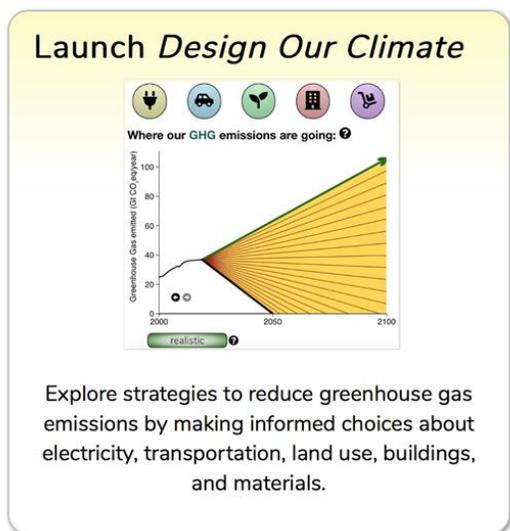


From polarization to accessible solutions in tackling climate change.

What if we could move beyond politicized and polarizing sound bites about climate change to explore feasible climate solutions? What if educators and citizens could learn which combination of mitigation strategies has the greatest potential to meet elusive international commitments to reduce greenhouse gas emissions at the global level?

With financial support from Energy Efficiency Alberta, the King's Centre for Visualization in Science (KCVS), a research centre of the King's University, Edmonton, Alberta Canada has released just such a tool for free global use.

The interactive electronic Design Our Climate simulation (DOCs) equips users to explore the paths we can take globally toward “net-zero” emissions in 2050 needed to meet the international commitments to keep average surface temperature increases below 1.5 °C by 2100. The simulation breaks down the seemingly intractable challenge of moving from our “business as usual” trajectory into 20 smaller challenges. Users can design our climate future by implementing mitigation strategies in five sectors: electricity, transportation, land use & agriculture, buildings, and materials. A “Reality Check” feature gives live feedback on the feasibility of each action and educates about the underlying assumptions that determine what is realistic. “Users soon realize there is no magic solution—no silver bullet to mitigating climate change,” says Peter Mahaffy, KCVS director. “But they also learn how far we can get with a mosaic of solutions. Using currently available technologies, we can change the trajectory we are on and get much closer to reaching the goals of the Paris agreement.”



The DOCs simulation was developed by an interdisciplinary team of undergraduate students and faculty at The King's Centre for Visualization in Science (KCVS), with support from Energy Efficiency Alberta, as part of *Accessible Solutions: Visualizing Energy Choices and Climate Implications Embedded in Alberta Narratives*. The free digital learning resources provided by KCVS are already used by over 500,000 students, educators and the public from over 100 countries each year. This simulation joins that suite of free interactive tools. Besides being released on the web for the global public, it will be used in Alberta with project partners Energy Futures Lab, the Alberta Council for Environmental Education, Student Energy, and People for Energy and Environmental Literacy, who have provided important input into the development of the simulation. In the USA we are working with the National Center for Science Education (NCSE) to develop lessons and activities for students based on the simulation. 25 global experts provided external peer review.

Learn more about the Design Our Climate simulation in the [November ACCN Canadian Chemical News](#). Please let us know how you are using it and provide feedback to us.

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