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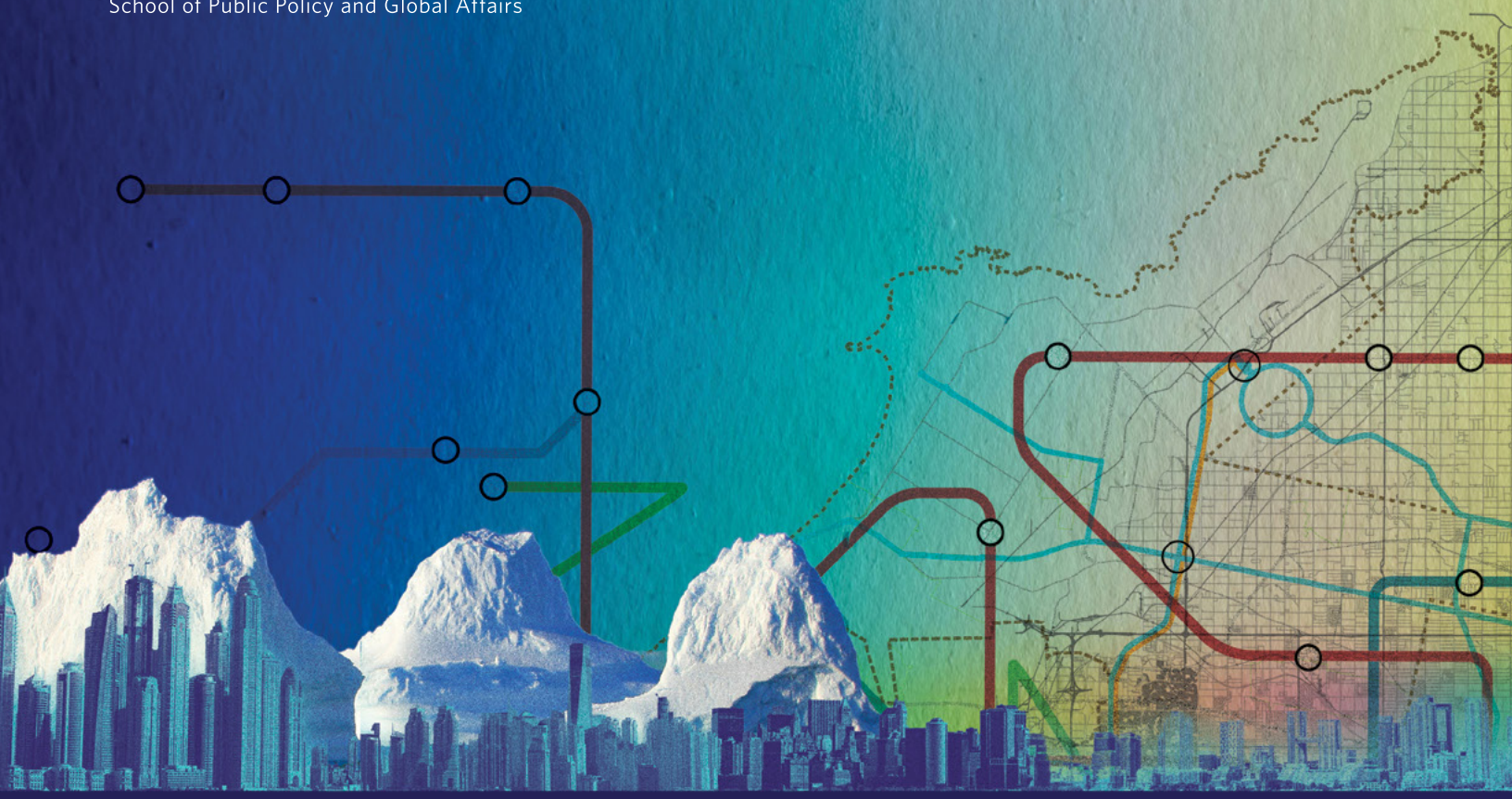
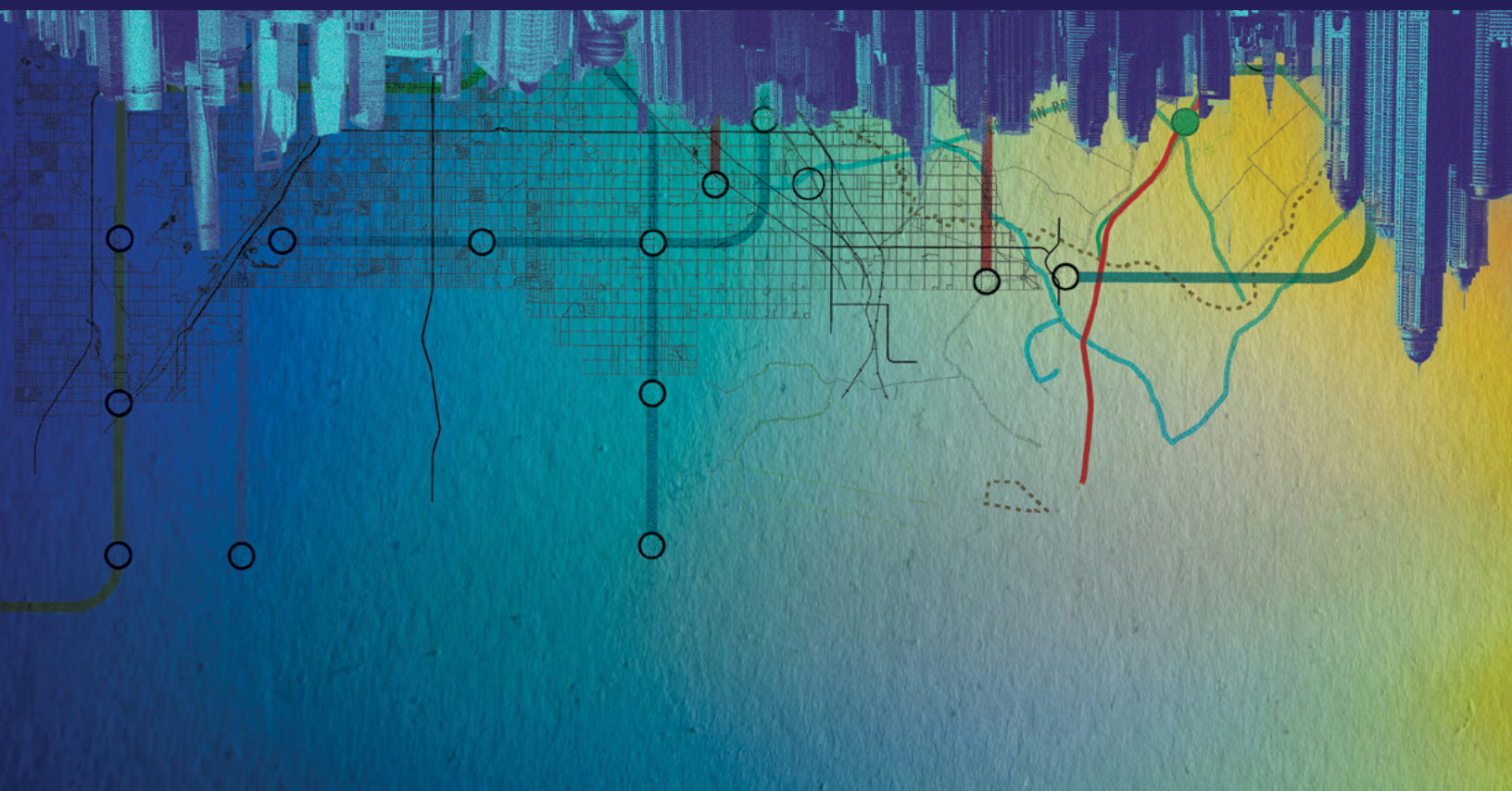


MUNICIPAL MATTERS

BUILDING CAPACITY FOR LOCAL CLIMATE CONVERSATIONS



MUNICIPAL MATTERS:

Building Capacity for Local Climate Conversations

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EXECUTIVE SUMMARY

Over 70% of global greenhouse gas emissions are produced in urban areas, making local climate leadership critical. Since the 1990s, local government policies have advanced climate action, but today's complex information environment poses increasing obstacles to the development and impact of local climate policies.

Municipal Matters: Building Capacity for Local Climate Conversations examines the challenges of communication around local climate action. We consider if and how communications affect trust and policy efficacy—especially when local policies face the spread of false or misleading information, whether intentional (disinformation) or unintentional (misinformation). While much research focuses on national and global responses to misinformation, little attention has been given to local governments' roles and capacity on the issue. Based on interviews with climate experts and local officials, we identify key narratives, actors, and impacts of the misleading narratives shaping climate discourse:

- **Key actors** include industry lobbyists, social media influencers, and some media outlets;
- **Targeted narratives** on energy, infrastructure, and extreme weather depict climate policies as elitist or government overreach;
- **Local impacts** of distorted information include delays or derailments of climate policies, disproportionately harming low-income and marginalized communities;
- **Capacity gaps** in local governments hinder their ability to manage communications, further straining limited budgets and wasting staff time.

Case studies, including Edmonton's "15-minute city" plan, Vancouver's natural gas policies, and local governments' responses to extreme weather events, illustrate these dynamics.

This report argues that robust communications around climate go beyond providing accurate information—such communications should aim to promote public trust, foster dialogue with communities, and address their genuine concerns. Local governments must pair effective policymaking with proactive communication at every stage of climate policy development. The report recommends five key actions for fostering productive local climate conversations:

1. **Messaging**: Ensure climate conversations are culturally relevant, accessible to diverse audiences, and facilitated through trusted community members.

2. **Safety**: Implement measures to protect local government staff and elected officials from reputational, psychological, and physical harassment to ensure they can safely and effectively communicate policies.
3. **Community Engagement**: Practice open, transparent dialogues to strengthen democratic participation and local populations' informational resilience.
4. **Collaborations**: Strengthen partnerships across sectors and levels of government to optimize resource mobilization and response coordination through knowledge-sharing.
5. **Measurement**: Systematically track the spread and impact of information or information voids, using data to inform interventions and refine communications strategies.

Like climate change itself, climate misinformation, the polarized information environment, and the declining trust in government are all whole-of-society issues. Local governments, working with communities, businesses, and civil society groups, have often taken the lead on tackling climate change. Now, they must do the same to build better climate conversations.

INTRODUCTION

Over 70% of global greenhouse gas emissions are produced in urban areas.[1] This means that local governments play a pivotal role in addressing climate change. Local climate action includes promoting renewable energy, improving public transit, advancing sustainability plans, and supporting community-led initiatives to reduce carbon footprints.[2] These efforts often involve local governments, civic organizations, businesses, neighbourhood associations, and resident groups working together to implement climate change mitigation and adaptation strategies.[3] When local governments commit to climate action, a key element of success is an engaged, informed, and inclusive public conversation. This can be a major challenge in today's information environment. As one of our interviewees put it, "We're in an information crisis … and there's a political and social crisis that's following from that."[4]

"We're in an information crisis ... and there's a political and social crisis that's following from that."

Amid such political, social, and informational tensions, local governments that pursue climate action increasingly face misleading, false, or hostile claims. Although not a new problem, these issues have taken on new forms and scale in recent years, particularly online.[5] A 2025 report by McGill University's Centre for Media, Technology, and Democracy finds that "climate delay and disinformation narratives" are gaining traction within the broader Canadian information ecosystem.[6]

Local governments and their climate efforts are ever more entangled in this ecosystem. However, while misinformation at national and international levels has received significant attention from researchers and policymakers,[7] the extent and impact of the issue on the local level remain underexplored. One important exception is the 2024 *Disinformation in the City Playbook* by the German Marshall Fund (GMF) and the Melbourne Centre for Cities. The *Playbook* argues that the information crisis has created "individual, organisational and societal consequences" for local governments, creating a need to "identify disinformation narratives, assess their likely impact in cities, and formulate and enact appropriate communications responses."[8]

Researchers and policymakers have increasingly used the terms "misinformation" and "disinformation" to examine challenges to a high-quality information ecosystem. The distinguishing factor is intent: misinformation refers to false or misleading content spread unintentionally, while disinformation is deliberately crafted to deceive, profit, or cause harm.[9] Both terms identify claims that are to some degree untrue.

False or misleading statements regarding climate change frequently spread and have impact because they fit into "narratives." Narratives involve storylines, values, and social identities, which often cannot be reduced to questions of truth alone.[10] Narratives can promote or undermine evidence-based and inclusive public conversations. Narratives that involve disinformation can be called "adversarial narratives," which not only involve misleading or false claims (often along with accurate ones), but are also "adversarial in nature against an at-risk group or institution, and … [create] a risk of harm."[11]

Research shows that climate-related misinformation and disinformation have shifted from outright climate denial to contributing to narratives of "delayism," which undermine climate solutions by questioning their feasibility, fairness, or necessity.[12] These narratives may bring together true statements (e.g. energy transitions are expensive), storylines (e.g. global business elites unduly shape our lives), and values (e.g. our society places high value on freedom of movement), alongside misinformation (gas-heating is always cheaper than electrical heating) to prevent or slow climate action.

What's the Difference?

Misinformation involves the *unintentional* spread of false or misleading information by actors who are not aware of its inaccuracy.

Disinformation refers to the *deliberate* spread of false information, typically initiated by individuals or organizations aware of its falsehood but relying on others to unknowingly amplify it.

Narratives refer to the broader storylines that claims about climate change and climate policy fit into. Narratives describe why things take place over a period of time, and often involve characters, values, identities and emotions.

Adversarial narratives include intentionally false or misleading claims (disinformation) as part of narratives that aim to undermine or counteract climate action.

Researchers have debated the utility of focusing on mis- and dis-information, which may unduly narrow analysis and response. First, as noted, it is often more useful to investigate and respond to narratives, rather than addressing whether individual statements are true or not. Second, rather than react when misinformation or disinformation is spread, it is often more effective to inform people in advance or address "data voids," which exist when there is no widely-accessible, high-quality information about a topic.[13] Third, beyond individual

messages or information campaigns, it is critical to consider the broader informational and social ecosystems that facilitate the spread of false and misleading claims, including distrust in governments and institutions.[14] Fourth, as this report argues, productive climate conversations do not consist of the *removal* of problematic messaging, but the active engagement with diverse perspectives, including from marginalized groups who are too often dismissed or ignored in climate policymaking.

In this report, we frequently use "misinformation" as a shorthand for different forms of content that flourish amid dysfunctions in the broader information system. Our interviewees often used this term when describing the information ecosystem they experience. While climate misinformation is an increasing concern for many local governments, we do not imply that countering misinformation, or providing "good" information, is a panacea for local climate action; it is just one piece of the policymaking puzzle. Moreover, the spread and uptake of misinformation often reveals deeper problems, from distrust of local governments to online platforms that reward toxic and polarizing content.

In the face of these challenges, local governments face problems of limited capacity and jurisdictional power. Although our report focuses on municipalities (cities, towns, villages), we use the more general term "local government" because we aim to highlight issues and solutions that can be useful to anyone working in or alongside this broader jurisdictional category. In Canada, local governments are legally subordinate to provincial and territorial governments. Compared to these other government levels, they have much more limited means to raise revenue and fewer human resources. They lack legislative or regulatory authority to address many key climate mitigation and adaptation issues, or to advance policies for social media platforms or other organizations that shape the information ecosystem. Moreover, local governments face incredible pressure to respond to the housing crisis while continuing to deliver services to a growing population. Their responses to evolving climate communication challenges thus will differ from national and international approaches, as this report explores.

Nevertheless, local governments and other local actors can play critical roles in advancing productive climate conversations and actions. Doing so requires a dual strategy: effective policymaking and proactive communication. We do not suggest that all climate policies are good ones, that governments should be spared from criticism, or that opponents of climate action are the only ones who spread false or misleading information. Governments need to address real grievances and balance competing goals. It is a mistake to malign all opposition as misinformation, as seen in the case study of London's Ultra Low Emission Zone that follows this introduction.

This report provides insights into the role of strategic communication in advancing local climate action policies in Canada. It identifies forms of misinformation and disinformation regarding local climate policies as well as some actors and institutions that may be involved in their spread. It foregrounds systemic communication challenges, exploring their implications for trust and policy effectiveness. Our report does not take a narrow view of communications as government messaging but emphasizes how community engagement and transparency can strengthen the policymaking process.

We conclude with recommendations for communication strategies over the long- and short-term. We suggest how local governments can use proactive communications to improve policy development and implementation, while exploring what is feasible with limited resources. We also provide ideas on how to prepare for potential crises by protecting staff against abuse and harassment.

Our analysis and recommendations draw on extensive research, including 17 interviews with local officials and climate communication experts, two focus groups with communications staff of local governments, and extensive desk research. We include case studies of contested climate policies on the expansion of the Ultra Low Emission Zone (London, UK), "15-minute city" district planning (Edmonton), natural gas hook-ups to buildings (Vancouver), and response to extreme weather events (multiple governments), focusing on interactions between online activity and local policy action. Details on our methodology can be found in the Appendix.

This report focuses on Canada, though we build on insights from experts, advocates, and governments around the world. Our recommendations likely apply to local governments in many locations. Some insights may require adaptation for rural, remote communities, and for First Nations, Inuit, and Métis governments.

PHOTO: MATT BROWN_FLICKR

London, United Kingdom:

Navigating Public Misunderstanding and Distrust of the ULEZ Expansion Policy

In November 2022, the Ultra Low Emission Zone (ULEZ) policy became a major social media talking point when the Mayor of London announced its expansion to all boroughs of the capital city, effective August 29, 2023.[15] The policy was designed to reduce air pollution by discouraging high-polluting vehicles; it faced significant opposition from residents, businesses, and politicians, who expressed concerns over affordability and fairness. A Transport for London (TfL) consultation in 2022 revealed that 59% of respondents opposed the ULEZ expansion, and a YouGov poll found that 27% were against the policy.[16]

While some opposition was based on genuine concerns, misinformation on social media played a role, too. Despite the small percentage of cars that would be affected by the ULEZ expansion, claims circulated online that ULEZ was a government plot to seize cars. An official at the Greater London Authority recollected statements suggesting the policy would "trap [people] in their homes," and set up "surveillance cameras every 20 feet."[17]

What started as a technical policy to improve air quality became what the official called "an absolute flashpoint," at times fuelled by conspiracy theories.[18] Opponents ranged from anti-vaccine activists to foreign bot accounts to national political leaders who framed ULEZ as part of a "war on drivers."[19] While there are not exact statistics

for how many Londoners encountered the ULEZ expansion policy through misinformation before seeing official messaging, our interviewee believes the percentage to high.[20]

In response, the Mayor's office and the Greater London Authority worked to ease concerns by addressing legitimate grievances, such as expanding vehicle scrappage schemes and improving public transit in underserved areas. Their communications strategy shifted from engaging bad-faith actors to focusing on residents with genuine concerns. According to our interviewee at the Greater London Authority, leveraging local media, influencers, and community organizations enabled the government to counter false narratives and rebuild trust, dissipating misinformation-driven opposition when the ULEZ expansion was implemented in August 2023.[21]

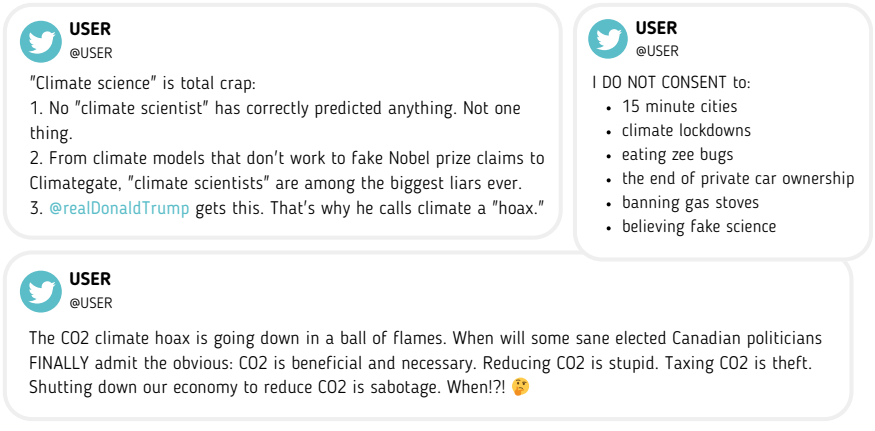
This example presents an illustrative situation where a local government's climate policy received a mixture of reactions, including genuine concerns about the policy and misinformation. The Greater London Authority's response to the pushback took those concerns on board and addressed them as best it could. Eventually, the ULEZ expansion was implemented. The ULEZ expansion shows a full range of dynamics that local governments can experience when introducing or pursuing new climate policy. And it shows that even local governments with as many resources as London's can struggle with how best to communicate their policies and policy goals.

CHALLENGES WITH LOCAL CLIMATE COMMUNICATION

Local governments frequently face healthy criticism for their climate-related actions, including critiques of the development and enforcement of policies. Our analysis focuses instead on false or misleading claims and narratives that affect climate action by local governments and communities. This climate-related misinformation generally falls into two key categories:

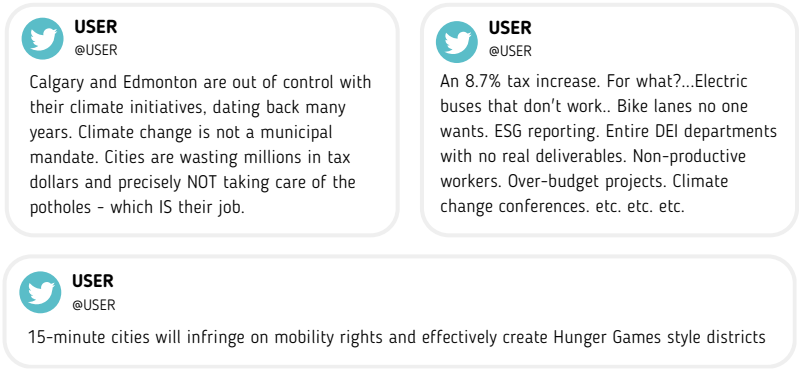
1. **Climate Science and Policy**: Misinformation that contradicts widely-recognized climate science (e.g., contesting the existence or impacts of human-induced climate change) or that significantly misrepresents broader regional, national, or supra-national climate policies (e.g., claims that the primary aims of climate policies are to harm certain communities, provinces, or nations), which may undercut public understanding of why and how climate action is being taken (Figure 1).

***Figure 1**. Examples of narratives about climate science and policy.*
Messages shown are excerpts from posts analyzed in our case studies. See Appendix for details.



2. **Local Climate Solutions and Issues**: Misinformation about specific locally-implemented climate initiatives, such as "15-minute cities," bike lanes, or emergency response measures, which may undermine public understanding of the specific actions that local governments, industries, and communities are taking (Figure 2).

***Figure 2**. Examples of narratives about local climate solutions and issues.*
Messages shown are excerpts from posts analyzed in our case studies. See Appendix for details.



Local government officials indicated in interviews that misinformation has affected climate policy implementation in specific cases, contributing to delays and shifts in public support.

WHAT ARE THE IMPACTS ON POLICIES AND COMMUNITIES?

Potential consequences of climate misinformation are wide-ranging, from disrupting governance to endangering physical safety and fracturing communities (Figure 3). However, infor-

***Figure 3**. Consequences for local government policies and civic safety.*

mation cannot be blamed for all ills and its influence may sometimes be overstated compared to other political, socio-economic, or cultural factors. Hence, it is crucial to develop a nuanced understanding of potential impacts. Here, we briefly outline the impacts on local government policies as well as broader community health and safety.

Our research has surfaced three key impacts on local policies, programs, and resources:

- **Promoting Mistrust of Governments and Policies**: Some of our interviewees believed that confusion or misinformation about local initiatives might intensify resistance and undermine trust by blending genuine local concerns with misleading narratives.[22] For instance, local governments involved in the rollout of Low Traffic Neighbourhoods (LTNs) in the UK faced significant backlash due to their inadequate policy communication (residents were unaware of the changes until facing penalties) as well as adversarial narratives about global conspiracies and threatened freedoms.[23] In other cases, instances such as conspiracies around Edmonton's "15-minute city" policy may intentionally stoke fears of government overreach or corruption
  (see Case Study 1).
- **Undermining Climate Policy and Program Implementation**: Misinformation-driven skepticism may delay policies, diminish program uptake, or even contribute to the rollback of policies, plans, or investments.[24] Our first case study, on the ULEZ expansion in London, showed how unaddressed citizen concerns and online misinformation threatened to derail the policy. In Vancouver in 2024, the City Council temporarily overturned its ban on gas hook-ups for new buildings, a climate policy setback driven in part by misleading claims about the ban's impact on construction and housing affordability (see Case Study 3).
- **Straining Local Government Resources**: Expanded communications efforts, staff training, and legal defenses against misinformation-fuelled challenges can siphon resources away from climate initiatives and communication efforts; less-resourced communities in particular can face significant struggles to manage online campaigns.[25]

In addition, we identified three impacts on community health and safety:

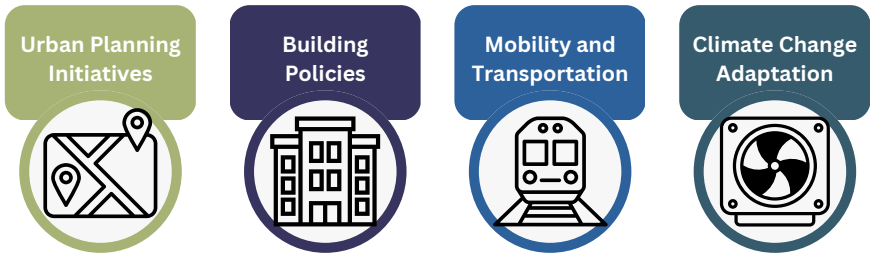
- **Threatening Staff Safety and Wellbeing**: Ten out of fourteen local governments from Europe and Australia surveyed in 2024 believed that climate misinformation threatened "staff safety and perception of safety" and warranted the creation of "new processes to support affected staff."[26] Our interviewees described similar issues in North America: leaders of local government advocating for renewable energy transitions have faced persistent harassment campaigns amplified by misinformation.[27]
- **Exacerbating Public Health Risks**: Individuals or communities may resist necessary measures to prepare for climate-exacerbated weather events that threaten public health, including heatwaves, floods and hurricanes. Vulnerable populations—including the elderly, children, and individuals with pre-existing health conditions—may face heightened risks when climate action is delayed or they lack accurate information about protective measures.[28]
- **Undermining Adaptation**: When narratives misrepresent climate impacts as distant or hypothetical, they risk undermining emergency preparedness, support systems, and other adaptation measures to reduce climate-related hazards. For instance, contrary to narratives that portray climate displacement as affecting only the Global South or impoverished regions, communities in the Global North also face internal climate displacement.[29] One former resident of British Columbia's Okanagan Valley, for example, left due to escalating wildfires, heatwaves, and droughts that decimated the region's agricultural and viticultural industries.[30]

WHICH LOCAL CLIMATE POLICY ISSUES SPUR ADVERSARIAL NARRATIVES?

Any local policy can spur reaction, resistance, and misinformation. Robust debate around policies is an essential aspect of democratic politics. At times, however, this can tip into false claims, conspiracy theories, or even harassment of officials who propose, explain, or enforce climate-related policies (Figure 4).

Four major issues tend to be targeted with misinformation or narratives that undermine local climate initiatives:

***Figure 4**. Local climate policy issues spurring adversarial narratives.*



- **Urban Planning and Density Initiatives**: Rezoning changes, "15-minute city" plans, and other urban planning measures are frequent topics.[31] Our case study of the "15-minute city" debate in Edmonton illustrates how pandemic-era anxieties and anti-government sentiments depict such planning policies as government plots to impose draconian surveillance measures or restrictions on movement.
- **Building Policies**: These narratives often focus on heat pump rebate programs, fossil fuel heating restrictions, and building retrofits. (See our case study on contention over Vancouver's effort to ban natural gas in new buildings.) A common narrative frames natural gas as the most affordable, and efficient energy source, despite evidence showing renewable energy's generally superior efficiency and long-term cost-effectiveness.[32] Such narratives amplify short-term expenses and obscure the long-term benefits of electrification and renewable solutions to protect citizens during dangerous weather events, like heat waves.[33]
- **Mobility and Transportation Solutions**: Here, topics include bike lanes, bus lanes, electrification of public transit fleets, diesel vehicle bans, electric vehicle subsidies, and road taxes. A municipal staff member highlighted the spread of misinformation about EVs not paying off their carbon debt and being more expensive to run, when in reality, carbon debts from EVs are paid back after about two years of driving.[34] Despite compelling evidence that bike lanes and low-traffic neighbourhoods enhance public health, safety, and community well-being, false claims persist that these measures harm local businesses or reduce property values.[35]

- **Climate Change Adaptation and Extreme Weather Responses**: Efforts to build climate resilience—including early warning systems, emergency response capabilities, urban forests, seawalls, and green rainwater infrastructure—may be undermined by narratives that decouple extreme weather events from climate change. Wildfires in Canada, for example, are sometimes attributed solely to arson or poor forest management, ignoring the role of rising temperatures and drought conditions. [36] (See our case study on extreme weather events.) Similar narratives attempt to decouple climate change from extreme weather events such as hurricanes, heatwaves, and droughts.[37]

PHOTO: ALICIA PAYDLI_UNSPLASH

Edmonton, Alberta:
Internet-Fuelled Opposition to "15-Minute City" Plans

In 2021, the City of Edmonton began incorporating the "15-minute city" concept into its district planning to create a more "healthy, urban and climate-resilient city."[38] Before the Council approved the plan in 2024, it faced organized demonstrations, heated city council meetings with accusations of "climate tyranny," and intense condemnation by local and foreign online influencers.[39] The backlash to Edmonton's "15-minute city" plan provides a cautionary tale about how internet-fuelled narratives can thrust local climate action into the international spotlight, while also fostering local mistrust.

The "15-minute city" concept emerged as a transformative urban planning model, aiming to create self-sufficient neighbourhoods where residents can access essential services—such as work, education, healthcare, and recreation—within a 15-minute walk, bike ride, or public transit trip. Cities from Paris to Oxford to Ottawa have embraced this model as part of broader efforts to reduce carbon emissions, promote accessibility, and enhance community well-being.

Alongside praise for the concept, critics have raised reasonable concerns that "15-minute city" plans will lead to gentrification, reduced interactions across cities, or impose costly or unwanted restrictions on vehicle use.[40] More extreme opposition draws on conspiratorial narratives that flourished

during the COVID-19 pandemic, labelling "15-minute city" policies as government-imposed "lockdowns," driven by national or "globalist" forces such as the World Economic Forum.[41] Narratives such as these were promoted to global audiences by politicians like the UK's Nigel Farage, and online influencers like Canadian psychologist Jordan Peterson and UK-based Wide Awake Media.[42]

In Edmonton, hostility toward "15-minute city" planning began in early 2023, with demonstrations by university students and other protesters and posts by influencers such as Calgary-based businessman Brett Wilson and Toronto-based developer Chris Sky.[43]

Our analysis of 476 social media posts using the term "15-minute cities" found several prominent narratives with elements of misinformation.[44] One theme was the fear that city planners aimed to create "open-air prisons" under the pretext of fighting climate change. For instance, one source from a protest and in online commentary falsely claimed that "15-minute city" plans were designed to confine residents to their neighbourhoods using barricades and surveillance, so that "You're never going to go more than 5 minutes from your house."[45]

A second related theme was that "15-minute city" plans were designed to enrich the wealthy under the guise of climate action, with some going further to suggest a conspiracy promoted by shadowy global actors. This included claims that "15-minute cities" are part of the World Economic Forum's so-called "Great Reset" agenda, framing them as tools for elites to tighten control over economies and societies.

Edmonton's public engagement on the district plans thus faced protests and conspiracy theories along with legitimate concerns about the impacts of new district plans. The heated debate led to extended and tumultuous City Council meetings, threats made to local officials, and delays in policymaking. Before the district plan was passed on October 2, 2024, the Council added a provision explicitly stating that the bylaw would not violate Charter-protected rights to freedom, association, and commerce.[46] Researchers and Councillors expressed disappointment at the necessity of including such a clause, viewing it as a reflection of eroding public trust in local government.[47]

Edmonton's experience serves as a case study for other local governments considering similar urban transformations. Local government staff and elected officials must pursue clear communication, transparency, and ongoing public engagement to respond to issues raised by citizens, even if some are associated with more conspiratorial nar effectively countering misconceptions and addressing legitimate concerns.

HOW DO ADVERSARIAL NARRATIVES GAIN GROUND IN LOCAL CLIMATE DISCOURSE?

Local climate discourse often mirrors global and national narratives but incorporates local social and political tensions, and occurs within a specific local communications environment. Local misinformation often spreads through grassroots networks and informal channels, including word-of-mouth and group chats, relying on genuine local concerns to amplify skepticism toward climate initiatives that make it hard to detect in communities.[48] The proliferation of misinformation, and failures to correct it, may be exacerbated by weak local news capacity, discussed in the next section.

Several of our interviewees believed that residents may be more susceptible to climate-related misinformation if it forms part of narratives that manipulate local fears, community identities, and socio-political conflicts (Figure 5).[49] For example, opposition to offshore renewable energy wind projects fuelled by misleading assertions of wind farms killing whales has slowed a Danish company's wind energy project off the New Jersey coast.[50]

***Figure 5**. Tactics obstructing meaningful discourse for local climate action.*

Political framing can play a role too. As one interviewee from a local government in Canada explained, local government officials are "wedging the issue of climate" into broader political and community concerns, making it more difficult for local governments to build consensus and implement effective climate policies.[51]

Tactics to obstruct meaningful climate action, according to interviewees, include:

- **Exaggerating Costs**: Framing climate solutions as financially burdensome, elitist, or inaccessible by focusing on short-term expenses and affordability concerns.

- **Misrepresenting Climate Impacts**: Downplaying the severity of climate crises by attributing extreme weather events to unrelated factors.
- **Exaggerating Freedom and Autonomy Concerns**: Overblowing portrayals of climate policies as government overreach and threats to personal freedoms, leveraging anti-government sentiments.
- **Greenwashing**: Misleading the public about the actions taken by a company, government or other entity to protect the environment.
- **Misrepresenting Climate Solutions**: Making misleading or false statements about the effectiveness or risks of heat pumps, electric vehicles, flood defenses, despite strong supporting evidence.
- **Defending the Status Quo**: Putting forth arguments that researchers call "discourses of delay," such as undermining personal responsibility, denouncing the possibility of meaningful change, and claiming that no action should be taken until other countries do more.[52]
- **Delegitimizing and Harassing**: Attacking climate advocates and researchers,[53] and the local governments and officials who pursue climate action (observed in all three of our case studies).

WHICH ACTORS CONTRIBUTE TO COMMUNICATION CHALLENGES?

Many different actors shape and contribute to local information ecosystems (Figure 6). This section examines how industries, governments, media outlets, social media platforms,

Figure 6. *Actors contributing to communication challenges.*

influencers, and foreign entities shape the local information ecosystem.

Some industries and interest groups have a history of using information to prolong fossil fuel dependencies.[54] This involves promoting false solutions, downplaying climate urgency, and sowing doubt about renewable energy feasibility. Geoff Dembicki, global managing editor of DeSmog, an investigative journalism organization, gives the example of how a fossil fuel association funded a digital advertising campaign in 2023 encouraging Canadian residents to contact their local officials with form letters opposing potential gas bans.[55] Talking about this case, Dembicki explained that the fossil fuel association was "trying to get people on the ground to be foot-soldiers for their agenda."[56]

Additionally, local governments may be particularly susceptible to a tactic called astroturfing, where corporate-backed campaigns are disguised as grassroots movements. A recent study gave the example of an astroturfing organization with indirect ties to the fossil fuel industry, which presented itself as a purely community-driven effort as it "actively disseminated false information and encouraged residents…to delay renewable energy projects."[57] Today's digital information environment makes it easier to hide the identities of those promoting industry interests, such as through "dark-money" advertising or bot accounts on social media platforms.[58]

Governments may also propagate fragmented messaging or resistance to climate science. For example, when federal, state, and local governments fail to coordinate on climate policies, opponents of these measures can exploit these discrepancies to undermine trust in government initiatives.[59] A staff member for a local government in British Columbia described in our interview an example of conflicting messaging between levels of government:

> We have a very clear mandate towards 100% renewable energy and electrification, same as in the Clean BC Plan.… We keep asking [the Province] to take out the new natural gas equipment rebates from what they're advertising…because Clean BC is about climate action.… It's frustrating our efforts to have any clarity of messaging.[60]

In some cases, internal resistance to climate science or bureaucratic inertia within government may exacerbate inadvertent mixed messaging. Another interviewee, a climate engagement specialist for a local government in Canada, highlighted concerns about local council members adopting industry talking points during meetings:

> Councillors are coming to council meetings with speaking notes that sound remarkably similar to the speaking points that we hear from gas companies when they're advocating for continued use of gas for heating homes.… It seems pretty well understood that there is a lot of interaction between industry and our local elected officials.[61]

Local governments can struggle to maintain credibility when public officials are implicated in spreading or acting on misleading climate narratives.[62]

Traditional news organizations, alternative media, and online influencers all play major roles in shaping the climate information ecosystem.

Professional journalism organizations frequently provide evidence-based coverage of climate issues, though they can also present a false "balance" in perspectives about whether climate change is occurring, can tend to under-cover positive stories about climate policy, and can indulge in sensationalism to drive reader interest.[63] Dr. Rosalind Donald, an expert in climate change communications at American University, described the UK media's misrepresentation of climate risks through the use of clickbait headings like "climate change will turn the UK into the south of France."[64] When journalists pursue more critical coverage, they often face pressures from governments, political elites, and major advertisers, including fossil fuel companies.[65] They may also face verbal, legal or physical threats in response to their work.[66]

Whether journalists address or exacerbate false and misleading narratives about climate change depends in part on the financial sustainability of public-interest journalism, particularly journalism that constructively engages with local communities.[67] In Canada, journalism organizations face declining trust and economic sustainability.[68] Local journalism organizations have been particularly hard hit by declining revenue and rising competition for attention in today's information ecosystem.

Canada's Online News Act (2023) was intended to help news organizations receive compensation from large platforms that share their work. In response, Google committed over $100 million annually to support Canadian journalism, including local journalism. However, Meta's decision to prohibit all news links on Facebook and Instagram decreased news exposure massively, contributing to a 43% decrease in social media engagement with news outlets and the disappearance from social media entirely of 30% of Canada's local outlets.[69] These developments occur within an overall Canadian landscape of shrinking traditional news media, particularly local news organizations. Since 2008, 516 local radio, TV, print, and online news outlets have closed across 345 communities in Canada.[70] Declines in access to reliable, community-focused reporting can contribute to "data voids" regarding local climate action.

"With the challenges to traditional news media, audiences have increasingly turned to alternative news media and online influencers."

With the challenges to traditional news media, audiences have increasingly turned to alternative news media and online influencers. DeSmog, the Narwhal, and InsideClimate News are examples of new media organizations committed to action on climate change, while pursuing journalistic reporting.

Other news organizations and influencers are not so prudent with their commitment to journalistic principles. As described in this report's case study on resistance to "15-minute cities" planning, when national and international online influencers turn their attention to climate action in local communities, it can lead to a dramatic increase in online attention. As one of our interviewees observes: "Social media enables individuals worldwide to attack climate policies by local governments."[71]

To many information consumers, the line between traditional media, alternative media, and online influencers is becoming blurry. Trust in traditional news media has declined over the last five years in Canada, particularly among the increasing number of people who get news on social media, such as TikTok, Instagram, WhatsApp, Reddit, and Snapchat.[72] Nevertheless, most Canadians continue to trust news organizations more than online platforms.[73] From a policymaker's perspective, distinctions among news sources remain relevant. For instance, traditional journalism organizations will generally correct errors that are pointed out, and complaints about accuracy or bias can be made to an outlet's public editor or to ethics bodies like the National NewsMedia Council. Fewer options exist for alternative media or influencers.

Social media platforms have rapidly emerged as a significant challenge for local government officials.[74] Platform design or algorithms incentivize engagement which can create issues. Our interviewee from Global Witness, an international NGO for human rights advocacy and accountability, observed that narratives opposed to climate action may include "shocking, outrageous, and conspiratorial" content that draws high engagement from users.[75]

"Social media platforms have rapidly emerged as a significant challenge for local government officials."

Some platforms, including Facebook, Instagram, and TikTok, developed policies to limit clear climate misinformation when it is identified by independent fact-checking organizations.[76] However, many alternative platforms (such as Rumble or Truth Social) have not made such efforts. Moreover, major platforms appear to be reducing their commitment. In January, 2025, Facebook, Instagram, and WhatsApp parent company Meta announced that it would end its fact-checking program in the US, a change that seems likely to reduce its action on climate misinformation across its platforms.[77]

Our interviewees working in local government—even those without firsthand experiences with the issue—also mentioned their concerns around the growing prevalence and accessibility of misinformation generated by **artificial intelligence (AI)**. These concerns are informed by three key factors: the power of the technology, its ease of accessibility, and the current lack of regulatory frameworks governing its deployment. AI systems—whether standalone

chatbots like ChatGPT or integrated programs like Microsoft CoPilot—can readily generate structured arguments that promote common misinformation narratives related to climate and vaccines.[78] Given the growing use of AI tools and chatbots, more frequent encounters with AI-generated climate misinformation that floods the information ecosystem are increasingly likely.

Foreign actors may use climate misinformation strategically to try to destabilize public trust in climate change science and delay sustainable transitions in competing nations. These efforts often align with broader geopolitical objectives, such as protecting domestic fossil fuel industries or undermining the global transition to renewable energy.[79]

One strategy foreign actors use is to capitalize on existing ideological divides. A notable example is Tenet Media, an American media company (with American and Canadian leadership) that provided funds to prominent right-wing influencers. In 2024, news broke that the U.S. Justice Department was investigating Tenet Media in connection with millions of dollars in funding the company had allegedly received from Russian actors to promote Russian narratives to Western audiences.[80] According to reporting by Friends of the Earth, a member of the global Climate Action Against Disinformation (CAAD) coalition, some of the narratives spread by Tenet Media contained climate disinformation, such as labelling climate change a "hoax" or an excuse by global elites to pursue a "great reset."[81] In a world where communication across borders and continents is seamless and accessible, foreign actors can pose a serious risk to local climate dialogues and policies.

PHOTO: TORSTEN DETLAFF_PEXELS

Vancouver, British Columbia:

Industry Push to Reverse Natural Gas Ban in New Builds

Some local governments are pursuing a ban on the natural gas "hook-ups" to buildings, which enable gas-powered space and water heating. At its core, the issue revolves around whether to phase out natural gas infrastructure in new buildings and encourage a transition to electrified heating systems like heat pumps. Debates in Vancouver City Council reveal how hook-up bans, and other policies that promote energy transition, can ignite competing concerns around climate, energy, and affordability.

In 2020, Vancouver became the first city in Canada to restrict natural gas by banning natural gas heating for new builds (though gas could still be used for cooking and fireplaces). The policy would help the City achieve its climate targets, as buildings account for a significant share of greenhouse gas emissions—13% nationally and 55% in cities like Vancouver.[82] Other local governments have followed Vancouver's lead, including Nanaimo and Victoria in BC, and Prévost and Montreal in Quebec. However, Vancouver's ban faced opposition and in July 2024, City Council voted to rescind the policy. That decision prompted outrage from climate advocates and questions about why the policy was being reversed.

Mayor Ken Sim and other opponents of the ban argued that it would raise costs to construct and heat buildings. However, that claim was disputed by voices from the construction industry and other sectors, as well as City of Vancouver staff.[83] As a sustainability officer at another local government noted, it is not

uncommon to face the "misleading message that climate action is what's costing money and hurting affordability and reducing people's freedoms."[84]

Fossil fuel industry players may have shaped the Council's decision to rescind the ban. Reports reveal that some Councillors had significant financial interests in natural gas companies, and met with BC's principal natural gas provider, Fortis, represented by a registered lobbyist and the director of two natural gas companies who is also the Mayor's top advisor.[85]

To explore the online discussion of these issues, we examined 1870 social media posts found using the terms "gas hookups," "gas ban," "gas heat," "heat pumps," or "heat-pumps."[86] Opponents of the gas ban and/or the switch to heat pumps frequently made claims of unaffordability, heat pumps' inadequacy in very cold weather, and BC's inability to meet electricity demands with mass adoption of heat pumps.

Unlike in the previous case study (Edmonton and "15-minute cities"), we did not see conspiracy theories or posts by international influencers targeting the gas ban debate.

However, we did observe more toxic and conspiracist content in comments directed at Vancouver City Councillors Christine Boyle, Pete Fry, and Adrianne Carr, who supported the gas hook-ups ban. For example, on June 14, 2024, the then Councillor Christine Boyle posted on X in support of phasing out gas water heaters. Two responses read: "How about that big quake hits and gets rid [o]f all you soy people" and "GFY [go fuck yourself], the only good communist is a dead communist."

Advocates for the ban were prominent on social media, in the news, and speaking at City Council.[87] On November 28, 2024, Council voted to reinstate the ban, after one Councillor changed from opposing to supporting the policy.

The back-and-forth over natural gas policies illustrates a broader challenge facing local governments in Canada: how to implement ambitious climate policies while navigating industry resistance and public concern over energy affordability. Policymakers must prepare for legal challenges, industry-funded pushback, and shifting political dynamics when implementing energy transitions. Strong, evidence-based support for the policy, coming online and especially in-person from multiple sectors within and beyond government, is key to addressing those obstacles.

WHO IS TARGETED BY LOCAL CLIMATE MISINFORMATION?

Different actors disseminate misleading narratives based on their distinct goals, which influence how misinformation is framed and whom it targets.[88] Local governments must choose how to focus their limited resources for communications around climate action, recognizing how power dynamics and identity influence the processing of climate information in different communities.

Misinformation does not affect all communities equally. Socioeconomic status, location, race, age, gender, and political identity influence how communities and individuals experience the consequences of both climate change and communications.[89] Additional factors such as knowledge, attitudes, and motivations also shape information processing. Misleading or false narratives often target vulnerable populations, including low-income groups, Indigenous communities, and communities of colour.[90] These narratives may exploit existing structural inequalities, undermining efforts to build consensus on climate policies.

Low-income communities, particularly those in historically marginalized areas, face compounded vulnerabilities from both environmental risks and socio-economic inequalities.[91] For example, climate policies framed as neighbourhood improvements can inadvertently fuel public mistrust by amplifying fears of displacement, often associated with "green gentrification."[92] Misinformation surrounding these policies may exacerbate such fears by framing climate action as a form of redlining or exclusion rather than as improving the community's resilience. [93] This may contribute to local resistance to climate initiatives, even when the intended goals are to benefit the community.

In addition, many communities of colour, particularly Black and Indigenous populations, have a historical distrust of governmental and media institutions. Climate misinformation in these contexts often undermines traditional environmental knowledge, framing climate policies as threats to cultural practices, while colonial biases in media narratives can marginalize Indigenous perspectives on sustainable energy initiatives and other issues.[94]

"Endemic digital exclusion" hinders access to reliable and quality media, particularly in rural or remote areas and regions that lack access to relevant news media.[95] This further exacerbates the vulnerability of marginalized communities to misinformation.

Opposition by **affluent communities** may delay or derail critical climate policies, such as new renewable energy or public transportation projects, due to concerns like "Not In My Backyard" (NIMBY). Because of their greater financial and political influence, wealthier

communities are often more likely to affect the success of these projects. These delays have a cascading effect, disproportionately harming marginalized communities, when public transit takes longer to arrive or, as a federal and provincial issue, fossil fuel plants remain operational in their areas, perpetuating health and environmental inequalities.[96]

Our interviewees suggested that **elected officials** are frequent targets of misinformation or even harassment both online and offline. This may include direct lobbying, using misleading narratives that leverage the real concerns of citizens to get them to put pressure on legislators.[97] An interviewee in a regional government body highlighted how companies were "directly emailing all of the elected officials in the region with... a list of why natural gas is a fuel of the future."[98] High-profile figures, such as climate scientist Michael Mann and former Environment Minister Catherine McKenna, have faced threats and disparagement. Online harassment against **women and other underrepresented groups** may discourage those people from speaking out or becoming involved in public positions.[99]

Misinformation about climate action often speaks to **political and ideological identities**.[100] Identity-driven narratives may manipulate emotional responses and prevent meaningful cooperation on climate issues, according to several interviewees who belong to ICLEI, an international non-governmental organization supporting local governments to meet sustainability objectives.[101] Narratives that align with personal or political identities are more likely to be accepted and spread, even when they are factually inaccurate.[102] Identity-protective cognition theory suggests that individuals are likely to resist information that contradicts the beliefs of their social or political groups.[103] Maintaining a narrow focus on the factual accuracy of information often overlooks these critical social, political, and systemic dynamics of information dissemination and reception.

PHOTO: PIXABAY

Weathering Misinformation:
Extreme Weather Events and Conflict over Climate Change

Climate change contributes to more frequent and severe extreme weather events, including heatwaves, wildfires, floods, and hurricanes.[104] These disasters often trigger intense debates about whether climate change played a role. Advocates for climate action seek to use these events to galvanize mitigation and adaptation efforts. Other actors take very different positions in the wake of disasters, using them to sow social division, engage in political attacks, and reject or misrepresent climate science. Such narratives not only misdirect public attention but also shield industries and governments from accountability for their failures to limit or prepare for climate change. At their most extreme, these narratives may incite hostility toward near-term disaster responders or longer-term rebuilding efforts.

Denying the role of climate change in extreme weather events. Politicians and influencers, particularly those on the political right, frequently dispute the relationship between natural disasters and climate change. [105] For instance, in the wake of the worst wildfire in California's history, people including Elon Musk and Donald Trump, Jr., blamed Diversity, Equity, and Inclusion (DEI) programs for supposedly weakening firefighting efforts, rather than acknowledging the role of prolonged drought and record-high temperatures.[106] During the intense wildfire season in BC and Alberta in 2023, some right-wing and anti-establishment actors blamed arsonists—sometimes

accusing environmentalists of setting fires to justify climate policies—rather than acknowledging the role of rising temperatures and drought conditions in worsening wildfire severity.[107] (Some wildfires are indeed caused by arson, an issue that warrants attention without invalidating the role of climate change in increasing wildfire risks.) Influencers also falsely stated that wildfires were deliberately set to force people in Kelowna to move into "15-minute smart cities" where they could be controlled.[108]

Fomenting distrust toward government responses. Some actors use natural disasters to promote hostility toward governments. After wildfires burned down Lahaina in Hawaii in 2023, conspiracy theories escalated, with claims that the government had intentionally caused the fires.[109] Following Hurricanes Helene and Milton in Florida in 2024, influencers promoted rumors that the federal government targeted the hurricanes at Republican-leaning districts, or used them as an excuse to seize private property or force residents into detention camps[110]. These false narratives discouraged people from accepting aid and led to direct threats against government personnel. Similarly, in the 2023 wildfire season in BC, emergency responders faced resistance, threats, and equipment tampering in some communities while fighting fires or enforcing evacuation orders.[111] Anti-government narratives can thus impede immediate disaster responses and undermine long-term efforts by governments to work with stakeholders in climate-resilient rebuilding activities

Polarization rather than finding common ground after Jasper's fire. Following the 2024 wildfires that swept through Jasper, Alberta, many discussions became polarized over the role of climate change. Our analysis of 2,291 posts containing the keywords "Jasper" and "fire" found that many prominent posts downplayed or denied the impact of climate change, instead emphasizing other factors.[112] These included allegations of poor forest management or accusations that the federal government's response was inadequate due to partisan motives or budgetary priorities like aid to Ukraine and DEI initiatives.[113] Rather than fostering a constructive discussion, many posts engaged in a blame game, targeting whichever government the author opposed and trying to score points for or against climate action, rather than assessing the crisis in an evidence-based manner.[114]

Wildfires, like other natural disasters, occur when extreme weather events—made more frequent and severe by climate change—intersect with inadequate policies and infrastructure. An exclusive focus on climate change can come across as dismissive of the immediate harm to communities, and can paper over other policy failures. At the same time, ignoring the role of climate change risks diverting attention from increasingly critical adaptation and mitigation measures.

RECOMMENDED COUNTER-STRATEGIES & APPROACHES

This report proposes five complementary thematic areas to build more robust capacity for productive climate conversations: Messaging, Safety, Community Engagement, Collaborations, and Measurement. These themes do not focus narrowly on addressing misinformation or disinformation, but orient local governments to develop capacities to anticipate emerging narratives, implement pre-emptive communication strategies, and develop long-term trust-building initiatives. These capacities would address the deeper systemic factors undermining the information ecosystem. Most of these recommendations focus on what local governments can do, sometimes in collaboration with other government levels, industry, and civil society, in the realm of climate science and climate policy communication and dialogue with their local community. Some can inform actions by individuals in government or civil society. Specifically, we recommend:

"When climate narratives become politicized, countering climate misinformation risks being perceived as partisan, eroding trust and limiting effectiveness."

- **Messaging** strategies to ensure that climate messaging is tailored to different audiences, culturally relevant, and delivered through trusted sources.
- **Safety** measures that prioritize protections for local government staff, elected officials, and climate advocates who face reputational, physical, and psychological risks from harassment and violence.
- **Community Engagement** that fosters trust, strengthens democratic participation, and makes local populations more resilient to misinformation.
- **Collaborations** to enhance information-sharing, resource mobilization, and coordinated responses across local governments, governance levels, and community organizations.
- **Measurement** practices that enable local actors to systematically track the spread of false and misleading information, assess its impacts, and evaluate the effectiveness of interventions.

It is crucial for local policymakers to use communication strategies that enhance the quality

and inclusiveness of public conversations, without taking actions that harm civil liberties (including freedom of expression) and public trust (including treating all communities with respect). As broader policy discussions—including those by international organizations like the OECD—highlight, building trust through transparency and open dialogue is often more effective than taking on the role of heavy-handed "arbiters of truth" and imposing top-down controls.[115] Such actions can contribute to resentment and distrust. By contrast, our recommendations emphasize making high-quality information easily accessible and prioritizing transparency, inclusive engagement, and empathy-based trust-building. We recognize that some recommendations may not be feasible for less-resourced local governments, but we believe the five themes still provide a useful framework of the types of interventions local governments and individuals can pursue.

MESSAGING

Effective policy messaging requires that local government actors provide accessible, useful, and engaging information to diverse groups. Two-way communication is difficult and time-consuming because it involves long-term trust-building and creating messages that resonate with audiences. Political polarization further complicates these efforts. When climate narratives become politicized, countering climate misinformation risks being perceived as partisan, eroding trust and limiting effectiveness.[116]

In such contexts, practical guidance can be invaluable for local governments striving to engage communities on climate action. ICLEI Canada's *2025 Climate Communications Playbook* offers evidence-based strategies, from traditional messaging to emerging behavioural science approaches that make climate action feel personal and urgent.[117] Similarly, organizations like Re.Climate provide research-backed tools and training to help municipalities foster productive conversations.[118]

PREBUNK AND INOCULATE

Prebunking campaigns are pre-emptive interventions that disseminate accurate and relevant information before an event or policy change. This can offer a form of cognitive "inoculation," rendering people more resilient when encountering deceptive narratives or false information.[119] However, for prebunking to be effective, local governments need to consider how different demographic groups consume and engage with information. For example, Victoria's prebunking efforts on carbon tax expansions sought to provide the public with necessary information for countering false narratives before they emerged.

Paul Costello, the senior program manager for GMF Cities, offered insight into what this

could look like in our interview. One model comes from Helsinki, Finland, where media literacy is integrated into school curricula. The Helsinki government collaborates with educators, public libraries, and media organizations to provide workshops and training on recognizing disinformation.[120] During Media Literacy Week, nearly all students receive instruction on evaluating sources, identifying manipulation tactics, and critically assessing online content. Costello similarly identified Lie Detectors, a Brussels-based organization that brings journalists into classrooms to teach media literacy using gamified prebunking techniques.[121] By simulating misinformation tactics, these programs help users recognize and resist deceptive narratives.[122]

What's the Difference?

Prebunking is a strategy that delivers accurate information to equip people to identify and counter misinformation before it spreads.

Inoculation is a psychological method that prepares individuals to resist misinformation by exposing them to examples of false claims and teaching them effective rebuttals.

Further proactive communication measures include structured educational efforts and bipartisan dialogue. To do so, local governments can collaborate with civil society groups or existing government programs with the expertise, resources, and access to diverse communities.[123] These efforts are crucial in guiding communities through the complexities of climate communication, building resilience against misleading narratives.

ADAPT MESSAGING TO AUDIENCE

Effective communication involves producing and delivering context-specific messaging in collaboration with individuals who are "social natives," or people who intuitively understand how engagement on emergent platforms works and are creatively adept at driving it.[124] This means working with trusted community figures such as local leaders and citizen journalists to spread accurate information, especially to marginalized groups that may be overlooked by mainstream media.[125]

Culturally-aligned messaging can foster a deeper resonance with varied demographic groups. For example, Toronto's TransformTO initiative runs a Neighbourhood Climate Action Champions program, which equips trusted local leaders with the tools to communicate climate goals and implement community-driven projects.[126] The project works with trusted and influential figures, such as leaders in immigrant communities or respected members of cultural organizations. Their endorsement carries weight, as they can integrate culturally relevant narratives, values, and practices into climate messaging, ensuring broader and more meaningful community participation in climate action.[127]

Furthermore, reframing climate action in relation to local economic and social considerations can create opportunities for community engagement and historical redress, which can broaden the appeal of policies that contribute to climate change mitigation or adaptation.[128] For example, using terminology such as "weather-related emergencies" instead of "climate disasters," or personalizing communities' connection to climate topics with real-life stories and compelling imagery could enhance resonance between their daily experiences and local climate action policies.[129]

DEBUNK

Debunking campaigns rely on rapid-response strategies to counter false or misleading information by disseminating corrective messages via diverse channels, including traditional and independent media outlets, local community networks, social media influencers, and podcasters. The approach aims to diversify outreach, specifically targeting groups that may be harder to reach via conventional communication methods. For example, our interviewee from the Greater London Authority describes their multi-channel approach:

> We work with podcasters and alternative media, we work with local papers and Instagram accounts. Through funding, partnerships or other support, we are in … nearly daily contact with every single community group, faith organization, sporting group, or private partnership in London.[130]

This strategy enhances public engagement and broadens the distribution of climate policy messages by leveraging the trust these alternative media forms have built with their audiences. The success of this initiative underscores the importance of establishing these institutional networks and trust in advance, which enables rapid, effective responses when misinformation arises.

ENSURE INCLUSIVE AND ACCESSIBLE MESSAGING

Inclusive communication strategies are crucial to ensure that policies resonate with and include all affected communities. For example, in Oxford, UK, the introduction of a low-traffic neighbourhood (LTN) policy had unintended consequences for Muslim communities, who found it more difficult to access their places of worship. The consultation process for the low-emission zones failed to account for the distance between mosques and the Muslim communities living just outside the LTN zones. As an interviewee from Demos UK remarked:

> People were consulted if they lived directly in the area where the low-traffic neighbourhood policy was being considered in the UK, but not if people drove through it or depended on it for another reason because they lived outside. So, they didn't consult the people deemed as not relevant, even though they were still members of the community and still contributed to that area.[131]

An inclusive approach to climate policy requires fostering cultural safety and self-determination, ensuring that the knowledge and priorities of Indigenous and marginalized communities are respected and integrated into decision-making processes. Failure to do so not only alienates affected groups but also reinforces existing social divides, ultimately limiting the potential for meaningful progress. As Dr. Rosalind Donald of American University puts it, "Climate change is a symptom of histories of extraction from people and nature."[132]

"Hostile communication—online and offline—poses risks to individuals' mental health, physical safety, and professional efficacy."

When climate change is framed solely as an environmental issue, the connection to historical inequities may be overlooked or dismissed, especially in scientific or policymaking circles. Candis Callison, the Canada Research Chair in Indigenous journalism, media, and public discourse at the University of British Columbia, argues that:

> [T]hinking about climate change **only** as a science issue, or even a science/policy/economic issue, may in fact be a huge part of "the problem" of getting and sustaining the attention of publics and policy makers…[C]limate change does not stand outside the varied social contexts from which it has emerged, nor can it be fully addressed without recognizing how deeply ecological problems are rooted in colonialism.[133]

Communication strategies that address the deeper histories and social contexts can foster greater engagement, particularly in communities that might feel alienated by top-down, one-size-fits-all policies.

Finally, accessible messaging is essential. Ensuring that policy messages are available in multiple languages, on various platforms, and in formats that reflect diverse cultural contexts, can make a critical difference in achieving broad-based support for climate action.

SAFETY

Any communications work is only as good as the staff creating it. But many officials and staff worry about the consequences of public engagement. Narratives that use false or misleading information to criticize climate policies are often accompanied by disparaging or threatening messages toward public officials, researchers, and advocates.[134] Hostile communication—online and offline— poses risks to individuals' mental health, physical safety, and professional efficacy.[135] In Canada, female politicians face significant "green rage" attacks and online abuse, with one report finding that 86% of replies to their climate-related tweets contained harassment, such as name-calling and attacks on their authority.[136] Catherine McKenna, Canada's former Environment Minister, faced sexist

slurs like being called "Climate Barbie," and had to hire security due to threats.[137] This hostile environment doesn't just jeopardize safety; it undermines the well-being of those advocating for climate action. Local governments must treat harassment as part of occupational safety, developing protocols, training staff, and offering legal and mental health support.[138]

ESTABLISH PROTOCOLS

Public institutions must proactively identify and manage safety risks to protect reputations and physical security. This means creating a flexible, dynamic security infrastructure that evolves alongside the threats posed by online and offline abuse.

Key strategies include systems to monitor online abuse, track reputational attacks, and assess potential risks such as violence or legal action.[139] Real-time safety protocol updates are essential, particularly during public engagements, and should include threat monitoring, security planning, and de-escalation tactics.[140] Responsive threat detection and reporting systems allow quick escalation to law enforcement, while tools like automated reporting forms help identify patterns of abuse and ensure accountability.[141] Additional resources, such as password managers, data removal, IT security, help mitigate the risks of online harassment.

"Local governments must engage residents in planning processes, support local community projects, and ensure that public services meet community expectations."

Staff training in digital safety, abuse response, and bystander intervention is critical.[142] This empowers personnel to protect themselves and others without compromising their duties. For local governments, content moderation tools, clear guidelines for using their websites, and anonymized communication channels—such as generic email addresses—can reduce harassment and protect reputations.[143] As one Canadian environmental program manager explained during our interview, this approach significantly reduces the risk of online vitriol targeting staff.[144]

SUPPORT HEALTH AND WELLBEING

Harassment can take a significant psychological toll on those involved in climate policy. Supporting the mental health of staff exposed to such abuse is vital for a productive, secure work environment. Promoting mental health literacy helps employees address psychological effects and fosters a culture where open dialogue about emotional distress is encouraged.[145]

Mental health counseling and peer support services are crucial for managing harassment impacts, enabling staff to process the emotional toll and remain resilient. A culture of peer support strengthens mental well-being and encourages employees to share experiences and seek help when needed.[146]

Support from law enforcement or legal assistance may also be appropriate if harassment

escalates to cyberstalking or threats of violence. Together, these strategies safeguard both staff safety and well-being, allowing individuals to continue advocating for climate action without compromising their health or effectiveness.

COMMUNITY ENGAGEMENT

Engaging communities in climate policy helps build trust and improve policy legitimacy over time. By fostering transparent dialogue, co-creating policies, and leveraging existing institutions, local governments can encourage meaningful public dialogue on climate solutions.

REBUILD TRUST THROUGH TRANSPARENT DIALOGUE

Rebuilding trust in communities affected by climate misinformation requires open, constructive dialogue—especially in polarized environments. According to research from Demos, trust grows when local governments prioritize three key factors:[147]

1. **Structured Engagement**: Building long-term relationships through consistent community interaction.
2. **Responsive Resource Distribution**: Ensuring policies and programs are equitable and meet diverse needs.
3. **Transparent Governance**: Making decision-making processes clear and accessible to the public.

To achieve this, local governments must engage residents in planning processes, support local community projects, and ensure that public services meet community expectations. Civic accords provide a structured mechanism for trust repair by reshaping local governance-citizen dynamics through reciprocal engagement principles. These types of processes can transform community engagement from consultation into meaningful participation. As part of the Cities Forward program in Montego Bay, Jamaica, for example, local officials implemented mini citizen assemblies to directly engage community members about climate policies.[148] By aligning broader climate action plans with local priorities, this approach increased public buy-in and made climate policies more relevant to their lived experiences.

CO-CREATE POLICIES AND PROGRAMS WITH CITIZENS

Local governments can improve climate policies and enhance public support for them through participatory mechanisms, such as direct interaction with community organizations and civil society groups. As an example, BC Housing recommends local governments improve their building resilience plans by leading engagement with communities, industry

stakeholders, and equity deserving groups.[149] This illustrates a feedback loop where community input is integrated into policy frameworks, enabling proactive measures against information narratives—crucial for maintaining public understanding and support.

Meanwhile, citizen assemblies have been shown to increase public trust in government by fostering transparency, accountability, and direct civic participation in decision-making. These initiatives create "a long-term visioning in which citizens have a role to play," ensuring that public trust is not just restored but actively maintained through sustained participation and accountability.[150] For example, Ireland's Citizens' Assembly on Climate (2016–2018) engaged 99 randomly-selected citizens to deliberate on climate policy, leading to 13 recommendations that directly influenced Ireland's Climate Action Plan.[151] Similarly, Melbourne's People's Panel in 2015 brought together 43 randomly-chosen community members to co-develop the city's ten-year financial plan with the Future Melbourne Committee of Council.[152] Through clear decision-making, well-defined public roles, and a commitment to core values, this process led to ten out of the Panel's eleven recommendations being implemented.[153] Beyond formal assemblies, integrating public dialogue into established community hubs—such as libraries—enhances community awareness and knowledge dissemination.[154]

COLLABORATIONS

Local governments can strengthen climate action by collaborating with peer local governments, other levels of government, and partners across academic, non-profit, and private sectors. By pooling resources, expertise, and methodologies, such as social media monitoring tools, local governments can quantify the prevalence and effects of information narratives, and develop more effective responses. One way to visualize these collaborative efforts is through mapping local government networks that share resources, expertise, and coordinated action. The GMF and Melbourne Centre for Cities' *c*ollaboration framework provides a model for how local governments can structure partnerships for greater impact.[155]

STRENGTHEN PEER NETWORKS ACROSS MUNICIPALITIES

Local government networks such as Climate Caucus, BC Municipal Climate Leaders Council, ICLEI Canada, and the Global Covenant of Mayors facilitate knowledge-sharing, pilot solutions, and coordinate interventions against climate misinformation. Cross-collaborations help local governments identify common challenges, exchange best practices, and scale up successful strategies. For example, staff federations—coalitions of local government employees—build expertise over time through sustained knowledge-sharing, pilot projects, and research. As one of our interviewees noted, "it's not progress that

happens overnight; it's incremental. It's years and years of having conversations, building relationships, running pilots, doing research, going two steps backwards."[156]

Beyond formal networks, informal collaborations also play a critical role. In Metro Vancouver, communities of practice gathering sustainability staff from the 21 local governments support an informed and collaborative approach to climate communications across local governments.[157] These knowledge-sharing efforts refine strategies and strengthen policy impact by anticipating challenges and co-creating strategies for local contexts.

ALIGN EFFORTS ACROSS GOVERNMENT LEVELS

While local governments are instrumental in identifying and understanding community-specific narratives, other levels of government can provide essential resources, establish relevant policy frameworks, and maintain overarching strategic oversight.[158] For example, Canada's federal government amended the Competition Act to require corporations to substantiate their environmental claims, which should reduce the spread of greenwashing misinformation and improve corporate accountability for misleading information narratives.[159] The federal government's outside international strategies, such as the European Commission's Code of Practice on Disinformation provides a framework to reduce fake accounts, deepfakes, deceptive advertising, and other disinformation tactics, as well as increasing platforms' transparency to researchers and regulators jurisdictions.[160] By showing a common front and examining how misinformation affects climate efforts, local governments may unlock critical legislative, logistical, or financial support from higher levels of government.

"A clearer understanding of misinformation's consequences can help local governments design more measured responses."

Coordinated communication across government levels is important, ensuring that policies—whether related to electrification, renewable energy, or retrofitting—are conveyed clearly and consistently.[161] This reduces public confusion, fosters accountability, and builds trust in climate initiatives.

MEASUREMENT

To build strong climate communication and engagement, local governments need to understand how false and misleading information spreads, whom it affects, and which counter-strategies are most effective. However, many local governments—especially smaller ones—lack the technical resources or personnel to effectively conduct qualitative and quantitative assessments. Collaborative approaches, such as shared knowledge repositories, academic partnerships, and regional data-sharing networks, can help fill these gaps. These efforts allow local governments to systematically track misinformation patterns, identify emerging tactics such as deepfake audio or misleading Facebook group narratives, and develop informed responses.[162]

MEASURE MISINFORMATION PREVALENCE

Digital monitoring tools can enable local governments to track false and misleading information and assess their counter-strategies in real time. This can be done using platform tools, such as Meta Business Suite, X Analytics, YouTube Studio, and Reddit Insights, which allow local governments to analyze online discussions, social media engagement, and comment patterns. Such sentiment analysis can provide some insights into public concerns and motivations. Different platforms will offer different analytics, but they should all provide some basic information about how many people saw a page or a post, as well as how many people interacted (liked, commented, etc.) with that page or post. Another example is the Deepfakes Tracker Research Portal, created by the Social Media Lab at Toronto Metropolitan University to identify manipulated media and decontextualized narratives across the information ecosystem.[163] While analytics like these only offer a partial picture of sentiments around campaigns, they are powerful tools that are easy to access.

A structured approach to understanding and countering climate misinformation also involves developing baseline metrics. For example, local governments that conduct narrative pattern analysis can identify recurring themes and rhetorical strategies used in climate misinformation campaigns and refine their messaging strategies to counteract false narratives more effectively. A broader cross-platform analysis can help local governments understand how climate misinformation intersects with other ideological movements, such as far-right disinformation networks.[164] Network analysis tools can map relationships within climate misinformation networks to identify the major influencers, allowing local governments to design targeted interventions. However, smaller local governments can still benefit from targeted approaches by leveraging partnerships and shared networks to track misinformation within their means.[165]

Municipal-academic collaborations provide a practical way for local governments to track

misinformation with limited resources. By partnering with universities and research institutions, local governments can access expertise, shared databases, and co-develop fact-based counter-narratives.[166] For instance, the RMIT University's FactLab in Melbourne, Australia, collaborates with media organizations and policymakers to verify content and improve digital literacy.[167]

EVALUATE IMPACT OF MISINFORMATION

Although both researchers and policymakers recognize the harm caused by climate misinformation during our interviews, concrete measurement of these impacts remains limited. A clearer understanding of misinformation's consequences can help local governments design more measured responses to the challenge. Consider the following factors to evaluate its impact:

1. **Policy Uptake**: Consider whether and how initiatives and plans are delayed, cancelled, with goals reduced or implementation weaker than otherwise expected.
2. **Resource Utilization**: Quantify the staff time diverted to counter climate misinformation and manage its effects on programs or policies.
3. **Health Condition**: Assess stress, anxiety, or burnout among staff caused by harassment or climate misinformation campaigns.
4. **Democratic Resilience**: Evaluate the broader effects on public trust, policy adoption rates, and civic engagement to understand the resilience of democratic processes.
5. **Community Cohesion**: Document how climate misinformation affects community cohesion, access to accurate information, and public opinion.

To systematically assess these impacts, local governments can collaborate with NGOs or join formal or informal networks to document the effects of misinformation on governance, resource allocation, and public trust. Over time, this collective effort would enable local governments to allocate resources more effectively, ensuring targeted interventions that address community concerns.

ASSESS EFFECTIVENESS OF COUNTER-STRATEGIES

To gauge the impact of past interventions and apply lessons to future initiatives, local governments can use a variety of forms of impact assessments.

Longitudinal surveys of public opinion, while challenging, would be a valuable means to track the effectiveness of misinformation interventions over time.[168] Key indicators include public comprehension of climate issues, trust levels in government and scientific institutions, and shifts in civic engagement and policy support. The Civic Information Index offers one

model for assessing the health of a civic ecosystem, measuring factors such as access to quality information, equitable civic participation, and barriers to engagement.[169] By partnering with research institutions, local governments can conduct these evaluations cost-effectively while gaining deeper insights into their communication strategies.

Tracking behavioural change and public engagement also provides measurable indicators of intervention success.[170] Municipalities can conduct pre- and post-campaign surveys to assess shifts in public sentiment, analyze attendance and participation levels at climate-related events, and monitor the adoption of sustainable practices within communities.

A FRAMEWORK FOR TIMELY INTERVENTIONS

To effectively intervene, climate misinformation should be addressed at different stages of its progression. The GMF' and Melbourne Centre for Cities' *Disinformation in the City Playbook* introduces a three-stage temporal framework to guide local government responses, categorizing interventions into:[171]

1. **Before (Early Detection)**: Focus on identifying and countering misinformation before it spreads. An example is pre-emptive engagement, which works by engaging with communities to discuss potential concerns before a policy is announced. For instance, a local government proposing new planning bylaws that encourage transit and bike use could proactively discuss and address fears about restrictions on people's liberties.
2. **During (Spread Prevention)**: Aim to curb misinformation as it emerges. This includes debunking, which involves directly addressing and correcting misinformation in real time. For instance, local government staff can identify misconceptions and misleading claims that are circulating, which could be addressed on the government's website as well as via elected officials' interviews with news media and influencers.
3. **After (Recovery)**: Conduct post-event analysis to understand misinformation's effects. Impact assessments help local governments evaluate the spread and influence of false narratives, informing future responses. City staff can conduct a follow-up survey to assess views of key populations affected by the policy; they can also remind staff and officials who may have faced harassment that they can access psychological and social support.

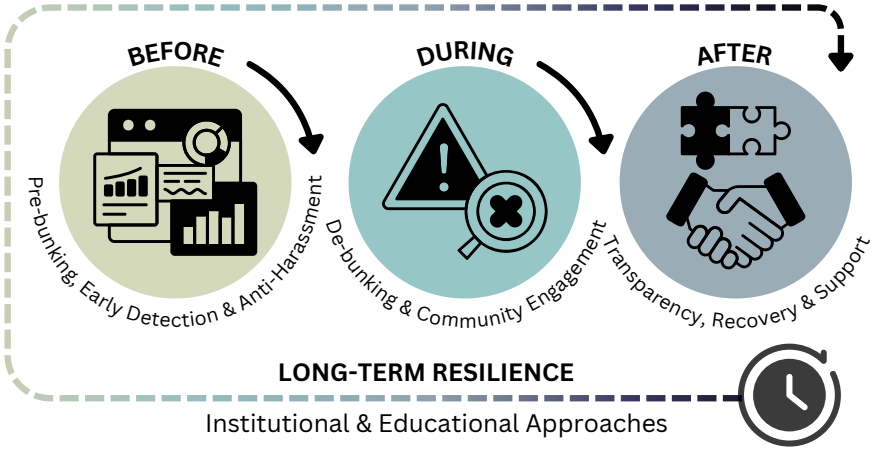
Building on this model, **we propose a fourth stage—Long-Term Strategies—focused on systemic change.**

This step highlights institutional and educational approaches that build resilience against misinformation over time. One key intervention in this category is trust-building—ensuring that local governments cultivate strong relationships with their communities. A practical example is the facilitation of ongoing, inclusive public forums, where residents can engage in climate policy discussions, voice concerns, and gain clarity on government actions. By establishing these sustained channels for dialogue, local governments contribute to "cooling temperatures" and fortifying community bonds. Integrating such strategies into long-term planning helps local governments to build resilient communities.

Not all strategies are suitable for every situation, but recognizing the different stages of misinformation's lifecycle allows local governments to respond effectively. Establishing a clear, coordinated framework can better prepare local governments to navigate climate communication challenges.

Figure 7 illustrates how long-term strategies reinforce and enhance the existing three-stage framework.

***Figure 7**. Intervention framework for local climate policy over time.*



LOOKING AHEAD

Climate action presents a complex challenge for local governments, as public support and trust depend on interconnected political, social, and economic factors that often transcend local boundaries. These challenges are further compounded by rapidly evolving media technologies and entrenched power dynamics.

This report highlights the need for proactive communication and deeper community engagement in climate policy and program design. Capacity remains the greatest barrier to such efforts. Many local governments lack the technical expertise, data analytics, and communication infrastructure needed to respond effectively.[172] These challenges are particularly acute in communities already distrustful of government institutions. To rebuild trust, local governments need to collaborate with community leaders and civil society organizations, leveraging these networks to expand resources and strengthen public confidence in climate action.

To operate effectively in this challenging information landscape, local governments must coordinate efforts across jurisdictions, track misinformation's impact, and ensure the safety of staff and communities. Officials we interviewed identified two key tools to support these efforts:

1. **Living Repository**: A continuously evolving library of resources that outlines common climate policy challenges, key misinformation narratives, and effective counter-strategies for transparent public engagement.
2. **Local Government Network**: A central knowledge hub for local governments to assess misinformation's impact and develop proactive solutions.

We encourage local government networks, policymakers, and civil society organizations to take up this challenge—developing tools, partnerships, and strategies to support informed, constructive climate conversations. Such strategies need to evolve at the pace of challenges they face. As one interviewee at a local government in Canada put it, "misinformation around climate solutions and the municipality's role in implementing climate solutions have evolved significantly in the last five years."[173]

Addressing climate misinformation is not just about protecting climate policies—it is about strengthening democratic resilience, rebuilding community trust, and fostering informed civic engagement. Local governments are at the heart of this work. By embracing proactive communication, strengthening networks, and prioritizing public trust, they can help ensure that climate action is shaped by shared understanding rather than false narratives.

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APPENDIX: Methodology

This study explores local strategies for creating productive climate communication ecosystems using a mixed-methods approach. Our methodology integrates qualitative and quantitative techniques to provide a comprehensive understanding of the issue.

RESEARCH DESIGN

- Literature & Policy Review: We analyzed research studies, local government policies, and publicly-available documents to contextualize our findings.
- Semi-Structured Interviews: Semi-Structured Interviews: We conducted 17 interviews with two participant groups: experts from research organizations focused on misinformation or local governance. and local government staff involved in sustainability and information management.
- Focus Groups: We held two focus groups (totalling 17 participants), which included semi-structured discussions and scenario-based exercises, were held to receive further input on effective communication strategies
- Case Studies of Local Climate Policy Debates: We identified three local climate issues in Canada that saw significant debate or conflict. To clarify the communication challenges in these cases, we analyzed news articles and policy reports, and we conducted a focused social media analysis (see below).

QUALITATIVE DATA ANALYSIS

All interviews were conducted with approval from the University of British Columbia Behavioral Research Ethics Board (H24-01662). Interviewees were given the opportunity to be cited by name or by their organizational role.

All interviews were transcribed. The transcripts were coded and analyzed to identify themes and trends. Two individuals coded all transcripts to ensure reliability.

SOCIAL MEDIA ANALYSIS

To analyze social media on local climate issues, we used a multi-platform database created in cooperation with the Canadian Digital Media Research Network (CDMRN). The database contains posts from the social media accounts of prominent individual and institutional voices in Canadian discourse, including politicians, news outlets, journalists, influencers, and civil society organisations. We limited our analysis to posts from the year 2024.

In total, our database contains 5,552,618 posts by 7,042 accounts. This includes 3,224 accounts on X with 4,872,125 posts; 2,321 accounts on Instagram with 459,449 posts; 1,074 accounts on YouTube with 162,123 posts; and 423 accounts on TikTok with 58,921 posts. Of all posts, 43.1% (2,394,061) were by influencers, 38.0% (2,111,190) by news outlets, 10.8% (598,648) by politicians, 6.2% (342,958) by civil society organizations, and 1.9% (105,761) by government organizations. The vast majority of these accounts are used by Canada-based institutions and individuals. However, some "international" accounts were included, particularly if they were re-posted by Canadian entities and their actual location is unknown (e.g. the account on X called "Wide Awake Media").

For each of our case studies, we identified key words that were reliably associated with the policy issue under analysis.

- For Case 2 on "15-minute cities" we used the search term "15 minute cities" or "fifteen minute cities." The search would include text with hyphens or "city" instead of "cities." This search resulted in posts created by 119 accounts with 445 posts on X, 10 accounts with 11 posts on Instagram, 7 accounts with 10 posts on YouTube and 5 accounts with 10 posts on TikTok, collectively totalling 476 posts by 141 accounts.
- For Case 3 on gas hook-ups and the broader issue of gas versus electric heating, we used the search terms "gas hookups", "gas heat", "gas ban", "heat pumps", or "heatpumps." This resulted in 1,870 posts by 600 accounts, which included 1,521 posts on X by 446 accounts, 263 posts on Instagram by 118 accounts, 80 posts on YouTube by 30 accounts, and 6 posts on TikTok by 6 accounts.
- For Case 4 on the Jasper wildfire, we searched for posts with both "Jasper" and "fire" in them. This resulted in 2,291 posts by 587 accounts, which included 1,950 posts on X by 448 accounts, 148 posts on Instagram by 89 accounts, 167 posts on YouTube by 37 accounts, and 26 posts on TikTok by 13 accounts.

Our team manually reviewed all posts in our database that contained the keywords for Case 2 and Case 3, and all posts with over 50,000 views (total of 423 posts) in our database that contained the keywords for Case 4. We summarized frequently occurring narratives for each case, the most common types of actors (e.g. politicians, news outlets, influencers, etc.) with posts featuring those narratives, and the policy issues or events that posts featuring these narratives tended to reference.

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