

Climate change mitigation is achievable and urgent

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On November 2nd the Intergovernmental Panel on Climate Change (IPCC) released the Synthesis of its Fifth Assessment Report (AR5). This report crystallises the work of three IPCC groups made up of 938 scientists, vetted by 3697 scientific, government, industry and NGO reviewers. The report shows that humans caused more than half of the observed increase in global temperature from 1951–2010, and we face irreversible, and potentially catastrophic, changes to global climate if we do not take action.

It is thus time for Canada to take the lead on climate change. We are lagging behind other developed nations in meeting our international obligations to implement effective mitigation action at a national level. Climate change is happening, and it offers many opportunities for innovative policy, technology and development in Canada to mitigate and adapt to climate change. Such actions will contribute to environmental and human wellbeing, at home and abroad.

Canadians can be proud of the many outstanding initiatives at provincial and municipal levels, from Ontario's withdrawal from coal-fired power plants to Vancouver's concrete plan to become the world's greenest city by 2020. However, the impact of these initiatives is limited without a coherent federal framework to address climate change. As highlighted by the Summary for Policymakers of the IPCC's Working Group III report: "Effective mitigation will not be achieved if individual agents advance their own interests independently". This Working Group focuses on mitigation and provides a clear assessment of a number of potential routes to sustainability (including energy supply and use, primary production, and societal changes), along with their costs and benefits. Strikingly, a majority of those routes to sustainability are feasible, affordable, and outweigh the significant costs of avoiding climate action.

As an interdisciplinary initiative of over 55 Canadian researchers working on sustainability, the Sustainable Canada Dialogues project wishes to highlight the importance of the IPCC process. A coordinated response to climate change is becoming ever more urgent, and ignoring it now will only increase the damage and the cost of our response. The IPCC report points out that "Delaying mitigation efforts beyond those in place today through 2030 is estimated to substantially increase the difficulty of the transition to low longer-term emissions levels and narrow the range of options consistent with maintaining temperature change below 2 °C". The world is beginning to take notice – the report notes that the proportion of global greenhouse gas emissions that are subject to regulation has increased by nearly 50% since 2007. However, Canada's emissions continue to climb, in spite of our Arctic and sub-Arctic regions being some of the fastest-warming places on Earth, putting Northern Canadians on the front lines of climate change.

The Sustainable Canada Dialogues is in the final stages of developing a pathway of sustainability solutions that will make a real difference to the global environment and Canadian society – with positive or only transient negative impacts on the economy. Climate change needs to be clearly addressed during the 2015 federal election, and we are striving to provide evidence-based information to Canadian voters. We look forward to contributing positive, Canada-focused, proposals to this discussion.

Each IPCC report – including the forthcoming AR5 Synthesis Report – comes with a Summary for Policymakers. These summaries provide a coherent and meaningful explanation of climate change issues both for policymakers and voters. We are striving to provide evidence-based information to Canadian voters so that climate action can be a key issue in their decision-making. We believe it is essential that all political parties seriously consider this report as they formulate their election-year platforms.

On behalf of the Sustainable Canada Dialogues,

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