

September 18, 2015

Alberta Climate Panel

ATTN: Dr. Andrew Leach

Dear Dr. Leach,

We are pleased to submit evidence to the Alberta Climate Leadership Panel.

Friends of Science Society is a group of earth, atmospheric, solar scientists and engineers, supported by our membership which includes scientists and citizen interested in climate science. We have been reviewing the scientific evidence on climate change for over 13 years. We are a non-profit society, run largely by volunteers, operating on a small budget, and we do not represent any industrial or commercial interests. We bring highly qualified experts to Calgary for special events to educate the public on various aspects of climate change science and policy as we explore the evidence over the ideology.

Most recently, on June 2, 2015, we hosted astrophysicist Dr. Nir Shaviv at the Red and White Club in Calgary, to speak about his [research into the effects of cosmic rays](#) and other solar influences on climate change. Dr. Shaviv had just completed a sabbatical year at the Princeton Institute for Advanced Studies, and is an IBM Einstein Fellow. He is a full professor of physics at the Racah Institute of Physics, Hebrew University of Jerusalem, and did his post-doctoral work at the University of Toronto's Canadian Institute for Theoretical Astrophysics. He has published peer-reviewed papers on the sun's role in climate change with Canadian Dr. Jan Veizer, who is a "Distinguished University Professor" of Geology at the University of Ottawa (Emeritus since April 2004). Dr. Veizer held the NSERC/Noranda/CIAR Research Chair in Earth Systems, and, from 1992 to 2004, concurrently served as the Director of the "Earth System Evolution Program" of the Canadian Institute for Advanced Research (CIAR). He recently also retired from the Chair of Sedimentary and Isotope Geology at Ruhr University in Bochum, Germany. Their research shows that the sun is the main driver of climate change, and carbon dioxide's influence is nominal.

Dr. Shaviv reports that the Intergovernmental Panel on Climate Change (IPCC) does not do a thorough review of the effects of the sun on climate, therefore their forecasts are not reliable for policy making.

Likewise, in 2014 we hosted Dr. Ross McKittrick, economist and co-author of peer-reviewed papers that disputed the "Hockey Stick" graph on empirical grounds. [Dr. McKittrick noted in his talk](#) that the divergence between the IPCC's forecasted warming, and the on-going 'pause' indicated that climate simulations (models) had an error factor; most likely the effect of carbon dioxide was estimated to be too high. He then discussed how this meant that the Social Costs of Carbon were also extremely exaggerated. His advice to policy makers was to wait 2 to 4 years before making any drastic changes.

In 2013, we hosted [Dr. Benny Peiser of the UK](#), who revealed that extreme climate targets and the addition of renewable energy like wind and solar had caused skyrocketing power prices, which pushed ordinary middle class and poor people into fuel poverty – to the point where they had to choose between paying for heating or buying food.

In 2012, we hosted Canadian investigative journalist, Donna Laframboise, whose research has revealed that the [Intergovernmental Panel on Climate Change](#) has been infiltrated by numerous agenda-driven green activists, who hold particular influence over the IPCC Summary for Policy Makers. This is the document your “Climate Leadership” brief references – therefore, be advised that the Summary reflects a far more apocalyptic view than that of the scientists. For their view and their uncertainties, please check the Technical Summary of the IPCC Sept. 2013 Working Group I report on pages 114 and 115. There are few catastrophic predictions by the scientists.

We are aware that the Honorable Minister Phillips and some of the people associated with your panel have been claiming that Alberta should phase-out coal, stating that this would save Alberta some \$300 million and also save 100 premature deaths from related respiratory conditions. These claims are not supported by the evidence.

The report by Pembina Institute/Pembina Foundation [“A Costly Diagnosis: Subsidizing Coal Power with Albertans’ Health”](#) is based on computer models, not actual patient records. Our report [“Burning Questions – An Evidence-based Review of the Alberta “Phase-out Coal” Campaign”](#) disputes their claims. Dr. Ross McKittrick assessed the ICAP model used in the report some years ago and found that, when hindcasting against known data, the ICAP model reported that more people died of air pollution than died in total. Likewise, we asked Evan Bahry of the Independent Power Producers’ Society of Alberta about the cost of phasing out coal and he stated it would be on the order of >\$11 billion to transition to natural gas, plus millions or billions would have to be paid in compensation to coal industry owners, shareholders and employees. Further research revealed that coal-fired power plants only put out 0.4% of the fine particulate matter (PM2.5) in Alberta, while wildfires emitted ~1,000 times that amount (2011) and residential fireplaces emit double that amount. Other factors include road dust, transportation emissions, agricultural fertilizer, construction dust and naturally occurring molds, spores and pollens. Likewise, the power generation scenarios in Alberta and Ontario (which is held up as an example) are very different. Alberta has lots of coal, of good quality, with advanced emissions management on all plants and two supercritical plants. We do not see any benefit in phasing-out coal and hope you will take an evidence-based approach to this discussion.

As reported in a study of members’ views of the Association of Professional Engineers and Geoscientists, published in [Organization Studies](#) by Lefsrud and Meyer (2012), a very large percentage of Alberta experts disagree with the catastrophic view of climate change, and see it as being driven by natural factors. They, like we, accept that climate changes, accept that humans have some influence, but questions the scope, specific causes (i.e. Carbon dioxide/GHG emissions or land use, deforestation, urban development or other human impacts).

As noted in the American Association for the Advancement of Science (AAAS) Code of Conduct, of the largest such scientific body in the world representing 24 disciplines: “One of the basic responsibilities of scientists is to maintain the quality and integrity of the work of the scientific community. Ideally, it is an open community—**all findings should be publicly and generally available, and open to criticism, improvement, and, if necessary, rejection.**”

Our formal submissions are attached and include a review of climate change target implications by Robert Lyman, and energy economist of 37 years’ experience. We also refer you to an earlier [debate on](#)

[the Kyoto Accord](#) from 2002, solicited by APEGA in which 2 of our scientific advisors (Drs. Patterson and Baliunas) participated. Our people's perspective has been proven over time.

We give you permission to post this letter and the accompanying submissions on your web-site.

Thank you for your review. Please feel free to ask for more information.

Sincerely,
Warren Blair
President
Friends of Science Society