

May 6th, 2024

To: Steven Guilbeault, Minister of Environment and Climate Change
cc: Prime Minister Justin Trudeau
Jonathan Wilkinson, Minister of Natural Resources

Dear Minister Guilbeault,

As scientists, academics, and energy system modellers, we strongly support your efforts to put an effective cap on the oil and gas sector's emissions. However, we are deeply concerned that the proposed regulatory timeline and loopholes outlined in the Framework will undermine the effectiveness of the cap and Canada's ability to meet its emissions targets.

Our climate cannot afford any more delays. From wildfires to extreme heat to floods, Canadians are already experiencing devastating climate impacts. The emissions cap must come into effect by 2025 at the latest, necessitating that draft regulations be out by this summer. This decade is crucial in reducing emissions and keeping the rise in global average temperature to below 1.5°C.

We strongly urge you not to include loopholes, such as domestic and international offsets and a decarbonization fund, in the oil and gas emissions cap because these will enable carbon pollution rather than much-needed emissions reductions.

The Framework proposes using compliance market offsets from Canada's GHG Offset Credit System and recognized provincial systems. Domestic offsets are notoriously unreliable as permanent additional emission reductions, and should not be counted as such. International offsets, often referred to as Internationally Transferred Mitigation Outcomes (ITMOs), through the Paris Agreement's Article 6.2, are even more dubious.¹ There are no agreed upon rules to assure their quality, and prospects for agreement on such rules is unlikely. Meanwhile, contributions to the decarbonization fund in lieu of emissions reductions mean producers can continue to emit in exchange for uncertain future emissions outcomes from the expenditures (investments) from the decarbonization fund creating the further risk of double-counting. Further, we are concerned this fund will become a new fossil fuel subsidy and will be used for investments in technologies like carbon capture and storage, which are expensive and unproven at scale.

¹ Watson Institute of International and Public Affairs, Brown University. Response Report to Canada's Proposed Regulatory Framework for GHG Emissions from Oil and Gas.
https://watson.brown.edu/climatesolutionslab/files/csl/imce/research_briefs/2024/CSL%20White%20Paper%20on%20Canada%20G%20emissions%20regs%20-2023Jan14.pdf

Allowing these loopholes in the oil and gas emissions cap will delay and weaken emissions cuts – the exact opposite approach to what science says we need. The oil and gas sector is the biggest² source of carbon pollution in Canada. A 2023 study on GHG emissions from oil sands facilities found them to be 65 per cent higher than those reported by industry.³ **Canada's oil and gas sector needs regulations to cut emissions – not loopholes that undercut the cap and enable industry to continue polluting.**

Under the draft framework, the oil and gas sector will receive preferential treatment. The framework proposes capping oil and gas emissions at 35-38 per cent below 2019 levels by 2030 – far less than Canada's whole-of-economy target of 54 per cent below 2019 levels by 2030. This would require other sectors and individual Canadians to cut more emissions than Canada's most polluting sector.

The International Energy Agency states that to limit warming to 1.5°C, the global oil and gas sector must cut emissions by 60 per cent by 2030, from 2023 levels.⁴ In Canada, this would mean the oil and gas sector must reduce their emissions by 57 per cent from 2019 levels by 2030. In contrast, oil and gas companies in Canada that buy offsets would only be required to reduce emissions by 20-23%. This is not in line with climate science.

Canada's oil sands are among the most carbon-intensive energy producers in the world. Canada is poised to become the world's second largest developer of *new* oil and gas extraction from 2023 to 2050.⁵ Carbon pollution generated by *new* oil and gas production in Canada by 2050 would be equivalent to the lifetime emissions of 117 new coal plants.⁶

Loopholes not only threaten to undermine government efforts to reach net-zero by 2050, they risk preventing Canada from meeting our legally binding international commitments under the Paris Agreement. We implore you not to introduce yet another way for oil and gas companies to continue to sidestep their responsibility for their pollution.

² Government of Canada. Greenhouse gas emissions by economic sector.

<https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>

³ Aircraft and satellite observations reveal historical gap between top-down and bottom-up CO₂ emissions from Canadian oil sands. PNAS Nexus. April 2023. <https://academic.oup.com/pnasnexus/article/2/5/pgad140/7127723>

⁴ The Oil and Gas Industry in Net Zero Transitions. International Energy Agency. November 2023. [https://www.iea.org/reports/the-oil-and-gas-industry-in-netzero-transitions](https://www.iea.org/reports/the-oil-and-gas-industry-in-net-zero-transitions)

⁵ Canada Fact Sheet - Planet Wreckers. Oil Change International. September 2023. <https://priceofoil.org/content/uploads/2023/09/Planet-Wreckers-Canada.pdf>

⁶ Ibid.

Last summer, record-breaking wildfires in Canada scorched 18 million hectares – six times the average amount of land lost a year to fire.⁷ Smoke from the wildfires blanketed skies across Canada (in Vancouver,⁸ Calgary,⁹ Toronto,¹⁰ Ottawa,¹¹ Montreal,¹² and more), the U.S. (New York,¹³ and Washington, DC) and stretched as far as Norway.¹⁴ Climate scientists linked the rise in wildfires over the past 30 years in parts of North America to emissions from specific oil and gas companies.¹⁵ Fossil fuel emissions are wreaking havoc on our climate.

Effective solutions to achieve deep emissions reductions in the next decade along a pathway to net zero emissions are available, including renewable energy, electrification, energy storage and energy efficiency. This is what Canada should be leaning into – not letting its most polluting sector off the hook with loopholes.

We strongly urge you not to introduce offsets into the emissions cap as this is not in line with science. If the Government of Canada proceeds with offsets, it must include the following conditions:

- **Offsets must be from within the domestic oil and gas sector specifically.**
- **Allowable offsets must be from sources that are unquestionably permanent and additional.**

Thank you for your efforts to ensure that the oil and gas sector's emissions are subject to a declining cap. We recognize there is intense industry pressure to weaken, delay or dilute the

⁷ Zurowski, Monica. The Summer Canada Burned. Excerpt from *The Summer Canada Burned*, Calgary Herald. 22 November 2023. <https://calgaryherald.com/feature/wildfires-novascotia-bc-alberta-summer-canada-burned-book-smoke>

⁸ Jussinoja, Jaija. Metro Vancouver issues air quality advisory due to wildfire smoke. CTV News. 19 August 2023. <https://bc.ctvnews.ca/metro-vancouver-issues-air-quality-advisory-due-to-wildfire-smoke-1.6526480>

⁹ Sharp, Jonathan. Wildfire smoke descends on Calgary, air quality index at 'very high risk.' CBC News. 16 May 2023. <https://www.cbc.ca/news/canada/calgary/wildfire-smoke-air-quality-statement-calgary-1.6844824>

¹⁰ Vega, Manuela. Toronto's air quality is among the worst in the world due to wildfire smoke. Toronto Star. 28 June 2023. https://www.thestar.com/news/gta/toronto-s-air-quality-is-among-the-worst-in-the-world-due-to-wildfire-smoke/article_81645fb7-20ed-5a77-9979-33a23bba85f1.html

¹¹ Air quality risk 'off the charts' in Ottawa because of smoke. CBC News. 5 June 2023. <https://www.cbc.ca/news/canada/ottawa/air-quality-fire-smoke-gatineau-1.6865730>

¹² Wildfire smog gives Montreal worst air quality of any major city, says pollution monitor. Agence France-Presse. VOA News. 26 June 2023. <https://www.voanews.com/a/wildfire-smog-gives-montreal-worst-air-quality-of-any-major-city-says-pollution-monitor/7152820.html>

¹³ Amatulli, Jenna. Canadian wildfire smoke to engulf New York skies again. The Guardian. 27 June 2023. <https://www.theguardian.com/us-news/2023/jun/27/canada-wildfire-smoke-returns-new-york-air-quality>

¹⁴ Paddison, Laura. Smoke from Canada's wildfires has reached as far as Norway. CNN. 9 June 2023. <https://www.cnn.com/2023/06/09/europe/canada-wildfires-norway-smoke-climate-intl/index.html>

¹⁵ Kristina A Dahl, John T Abatzoglou, Carly A Phillips, J Pablo Ortiz-Partida et al. Quantifying the contribution of major carbon producers in vapor pressure deficit and burned area in western US and southwestern Canadian forests. Environmental Research Letters. Vol 18:6. 16 May 2023. <https://iopscience.iop.org/article/10.1088/1748-9326/abcce8>

effectiveness of the cap and we call for the above to ensure that industry invests in real emissions reductions that will achieve the 2030 target.

À : Steven Guilbeault, ministre de l'Environnement et du Changement climatique

cc. : Justin Trudeau, premier ministre

Jonathan Wilkinson, ministre des Ressources naturelles

Monsieur le ministre,

En qualité de scientifiques, universitaires et modélisateurs du système énergétique, nous appuyons fermement les efforts que vous consentez pour plafonner efficacement les émissions du secteur gazier et pétrolier. Cependant, nous craignons vivement que l'échéancier réglementaire proposé et les échappatoires indiquées dans le cadre sapent l'efficacité du plafond et la capacité du Canada d'atteindre ses objectifs en matière d'émissions.

Notre climat ne supportera pas de retard supplémentaire : des feux de forêt aux inondations, en passant par les vagues de chaleur extrême, les Canadiens subissent déjà les effets dévastateurs du changement climatique. Comme le plafonnement des émissions doit entrer en vigueur d'ici à 2025 au plus tard, il faut que le règlement préliminaire soit publié cet été. Cette décennie est cruciale pour réduire les émissions et faire en sorte que la hausse de la température mondiale moyenne demeure sous la barre de 1,5°C.

Nous vous exhortons vivement à ne pas inclure d'échappatoires, comme des compensations nationales et internationales et un fonds de décarbonation, dans le plafonnement des émissions gazières et pétrolières parce qu'elles entraîneraient de la pollution par le carbone et non pas des réductions d'émissions, actuellement si vitales.

Ce cadre propose d'utiliser des compensations commerciales fondées sur la conformité à partir du système de crédits de compensation des GES du Canada et de systèmes provinciaux reconnus. Il est de notoriété publique que les compensations nationales ne sont pas fiables, contrairement aux réductions des émissions supplémentaires permanentes, et ne doivent pas être considérées comme telles. Les compensations internationales, souvent désignées sous le terme de résultats d'atténuation transférés à l'échelle internationale (ITMO), établies selon l'article 6.2 de l'Accord de Paris, sont encore plus douteuses [1]. Il n'y a pas de règles consensuelles pour assurer leur qualité, et il est peu probable que l'on réussisse à obtenir un accord à leur sujet. Par contre, en contribuant à des fonds de décarbonation au lieu de tenter de réduire les émissions, on permet aux producteurs de continuer à émettre en échange de résultats d'émissions futures incertaines à partir des dépenses [investissements] du fonds de décarboration, ce qui crée le risque

supplémentaire d'un double comptage. De plus, nous craignons que ce fonds devienne une nouvelle subvention pour les combustibles fossiles et serve à investir dans des technologies comme le captage et l'entreposage du carbone, qui sont dispendieuses et non éprouvées à grande échelle.

En permettant ces échappatoires dans le plafonnement des émissions gazières et pétrolières, on reporte et contrecarre la baisse des émissions, ce qui est l'approche directement opposée à celle préconisée par les scientifiques. Le secteur gazier et pétrolier est la plus importante source^[2] de pollution par le carbone, et celle qui affiche la croissance la plus rapide au Canada. Lors d'une étude menée en 2023 sur les émissions de GES des installations d'exploitation des sables bitumineux, on a constaté qu'elles étaient supérieures, à hauteur de 65 %, à celles signalées par l'industrie^[3]. **Le secteur gazier et pétrolier du Canada a besoin de règlements visant à réduire les émissions, et non pas d'échappatoires qui compromettent le plafonnement et permettent à l'industrie de continuer à polluer.**

Selon le cadre préliminaire, le secteur gazier et pétrolier bénéficiera d'un traitement préférentiel. Ce cadre propose de plafonner les émissions de ce secteur à 35 à 38 % en dessous des niveaux de 2019 d'ici à 2030, soit un niveau bien inférieur à la cible fixée pour l'ensemble de l'économie du Canada, qui est de 54 % en dessous des niveaux de 2019 d'ici à 2030. Pour ce faire, il faudrait que d'autres secteurs et des Canadiens, individuellement, éliminent plus d'émissions que le secteur le plus polluant du Canada.

Selon l'Agence internationale de l'énergie, pour limiter le réchauffement à 1.5°C, le secteur gazier et pétrolier mondial doit abaisser ses émissions de 60 % d'ici à 2030, par rapport aux niveaux de 2023^[4]. Au Canada, il faudrait donc que le secteur gazier et pétrolier réduise ses émissions de 57 % par rapport aux niveaux de 2019 d'ici à 2030. Par contre, les entreprises gazières et pétrolières du Canada qui achètent des crédits devraient seulement réduire leurs émissions de 20 à 23 %. Or, ces chiffres ne correspondent pas à ceux de la science sur le climat.

Les sables bitumineux du Canada font partie des producteurs énergétiques qui émettent le plus de carbone au monde. Le Canada s'apprête à devenir le deuxième plus grand promoteur de nouveaux projets d'extraction pétrolière et gazière entre 2023 et 2050^[5]. La pollution par le carbone générée par ces nouveaux projets pétroliers et gaziers au Canada d'ici 2050 équivaudrait aux émissions à vie de 117 nouvelles usines au charbon^[6].

Les échappatoires risquent non seulement de saper les efforts du gouvernement d'atteindre la carboneutralité d'ici à 2050, mais aussi d'empêcher le Canada de respecter ses

engagements internationaux légalement contraignants en vertu de l'Accord de Paris. Nous vous demandons instamment de ne pas introduire encore un autre moyen que les entreprises gazières et pétrolières pourront utiliser pour se dégager de la responsabilité de leur pollution.

L'été dernier, des feux de forêt records ont dévoré 18 millions d'hectares au Canada, soit six fois la superficie moyenne annuelle^[7]. La fumée des feux de forêt a assombri le ciel de tout le Canada (à Vancouver^[8], Calgary^[9], Toronto^[10], Ottawa^[11], et Montréal^[12], entre autres) et des É.-U. (New York^[13] et Washington, DC) pour s'étendre jusqu'en Norvège^[14]. Des scientifiques experts du climat ont associé la hausse des feux de forêt au cours des 30 dernières années dans certaines parties de l'Amérique du Nord aux émissions d'entreprises gazières et pétrolières spécifiques^[15]. Les émissions issues des combustibles fossiles font des ravages climatiques.

Parallèlement à une voie vers la carboneutralité, il existe des solutions efficaces pour réduire réellement les émissions durant les prochaines décennies, notamment les énergies renouvelables, l'électrification, l'entreposage énergétique et l'efficacité énergétique. C'est la voie que le Canada doit emprunter, au lieu de laisser à son secteur le plus polluant le loisir d'en faire à sa tête grâce à des échappatoires.

Nous vous exhortons vivement à ne pas introduire de compensations dans le plafonnement des émissions, car cette méthode ne correspond pas aux exigences scientifiques. Si le gouvernement du Canada décide d'adopter des mesures compensatoires, il doit inclure les conditions suivantes :

- **Les crédits doivent provenir spécifiquement du secteur pétrolier et gazier national.**
- **Les crédits permis doivent provenir de sources indubitablement permanentes et additionnelles.**

Nous vous remercions de vos efforts visant à faire en sorte que les émissions du secteur gazier et pétrolier soient assujetties à un plafond décroissant. Nous sommes conscients du fait qu'il y a une intense pression industrielle pour affaiblir, retarder ou diluer l'efficacité du plafonnement, mais nous réclamons le respect des conditions ci-haut pour veiller à ce que l'industrie investisse dans de réelles réductions des émissions de sorte à atteindre la cible de 2030.

En vous remerciant de votre attention, nous vous prions d'agrérer, Monsieur le ministre, l'expression de nos sentiments les meilleurs.

-
- [1] Watson Institute of International and Public Affairs, Brown Université. Response Report to Canada's Proposed Regulatory Framework for GHG Emissions from Oil and Gas.
https://watson.brown.edu/climatesolutionslab/files/csl/imce/research_briefs/2024/CSL%20White%20Paper%20on%20Canada%20G%20emissions%20regs%20-2023Jan14.pdf
- [2] Gouvernement du Canada. Émissions de gaz à effet de serre en fonction de secteurs économiques.
<https://www.canada.ca/fr/environnement-changement-climatique/services/indicateurs-environnementaux/emissions-gaz-effet-serre.html>
- [3] Aircraft and satellite observations reveal historical gap between top-down and bottom-up CO₂ emissions from Canadian oil sands. PNAS Nexus. Avril 2023. <https://academic.oup.com/pnasnexus/article/2/5/pgad140/7127723>
- [4] The Oil and Gas Industry in Net Zero Transitions. Agence internationale de l'énergie. Novembre 2023.
<https://www.iea.org/reports/the-oil-and-gas-industry-in-net-zero-transitions>
- [5] Canada Fact Sheet - Planet Wreckers. Oil Change International. Septembre 2023.
<https://priceofoil.org/content/uploads/2023/09/Planet-Wreckers-Canada.pdf>
- [6] Ibid.
- [7] Zurowski, Monica. The Summer Canada Burned. Extrait de l'article *The Summer Canada Burned*, paru dans le Calgary Herald le 22 novembre 2023. <https://calgaryherald.com/feature/wildfires-novascotia-bc-alberta-summer-canada-burned-book-smoke>
- [8] Jussinoja, Jaija. Metro Vancouver issues air quality advisory due to wildfire smoke. CTV News. Le 19 août 2023.
<https://bc.ctvnews.ca/metro-vancouver-issues-air-quality-advisory-due-to-wildfire-smoke-1.6526480>
- [9] Sharp, Jonathan. Wildfire smoke descends on Calgary, air quality index at 'very high risk.' CBC News. Le 16 mai 2023.
<https://www.cbc.ca/news/canada/calgary/wildfire-smoke-air-quality-statement-calgary-1.6844824>
- [10] Vega, Manuela. Toronto's air quality is among the worst in the world due to wildfire smoke. Toronto Star. Le 18 juin 2023.
https://www.thestar.com/news/gta/toronto-s-air-quality-is-among-the-worst-in-the-world-due-to-wildfire-smoke/article_81645fb7-20ed-5a77-9979-33a23bba85f1.html
- [11] Air quality risk 'off the charts' in Ottawa because of smoke. CBC News. Le 5 juin 2023.
<https://www.cbc.ca/news/canada/ottawa/air-quality-fire-smoke-ottawa-qatineau-1.6865730>
- [12] Wildfire smog gives Montreal worst air quality of any major city, says pollution monitor. Agence France-Presse. VOA News. Le 26 juin 2023. <https://www.voanews.com/a/wildfire-smog-gives-montreal-worst-air-quality-of-any-major-city-says-pollution-monitor/7152820.html>

- [13] Amatulli, Jenna. Canadian wildfire smoke to engulf New York skies again. The Guardian. Le 27 juin 2023.
<https://www.theguardian.com/us-news/2023/jun/27/canada-wildfire-smoke-returns-new-york-air-quality>
- [14] Paddison, Laura. Smoke from Canada's wildfires has reached as far as Norway. CNN. Le 9 juin 2023.
<https://www.cnn.com/2023/06/09/europe/canada-wildfires-norway-smoke-climate-intl/index.html>
- [15] Kristina A Dahl, John T Abatzoglou, Carly A Phillips, J Pablo Ortiz-Partida et coll. Quantifying the contribution of major carbon producers in vapor pressure deficit and burned area in western US and southwestern Canadian forests. Environmental Research Letters. Vol 18:6. Le 16 mai 2023. <https://iopscience.iop.org/article/10.1088/1748-9326/acbce8>

Sincerely,

Dr. Dana Sawchuk, Professor, Department of Sociology, Wilfrid Laurier University

Dr. Alex Latta, Wilfrid Laurier University

Dr. Amy Janzwood, Assistant Professor, Department of Political Science and Bieler School of Environment, McGill University

Dr. Angela Carter, Associate Professor, Department of Political Science, Memorial University of Newfoundland and Labrador

Dr. Brent Sinclair, Professor, Department of Biology, Western University

Dr. Dennis Murray, Professor and Canada Research Chair, Department of Biology, Trent University

Dr. Damon Matthews, Professor, Department of Geography, Planning and Environment, Concordia University

Dr. Cassandra Kuyvenhoven, Department of Family Medicine, McMaster University

Dr. Emily Eaton, Professor, Department of Geography and Environmental Studies, University of Regina

Dr. Greg Albo, Professor, Department of Politics, York University

Dr. JP Sapinski, professeur d'études de l'environnement, Université de Moncton

Dr. Ilan Kapoor, Professor, Faculty of Environmental and Urban Change, York University

Dr. Ingrid Waldron, Professor and HOPE Chair in Peace and Health, Faculty of Humanities, McMaster University

Dr. Craig Johnson, Professor, Department of Political Science, University of Guelph

Dr. Jeff Dahn, Professor, Dept. of Physics and Atmospheric Science, Dalhousie University

Dr. Joyce Green, Professor Emerita, Department of Political and International Studies, University of Regina

Dr. David P. Wilkinson, Professor and CRC, Department of Chemical and Biological Engineering, University of British Columbia

Dr. Gail Krantzberg, Professor, Faculty of Engineering, McMaster University, Ontario

Dr. Deborah de Lange, Associate Professor, Toronto Metropolitan University, Ted Rogers School of Management

Dr. Jordan B. Kinder, Assistant Professor, Communication Studies, Wilfrid Laurier University
Burgess Langshaw Power, PhD Candidate, Balsillie School of International Affairs,
University of Waterloo

Dr. Laura Tozer, Assistant Professor, Physical and Environmental Sciences, University of
Toronto

Dr. Matthew Paterson, Professor, and Director of the Sustainable Consumption Institute,
University of Manchester

Dr. Marco Festa-Bianchet, Professor and Head, Département de biologie, Université de
Sherbrooke

Dr. Guillaume Blanchet, Assistant Professor, Département de biologie, Université de Sherbrooke

Dr. Isabelle Laforest-Lapointe, Assistant Professor, Département de biologie, Université de
Sherbrooke

Dr. Fiona Soper, Assistant Professor, Biology and School of Environment, McGill University
Meghan Brien, MES, Department of English Literature and Creative Writing, Queen's
University

Dr. Jean-Frédéric Morin, Professeur titulaire, Département de science politique, Université Laval
Allan Moscovitch, Professor Emeritus, School of Social Work, Carleton University

Dr. Gavin Fridell, University Research Professor, Global Development Studies, Saint Mary's
University

Dr. Courtney Mason, Professor, Canada Research Chair, Natural Resource Science, Thompson
Rivers University

Dr. James Nugent, Continuing Lecturer, School of Environment, Resources and Sustainability,
University of Waterloo

Danielle Dinovelli-Lang, Associate Professor, Department of Sociology and Anthropology,
Carleton University

David J Cooper, Emeritus Professor of Accounting, University of Alberta

Michael Byers, Professor, Canada Research Chair in Global Politics and International Law, UBC

Lori Lee Oates, Instructor, Department of Sociology, Memorial University of Newfoundland

Dr. Juliane Collard, Department of Geography, Vancouver Island University

Dr. Imre Szeman, Department of Human Geography, University of Toronto Scarborough

Dr. G.W.K. Moore, Distinguished Professor, Department of Chemical and Physical Sciences,
University of Toronto Mississauga

Dr. Ian Angus, Professor Emeritus of Humanities, Simon Fraser University

Dr. Niyyokamigaabaw Deondre Smiles, Assistant Professor, Department of Geography,
University of Victoria

Dr. Nicolas Graham, Banting Postdoctoral Fellow, Department of Sociology, University of
British Columbia

Dr. John Holmes, Professor Emeritus, Department of Geography and Planning, Queen's
University

Dr. Dip Kapoor, Professor, International Development Education, Faculty of Education, College

of Social Sciences & Humanities, University of Alberta

Dr. Jody Berland, Professor Emerita, Department of Humanities, York University

Dr. Karena Shaw, Professor, School of Environmental Studies, University of Victoria

Dr. Carole C. Tranchant, Professeure titulaire, Faculté des sciences de la santé et des services communautaires, Maîtrise en études de l'environnement, Université de Moncton

Dr. Enakshi Dua, Professor, York University

Dr. Nancy Viva Davis Halifax, York University

Dr Georges Moyal, York University

Dr. Karen Murray, Department of Politics, York University

Dr. Elizabeth Halpenny, Faculty of Kinesiology, Sport and Tourism, University of Alberta

Dr. Rianne Mahon, Distinguished Research Professor, Institute of Political Economy, Carleton University

Dr. Makere Stewart-Harawira, Professor, Indigenous, Environmental and Global Studies, College of Social Sciences and Humanities | Faculty of Education, University of Alberta

Dr. Audrey Laurin-Lamothe, Professor, York University

Dr. Meenal Shrivastava, Professor and Associate Dean, Athabasca University

Dr. Sourayan Mookerjea, Professor, Department of Sociology, University of Alberta

Dr. Christina Laffin, Associate Professor, Department of Asian Studies, University of British Columbia

Riham Alkhalfaf, finissante en maîtrise en études de l'environnement, Université de Moncton

Dr. Christine Kurtz Landy, Associate Professor, School of Nursing, York University

Dr Bruce Connell, Professor, Dept of Multidisciplinary Studies, York University

Dr. Raju J Das, Faculty of Environmental and Urban Change, York University

Dr. Susan McGrath C.M., Professor Emerita, Centre for Refugee Studies, York University

Liisa L. North, Emerita Professor of Politics and Latin American |Studies, York University

Dr. Alain Deneault, professeur de philosophie, Université de Moncton - Campus de Shippagan (UMCS)

Dr. Leonard Sklar, Professor Emeritus of Environmental Geoscience, Department of Geography, Planning and Environment, Concordia University

Dr. Kyla Tienhaara, Canada Research Chair in Economy & Environment, Associate Professor, Queen's University

Dr. Kate Ervine, Associate Professor, Global Development Studies, Saint Mary's University

Dr. Jessica Dempsey, Associate Professor, Department of Geography, University of British Columbia

Dr. David McLagan, Assistant Professor, Department of Geology, School of Environmental Sciences, Queen's University

Dr. Rachel Berman, Professor, School of Early Childhood Studies, Toronto Metropolitan University

Dr. Matthew Barbour, Assistant Professor, Département de biologie, Université de Sherbrooke

Paul Downes, Professor Department of English, University of Toronto, St. George

Dr. Lindsay McLaren, Professor, Department of Community Health Sciences, University of Calgary

Dr. Ryan Katz-Rosene, Associate Professor, School of Political Studies, University of Ottawa

Dr. Peter Andree, Professor, Department of Political Science, Carleton University

Dr. Barbara Leckie, Professor, Department of English and the Institute for the Comparative Study of Literature, Art, and Culture, Carleton University

Geoff Mann, Distinguished Professor, Dept. of Geography, Simon Fraser University

Rosemary Collard, Associate Professor, Geography, Simon Fraser University

Ester Reiter, professor emeritus, York University

Dr. Hamish van der Ven, Assistant Professor, Faculty of Forestry, University of British Columbia

Jennifer Hosek, Professor, Queen's University

Dr. Christopher Powell, Associate Professor, Department of Sociology, Toronto Metropolitan University

Dr. Laurie Adkin, political economist and Professor Emerita, University of Alberta

Dr. Peter Vandergeest, Professor Emeritus and Senior Scholar, Geography, York University

Dr. Ryan Phillips, Lecturer, Department of Politics and Public Administration, Toronto Metropolitan University

Dr. Liv Yoon, Assistant Professor, School of Kinesiology, University of British Columbia

Prof. Nina-Marie E. Lister, Professor, School of Urban & Regional Planning, Director, Ecological Design Lab, Toronto Metropolitan University

Dr. Matthew Tegelberg, Associate Professor, Department of Social Science, York University

Dr. Lisa Nathan, Associate Professor, School of Information, University of British Columbia

Dr. Joel Lexchin, Professor Emeritus, Faculty of Health, York University

Erik Post, PhD Candidate, Faculty of Geography, University of British Columbia

Dr. Kathryn Harrison, Professor, Department of Political Science, University of British Columbia

Dr. Vanessa Lamb, Associate Professor, Department of Social Science, York University

Dr. Ruth A. Frager, Professor Emerita, McMaster University

Dr. Kirsten Zickfeld, Distinguished Professor of Climate Science, Simon Fraser University

Dr. William K. Carroll, Professor of Sociology, University of Victoria

Dr. Neil Balan, Contract Faculty, WLUFA and CUPE 3912 Member, SMU and WLU

Dr. Simon Dalby, Professor Emeritus, Balsillie School of International Affairs, Wilfrid Laurier University

Dr. Stephanie Green, Associate Professor and Canada Research Chair, University of Alberta

Dr. Dawn Hoogeveen, University Research Associate, Simon Fraser University

Dr. M. V. Ramana, Professor, School of Public Policy and Global Affairs, University of British Columbia

Dr. Patricia Wood, Professor, Faculty of Environmental and Urban Change, York University

Dr. Danny Harvey, Professor, Department of Geography, University of Toronto

Dr. Mélanie Jean, Département de biologie, Université de Moncton

Dr. Marcus Taylor, Global Development Studies, Queen's University

Dr. Christian Seiler, School of Environmental Studies, Queen's University

Dr. Nadège Compaoré, Department of Political Science, University of Toronto

Dr. Luin Goldring, Professor, Sociology, York University

Prof. Thomas Marois, Political Science, McMaster University

Dr. Alina Sajed, Political Science, McMaster University

Dr. David A McDonald, Global Development Studies, Queen's University

Dr. Stephanie Rutherford, Associate Professor, School of the Environment, Trent University

Professor Steven Moore, Assistant Professor, Sustainability, Queen's University

Dr. Teresa Kramarz, School of the Environment, University of Toronto

Dr. Andrew Watson, Department of History, University of Saskatchewan

Dr. Susan O'Donnell, Environment & Society program, St. Thomas University

Dr. Frédéric Fabry, Director, Bieler School of Environment, McGill University

Dr. Veldon Coburn, Associate Professor, Administration and Governance, McGill University

Dr. Sara Cannon, Postdoctoral Fellow, Institute for the Oceans and Fisheries, University of British Columbia

Dr. Scott Krayenhoff, Associate Professor, School of Environmental Sciences, University of Guelph

Dr. Douglas Robb, Assistant Professor, School of Architecture, Planning, and Landscape, University of Calgary

Dr. Shannonbrooke Murphy, Endowed Chair in Human Rights, St Thomas University

Dr. Sophie Calmé, Professeure titulaire, Département de biologie, Université de Sherbrooke

Dr. Sophie L. Van Neste, Professeure agrégée, Chaire de recherche du Canada en action climatique urbaine, INRS

Dr. Penelope Simons, Professor of Law and Gordon F. Henderson Chair in Human Rights, University of Ottawa

Dr. Patricia E. Perkins, Professor, Faculty of Environmental and Urban Change, York University

Dr. Heather McLeod-Kilmurray, Professor, Centre for Environmental Law and Global Sustainability, Faculty of Law, University of Ottawa

Dr. Stepan Wood, Canada Research Chair in Law, Society & Sustainability and Director, Centre for Law & the Environment, Allard School of Law, University of British Columbia

Dr. Brad Cross, Professor and Chair, History Department, St. Thomas University

Dr. Mark S. Boyce, Professor of Ecology, and Alberta Conservation Association Chair in Fisheries & Wildlife, Department of Biological Sciences, University of Alberta

Professor Martha Jackman, Faculty of Law, University of Ottawa

Dr. Jeff Everett, Professor, Schulich School of Business York University

Dr. Sarah E. Sharma, Assistant Professor, Department of Political Science, University of Victoria

Dr. Michael Ekers, Associate Professor, Department of Geography & Planning, University of Toronto

Dr. Carol Hunsberger, Associate Professor, Department of Geography & Environment, University of Western Ontario

Dr. Tracy Glynn, Assistant Professor, Environment and Society Program, St. Thomas University
Dr. Kristen Bos, Assistant Professor, Technoscience Research Unit, University of Toronto
Dr Steven Jordan, Associate Professor, Integrated Studies in Education, McGill University
Dr. Scott Prudham, Professor, Department of Geography and Planning and School of the Environment, University of Toronto
Roger Suffling, Adjunct Professor, School of Planning, University of Waterloo
Dr. Mark Hudson, Professor, Department of Sociology and Criminology, University of Manitoba
Dr. Peter A. Victor, Professor Emeritus, Faculty of Environmental and Urban Change, York University
Dr Shelagh Campbell, Professor Emerita, Department of Biological Sciences, University of Alberta
Dr. Rebecca Hall, Assistant Professor, Global Development Studies, Queen's University
Dr. Taco Niet, P.Eng., Assistant Professor (Practitioner), Sustainable Energy Engineering, Simon Fraser University
Dr. Tom Langford, Professor Emeritus of Sociology, University of Calgary
Dr. Susie O'Brien, Professor of English and Cultural Studies, McMaster University
Dr. Juanita Sundberg, Associate Professor of Geography, University of British Columbia
Dr. Anna Zalik, Professor, Environmental and Urban Change, York University
Dr. David Kahane, Professor of Political Science, University of Alberta
Dr. Debra J. Davidson, Professor of Environmental Sociology, University of Alberta
Dr. Glen Hvenegaard, Professor of Environmental Science, University of Alberta
Dr. Robert O'Brien, Professor of Political Science, McMaster University
Dr. Nathalie Chalifour, Professor of Law, University of Ottawa
Dr. Mark Simpson, Professor of English and Film Studies, University of Alberta
Dr. Stephen Bocking, Professor Emeritus, Trent School of the Environment, Trent University
Dr. Carlos Fiorentino, Assistant Professor of Information Design, Mount Royal University
Dr. Lina Brand Correa, Assistant Professor, Faculty of Environmental and Urban Change, York University
Dr. Ratiba Hadj-Moussa, Professor of Sociology, Faculty of Arts and Professional Studies, York University
Dr. Lisa Mills, Associate Professor, Public Policy and Administration, Carleton University
Dr. Robert Aschah, Research Fellow, The Parkland Institute, University of Alberta
Dr. Ellen Field, Assistant Professor, Faculty of Education, Lakehead University
Dr. Tony Weis, Professor, Geography and Environment, Western University
Dr. Brenda Vellino, Department of English, Coordinator, Carleton Climate Commons, Carleton University
Dr. Kevin A. Gould, Department of Geography, Planning and Environment, Concordia University, Montreal, Canada.
Sarah Marquis, PhD Candidate in Environmental Sustainability, Institute of the Environment,

University of Ottawa, Ottawa, Canada

Dr. Anelyse M. Weiler, Assistant Professor of Sociology, University of Victoria

Dr. Ibrahim Ouattara, Professeur agrégé, Département de philosophie, Université de Moncton

Dr. Janice Harvey, Environment and Society, St. Thomas University, Fredericton

Dr. Kai Chan, Professor and Canada Research Chair, Institute for Resources, Environment and Sustainability, University of British Columbia

Dr. Matthew Hoffmann, Professor of Political Science, Co-Director Environmental Governance Lab, University of Toronto

Dr. Eric Sager, Professor, Ecological Restoration Program, Fleming College/Trent University

Daniela Senkl, Assistant Professor of Accounting, University of Guelph

Emmanuel G. Moutondo, D.Sc, Senior Project Manager, Africa Global Vision

Barry Bruce, PhD, Co-chair, Rural Healthy Living Coalition

Helen Nowlin, J.D.; L.L.M. International Environmental Law

Judith A. Hoy, Bitterroot Wildlife Rehabilitation

Dr. Angele Alook, Centre for Indigenous Knowledges and Languages, York University

Dr. Ricardo Grinspun, Professor Emeritus of Economics, York University

Dr. Kathleen Kevany, Professor, Sustainable diets, Faculty of Agriculture, Dalhousie Victoria Volkanova, Librarian, Université de Moncton

Dr. Talan Iscan, Professor of Economics, Dalhousie University

Enda Brophy, Associate Professor, Simon Fraser University

Dr. Matthew Schnurr, Professor, International Development Studies, Dalhousie University

Dr. Maura Hanrahan, Associate Professor, University of Lethbridge

Dr. Meg Holden, Professor, Centre for Sustainable Development, Simon Fraser University

Dr. Natalie Knowles, Faculty of Environment, University of Waterloo

Dr. Werner Antweiler, Associate Professor, Sauder School of Business, University of British Columbia

Joanna Grealish, Sustainability, Planning, and Environmental Policy, Cardiff University

Dr. Marc-Urbain Proulx. Professeur Économie régionale, UQAC

Dr. Stéphane Paquin, professeur titulaire à l'Ecole nationale d'administration publique et titulaire de la Chaire Jarislowsky sur la confiance et le leadership politique de l'UQTR en collaboration avec l'ENAP

Thomas L Green, Ph.D, Senior Climate Policy Adviser, DSF

Maya Jegen, Ph.D., professeure, Département de science politique, Université du Québec à Montréal

Dr. Bob Abell, Coordinator, Scientists Concerned and Informed on the Environment Speak Out

Johanne Whitmore, chercheuse principale, chaire de gestion du secteur de l'énergie, HEC Montréal

Prof. Loïc Boulon, Ph.D., Département de génie électrique et génie informatique, Université du Québec à Trois-Rivières

Prof. Alexandre Gajevic Sayegh, Ph.D., Département de science politique, Université Laval
Jena Webb, Ph.D., professionnelle de recherche, Université du Québec à Montréal
Eric Pineault, Ph.D., professor at the Institute of Environmental Sciences at the Université du Québec à Montréal
Annie Chaloux, professeure agrégée en politique environnementale, Université de Sherbrooke
Laure Waridel, Ph.D., associate professor at the Institute of Environmental Sciences at the Université du Québec à Montréal
Mélanie Lemire, Professeure titulaire, Titulaire de la Chaire de recherche Littoral en approches écosystémique de la santé, Université Laval
Isabelle Goupil-Sorman, MD, FRCPC, Université Laval
Charles Baron, Ph.D., professeur titulaire en management, Université Laval
Maxime Boivin, Ph.D., professeure associée, Université Laval
Lucie Sauvé, Ph.D., professeure émérite, Université du Québec à Montréal
Christophe Reutenaer, Ph.D., professeur, docteur en mathématique, UQAM
Bonne Campbell, Ph.D., professeure émérite, Université du Québec à Montréal
Eric Notebaert, MD, professeur agrégé, faculté de Médecine, Université de Montréal
Donna Mergler, Ph.D., professeure émérite, Université du Québec à Montréal
Stephan Williams, Ph.D., MD, professeur, Université de Montréal