

Media Release

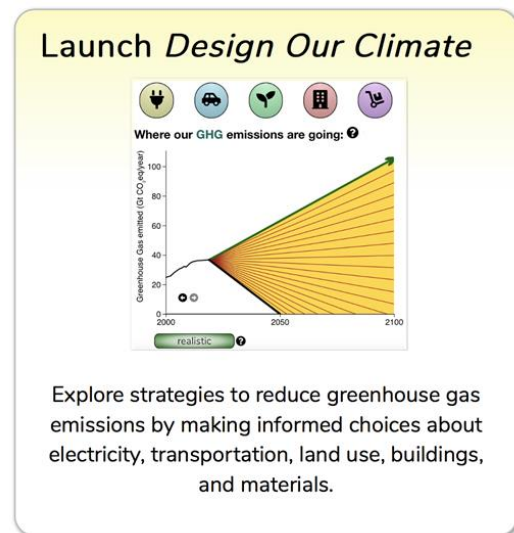
Nov 13, 2019

FOR IMMEDIATE RELEASE

Beyond polarizing climate debate: Global launch of interactive simulation invites users to design a more liveable future using a mosaic of accessible solutions

The King's Centre for Visualization in Science (KCVS) at The King's University in Edmonton, has released for free global use a peer-reviewed interactive simulation designed to help citizens move from polarization to action in tackling climate change.

[The Design Our Climate simulation \(DOCs\)](#) contrasts the current “business-as-usual” trajectory of the global increase in greenhouse gas (GHG) emissions with the path 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 magnitude of the challenge of reducing emissions to this extent so quickly can paralyze action. Using an approach first introduced 15 years ago at Princeton University, the simulation breaks the seemingly intractable challenge down 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. Twenty-five global experts in the sectors included in the simulation have provided external peer review.

While DOCs is intended for use with many different audiences, the first pilot of the Design Our Climate simulation took place on November 2 at the Alberta Teachers Association Science Council Conference. Here, educators were able to actively explore DOCs and analyze the potential impact it may have in the classroom. "Design Our Climate is a powerful tool that allows students to understand the stark reality of becoming a net zero world by 2050 while also giving hope that we can mitigate climate change through our ingenuity" says Renee LeClerc, educator from Ecole Paul Kane High School in St. Albert, Alberta. Additionally, Program Director of Inside Education, Kathryn Wagner, says "[the DOCs] is a great engagement tool for students and will certainly be a platform for meaningful discussion in the classroom".

Learn more about the Design Our Climate simulation in the [November ACCN Canadian Chemical News](#).

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