Conclusions and Recommendations of the Commissioners

Putting it into context

1. The problems of climate change are primarily caused by the greenhouse gas emissions associated with fossil fuel consumption here and around the world. Coal and then oil are the worst greenhouse gas emitters, but there are also substantial emissions associated with burning natural gas. In addition, there are secondary but important sources of human-produced greenhouse gas emissions, and these are particularly relevant in a Saskatchewan context. Examples include: methane and carbon dioxide emissions from fossil fuel extraction, carbon dioxide emissions from deforestation (including the burning of bush and shelterbelts), nitrous oxide emissions from the application of nitrogen fertilizer, and methane emissions from landfills and intensive livestock operations.

2. It is very clear that climate change resulting from human-produced greenhouse gas emissions poses grave risks to the well-being of peoples around the world, as well as to other species. These risks include: severe heat waves, severe flooding in many regions, disruption of the hydrological cycle, unstoppable sea level rise, declines in food production in many regions, serious water shortages in many regions, spread of disease, intensification of wild fires, widespread loss of coral reefs, degradation of ecosystems, extinction of many species, more powerful hurricanes/typhoons, and acidification of the oceans. Portions of our planet are at risk of becoming uninhabitable. The World Health Organization estimates that 150,000 people already die from climate change each year, and if human-produced greenhouse gas emissions are not phased out, this number is certain to rise sharply in the decades ahead. Moreover, there is likely to be large scale migration involving tens of millions of people, as some parts of the world become more and more difficult to live in. Several of the above-mentioned risks are already in the early stages of becoming reality.

3. The dilemma we have gotten ourselves into as a global society is that, once emitted, carbon dioxide and nitrous oxide last an exceptionally long time in our atmosphere – 100 years (average) and 114 years respectively. This is why human-produced emissions have built up to dangerous levels more quickly than many citizens expected. As a result, catastrophic effects from their growing atmospheric concentration can only be avoided by completely phasing out human-produced emissions of these greenhouse gases. In other words, fossil fuel use must be phased out worldwide and replaced with clean renewable energy sources.

4. For our population size, Saskatchewan and Alberta are the worst greenhouse gas polluters in Canada and among the very worst in the world. With only 3% of Canada's population, Saskatchewan accounts for 10% of Canada's greenhouse gas emissions.

5. Climate change is a moral issue that requires a moral response. Without concrete action, critical life support systems will suffer irreparable damage. In our judgment, damaging the planet for the sake of cheap fossil fuel energy is wrong.

6. The negative impacts of climate change are not equally experienced, but are disproportionately felt by those in developing countries, as well as more locally, by Indigenous communities. Those living in poverty, the elderly, and the ill are more likely to be affected by climate change and associated health impacts. Put another way, climate change is a violation of basic justice. The countries most responsible for producing greenhouse gas pollution (like Canada) are for the most part not the countries expected to suffer the gravest consequences of climate change.

7. To date, when it comes to climate change and fossil fuel policy, governments in Saskatchewan, Canada and many other parts of the world appear to be prioritizing short term economic gain over social and environmental health. Given the emerging climate crisis, this is a dangerous strategy.

Saskatchewan: Impacts and Responsibilities

8. With respect to climate change impacts locally, Saskatchewan residents should be particularly worried about the disruption of the hydrological cycle that is now occurring. There has already been a marked increase in flooding in our province over the past decade, and that is likely to continue for some time. Saskatchewan also needs to be concerned about the growing potential for more intense and prolonged drought, a risk likely to become a reality as the century progresses. Third, Saskatchewan is vulnerable to the potential for more extreme weather events.

9. Saskatchewan and all parts of the globe have a moral responsibility to communities most affected by climate change; and to our children, grandchildren, and all future generations to act quickly to reduce greenhouse gas pollution. We also have a special responsibility to other species to protect them from climate change. If stabilization of greenhouse gas concentrations in the atmosphere cannot be achieved soon, the economic, social and environmental costs for the next generation will be very high.

Government Leadership and Support

10. Climate change cannot be addressed without the full cooperation and leadership of local, provincial, First Nations, Métis, and national governments. Citizens urgently need their elected representatives at each level of government to work together to establish good climate policy that achieves atmospheric stabilization of greenhouse gases and protects the future of human society and of the other species we share the Earth with. Equally important, the citizens of Saskatchewan need to give their support to the enactment of sound climate policies. That will inevitably involve some inconvenience, but many exciting new opportunities as well.

11. Saskatchewan's government has made no headway over the past decade in reducing total province-wide greenhouse gas emissions. There is no justification for such inaction, given the urgency of climate change and the fact that the Province has many policy levers at its disposal.

Similarly, although worthwhile emission reduction projects are being undertaken at a municipal government level, there is no evidence to suggest that any progress has been made in actually reducing total city-wide greenhouse gas emissions in Saskatoon. The same can likely be said for other large centres across Saskatchewan.

12. Despite the overwhelming scientific evidence that greenhouse gas emission reduction is imperative, national leadership on climate change has been noticeably absent, and is best symbolized by the Government of Canada's withdrawal from the Kyoto Protocol. Kyoto continues to be the only formal climate change treaty among industrialized countries with firm emission reduction obligations, and Canada's withdrawal came despite the fact that the treaty is having a positive effect.

Positive Steps Forward

13. The Citizens' Hearings decided to give special attention to how climate change is influencing the global hydrological cycle, given that these changes appear to be having a major influence in Saskatchewan, Alberta and Manitoba. We were fortunate to have Bob Sanford address this topic. Bob is the Director of the Western Watersheds Research Collaborative and EPCOR Chair of the Canadian Partnership Initiative in support of the United Nations "Water for Life" Decade. He noted that hydrologists have been reporting observed changes in the rate and manner in which water moves through the global hydrological cycle for at least a decade. Concern has grown to the point that in 2013 the World Economic Forum ranked the global hydro-climatic crisis 4th out of 50 top global risks of concern, and 2nd in terms of its potential to impact not just the performance, but the survival, of businesses in many sectors of the global economy.

14. At the local level there are exciting opportunities that municipal governments should pursue to promote energy conservation in buildings, reduce the use of fossil fuels in transportation, and encourage nature to thrive in our communities. This involves a broad range of policy measures such as facilitating the installation of high efficiency lighting, providing alternative energy options for residences and businesses, promoting vehicle sharing and carpooling, and designing a city-wide bicycle path network that provides a real alternative to fossil-fuel based transport. Natural areas – which are important absorbers of carbon dioxide (carbon sinks) should be protected as new subdivisions are planned, and those subdivision plans should include super-energy efficient homes and good solar access for property owners. This report elaborates extensively on the opportunities that exist.

15. At a provincial level there are some obvious places to start cutting emissions that will make a big difference. For example, if the Saskatchewan government required the oil industry in our province to consistently capture and utilize natural gas/methane, instead of venting and flaring it into the atmosphere, millions of tonnes of greenhouse gas emissions would be saved each year. Similarly, if Saskatchewan's aging coal fired power plants were replaced with a broad mix of renewable sources of electricity over the next decade, millions more tonnes of emissions would be saved annually. Those two actions alone would cut Saskatchewan greenhouse gas pollution by approximately one third.

16. Saskatchewan is fortunate to have a remarkable mix of renewable sources of energy that we are only just beginning to utilize. Saskatchewan has the best sunlight resource in Canada, a wonderful wind resource, modest geothermal potential and excellent opportunities for developing biomass. Accelerating the development of these renewable energy resources should be a priority for local, provincial and national governments. So too should promoting energy efficiency in all economic sectors and in all walks of life.

17. The economics of large scale wind power are particularly attractive. There is no reason why Saskatchewan could not integrate far more wind power onto its electricity grid, and encourage the development of wind-farm cooperatives as a way to reduce greenhouse gas emissions and keep profits from wind power circulating in the local community.

18. We note that feed-in-tariffs to accelerate the use of renewable energy technologies such as solar, biomass and geothermal are being used in more than 60 countries worldwide. We encourage the adoption of feed-in-tariffs in Saskatchewan's electricity generation sector.

19. Canada and Saskatchewan should recognize that a world that faces the imperative of phasing out fossil fuels is a world that does not need new large scale fossil fuel extraction assets to be constructed. It is time, for example, for our national government to stop approving the development of new oil sands extraction facilities

in Alberta, and for Saskatchewan to drop the idea of developing oil sands in this province. The oil sands sector is currently the fastest growing source of greenhouse gas emissions in our country. It is also time to terminate all subsidies designed to encourage the extraction of fossil fuels, here in Canada and around the world.

20. The Government of Canada should rejoin the Kyoto Protocol, and adopt a national action plan for greenhouse gas emission reduction similar to that of Europe. Most European countries are meeting ambitious greenhouse gas reduction targets, and the European Union is on track to achieve a 20% reduction below 1990 greenhouse gas emission levels by 2020. Canada needs to catch up. The world community is relying on us to do our share.

Concluding Comments

21. Climate change will impact the livelihoods of a great many who rely on the land for their income. This is one of the reasons why greenhouse gas emissions must be curbed quickly. If prompt action is not taken, climate change will lead to loss of habitable land, species loss, increased poverty and climate-related illness and loss of life.

22. In order to fully understand the need to take action on climate change and what to do, we need to remain connected to nature and we must grow in our understanding of how nature sustains us, and how we can best protect it. Simply put, we need to have a relationship with the land. Many witnesses at the hearings addressed the importance of public education in this arena, and the need for a plan to build "sustained awareness" of climate change impacts among all citizens.

23. It is critical that people are fully engaged in the climate change issue. It should become a priority for our school systems, for our Universities and Colleges, and in community education. The future depends on it.

24. We need to build on the wisdom of our Aboriginal ancestors and our living elders at this time of crisis.

25. Enforcement of treaties between the Government of Canada and First Nations may prove to be an important vehicle to secure better protection of the natural environment. An excellent area where this could be tested in court is on First Nations lands that are being negatively impacted by oil sands development. Indigenous communities and social movements have already called the Government of Canada to account for changes to federal legislation, without prior and informed consent of First Nations, which reduce protection of waterways and facilitate further development of oil sands infrastructure.

26. It is important to emphasize that it is the total amount of human-produced greenhouse gas emissions in the atmosphere that will ultimately shape the climate. In other words, every individual, every province and every country's emissions matter. The urgent task of each jurisdiction should be to bring their total greenhouse gas emissions down; failure to do so becomes a burden for everyone else worldwide. Several other parts of the world are successfully reducing greenhouse gas emissions. In Canada the Province of Ontario has provided important leadership in emission reduction by introducing feed in tariffs to promote renewable energy and by phasing out its coal fired power plants.

27. This report contains many excellent examples of personal action that can be taken and of government policies that could be put in place at a local and provincial level to reduce greenhouse gas emissions. We urge readers to examine them closely, and implement them broadly. It is important to remember that we should not wait for national and international