



MEMO

To Council
Oct. 16, 2017

TO: COUNCIL MEMBERS

FROM: COUNCILLORS ANN BAIRD AND GORD BAIRD

DATE: OCT 5, 2017

SUBJECT: RESPONDING TO THE URGENCY OF CLIMATE CHANGE

Below is the Feb 20, 2017 memo on the urgency of climate change from Saanich Councillor Vic Derman to his council. Vic sent this memo to Ann two weeks prior to his passing. As of Oct 5th, 2017 Vic's memo has not yet gone before Saanich council.

Vic's eight month old memo contains a number of climate change facts and we thought it would be useful to run his memo by a climate scientist for informal review of the facts (not the value statements). The red highlighted text was changed for clarity and accuracy as a result of this review.

RATIONALE

Climate change poses an ever growing, potentially critical, threat to human society and all species on our planet. At the climate change talks in Paris, politicians established an ideal goal of staying under 1.5 degrees C rise in global temperature and recognized that, at an absolute maximum, global temperature rise should be kept under 2 degrees C rise. While laudable, these goals are not realistic without a very dramatic acceleration of our efforts to reduce greenhouse gas (GHG) emissions.

Last fall, the CRD held a Forum of Councils on climate change. Several knowledgeable climate experts confirmed that we have already put enough carbon in the atmosphere to guarantee a 1.6 C rise, likely in under two decades. This means that limiting temperature rise to 1.5 would require sucking massive amounts of carbon out of the atmosphere. Doing so would be very expensive, if it could be accomplished at all.

*Furthermore, as we move to the 1.6 C increase, natural feedback loops such as methane release from melting permafrost will contribute at least an additional .3 C rise. A recent article in the journal Nature indicates that the contribution of these natural feedback loops may have been underestimated. To sum up, we are, very likely, already **effectively committed to a rise of 1.9 degrees or more**, very close to, **or beyond**, the 2 degree C absolute maximum. Best estimates suggest that accomplishing the GHG mitigation commitments established in Paris, which most nations are not yet on track to do, would result in an increase between 2.5 to 3.5 degrees C. That is very risky and very dangerous territory.*

More rapid sea level rise is one, but only one, of the potential consequences we face if climate change is allowed to follow its current trajectory. A few years ago, generally accepted estimates indicated a maximum sea level rise by 2100 of about 33 centimetres or 1/3 of a metre. By 2015, these

estimates had been revised to indicate a rise of about 1 metre. Recently, study of West Antarctic ice shelves revealed potential deterioration at a much more rapid pace than expected causing researchers to suggest sea level rise of 2 – 3 metres by century's end. (Vic is referring to this study <http://www.nature.com/nature/journal/v531/n7596/full/nature17145.html>) A three metre rise, would be catastrophic and would eliminate, or put at severe risk, many trillions of dollars of assets. Protecting them would be extremely expensive if it were possible at all. Concurrently, society would face a huge influx of “sea rise refugees” as low lying coastal areas were inundated or became otherwise unlivable.

Even if a 2 – 3 metre sea level rise occurs less quickly, severe environmental damage will almost certainly result from a temperature rise exceeding 2 degrees C. Unwisely, we are doing substantial damage to our planet's life support systems. Equally alarming are the potential fiscal and social impacts. A recent article suggests that attempts to control ocean albedo and “save” the arctic by using technology to “re-freeze” could cost about **\$5 trillion**. This is an enormous amount of money, but is only a small part of the economic costs of responding inadequately to climate change. It is completely false to suggest that we cannot afford to respond to climate change. Instead, it is clear that **we cannot afford to not respond**.

As to social consequences, a society with hundreds of millions of refugees that also faces problems such as substantially “re-working” agriculture is unlikely to be stable. Unfortunately, it is much more likely to be modelled on the four horsemen of the apocalypse. It is difficult to believe that we would allow such an outcome to happen.

We are severely mortgaging the future of today's children and those who follow. I doubt any of us would consciously choose to deny these children hope for a decent future but that's exactly the consequence of our failure to adequately respond. We need the kind of massive, focused effort that society demonstrated in World War II, if we are to have any hope of avoiding the worst that climate change has to offer. Without question, there is a need for much greater action on the part of federal and provincial governments. However, collectively, actions of individual cities and municipalities are at least as important. Hopefully, Saanich and its Council will become true leaders in the massive, focused effort needed in response to the challenge we face. The time we have to respond is becoming very short.

RECOMMENDATIONS

1. That Council commit to much more aggressively reducing GHG emissions (At least 80% reduction by 2040) and commit to establishing clear targets and “milestones” necessary to insure such a commitment is accomplished.
2. That Council consider adopting the need to respond aggressively to climate change as the #1 priority in its strategic planning and that Council then work with staff to establish a climate change lens that insures decisions will be shaped by that priority.
3. That Council direct staff to design and present to council a program of actions necessary to accomplish Council's much more aggressive commitment, targets and milestones. (A description of potential actions is included as appendices)
4. That in an open letter, Council copy this report to the Prime Minister of Canada and the Premier of British Columbia as well as to other relevant federal and provincial politicians along with a very strongly worded request for much more aggressive, focused federal and provincial action.

Councillor Vic Derman

Since Vic's passing in March, the climate has continued to heat up with hurricanes, wild fires, and floods in a relentless and unprecedented scale. Millions are displaced, traumatized, with entire islands obliterated, and many have died. Many will never recover. It has become a moral imperative to act.

Building upon Councillor Derman's memo, and our recent participation at the Livable Cities Forum, we would like to suggest that Highlands council take the urgency of climate change very seriously. Highlands is very well positioned with policy and tools to make decisions that reflect the extreme urgency of the climate situation. Our [Highlands Integrated Community Sustainability Plan \(ICSP\)](#) has two excellent sustainability tools; the [Decision Making Framework DMF \(page 24\)](#) and the [Appraisal Form \(AF\)](#).

Sustainable Highlands Decision Making Framework (DMF): Currently we have policy II-110 requiring the DMF to "be used to analyze operational plan items brought forward from council's approved Strategic Priorities" AND the two page DMF states right at the top that ***this tool can be used "to help assess any type of action, (plan, action, project, research, procurement, practice new or old)*** by using the Sustainable Highlands sustainability framework to inform decision making."

Highlands Sustainability Appraisal Form (AF): Currently we have Policy V-3506 that requires "all rezoning/OCP amendment applications be required to fill out..." and this form ***"may be used in other instances."***

The red highlighted text explains where these tools can be additionally used with no need to change our existing policies. We suggest that:

- a. Council members (and staff) look for opportunities to utilize these tools to better inform decisions that are deemed to have significant mitigation and adaptation implications.
- b. Council considers forwarding items of significant climate mitigation and adaptation implications to SSSC and/or SLUSC to gather more perspectives when utilizing these subjective tools.
- c. Council gives more weight to the information produced from the use of these tools when making decisions.

Additionally, the following recommendations arise from the Livable Cities Forum that both Councillors Baird attended:

Ann's notes: <http://www.highlands.ca/AgendaCenter/ViewFile/Item/3679?fileID=4328>

Gord's notes: <http://www.highlands.ca/AgendaCenter/ViewFile/Item/3680?fileID=4329>

1. That council direct staff to look into applying for a FCM grant to cover three integrated items and to report back to council with details, time frames, and costs if grant application is successful.
 - a. A new staff member dedicated to working with consultants on creating and implementing adaptation, mitigation, and resilience plans. (FCM pays 80% Salary). (Remaining 20% to be included in 2018 budget discussions). Grant would also include funds to work towards the following:
 - i. Create an adaptation and mitigation plan including a risk assessment.

- ii. Commit to creating a policy stating these risks and what we realistically can and cannot do to mitigate these risks.
 - iii. A full municipal natural asset initiative (MNAI) to begin in 2018/2019.
- 2. That council direct staff to include a heading called **Climate Change Implications** in every staff report to council. (This section could include any of risk/ adaptation/ mitigation implications, or ICSP tools as appropriate. Even if staff leaves this section blank, this gives the opportunity for discussion at the council table.)
- 3. That council direct staff to write a letter to South Island Prosperity Project (SIPP) indicating that Highlands will only continue membership in SIPP if the constitution is changed to include the wording “**promoting local economic resilience through the opportunities arising from mitigating and adapting to climate change**” AND that the ideas of working towards a circular economy are embedded in the vision for SIPP. Council further directs staff to send this same letter to all the SIPP funding partners.
- 4. That council direct staff to identify and bring back to council ongoing educational opportunities that strengthen corporate fluency and awareness of climate change, risks, adaptation, mitigation, and resiliency, for both staff and council.

Respectfully Submitted.

Ann Baird, Councillor

Gord Baird, Councillor
