then we would

have to pay even more for new transmission lines to the remote wind and solar industrial plants.

Bahry continued that we would also have to convert coal-fired plants into natural gas-fired plants or build new ones. Referring to the new Shepard natural gas plant on the outskirts of Calgary, he said: “For some sense of the dollars involved, the 800 MW Shepard Energy Centre cost \$1.4 billion. Replacing our entire coal fleet would require eight of those,” or \$11.2 billion.

Bahry summed up by noting: “In the context of Alberta’s growth, 5 per cent this winter over last or the fastest in North America, phasing out our coal supply in 10 years would be a very expensive proposition, and in light of the generation and transmission construction timelines it is by no means certain that we could physically do so and meet growing demand,” including for Alberta’s manufacturing sector, now the second largest in Canada.

The argument against coal-fired power plants rests on two claims – that their emissions are the single worst affective driver of health effects; and that carbon dioxide is supposedly causing catastrophic global warming. This is faulty logic. Coal stacks disperse emissions high above the ground.

While Edmonton is the location of most of Alberta’s coal operations, it also boasts many ground level particulate matter (PM2.5) sources – two intercontinental diesel-powered rail lines, hundreds of diesel truck fleets, the fifth busiest airport in Canada, and the Yellowhead truck route.

Dr. Stuart Carr, in fact, calls Edmonton the worst city in Canada for asthma-exacerbating allergies, due to mould and spores from surrounding agriculture land.

Coal-fired plants emit only 0.4 per cent of human-made emissions each year, not counting wildfires. By contrast, wildfires emitted 1,000 times the PM2.5 of coal-fired power plants in 2011; wildfire smoke is full of toxic chemicals. Most fires were caused by humans.

Look around any medical facility. Alberta’s affordable power from coal is literally your lifeline. The benefits of coal-fired power plants far outweigh any nominal health risk.

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## References

Dr. Stuart Carr

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