

## Speaker and Moderator Biographies

### Opening Remarks

**Dr. Gordon McBean | Professor, Western University | President-elect of the International Council for Science (ICSU) | Chair of the Canadian Climate Forum (CCF) and Ontario Climate Consortium (OCC)**



Dr. McBean is an international leader in the science and practice of climate change adaptation and natural disaster resilience. He is a professor at Western University, current president of the International Council for Science (ICSU), chair of the Canadian Climate Forum (CCF) and the Ontario Climate Consortium (OCC). Dr. Gordon McBean received his B.Sc. in Physics and Ph.D. in Oceanography from the University of British Columbia and a M.Sc. in Meteorology from McGill University. In addition to his activities at UWO, Dr. McBean is active nationally and internationally. He is Chair of the Board of Trustees of the Canadian Foundation for Climate and Atmospheric Sciences and a member of the scientific committee for the International Arctic Research Center of the University of Alaska, the Board of the International Institute for Sustainable Development, and the Canadian Committee for the

International Polar Year. He was a lead author for the Arctic Climate Impact Assessment. He has received the Patterson Medal for distinguish contributions to meteorology by a Canadian and is a Fellow of the Royal Society of Canada, the Canadian Meteorological and Oceanographic Society and the American Meteorological Society.

**Dr. Mo Elbestawi, Vice-President, Research and International Affairs, McMaster University**



As the Vice-President, Research and International Affairs at McMaster University, Dr. Mo Elbestawi is responsible for research activities within the University and for the aggressive pursuit of new partnerships – including technology transfer and economic development opportunities – locally, nationally and internationally. His experience spans a number of research and administrative roles over 25 years, including Dean of Engineering, Chair of Mechanical Engineering, and Founding Director of the McMaster Manufacturing Research Institute. His experience in industry included research engineer, unit head-structural dynamics, Ontario Hydro Research Division. He currently serves on the Board of Directors of the Ontario Centres of Excellence.

Dr. Elbestawi is known worldwide for his research in Manufacturing Engineering, specifically machining systems, and computer aided manufacturing. His record of scholarship includes more than 260 archival papers, contribution to 4 books, and 3 patents. He has supervised 82 graduate students – including 32 doctoral students – to the completion of their degrees. Dr. Elbestawi received his B.Sc. from the University of Alexandria and his MEng and PhD degrees from McMaster University.

## Keynote Speakers

### The Honourable Glen Murray | Minister of Environment and Climate Change



Glen Murray currently serves as Minister of the Environment and Climate Change. He was appointed the Minister of Infrastructure and the Minister of Transportation in February 2013.

He served as mayor of Winnipeg from 1998 to 2004. As Chair of the Big City Mayors' Caucus, Glen Murray led the successful campaign to transfer the equivalent of five cents per litre of the federal gas tax to municipalities for infrastructure renewal and construction.

In 2004, he moved to Toronto and served as Senior Resident at Massey College and a Visiting Fellow at the Faculty of Architecture and Landscape Design at the University of Toronto. Murray was a Managing Partner of AuthenticITY, a Toronto-based urban sustainability consulting and planning firm. He was appointed Chair of the National Round Table on the Environment and the Economy by former Prime Minister Paul Martin in 2005. Murray became president and CEO of the Canadian Urban Institute in 2007.

Glen Murray was born in Montreal, where he earned a diploma from John Abbott College. He then attended Concordia University's School of Community and Public Affairs for four years, majoring in Urban Studies.

### David McLaughlin | Strategic Advisor on Sustainability, University of Waterloo



David McLaughlin is one of Canada's leading experts and commentators on politics, public policy, and sustainability. David has a B.A., Honours from Mount Allison University, an M.A. in International Affairs from Carleton University, and an M.B.A. from the University of Bath, in the United Kingdom. Since 1980, he has worked for prime ministers, premiers, and ministers as a chief of staff and deputy minister at both the federal and provincial levels of government. David was President and CEO of the National Round Table on the Environment and the Economy from 2007-12. He led a rejuvenation of the NRTEE turning it into a dynamic, high-performing government agency delivering high-quality, innovative, and original-research reports on climate change impacts, carbon pricing, water conservation, oil sands, GHG best practices, the Kyoto Protocol, and sustainable development processes.

David is currently a Strategic Advisor on Sustainability to the Faculty of Environment at the University of Waterloo. David works with faculty, staff, and students to promote the original work being done at the university and offer his insights and experience.

David is an Honorary Fellow of the Royal Canadian Geographic Society. He is an advisory board member to the Environment Commissioner of Ontario, Canada 2020, and the Canadian Energy Pipelines Association.

## Session 1 | The Business of Climate Resilience and Adaptation

### Adam Auer | Director of Sustainable Development, Canadian Electricity Association



Adam Auer is the Director of Sustainability and Stakeholder Relations at the Cement Association of Canada (CAC). Adam has over a decade of experience as a sustainability professional working with public, private and non-profit institutions to develop, implement and communicate collaborative solutions to a wide range of sustainability challenges.

His current responsibilities include working with governments, industry, environmental and other civil society groups to promote and enhance concrete's contribution to sustainability, with a particular focus on life cycle approaches to climate change mitigation and adaptation. Prior to joining the CAC in 2012, Adam was at Environment Canada where he managed a variety of programs, including the Corporate Environmental Innovation (CEI) initiative - a multi-stakeholder program to promote the business and financial case for corporate environmental leadership. Adam holds a B.Sc. from the University of British Columbia and a Masters' of Environmental Studies from York University.

### Blair Feltmate | Associate Professor, Program Director Sustainability Practice; Chair, Climate Change Adaptation Project Canada



Dr. Feltmate is Associate Professor, Faculty of Environment, University of Waterloo, where he teaches the Master of Environment and Business program.

Positions he holds include: Intact Financial Chair, Climate Change Adaptation Project, Canada; Senior Advisor, Sustainable Electricity Program, Canadian Electricity Association; Board Member, CLEAResult; Co-Chair, WeatherWise, City of Toronto; Co-Chair, Greening Greater Toronto.

Previous positions Dr. Feltmate has held include: Vice President, Sustainable Development, Bank of Montreal, and Director of Sustainable Development, OPG. Dr. Feltmate has developed the sustainable development programs for two dozen multi-national companies and industry associations.



**Channa Perera | Director of Sustainable Development,  
Canadian Electricity Association**

Channa Perera has been with the Canadian Electricity Association (CEA) for fifteen years. He is currently serving as the Director of Sustainable Development, responsible for the management of the Association's Sustainable Electricity™ program. Sustainable Electricity is a mandatory sustainability program developed and implemented by the electric utility members of CEA. In addition, Channa also led the development and implementation of the Sustainable Electricity Company™ brand designation for utilities based on ISO 26000 guidance standard on Social Responsibility.

Before becoming Director of Sustainable Development, he served in other progressive positions within CEA, including as Senior Advisor on Climate Change. Channa holds a Bachelor of Arts in Political Science and Legal Studies and a Master of Arts in Political Science (Carleton University) as well as a Masters Certificate in Project Management from York University's Schulich School of Business and Carleton University's Sprott School of Business. He is also certified as a Corporate Social Responsibility Practitioner (CSR-P) by the Centre for Sustainability and Excellence.

**Tom Rand | Senior Advisor, Cleantech; Managing Partner, Arctern Ventures**



Tom is Managing Partner of ArcTern Ventures, a Senior Advisor at the MaRS Discovery District and sits on the board of a number of clean energy companies and organizations. Tom also developed Planet Traveler, a low-carbon hotel project in downtown Toronto. Tom's first book Kick the Fossil Fuel Habit was published in early 2010 and his second - Waking the Frog - became a bestseller in Spring 2014. Tom holds a BSc in electrical engineering (U of Waterloo), an MSc in philosophy of science (University of London and LSE) and an MA and PhD in philosophy (U of Toronto) and is an Action Canada Fellow.

**Benjamin Shinewald | President & CEO, Building Owners and Managers Association of Canada (BOMA)**



Benjamin L. Shinewald is the President and Chief Executive Officer of the Building Owners and Managers Association of Canada. Among other things, Benjamin's responsibilities include BOMA BEST®, Canada's leading environmental assessment and certification program for commercial real estate.

Prior to joining BOMA® in 2012, Benjamin served as the National Executive Director and General Counsel for Canadian Jewish Congress, before being promoted to Chief Executive Officer. Earlier, Benjamin served in the Privy Council Office and practiced law at Torys LLP. He also served as a Law Clerk to the Chief Justice of Israel and worked for the Democratic Party of Hong Kong, the Canadian Mission to the OECD in Paris and the Winnipeg Jets Hockey Club.

Benjamin has won various awards including an Action Canada Fellowship, which named him "one of Canada's best and brightest emerging leaders," and a European Union Visitors Programme Fellowship, which recognized him as a "young, promising leader."

Benjamin was educated at the University of Toronto, the London School of Economics, the University of Manitoba and the Hebrew University of Jerusalem. Fluent in three languages, he has been published repeatedly in leading newspapers and has appeared as a panelist on Al Jazeera.

Benjamin is active in the community, serving on the Executive Committee of Leadership Sinai/Mount Sinai Hospital Foundation, on the Board of Ve'ahavta and on the Ontario Cabinet of the Canadian Museum for Human Rights. He lives with his wife and two daughters in Toronto.

## Session 2 | The Synergies of Natural and Social Science: The Adaptation Tag-Team

**Sarah Burch | Assistant Professor, University of Waterloo**



Dr. Sarah Burch is an Assistant Professor in the Department of Geography and Environmental Management, University of Waterloo, Canada. Dr. Burch has published widely on transformative responses to climate change at the community scale, and innovative strategies for governing sustainability. She co-teaches a Massive Open Online Course called 'Climate Literacy: Navigating Climate Change Conversations,' which reaches thousands of students in over 130 countries.

Dr. Burch received a PhD in Resource Management and Environmental Studies from the University of British Columbia, Canada (2009) and held a postdoctoral fellowship at the University of Oxford (2009-2011).

She is a Coordinating Lead Author in the Second Assessment Report on Climate Change in Cities, and North American coordinator of the Earth System Governance network of Research Fellows. She was a Contributing Author to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (winner of the Nobel Peace Prize in 2007) and was awarded a Banting Fellowship for her work on sustainability innovation. Her most recent book (2014) is entitled 'Understanding Climate Change: Science, Policy and Practice.'

**Deborah Harford | Executive Director, Adaptation to Climate Change Team, Simon Fraser University**



As executive director of SFU's Adaptation to Climate Change Team (ACT), which develops adaptation strategies for all levels of government, communities and industry sectors, Deborah Harford is responsible for development of the initiative's vision and its partnerships with the public and private sectors, as well as overall coordination and management of the program.

Deborah's work with ACT has gained her national recognition as a resource for those seeking information on climate change adaptation and practical coping strategies.

**Linda Hawkins | Director, Community Engaged Scholarship Institute (CESI), University of Guelph**



Linda provides leadership, strategic direction, knowledge brokering and facilitation of research teams for the Institute for Community-Engaged Scholarship (ICES) and the Research Shop. She works collaboratively with community partners and institutional partners: faculty, staff, students in the College of Social & Applied Human Sciences, and the wider university.

**Scott Kalafatis | Great Lakes Integrated Sciences + Assessment Center (GLISA)**



Scott Kalafatis is a Ph.D. Candidate at the University of Michigan studying the role of leadership in the development of climate change policy in Great Lakes cities.

He has also worked for five years as a social scientist researching connections between climate science and decision-making with the Great Lakes Integrated Sciences and Assessments (GLISA).

## Overview of the Graduate Research Poster Session & Art Exhibition

**Dr. Altaf Arain | Director, McMaster Centre for Climate Change; Professor, School of Geography and Earth Sciences, McMaster University**



Dr. Arain is a professor in the School of Geography and Earth Science at McMaster University, Hamilton, Ontario, Canada. He is also the Director of the McMaster Centre for Climate Change. He was the president of the Canadian Geophysical Union (CGU) - Biogeosciences Section from 2009-2012. Dr. Arain's research interests focus on bio- and hydro-meteorology, hydrology, climatology, air pollution, land surface-atmosphere interactions and climate modeling. He has expertise in both micrometeorological measurements and land-surface atmosphere interaction modeling. Dr. Arain's Turkey Point energy, water and carbon flux tower sites in an age-sequence (75, 40 and 12 year old) of pine forests and a deciduous (80-year old) forest in southern Ontario are part of global Fluxnet program. He developed the carbon and nitrogen coupled Canadian Land Surface Scheme (CN-CLASS) and nitrogen modules for the Canadian Terrestrial Ecosystem Model (CTEM-N+). CN-CLASS model development work was part of a multi-university collaborative modeling initiative known as the Canadian Global Coupled Carbon Climate Model, (CGC3M)) to develop a global coupled carbon climate model. Dr. Arain has been involved in interdisciplinary research initiatives to measure nitrogen dioxide and other pollutants and to investigate the effects of air pollution on human health in several urban areas of Canada. Meteorological and nitrogen dioxide data helped to improve land use regression models for health studies in urban settings. He has published more than 95 refereed journal papers.

## Session 3 | Art, Activism and Climate Change: The Bridge between Science and Society

### Kai Reimer- Watts | Artist and Creative Director, Better Creative



Kai is a proud multimedia artist, Master of Climate Change (MCC) graduate, and climate action advocate. An innovator / entrepreneur by nature, Kai recently co-founded a bold multimedia start-up “Better Creative” merging the arts with social change, with its climate-focused branch Climate Matters. Kai was a UN student delegate to COP19, an event that transformed his understanding of international action on climate, and one part of the long lead-up to COP21. His role as Producer / Director on Beyond Crisis is his most recent endeavor to advocate for smart climate action.

### Rob Shirkey | Director, Our Horizon Project



Rob Shirkey is a recognized global authority on the subject of climate change warnings on gas pump nozzles. He has given lectures on the topic across North America and has been featured in media all over the world. His proposal has been endorsed by over a hundred academics and leaders in various disciplines from universities across North America.

Rob is a lawyer from Toronto, Canada. Prior to founding Our Horizon and launching his unique approach to addressing climate change, Rob operated a private practice in downtown Toronto. He also has experience as an Assistant City Solicitor and Prosecutor. Before completing his law degree, Rob studied business, economics, and psychology at the undergraduate level. He graduated with distinction and was the university valedictorian.

Rob’s talks draw on the latest in climate change research. He gathers insights from psychology, sociology, economics, business, law and politics to build the case for demand-side, local action on climate change. DeSmog Canada writes: “Shirkey speaks at breakneck pace with a lawyer’s clarity and the energy of a children’s entertainer.” His trial experience as a lawyer and his playful sense of humour makes him a compelling and entertaining speaker.

**Joan Sullivan | Photographer**

A self-taught photographer, Joan Sullivan spent nearly 20 years in Africa working on HIV prevention before returning to Canada in 2008 to dedicate her second 50 years to an even greater cause: climate change. She is currently the only female photographer in Canada focusing exclusively on the construction of renewable energy projects in the context of climate change. Recognizing that our collective consciousness of climate change is dominated by negative imagery (melting glaciers, stranded polar bears, coastal erosion, wildfires, bleaching coral reefs), Joan has consciously turned her camera toward the way forward, on positive solutions to climate change, in order to help transform despair into hope; apathy into action.

Since 2009, Joan has been granted privileged access to the construction sites of some of the largest wind farms in Canada. Beginning in 2015, Joan will expand her portfolio into biomass, solar and hydro projects. She is currently working on a photo book about the men and women who are literally building our clean energy future, whom she believes are the unsung heroes in the global conversation about climate change. Living on the Edge, a documentary film about Joan's renewable energy work, was released in 2014. Joan is a contributing blogger to Artists and Climate Change.

**Ian Clarke | Associate Dean, Faculty of Liberal Arts & Sciences and School of Interdisciplinary Studies, OCAD University**

Ian Clarke is the Associate Dean of the Faculty of Liberal Arts and Sciences and School of Interdisciplinary Studies and is an Associate Professor of Graduate Studies at OCAD University in Toronto where he has been teaching biology and sustainability science to art and design students since 2003. He received his Ph.D. in Biochemistry from Queen's University in 1993 and has a diploma in Fine Art (printmaking) from OCAD University. Until 2013 he was a cancer stem cell researcher at the Hospital for Sick Children Research Institute in Toronto. He has co-authored paper in journals such as Nature, Cancer Cell, Cell Stem Cell and Cancer Research. He is a Biomimicry Fellow at the Biomimicry 3.8 Institute in Montana and is active in Biomimicry Design and Sustainable Design education and consulting. His research at OCAD University focuses on Sustainable Design, Urban Ecology and

Urban Agriculture.

## Closing Remarks

### Dr. Robert Baker | Dean, Faculty of Science, McMaster University



Dr. Robert L. Baker received his PhD in 1981 from the University of Alberta. He was appointed as Assistant Professor in the Department of Zoology at the University of Toronto in 1982 and promoted to Full Professor in 1996. In 2013 he joined McMaster, becoming Dean of Science and a member of the Department of Biology. He is also currently serving as the Chair of the McMaster Centre for Climate Change's (MCCC) Advisory Board.

Before coming to McMaster, Dean Baker held several progressive senior administrative positions at the University of Toronto. He served as inaugural Chair of the Department of Biology and Associate Dean of Sciences at University of Toronto Mississauga. Later, as Chair of the Department of Zoology in the Faculty of Arts & Sciences, he was one of the leaders in the reorganization of the biological sciences at the University. He served as Chair of the new Department of Ecology and Evolutionary Biology (EEB) and worked tirelessly to give EEB the foundation that it needed to excel in teaching and research. Dr. Baker continued as Vice-Dean, Graduate Education and Research, Faculty of Arts & Sciences from 2009-2012. He oversaw a major graduate expansion and an increase in the Faculty's competitiveness in securing external research support. His position evolved into Vice-Dean, Research and Infrastructure in 2012, wherein he initiated a comprehensive assessment of the Faculty of Arts & Science's infrastructure needs for research and teaching.

### Benjamin Bradshaw | Associate Professor, University of Guelph

