Meeting the Climate Challenge: Accelerating the Transition to a Post-Carbon World

G78 Conference Report and Policy Recommendations

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Executive Summary of Key Messages

These messages and recommendations reflect the views of the Group of 78, arising from and informed by its recent policy conference on *Meeting the Climate Challenge: Accelerating the Transition to a Post-Carbon World*, and are not necessarily those of conference speakers.

**Key Message 1: It is Essential to Change Mindsets to Embrace the Post-Carbon Economy**

To reduce greenhouse gas pollution at the rate necessary will require the widespread adoption of a new mindset—one that recognizes that human beings are part of the interconnected web of life which is now endangered by human activity. Canadians' willingness to undertake the measures necessary to meet the climate emergency will depend on their knowledge and understanding of the facts of climate change and their willingness to engage in a rapid social mobilization similar to that adopted during wartime. We recognize that to achieve this, valuable contributions will be required from all levels of government and all sectors of society including the formal education system, the media, non-profit civil society, the private sector and national programs such as the Creative Canada policy framework.

**Recommendation 1.1: That all levels of government engage in intensive and sustained efforts aimed at making every Canadian aware of the significance of the climate emergency and to secure the support of every Canadian for the rapid transformation of our economy.**

**Key Message 2: Our World Faces an Urgent Need for More Aggressive Targets to Reduce Greenhouse Gas Pollution**

If the world is going to reduce the pace of global warming to the relatively safe level established by governments in Paris in 2015, we must limit greenhouse gas emissions to a tight global carbon budget. Since carbon dioxide, the main greenhouse gas from the burning of fossil fuels, can stay in the atmosphere for as long as 1,000 years, past emissions from the beginning of the industrial revolution are contributing to the global warming we are seeing today. This accumulated carbon pollution limits the new emissions that we can safely add to the atmosphere. This can be seen as giving us a carbon budget.

Industrialized countries, with their historical high emissions, are thus responsible for a significant part of the current level of carbon pollution in the atmosphere and the catastrophic weather events
which have already occurred globally. Industrialized countries should be dramatically reducing their share of world emissions while assisting developing countries with disaster aid and technical grants to develop in a more carbon neutral manner, and support to build their resilience against extreme weather events.

According to the Intergovernmental Panel on Climate Change (IPCC) the world has already used up much of its carbon budget. Indeed, for a target limiting global temperature increase to 1.5°C, and given current emission rates, there is an even chance we will overshoot that budget in about 12 years. In the longer term, we need to reach net zero emissions - where emissions match the uptake by the earth’s natural systems - by 2050, which is barely a generation away.

There is therefore an urgency to take aggressive action. Even an increase of half a degree can produce significant additional negative impacts. Since climate change is a global issue, the response needs to be at a global scale and Canada must contribute its fair share.

Canada is not currently on track to meet even the Paris targets, which are themselves insufficient, to allow the world to meet the agreed goal. Further, Canada does not have a plan for the aggressive reductions which are scientifically and morally required. Such socio-economic changes would require a joint collaborative effort at home and abroad. Our current commitments are inadequate to achieve the necessary pollution reductions and we must strive for greater ambition.

Recommendation 2.1: That the Government of Canada, and all other levels of government, commit to a national carbon budget informed by Canada’s equitable share of the global carbon budget for limiting warming to 1.5°C above the pre-industrial level in order to reduce greenhouse pollution.

Recommendation 2.2: That the Government of Canada substantially increase federal carbon pricing to align with mitigation scenarios that limit warming to 1.5°C above the pre-industrial level.

Recommendation 2.3: That all levels of government apply a climate change mitigation and adaptation lens to policy decisions across all government departments and agencies.

Recommendation 2.4: That the Government of Canada and its provincial counterparts facilitate the managed decline of fossil fuel production that includes the elimination of all fossil fuel subsidies, the acceleration and scaling up of renewable energy production and infrastructure, and the widespread adoption of energy efficiency and conservation measures in order to replace our current dependence on fossil fuels as a source of energy.
This should be achieved within a just transition framework to support workers and communities adversely impacted by the shift away from fossil fuels.

Recommendation 2.5: That all levels of government engage the public in a far-reaching and rapid transformation of our food system away from industrial agriculture towards small scale ecological farming with the aim of carbon neutrality in both distribution and production and the adoption of climate-friendly food procurement policies.

Key Message 3: It is imperative to Build Resilience at Home and Abroad to Climate Change Impacts and Vulnerabilities

Climate change is already wreaking devastation in every area of the world and we can expect further damaging impacts because of past emissions. But the number of fatalities and extent of damage in the poorest developing countries—the countries least responsible for climate change—are far higher. There is accordingly a moral obligation by the countries that have done the most to precipitate climate change, including Canada, to help the poorest developing countries build their resilience against extreme events such as droughts, floods and massive storms. Indeed, all countries, rich and poor, have not planned sufficiently for adaptation to climate change. The longer we wait, the greater will be the risks and the costs.

Recommendation 3.1: That governments at all levels pursue immediate assessments of exposure and vulnerability to the impacts of climate change, including the impacts of a 4°C warmer world, leading to corresponding adaptation and preparedness policies, in accordance with the Sendai Framework for Disaster and Risk Reduction 2015-2030.

Recommendation 3.2: That the Government of Canada allocate $3 billion to 4 billion a year towards international climate finance for the period of 2019 to 2025 and ensure that climate finance be in the form of grants.

Recommendation 3.3: That the Government of Canada lead an initiative to develop a coalition of nations to reform global trade institutions to create multilateral frameworks that incentivize and enforce climate change mitigation, technical assistance, and technology sharing obligations.
Conference Report

Introduction

Climate change poses an unprecedented threat to all forms of life on Earth, the addressing of which is in line with the Group of 78’s mission of promoting peace, justice, and human survival. On the 28th and 29th of September 2018, the group invited a range of experts to address its annual conference, *Meeting the Climate Challenge: Accelerating the Transition to a Post-Carbon World*. Convened in Ottawa, the conference’s objective was to highlight the urgency of the climate crisis and to identify solutions needed to address the problem. Speakers’ presentations reflected the intersectionality of the climate crisis and the urgent need for a wide-ranging and systemic approach to tackling it.

Roy Culpeper, the Chair of the Board of the Group of 78, in his opening remarks said that the topic of this year’s annual conference is particularly top of mind for many local residents. One week before, 6 tornadoes rampaged through the capital region, causing millions of dollars of damage and leaving more than 100,000 people without power as a result of damaged infrastructure.1

The historic agreement by the 21st session of the Conference of the Parties in Paris in 2015 committed the international community to keep global warming to “well below 2°C” above the pre-industrial level and to “pursue efforts” to limit warming to 1.5°C.2

The recent International Panel on Climate Change (IPCC) report demonstrates that even an additional 0.5C of warming makes a very substantial increase in climate change impact which threatens human survival. The window of opportunity for keeping to these targets is closing fast.3

Referring to the many frightening headlines of the increasing intensity of weather-related events around the world over the summer, Susan Tanner, Chair of the Group 78’s Conference Organizing Committee, commented that “We do not have the time we thought we had when the Rio Declaration was signed at the United Nations Conference on the Environment and Development meeting in 1992. The time to act is now.”

The scale of reduction needed was illustrated in a commentary published in the journal *Nature* in 2017. Former United Nations Framework Convention on Climate Change (UNFCCC) Executive Secretary Christiana Figueres and a group of renowned climate scientists concluded that to respect the temperature targets of the *Paris Agreement* and ensure that the United Nations Sustainable
Development Goals remain achievable, the global community would need to ensure its production of greenhouse pollution peaks no later than 2020 and plan to reach net zero emissions by 2050. (see Graph 1). No government is currently pursuing reduction rates of this magnitude.

As it stands, the domestic pledges of the global community to reduce greenhouse pollution are insufficient to meet the Paris Agreement commitments. According to the United Nations Environmental Programme (UNEP), if all countries were to keep to the reduction targets that they pledged to meet at the Paris conference, the global average temperature will likely rise to 3°C to 4°C above the pre-industrial average by 2100. The 2017 UNEP Emissions Gap report concluded the same.

There is wide agreement that an average global temperature increase of 4°C would very likely have unimaginably catastrophic consequences to all life on the planet, potentially locking in a sixth mass extinction. A recent academic study that was widely covered by the media warned that even limiting warming to 2°C runs the risk of locking in runaway global warming that could turn Earth into a hothouse, potentially inhospitable to human life.

The inadequacy of the voluntary national reduction targets has been acknowledged by the global community, and a mechanism for increasing the ambition of domestic reduction targets has been included within the Paris Agreement itself. Known as the ‘ratchet mechanism’, it requires that governments commence a ‘facilitative dialogue’ in 2018 to take stock of collective efforts towards achieving the Paris Agreement objectives in order to develop revised targets which national governments must submit to the UNFCCC in 2020.
Several of the presenters at the Group of 78 conference pointed to the fact that Canada was not on track to meet the Paris Agreement temperature targets, or even to meet the unambitious targets of the previous Conservative government. In 2016, the Liberal Government released its Pan-Canadian Framework on Clean Growth and Climate Change. This climate action plan was negotiated with the provinces to meet the previous government’s reduction targets. But, as Environment and Climate Change Canada (ECCC) reported in its latest assessment of Canadian federal climate action, the measures included in the Framework fall short of the efforts required to meet federal reduction targets (see Graph 2).10 The same conclusion was made by the Office of the Auditor General of Canada (OAG) in October 2017.11

However, even if Canada were able to meet its reduction targets, these efforts would be insufficient compared to what is required by a scientific consensus. Neither the ECCC nor the OAG compare the Canadian federal targets to the effort needed to respect the Paris temperature objectives. If we do compare the federal targets to a fair allocation of the global remaining carbon budget for 2°C, as was done in a recent Metcalfe Foundation report co-authored by leading Canadian environmental law experts and climate scientists, it is clear that Canada’s current targets are inadequate for the country to do its share in holding the global mean temperature below 2°C.12

The conference was preceded by the Liberal Government’s announcement of the details of its price on carbon pollution strategy, putting the issue of climate change at the forefront of the national debate and potentially the 2019 federal election. After close to three decades of consideration, a national price on carbon pollution, a policy instrument considered by many experts as being essential to drive down emissions,13 is finally being implemented.

However, a price on carbon pollution alone will be insufficient to achieve the kinds of reductions in carbon pollution called for by the scientific community. To reduce emissions appropriately there...
will need to be complementary activities such as carbon capture though boreal forests, and reduction of emissions from other sectors such as agriculture, transport, and construction.

On October 8th, following the Group of 78 conference, the Intergovernmental Panel on Climate Change (IPCC) released its most recent report. As the authors of the report noted, to have a chance of avoiding climate catastrophe the world must implement “rapid, far-reaching and unprecedented changes in all aspects of society”. This latest report reinforces the conclusions made at the Group 78 conference: that the world must drastically and immediately scale up climate action to avoid this drastic scenario.

In the section that follows, we summarize each speakers’ presentation and highlight the possible solutions they brought to the audience’s attention.
Conference Summaries

Opening Address Keynote - What’s love got to do with it? Climate politics, solutions and the future of our planet

Joanna Kerr, Executive Director of Greenpeace Canada, began her keynote by discussing the need for immediate action to address the climate crisis, stressing the need for systems change and a rapid shift to a circular economy. Her address set the tone for the conference, emphasizing the importance for a new ‘mindset’. A mindset, she proposed, is a “shared set of assumptions, so well established in society that it helps define behaviour and attitudes for millions of people.” When mindsets change, they pave the way for changes that are resilient to election cycles. With respect to climate, our mindsets need to change to the idea that “the economy must work within the limits of the planet.” To achieve this, all those concerned by the issue need to respect fully listen and reach out to people beyond political and social boundaries.

Kerr also discussed the importance of preserving the boreal forest and peatlands. Citing recent figures, she indicated that the forest is one of the greatest carbon sinks on the planet, fully a third of which is located in Canada. The mining and logging industry, she continued, have disturbed a quarter of this natural resource, and are threatening a third more. Not only does this threaten to increase Canada’s carbon footprint, it also threatens the habitat of many species and territories of many indigenous groups who call the forest home. Working through the Species at Risk Act, Greenpeace has been striving to counter this threat.

Kerr’s presentation led to a discussion period in which diverse issues were raised, such as the role of military greenhouse pollution, the intersectionality of issues pertaining to the climate crisis, and the role of fossil fuel subsidies in tipping the economic playing field against renewable energy.

The following were Kerr’s policy recommendations:

- That the Federal Government work towards communications programs geared to ‘mind set’ change that emphasizes the interconnectedness between humans and nature.
- That we follow the lead of indigenous leaders with respect to creating a sustainable economy.
- That we attain 100% renewable energy by 2045.15
- That carbon pricing be applied across the country.
- That the Canada Species at Risk Act be enforced with respect to new natural resource exploitation projects that threaten the natural habitat of the woodland caribou.
• That oil sands expansion be immediately halted.
• That fossil fuel subsidies across Canada be rapidly phased out.

Panel 1 – Magnitude of the Problem

The second day of the conference was opened with a panel discussion on the magnitude of the climate challenge from different perspectives. Moderator Manfred Bienefeld pointed to the role of expanding debt in sustaining our ecological crisis. In short, he argued, rising debt creates a pressure for production and growth to rise in order to meet the ever-higher interest payments. Yet the same rise in growth requires further debt, fuelling a vicious circle. Our level of debt makes debt-fuelled growth necessary, which breeds precariousness as well as unsustainable levels of consumption. This cycle must be disrupted if the ecological crisis is to be tackled, argued Bienefeld.

Gordon McBean, recently retired president of the International Council for Science, and Research Chair, Institute for Catastrophic Loss Reduction, began his address by noting that not only has the planet warmed more than 1 degree Celsius since pre-industrial times, but this warming is even stronger in Canada, particularly in the north. Yet McBean stated that, despite billions of dollars in damage, deaths numbering in the tens of thousands globally, and evidence showing increasing frequency of catastrophic events, Canada still does not have a comprehensive climate adaptation plan.

Given that Canada is losing both people and resources to natural disasters each year, McBean maintained that it was high time for the government to act on risk reduction. Calling attention to the global Sendai Framework for Disaster and Risk Reduction 2015-2030, McBean described the four priority areas: understanding disaster risk, strengthening governance to manage disaster risk, investing in resilience for mitigation and adaptation, and enhancing preparedness.

Adaptation and strengthening resilience are still largely neglected and demand urgent attention to protect communities both in Canada and abroad against the devastation of extreme weather events. At the Paris Conference, the international community did create a global fund to help developing countries to adapt to climate change, but only $5 billion has been mobilized out of the $100 billion per year by 2020 target set by the Paris Agreement. Canada’s fair share should be $4 billion.

McBean made the following recommendations:

• That the Federal Government pursue an immediate national assessment of exposure and vulnerability to the impacts of climate change, leading to a national policy of adaptation
and preparedness, in accordance with the *Sendai Framework for Disaster and Risk Reduction 2015-2030*.\(^\text{17}\)  
- That the Federal Government immediately upgrade the building code featuring defences against flooding and home efficiency measures.\(^\text{18}\)  
- That all levels of government immediately implement policies to restrict building on flood plains.

The second panellist, Rohinton P. Medhora, President of the Centre for International Governance Innovation in Waterloo, focused specifically on the need for global cooperation and international institutional support to address climate change mitigation and resiliency. Noting the high costs of climate-related disasters mentioned by the previous speaker, Medhora said that by “not doing anything, we are also imposing future costs on ourselves.” He suggested that the federal government position itself as a policy leader in reforming international institutions to better address global climate change mitigation.

Medhora listed various ways that international economic mechanisms could be put into place in order to strengthen our response to the climate crisis.

Medhora made the following recommendations:

- That the Federal Government lead on the international stage to implement advance market commitments for technologies diminishing greenhouse pollution in developing countries and implement a global carbon pricing strategy.
- That the Federal Government take a proactive role on the international stage to facilitate the dissemination of clean technologies through compulsory licensing programs.
- That the Federal Government work towards creating a global network of research centres for green technology patterned on the CGIAR (Consultative Group on International Agricultural Research), the successful research network in agriculture, pisciculture and food policy.
- That the Federal Government work toward the amendment of our current trade related intellectual property (TRIPS) regime to facilitate the deployment of patented green technology across the globe.
- That the World Trade Organization (WTO) could be refocused to develop a global regime of border carbon adjustments.

Concluding the panel Mike de Souza, Managing Editor and investigative reporter at the National Observer, stressed the need for more media coverage of climate change in the interest of promoting
a well-informed citizenry, pointing to recent political events where significant discussions on climate change, such as the G7 meetings in Halifax, were not covered by major media outlets. De Souza stressed the importance of debates being informed by an agreed upon set of facts. He emphasized the need for investigative journalism in informing public debate and holding governments and private interests to account. Only a well-informed public, he argued, can rise up to the task of tackling the climate crisis.

De Souza recommended:

- That the Access to Information Act of 1982 be enforced and expanded in consultation with representatives of the media.
- That the Federal Government publicly affirm the crucial importance of a free press for the functioning of Canadian democracy.
- That the Federal Government immediately disclose all its ties with the oil and gas sector, and reinforce conflict of interest provisions.

**Panel 2 - The Trudeau Government’s Policies in a Global Perspective**

Moderator Susan Tanner quoted a Forbes Global Survey saying that 56% of those surveyed think we have a shot at addressing climate change but there was a disturbing number of young people who thought we were doomed. Although we have the technology, they doubted that we have the political will. Tanner insisted that we need those young people to help make the necessary changes.

The second panel began with Dale Marshall, National Program Manager of Environmental Defence Canada, discussing what he described as “cognitive dissonance” in Canadian climate policy and the ways that it might be overcome. The cognitive dissonance he described was the combination of government’s embrace of new fossil fuel projects such as the Trans Mountain Pipeline and its adoption of ambitious international climate targets.

Marshall estimated that 33% of known reserves must remain in the ground if Paris Agreement targets are to be met. Canada’s oil sands being both expensive and particularly polluting, they will inevitably be a part of those reserves. Further, Marshall emphasized the importance of decreasing demand, following the lead of countries that are committing to zero greenhouse pollution cars, for example. He stressed the importance of facilitating a just transition for workers away from a carbon-intensive economy and criticized Canada’s funding of fossil fuel exploitation at home and abroad. He concluded that citizens must demand more action from their governments.
Marshall noted that the catastrophic impacts of climate change will include unavoidable loss and damage caused by temperature increases already locked in by past and current greenhouse pollution, as well as by how much we will emit on the road to zero greenhouse pollution. Marshall pointed to the fact that those least responsible for the climate crisis bear its starkest consequences. Specifically, those living in the Global South, as well as indigenous communities, are currently suffering at higher rates, making the moral imperative for an immediate and coordinated response even stronger. He highlighted current examples of extreme weather that have caused irreparable harm and lamented the lack of leadership shown by the Federal Government, which has yet to develop a policy for international adaptation assistance for populations that are experiencing or will experience loss and damage due to climate change.

Marshall made the following recommendations:

- That the Federal Government phase out fossil fuel production through a managed decline within a just transition framework.
- That the Federal Government halt all fossil fuel subsidies.
- That the Federal Government commit financial support for the developing world’s transition to a clean economy and as well towards adaptation and loss and damage.

The second speaker, Scott Vaughan, CEO of the International Institute for Sustainable Development noted that the Paris Agreement lacked the relevant architecture for coordinating international climate action. He also maintained that the metrics for measuring greenhouse pollution have yet to be agreed to and that the agreement lacks enforcement mechanisms. Vaughan suggested that the agreement be strengthened along the lines of the successful Montreal Protocol on Ozone Pollution. The parties in Paris failed to address how jobs that depend on fossil fuels would be replaced in a transition to a clean energy future. These issues, he added, must be part of future discussions surrounding international policy. Pointing to the Conference of Parties happening in December of 2018 in Poland, he expressed his hope that they could be settled and the international community could begin moving toward a just transition away from the fossil fuel economy. He was also critical of Canada’s lack of investment in human capital, noting that our education systems do not equip students to participate in the green economy.

Vaughan did point to signs of progress. New global investment in green energy is now more important than that in fossil fuels. The Paris Agreement is also paving the way for inter-city and inter-state coordination around climate actions. He also pointed to numerous climate commitments coming from the private sector.
He noted the need to shift away from GDP as a measure of national economic health, paraphrasing Robert F. Kennedy’s famous statement to that effect that “GDP measures everything except what we care about.” Concluding, he underscored that our window of opportunity for respecting the Paris temperature targets is closing fast.

Vaughan recommended:

- That the Federal Government take a lead on the international stage to reinforce the *Paris Agreements* architecture, particularly around defining climate targets, monitoring and enforcement.
- That all levels of government transition away from fossil fuels in a way that considers the interests of actors whose livelihoods depend on that sector.
- That the Federal Government support the private sector’s efforts in climate change mitigation, particularly around the inclusion of climate-risk in investment decisions.
- That the Federal Government increase its investment in clean energy.
- That beyond carbon pricing, stronger regulations be put in place to limit greenhouse pollution.
- That the Federal Government work towards the adoption of alternative measures of economic health that take into account the state of the natural environment.

**Luncheon Address - Serious About Climate Resilience? Empower Gender Equity**

Tracey Mann, Executive Director of Climate Wise Women, spoke on the importance of the relationship between female empowerment and climate resilience. Mann recounted several stories from the *climate witnesses project*, about the ways that front-line communities in Uganda and Papua New Guinea reacted in the face of climate change. Worldwide, traditional farmers are finding it more difficult to produce crops due to the impacts of climate change. For example, in Uganda, the introduction of simple, low-tech measures such as the use of oxen in farming, could shorten the time it took to plough and harvest and enable a community to gather food before the next drought.

In contexts such as these, women are often the key change agents as a result of their capacity for relationship-forming and the central role they play in agriculture in their communities. However, this centrality means they are more vulnerable to climate impacts. “We cannot ignore women, because they are the glue of our society,” yet they are the first to suffer the impacts of climate change.
Mann noted that only 0.2% of philanthropic donations go to women who are implementing strategies for climate adaptation and resilience. While Canada is already a leader with its Feminist International Assistance Policy, more needs to be done across the globe to empower female leaders.

Mann recommended:

- That the Federal Government make funds available for supporting women-led climate adaptation.
- That the Federal Government formally recognize the pivotal role of women in mitigating the impacts of climate change worldwide.

**Panel 3 - Getting from here to there – inspiring initiatives – mobilizing people**

Andrea Harden-Donahue, Energy Campaign Coordinator at the Council of Canadians, introduced the third and last panel, commenting that “every good campaign starts by talking to one another.” It is therefore important, she continued, to listen closely and share the stories of those most impacted by the issue – individuals and communities living on the front lines of climate change.

Martin Settle, Co-Executive Director, USC Canada, discussed both the climate impacts on agriculture and that sector’s contribution to climate change and environmental degradation. As Settle explained, the contribution to climate change is not equal among all forms of agriculture. Industrial farming is disproportionately responsible for the agricultural sector’s resource use. While it consumes 70% of available resources, it only contributes 30% of our current food production. According to the Food and Agriculture Organization (FAO), agriculture, deforestation and land-use change represents about 21% of global greenhouse pollution, with livestock representing nearly two-thirds of this.¹⁹

This industrial model is problematic beyond its large carbon footprint and environment impacts. Industrial agriculture is also fragile, being vulnerable to pests, soil failure, and climate change.

Industrial agriculture’s original aim of producing more food seems to answer the wrong problem. As Settle noted, there is enough food to feed the world, but the underlying cause of global hunger results from the way food is distributed. He stressed the imperative to transition to a better global food system which leverages the knowledge of local farmers,weaves together ecology and social benefit with production, and allows farmers to own and breed their seeds, instead of buying them from large multi-nationals.
Access to local seeds is a key component of establishing food sovereignty and biodiversity. Small scale agriculture’s emphasis on diversity, he added, fosters resilience, as was evidenced by USC Canada’s seeds of survival program. More can be done to encourage this type of farming both in the local and international arena, argued Settle.

Settle recommended:

- That all levels of government encourage farmers to shift toward food sovereignty by using and breeding their own seeds and lift restrictions impacting farmers’ ability to grow, adapt, save, and exchange local seeds.
- That all levels of government conduct an environmental and climate risk assessment for Canada’s food system, particularly in light of the fact that we import most of our food.
- That the Federal Government pro-actively engage at the World Council on Food Security in defence of local, small-scale agriculture.
- That the federal and provincial governments begin to impose further restrictions on the use of pesticides to preserve the micro-biodiversity of our soils.

Karine Peloffy, Legal Counsel, Quebec Centre for Environmental Law, indicated that the Liberal government has undertaken a process of restoring environmental laws that were dismantled by the previous government. As a part of this process, Bill C-69, the Canadian Impact Assessment Act, is currently being reviewed by the Senate. She warned that references in the bill to Canada’s commitments on climate change are currently being campaigned against by industry lobbyists.
Beyond C-69, Peloffy discussed the need for a climate test on all government decisions, as well as improvements to the way that environmental impacts are assessed. Specifically, she cited the need for including ‘downstream’ greenhouse pollution – such as greenhouse pollution from the burning of exported fossil fuels – in the assessment of a given project’s impacts on the environment. She also added that the cost of inaction is larger than that of acting, arguing that this ought to be featured in the assessment of climate policy.

Peloffy also presented a graph on different allocations of Canada’s remaining global carbon budgets for staying within 2°C and 1.5°C \(^{20}\) (see Graph 3). \(^{21}\) She argued that if these budgets are distributed based on principles of fairness, Canada is already a climate debtor as its historical share of greenhouse pollution amounts to a disproportionate contribution to cumulative greenhouse pollution in the atmosphere. Thus, she concluded Canada has a responsibility to proactively support other countries less responsible for climate change if it is to respect the principles of “equity” and “common but differentiated responsibilities” that are meant to guide the global efforts towards meeting the temperature targets. \(^{22}\)

Peloffy recommends:

- That the Federal Government preserve and extend the application of climate impact assessments in Bill C-69.
- That the Federal Government implement a rigorous climate-impact test on all decision-making.
- That the Federal Government increase development assistance to countries less responsible and most impacted by climate change (in light of the fact that Canada is a climate debtor.)
- That the Federal Government plan to revise its greenhouse pollution reduction targets in accordance with the principle of global equity and the remaining global carbon budget for 2°C.
• That the Federal Government include all downstream greenhouse pollution in climate assessments

Concluding the panel, Dr. Curtis Lavoie, emergency physician, Children’s Hospital of Eastern Ontario, addressed the audience about the health impacts of the climate crisis, the resilience of the Canadian healthcare system to climate change, and the current system’s contribution to greenhouse pollution.

Lavoie described the broad range of health impacts that have recently been tied to climate change, including the emergence of conditions such as Lyme disease and the West Nile virus, and the possibility of new pandemics. Moreover, the system is vulnerable to events such as casualty surges and power outages.

He also discussed the ways in which the healthcare system could be decarbonized. The system, he noted, is responsible for millions of tons of greenhouse pollution and could help reduce its contribution though changes to procurement policy.

Lavoie recommended:

• That all levels of government work towards developing a framework for decarbonizing the healthcare system.
• That all levels of government immediately develop climate adaptation strategies for the healthcare system in light of the fact that extreme weather events are happening at a frequent rate and with more intensity.
• That the Federal Government prepare emergency plans for mass-casualty weather events.

The conference concluded with brief presentations by the Chair of the Group of 78 and the Chair of the conference organizing committee summarizing the highlights. Audience members agreed on the urgent need for strong mitigation and adaptation measures, and some made the link to climate-caused conflict and the need for nuclear disarmament to avoid the potential catastrophe of nuclear war.
References

3 As the group held its conference, scientists at the IPCC were discussing findings concerning the feasibility of meeting 1.5°C targets. BBC news reported on this one day later. See more here: https://www.bbc.com/news/science-environment-45653099
9 For more on how the ratchet mechanism is suppose to work see: https://www.e3g.org/library/the-paris-agreement-ambition-mechanism
15 This is the same goal established by California for phasing out fossil fuels and transitioning to 100% renewable energy announced in July of this year. See more here: https://nypost.com/2018/08/29/california-sets-goal-of-100-percent-clean-energy-by-2045/
16 Specifically, McBean cited costs of CA$4.9 billion and CA$10 billion in society costs for the Fort McMurray fires alone.
18 As McBean explained, experience shows that building resilient homes is less expensive than updating existent ones by an order of magnitude. For the same protection, the cost difference between improvements and construction can vary between $10 and $1000 for simple measures.

20 This is based on carbon budgets found within IPCC SYR AR5, and not the most recent revised carbon budget for 1.5°C found within the IPCC 1.5°C special report which was released after the conference.
