

# Advanced Technologies to Depolarize Energy Dialogues

## What is the **problem** that needs to be solved?

The conversation on energy in Alberta and Canada is polarized, characterized by debates framed as environment vs. economy, Alberta vs. Canada, and so on. This polarized state does not create an environment that is conducive to constructive and creative solutions to address the social, economic and environmental challenges that Alberta faces today and in the years to come.

This polarization is further reinforced by the trend of news outlets and social media spreading inauthentic news stories designed to further re-entrench people in particular views and make it more difficult to form nuanced and constructive views. Current algorithms that organize and present content on social media networks and in search engine results, as well as precise behavioural data tracking, can be leveraged to target and spread inaccurate information to the groups of people most likely to believe and share them further. This further reinforces polarized views.

Machine learning technology can be used to fabricate videos of any person, swap or modify a face in an existing video, draft entire articles or impersonate a recorded voice. These technologies make it harder to know what is real and what is fake, especially since video and voice recordings are currently meaningful indicators of credibility and truthfulness.<sup>1</sup>

The intention of this collaborative initiative it is to:

- Better understand how technology, in particular machine learning, is being used to reinforce polarized views and spread inauthentic news.
- Explore innovations in which machine learning can be used to help depolarize the energy conversation.
- Identify ways in which interested collaborators can advance these innovations.

## Why is it **important** to solve this problem?

Peter Drucker, the famous management guru, coined the popular phrase “culture eats strategy for breakfast”. He was referring to how even the best strategies and ideas are not able to succeed if the culture of an organization is not ready to embrace them. For Alberta’s energy

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<sup>1</sup> Special thanks to *Overlap Associates*: <https://www.overlapassociates.com/> for their help to understand and framing the problem.

system to overcome the challenges it faces innovative ideas are not enough. In addition, it requires public opinion, markets and policy environments open for novel solutions. The current polarized state of “us vs. them” is not conducive to creating these conditions and holding Alberta back.

## What is the **ambition** for a solution?

The ambition is to prototype a technological-related solution (e.g. algorithms, machine learning, etc.) that helps people move out of where they are entrenched and move into a space where they are willing to consider another viewpoint. This is a prerequisite for creating an openness to smart and needed energy-related innovations.

For example, one potential solution to explore could be to address the monetary incentives to produce content that is designed to bridge views vs. reinforce existing biases. The whole incentive structure around social media is to feed one side or the other. What solution can we find that incentivizes “bridging” content as a means to have a more constructive conversation?

Related, and/or supporting the above example is an algorithm that can process large quantities of content and apply keywording, and categorize information based on a spectrum of perspectives. The keywording and categorization would help people understand the perspective, as well as find gaps to be “bridged” using the (to be determined) above incentive model.

## What **challenges** do you imagine facing to achieve this ambition?

**Privacy.** News aggregators tend to lean towards information that people agree with, but to depolarize requires that people receive information that perhaps they do not agree with. This challenge may be addressed by curating content that is not polar, but complementary and one step to the side of the content otherwise curated and preferred by existing aggregators and social media rankings.

**Ethics.** Social media algorithms build profiles of consumers thereby labelling and reinforcing content preferences. The challenge building the “anti-AI” that is able to learn from and help people discover content that offers a broader diversity of views. In doing so, similar profiles need to be created, or piggy-backed off of, presenting an equal ethics challenge.

**Leadership.** Although there is lots of discussion and interest in this topic, it is uncertain if there is an organization or entity that can provide the leadership and coordination be able to address this problem full on.

## What has been tried in the **past** (if anything)?

Current relevant efforts to keep in mind include:

- The [Alberta Narratives Project](#) is a community-based initiative and new approach to public engagement research that builds skills and better communications. It aims to uncover language and narratives that reflect the values and identities of Albertans, and to find ways of talking about our energy-climate future that build bridges to better community conversation.
- Two relevant projects that try to understand and, to an extent, solve threat of misinformation, fake news polarization:
  - [Protecting Public Discourse from AI-Generated Mis/Disinformation](#) and [Synthetic Media and Deep Fakes](#) at WITNESS Media Lab: Project and associated workshops that are developing strategies and solutions around the emerging threat of AI generated mis/disinformation
  - [Common Design Ideas](#): alternate design ideas for how to bridge the gap among polarized social media study groups
- Two additional studies that are relevant and paint a picture of the problem:
  - [Political Polarization on Twitter](#): study estimates the association between politicians' ideological positions and the size of their Twitter readership.
  - [Political Polarization in the American Public](#): discusses trend in polarization along ideological lines since 1994 to present day.