



BRIEFING NOTE

THE DATA DIVIDE

CLIMATE DATA AND DECISION MAKING IN ONTARIO

Sound decision-making for climate change adaptation requires relevant data, including information and projections about what the future climate may look like when compared to historic trends. Increasingly in Ontario, the potential end-users of climate data - public and private sector organizations, including municipalities - are seeking out this data to inform climate change adaptation planning.

THE CHALLENGE

Canadian federal and provincial governments have been investing in climate modelling for years. As a result, many climate data sets and projections exist and are freely available. However, this data is not always available in a format that can optimally support end users in decision-making.

End users of climate data are currently challenged to find localized climate data and projections that meet their needs. Different end users will require distinct types of data depending on the adaptation decisions they are making. Many end users also vary in their level of knowledge, objectives, and capacity; some may require more guidance or customized data. As a result, different user needs may dictate the development and use of different data sets in different situations; for example, climate models also feed into other datasets such as hydrology models. The cost of hiring someone to help navigate the climate data landscape can also be prohibitive for some end users.

While Ontario is home to internationally recognized universities and climate scientists, there is a gap between the modelling that is being produced locally and the accessibility and applicability of the data generated by these models. The gap is being filled by data intermediaries, including private companies that provide fee-for-service consulting or produce applications and more user-friendly technological interfaces. There are also several non-governmental organizations that work with data end users to determine their relevant data needs and how to use available information. However, from a policy perspective, the status quo is sub-optimal. Some private sector companies may have the resources to pay for expertise to help understand climate data and projections. However, this may not be the case for public and non-profit organizations, especially smaller governments and communities that have limited resources and expertise in climate change adaptation.

LACK OF COORDINATION AND FUNDING

It is widely recognized that demand for climate services will only increase, as more municipalities, government agencies and private sector organizations begin the process of understanding their climate change vulnerabilities and how to address them. Lack of coordination and funding are inhibiting that important work.

Currently in Ontario, unlike in some other provinces, there is no central coordinating body to support the application and use of climate datasets and projections being used by various end users, including municipalities, conservation authorities, private sector organizations and others. Unfortunately, the lack of coordination can result in the inefficient and inconsistent use of climate information. Even neighbouring municipalities may be using different datasets. A coordinating body could help neighbouring jurisdictions harness information of common value, and get the most from investments in climate information services.

The current situation also does not optimally support the academics in Ontario that are producing climate projections. Academics must secure grants to begin and continue research; more stable financial support would enable them to spend more time on their research and less on applying for grants. There can also be a disconnect between the academic institutions producing data, underlying science and research, and the application of that information to the end users making adaptation decisions. The status quo also does not sustain the non-profit data intermediaries who are pursuing one-off projects with end users and governments to continue operations. A greater degree of expertise in the academic and non-profit communities could be fostered with more stable funding and coordination, and could result in better on-the-ground adaptation decisions.

GROWING THE END USER COMMUNITY

There are many potential users of climate data that have yet to begin their journey due to the intensive resources required to seek out and interpret climate data at present. The current situation presents a barrier, especially to smaller organizations, to “get in the game” and identify and manage their climate change vulnerabilities.

THE ROLE OF THE ONTARIO GOVERNMENT

Ontario’s provincial government has expressed its commitment to play a leading role in climate change adaptation in its adaptation strategy, Climate Ready. Since climate data is such an important input for adaptation planning, the province must clarify its role in the provision of this data.

THE ECO CLIMATE DATA ROUNDTABLE

This climate data roundtable seeks to explore the needs of climate data end users and providers, the opportunities and barriers to greater uptake of climate information, and potential governance models to help move towards appropriate solutions in Ontario.