



To: The Rt. Hon. Justin Trudeau, P.C., M.P., Prime Minister of Canada

Cc: Hon. Catherine McKenna, Minister of Environment and Climate Change; Hon. Marc Garneau, Minister of Transport; Hon. Dominic LeBlanc, Minister of Fisheries, Oceans, and Canadian Coast Guard; Hon. Carolyn Bennett, Minister of Indigenous Affairs and Northern Development; Hon. Jim Carr, Minister of Natural Resources; Queen's Privy Council for Canada

26 May 2017

Dear Prime Minister,

We are a partnership of academics, graduate students and community activists committed to the goal of re-grounding the human/Earth relationship. Our approach starts with an unequivocal realization: human activity is systematically degrading our planet's life-support systems. Yet prevailing norms and institutions continue to rely on systems of thought which are not fit for the situation we are now in. Through a new synthesis of contemporary science, economics and the humanities, we aim to reconcile fragmented disciplines and find a path to a world where our relationship with the community of life on Earth becomes mutually enhancing.

Firstly, we would like to offer our thanks. Your leadership is responsible for finally taking the muzzle off scientists in Canada, and for significantly increasing support for a wide range of vital research initiatives. Nevertheless, many of your statements in your recent speech at "CERAWeek" in Houston struck us as being problematic. Let us explain why.

- ***"We are showing that environmental leadership and economic growth are inseparable, that they must go together."***

The necessity of continued economic growth for environmental protection is a common but deeply flawed myth. We live in a world of planetary boundaries, where the increasing scale of the human enterprise is now pushing Earth's life-support systems beyond their capacity. The converging crises we face, including catastrophic climate change, rapid biodiversity loss and widespread resource depletion are all inevitable symptoms of the pursuit of growth. Growth will do nothing but deepen and prolong the necessary adjustments we need to make as a modern society finding its place within the community of life. Growth has failed to deliver on its promises of a better life for all, and has brought about an unacceptable deterioration of the biosphere. We need to embrace a different way and a new vision.

- ***"No country would find 173 billion barrels of oil in the ground and just leave them there."***

As difficult as it is to imagine, this is precisely what the nations of the world must do if we are to preserve a liveable planet. As the steward of one of the largest reserves of fossil fuels in the world, Canada must be one of the first nations to take a brave step forward and make the unthinkable possible. A substantial proportion of the usable reserves that remain, within the tight carbon budget available to us, must be conserved expressly for the building of the renewable energy system of the future. These crucial reserves cannot be treated simply as export commodities, traded and shipped around the world for profligate consumption. A sensible transition to renewable energy, at the pace which our best science tells us is necessary, will be hard-won and requires the courage to turn decisively from the vestiges of the past.

The world is rapidly approaching dangerous levels of warming while we have barely begun the drastic cuts in our greenhouse gas emissions which are needed. As of May 2017, the concentration of carbon dioxide in the atmosphere was 410 parts per million, rising to levels not seen for millions of years. We are pushing the global climate system into a regime that humans have never experienced. Humanity can now emit no more than 350 billion tonnes of carbon dioxide to stay below a 1.5 Celsius increase, or 800 billion tonnes to stay below 2 degrees. Under projected global emissions trajectories, these thresholds will be passed in the next few decades. This unambiguously implies that the vast majority of the Earth's known coal, oil and natural gas reserves must be left in the ground: almost 70% if we are to stay below the 2 degree limit. Clearly, we have precious little time remaining to begin the difficult process of redesigning and transforming our way of life.

As you know, Canada, through its Nationally Determined Contribution, has committed to a reduction in carbon dioxide emissions of 30 percent below 2005 levels by 2030. Serious progress towards this target requires an immediate and managed decline of both the production and consumption of fossil fuels. Further expansion of the oil and gas sector and a hospitable climate are now mutually exclusive; a case of attempting to have our cake and eat it too. Canada's commitments require significant decarbonization, as many independent analyses have shown. Notably, the Parkland Institute and Oil Change International, as well as the government's own Environment Canada and the Office of the Auditor General of Canada, have all concluded that an expansion of the tar sands is inconsistent with federal climate policy.

- **You put forward carbon capture and storage as an emerging solution.**

The 'negative emissions' technologies do not currently and may never meet the expectations placed on them. Carbon capture and storage in particular has failed to live up to its promises — it increases fuel consumption drastically, can only be carried out in limited geologically favourable areas and is highly uneconomic. Until we have found the means to extract carbon from the atmosphere and store it underground, and have demonstrated the viability of this technology at very large spatial and temporal scales, the best place for the majority of our fossil fuel reserves is to remain in the ground. Innovation is necessary, but this approach is betting our common future on an unproven *possibility*.

Climate change is not the only issue we face. The growth agenda is an inexorable driver of the sixth mass extinction in the Earth's history, currently unfolding under our watch and by our hand. This realization alone should give pause to our reckless prioritization of the present over the future. However, Canada's existing energy policy continues to sacrifice the prospects of the disenfranchised, particularly its indigenous communities, and threatens the very web of life with which we share our heritage and ultimately our destiny.

- **You claim that we are passing the planet on to our children in better shape than we found it.**

In the context of a modern industrial society which is rapaciously consuming resources and degrading waste sinks, this is overtly false. The only feasible path to achieve this essential goal is to reduce the scale of modern economies, to allow the planet's natural systems to regenerate. Even should we do this, we have already caused irreversible changes in many key systems. Our non-renewable inheritance has largely been squandered and the family of life is now conspicuously smaller. A technology-centric strategy which aims to preserve the fossil fuel industry is simply not sufficient; we must intentionally reduce our claims on the natural world.

- **In your speech in Houston, you mentioned your father’s National Energy Program and flatly labelled it a failure.**

Whatever its deficiencies, one can hardly fault the core principles of security in energy supply, economic opportunity, and fairness of energy access. Was Canada not well served by a leader who saw a rising threat and took bold action? What will your legacy be, when it becomes clear that we cannot have it all?

Canada’s responsibility is clear. Standing with a growing chorus within Canada’s academic community and civil society, we call for an immediate moratorium on further fossil fuel exploration and development — including all auxiliary infrastructure, most notably pipelines — and a clear path towards the managed decline of the fossil fuel industry in Canada. Additionally, Canada must be unyielding in promoting similar policies abroad. This is our only chance for a just and achievable transition to a post-fossil fuel economy.

We are now facing the profound consequences of overexpansion of the human project, for ourselves and all of the uncountable lives yet to come. The window for gradual change within the familiar political and institutional landscape has closed. At this juncture, we need more than comforting platitudes; we require courageous leadership in the face of discord and uncertainty, unclouded by the fleeting distractions of the status quo. The magnitude and gravity of the situation confronting us must be at the forefront of decision making if we are to preserve *authentic* hope for the future. We urge you to safeguard the fragile rights of posterity.

We would appreciate the opportunity to meet with you to discuss these urgent matters, which affect no less than the future of all life on Earth.

Sincerely,

Peter G. Brown
Matthew Burke
Stephen Clare
Timothy Crownshaw
Alice Damiano
Laura Gilbert
Caleb Gingrich

Jennifer Gobby
Gabriel Yahya Haage
Emery Hartley
Karan Kumar
Christopher Orr
Dina Spigelski
Romain Svartzman

Department of Natural Resource Sciences, McGill University

James Arruda
Natália Britto dos Santos
Kesha Fevrier
Maria Juncos
Alia Karim

Alicia Richins
Sophia Sanniti
Martin Sers
Peter A. Victor

Faculty of Environmental Studies, York University

Janica Anderzén
Jon Erickson

Joshua Farley

Rubenstein School of the Environment, University of Vermont

Daniel Horen Greenford

Damon Matthews

Department of Geography, Planning and Environment, Concordia University