William Smith Gorham LD 2077

Members on the Committee on Energy, Utilities and Technology

I oppose LD 2077 "An Act Regarding Customer Costs and the Environmental and Health Effects of Natural Gas", and it "ought not to pass".

As I understand this bill, it would ban the expansion of natural gas infrastructure to new communities in the state and increase the cost to customers converting to natural gas, both limiting Mainers heating options and increasing their costs.

All this I assume is based upon conclusions determined from a single research paper from Spain on the health implications of gas stoves and the flawed science of anthropogenic caused climate change.

If perhaps anyone on the committee does not understand how the science being used to push forward UN Agenda 21 is flawed let me provide the following research papers with notes for your review.

I will add that the social pressures being used to cause this drive towards bad policy making are against the advice of the lead scientist of the IPCC who lead the CMIP5 runs.

The researchers upon completing the investigations using the climate model CMIP5 in 2017 wrote in the AR5 admitting the model error terms were terrible and that the next models should have significant improve. The lead scientist then went on to write an open letter to policy makers like yourselves asking that policy makers stop telling the populace that we're all going to live terrible lives due to climate changes and the potential for a 2 deg C change in temperature.

Within days activists wrote a letter to the policy makers of the world saying "The science is settled! We no longer need to look to scientists".

This is not science. Nor is it good policy making.

Again, I oppose LD 2077 "An Act Regarding Customer Costs and the Environmental and Health Effects of Natural Gas", and it "ought not to pass".

William Smith Gorham, ME

\* The recent rise in global temperatures match the events surrounding the run up of a Dansgaard–Oeschger [DO] event. The following paper describes a non-linear model for local swings in climate:

"Our model reproduces the observed DO cycle patterns of four climate variables central to the physics of DO cycles: the typical saw-tooth shape of arctic atmospheric temperatures, the reduced (extended) sea ice cover during interstadials (stadials), the strong interstadial AMOC, with sustained northward heat transport during stadials at a weaker level, and the corresponding stadial warming of the Nordic Seas"

https://arxiv.org/pdf/2303.04063.pdf

\* Ozone loss in the mesosphere due to electron precipitation

This paper shows ozone loss is due in part to electron storms. "... observational evidence demonstrating the importance of substorms on the ozone balance within the polar atmosphere."

Our magnetosphere is and has been in measurable exponential decline over the past 150 years. This allows for more energetic storms in the atmosphere.

https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023GL104860

\* The lack of UV impact on climate change in the CMIP models:

"In this study, we have attempted to raise the awareness of the importance of UV solar irradiance as a climate forcing mechanism."

https://www.mdpi.com/2225-1154/12/1/1

\* The lack of most Solar Forcings from the CMIP models used by the IPCC: There are at least ten solar forcings that affect climate and only Total Solar Irradiance [TSI] are expressed in the CMIP models used by the IPCC.

The following study shows how "The CMIP6 GCMs appear to greatly underestimate the Sun's role in climate change...".

"... at least about 80% of the solar influence on the climate may not be induced by Total Solar Irradiance [TSI] forcing alone, but rather by other Sun-climate processes (e.g., by a solar magnetic modulation of cosmic ray and other particle fluxes, and/or others), which must be thoroughly investigated and physically understood before trustworthy Global Climate Modles can be created.

"This result explains why empirical studies often found that the solar contribution to climate changes throughout the Holocene has been significant, whereas GCM-based studies, which only adopt radiative forcings, suggest that the Sun plays a relatively modest role."

https://www.sciencedirect.com/science/article/pii/S1674987123001172

\* Methane release incorrectly represented in climate models:

There is a density of CO2 at which CO2 heat absorption stops. And it is now known methane is naturally being emitted at a much higher rate than previously believed. This implies the amount being produced by humans is having much less of an effect being attributed to us in the models.

https://www.brown.edu/news/2023-12-12/arctic-lakes

I quote:

"Atmospheric methane's rapid growth from late 2006 is unprecedented in the observational record. Assessment of atmospheric methane data attributes a large fraction of this atmospheric growth to increased natural emissions over the tropics, which appear to be responding to changes in anthropogenic climate forcing. Isotopically lighter measurements of

urn:x-wiley:08866236:media:gbc21450:gbc21450-math-0001 are consistent with the recent atmospheric methane growth being mainly driven by an increase in emissions from microbial sources, particularly wetlands. The global methane budget is currently in disequilibrium and new inputs are as yet poorly quantified. Although microbial emissions from agriculture and waste sources have increased between 2006 and 2022 by perhaps 35 Tg/yr, with wide uncertainty, approximately another 35–45 Tg/yr of the recent net growth in methane emissions may have been driven by natural biogenic processes, especially wetland feedbacks to climate change. A model comparison shows that recent changes may be comparable or greater in scale and speed than methane's growth and isotopic shift during past glacial/interglacial termination events. It remains possible that methane's current growth is within the range of Holocene variability, but it is also possible that methane's recent growth and isotopic shift may indicate a large-scale reorganization of the natural climate and biosphere is under way."

Abstract for "Atmospheric Methane: Comparison Between Methane's Record in 2006–2022 and During Glacial Terminations"

https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2023GB007875

\* A warming North Atlantic and its relationship to the Beaufort Gyre: The Beaufort Gyre causes a cooling of the Atlantic but has for the past decade entered an elongated period of holding cold, fresh water in the ocean area north of Canada thereby allowing for an elongated warming period of the north Atlantic.

The lack of the release of this tremendous amount of cold water for an extended period of time (estimated 3x normal pseudo periodic release durations) which would cause North Atlantic warming, would produce local atmospheric warming and cause changes to the AMOC due to the lack of periodic cooling.

Computer models of the future projected release will flow down and along the eastern sea board and up along Greenland. The southward and easterly water will carry cold water to those regions, not having occurred in over 2 decades. This will result in the cooling of the Gulf of Maine and the areas around Scotland as well.

https://www.washington.edu/news/2021/02/24/record-high-arctic-freshwater-will-flow-through-canadian-waters-affecting-marine-environment-and-atlantic-ocean-currents/

\* The effects volcanism has on cloud cover and the external forcing of global eruptive activity in the past 300 years.

https://arxiv.org/pdf/2304.09564.pdf

\* Preindustrial Climate Anomalies such as the Medieval Warm Period (MWP) and the Little Ice Age (LIA) and the current understanding of the relationship to global climate

https://www.opastpublishers.com/open-access-articles/from-behavioral-climate-mode ls-and-millennial-data-to-agw-reassessment.pdf

\* A model that reproduces the observed Dansgaard-Oeschger (DO) events, containing cycle patterns of four climate variables central to the physics of DO cycles: the typical saw-tooth shape of arctic atmospheric temperatures, the reduced (extended) sea ice cover during interstadials (stadials), the strong interstadial AMOC, with sustained northward heat transport during stadials at a weaker level, and the corresponding stadial warming of the Nordic Seas.

https://arxiv.org/pdf/2303.04063.pdf

\* The decrease of our Earth's magnetosphere and that there is an interplay between stellar and planetary magnetism influence (exo)planetary environments and their habitability in star-planet systems with differing relative magnetic field strengths, or in a single star-planet system over the course of their evolution with age.

https://arxiv.org/pdf/2303.04770.pdf