



Strengthening Municipal Capacity for Inclusion of Climate Implications in Council Reports

A Clean Air Council Initiative

Presenters:

Gaby Kalapos and Heather Prest



On-Ramps to Climate Accountability



Climate Emergency
Declaration

Climate Action Plans
(Corporate, Community,
Mitigation, Adaptation
– or all together)

Climate Implication
Section in Council
Reports and Climate
Integration

Climate Lens
Application

Carbon Budgeting

Climate Disclosures and
Municipalities (TCFD)



Climate Emergency Declaration



- Education opportunity for council and staff
- Community education – government recognition of the role all of society needs to play while recognizing municipalities are in a leadership role
- 2-6% of GHG emissions directly, but influence 40 – 60% of community emissions
- This is an all of society effort
- What does the science say?





- **Corporate Mitigation Plan:** Getting the Municipal House in Order
- **Corporate Adaptation/Resilience Plan** – Risks and vulnerabilities to municipal services, infrastructure, etc.
- **Community Mitigation Plan:** GHG Inventory, target, actions to address emissions, community and stakeholder engagement, what municipalities need from other levels of government
- **Community Resilience Plan:** Risks and vulnerabilities to community and actions to address/mitigate risk, what municipalities need from other levels of government
- **Mitigation:** Avoiding the unmanageable
- **Adaptation:** Managing the unavoidable





- Incorporating a Climate Implications Section in all Council Reports
- How will this decision impact climate or be impacted by climate?
- Staff issues completing the section: It's an issue, but this is an adventure! Builds relationships and climate literacy
- *Do not let perfection be the enemy of the good*
- [Red, Yellow, Green Climate Lens](#)
- Climate Implications Repository
- Crowdsourcing Climate Implications
- ACTION: Climate Implications Section as part of all Council Reports



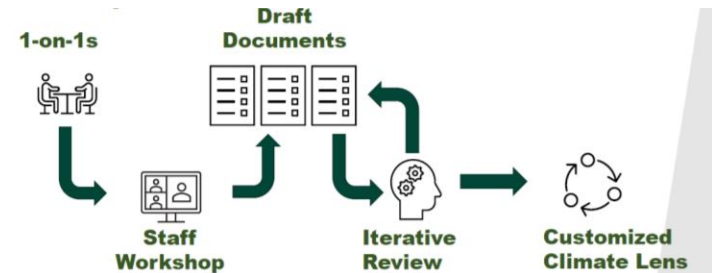


- Incorporating Climate Change into Municipal Decision Making
- [Climate and Growth Management and Official Plans](#)
- Climate Change integration into Municipal Plans (ex. stormwater, transportation, etc.)
- What is the connection between this municipal decision and climate?
- Can be qualitative and quantitative → Start where you can start
- [London Climate Lens Approach and Resources](#)
- [Brantford Climate Lens Approach and Resources](#)



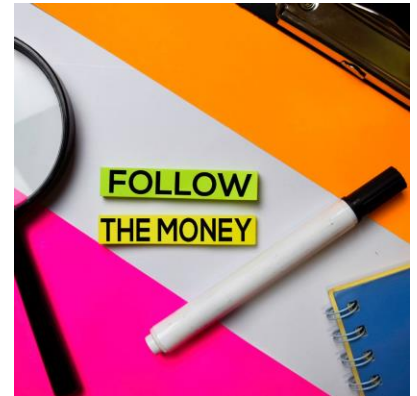


- Council direction makes a significant difference regarding: staff conversations, departments and climate team discussions
- Initial draft approach/findings worked through with the larger team
- Put through the test
- Improved upon
- Put into use
- Share with others
- They build on it and then share it again
- We play leapfrog with Climate Lens resources and approaches



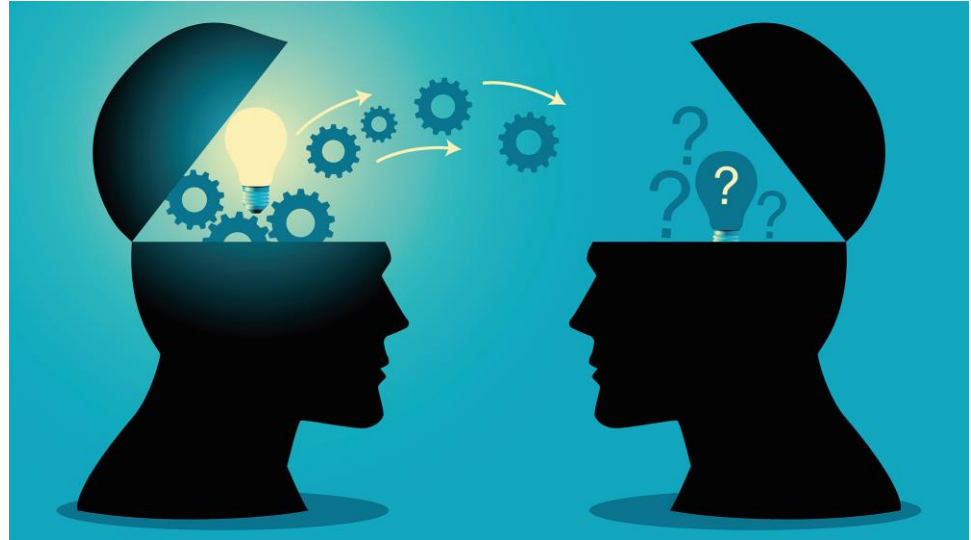


- Climate implications exist beyond Climate Action Plans
- Most governments are continuing to make investments that make it harder to reduce emission reductions
- Makes the climate lens quantitative
- Does this decision support our climate targets or undermine them?
- Help address climate action death on the budget floor issue
- No need to be perfectionists on this (good enough is good enough)
- Possible starting action: Incorporating climate lens in all RFPs or consulting services





- [Oslo and Edmonton Experience](#)
- [Durham Region and Town of Whitby](#)
- [Carbon Budgeting Briefing Note](#)
- Experiences to share –let us know!



Climate Related Financial Risk Disclosure (TCFD)



- Pressure for climate disclosure is coming from multiple sources
- Regulators, Suppliers, Investors/ Lenders/ Employees/ Customers
- **Governance:** climate-related risks and opportunities
- **Strategy:** potential impacts and implications for services/infrastructure
- **Risk Management:** So what do you do about it?
- Metrics and Targets: Identification and disclosure of material
- [Climate Disclosures and Municipalities: What to Know](#)



Climate Implications in Council Reports – What are the Barriers?



- Municipalities have made commitments to advance Climate Implications sections within council reports, but barriers have been raised to advancing this effort
- Main barrier is supporting municipal staff across all departments to better understand and communicate the climate implications and opportunities associated with their decisions going in front of Council
- Climate staff can support other staff in the development of climate implications, but doing so takes time away from climate implementation



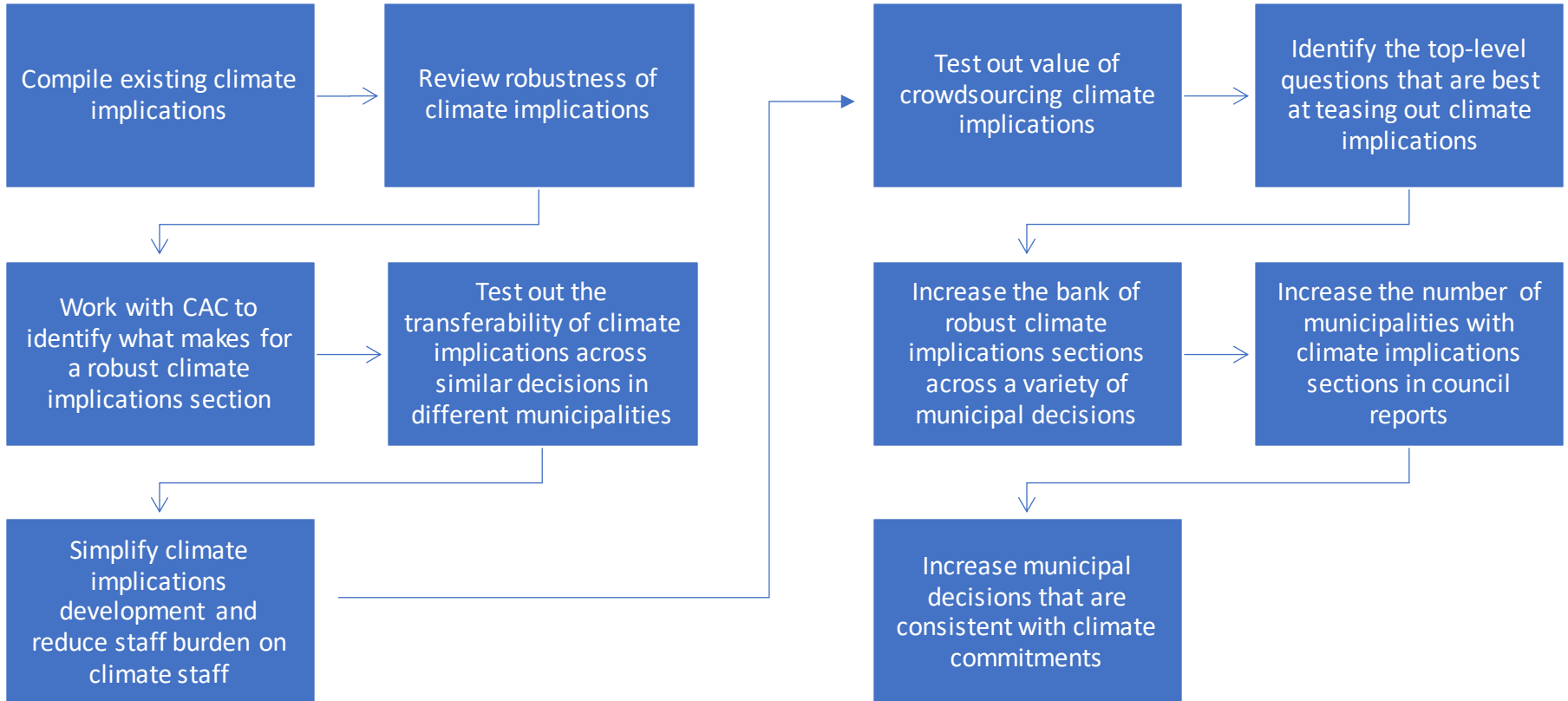
Top Level Questions We Would Like to Understand



1. Does creating a climate implications repository better enable climate staff and departmental staff to develop robust climate implications associated with their decisions?
2. Are climate implications transferrable across municipalities?
3. Does the climate repository increase the likelihood of municipalities adding climate implications to their council reports?
4. Is there value in working together to build robust climate implication sections across diverse decisions?
5. Can the climate repository enable departmental staff to create a robust climate implications section without relying on climate change staff? If so what would the climate implications repository need to be to achieve that?



Climate Implications Roadmap



Climate Implications Repository - Purpose

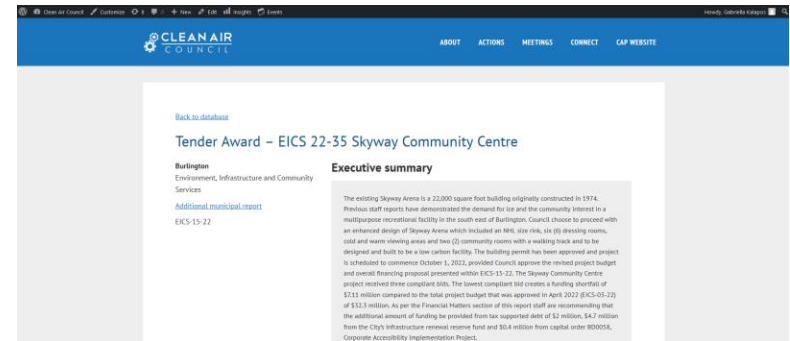


- Identify climate implications developed thus far
- Identify what questions are best able to identify climate implications and opportunities
- Identify what makes for a robust climate implication
- Simplify climate implication development and reduce staff burden on climate staff
- Inspire municipalities to collaborate with peers and deepen understanding of what makes for robust climate implications





- Currently holds **100+** climate implications from council reports
- Currently displaying reports from municipalities that have a climate implications section
- Crowdsourcing from CAC municipalities



Top Five Goals the Repository Can Support



- Will allow municipal staff to know which municipalities have a climate implications section in council reports
- Provides a place to see the wording of the climate implications that have been developed thus far
- Collective Input – allows staff to work together to improve the comprehensiveness of climate implications.
- Allows for climate implications in council reports to be streamlined and increase in robustness over time.
- Builds collective knowledge and understanding of how council decisions may affect climate and/or are affected by climate



Our Approach



- Scan CAC municipalities to see who has climate implications sections
- Looked into how C40 leading municipalities are advancing climate considerations
- Began pulling from Burlington and Halton Hills council reports
- Explore what questions are best at teasing out the most robust climate implications





What makes a climate implications section robust?

1. Speaks specifically to the decision and how it will either affect climate or be affected by climate
2. Identifies both mitigation and adaptation/resilience climate implications
3. Identifies interventions/opportunities that can help address climate implications.
4. Identifies co-benefits of climate interventions/opportunities
5. Lifecycle GHG quantification analysis (ideally)
6. What other criteria would be necessary/good?





Top Two Generalized Reports

1. OP Amendment – New Housing Development

- Development of a townhouse development
- Originally proposed 25 townhouse units; now proposes 24
- Report provides an overview of the application, an outline of applicable policies and regulations, a summary of technical and public comments that have been received, and staff's opinion with respect to application





Generalized Report: Housing Development – Townhouse Development

Climate Implications

- Increases energy use & GHG emissions
- Reduces permeable surfaces, thereby increasing flood risk

Climate Opportunities/Interventions

- Contributes to the intensification of the urban area, rather than urban sprawl, using existing infrastructure
- Introduces additional residents to parks, neighbourhood conveniences and transit services; the urban environment supports reduced vehicle trip lengths, transit usage, and reduced GHG emissions.
- Increases the site's impervious surface but will improve conditions for surrounding properties by directing drainage towards the main street and improving resilience related to stormwater and drainage management.



Generalized Report: OP Amendment – Townhouse Development

Climate Opportunities/Interventions (cont'd)

- Will include an EV charging station and all units EV conversion ready
- All residents will have the option of generating a portion of their energy needs through a solar rooftop energy supply
- Sustainable design measures will be reviewed and considered at the site plan stage

Questions to Consider

- What part of the climate implications are missing from this story?
- What top-level questions do you think aren't considered yet
- Let's identify the gaps in these implications; what's missing?



Generalized Report: Townhouse Development

Crowdsourced Questions to Consider:

- Was this the best use of land to meet housing and climate needs?
- Has consideration been given to the embodied carbon of building materials?
- What is the impact on local wildlife and ecosystems?
- Will the new development be hooked up to the local gas line or be equipped with heat pumps? Will it use fossil fuels or electricity?
- In detail, how does this development increase energy use and what are the GHG implications, either quantitative or comparative to green development standard and council policy?
- Is council policy being met? (i.e., green development standards)
- Has the climate been considered since the project plan began?
- Is this development 'future ready'? (Is it being designed with easy modification for things like district energy, EVs, etc.)



2. Municipal Facility – Firehall Asset Renewal

- Heat pumps and fossil fuel furnace units in three fire stations at end of life
- The municipality cannot purchase new equipment that locks in consumption of significant fossil fuels past 2030
- Need to pursue low-carbon and alternative fuel options whenever possible as capital investments are made into facilities
- The electrification of the Firehall will directly result in GHG emission reduction by fuel switching from fossil fuel to electricity. This will directly contribute to reducing overall GHG emissions and help it meet its 2030 net zero target.
- The optimization of heat pump and geothermal systems will improve operation of the HVAC system, improve efficiency, reduce operational costs, and reduce overall emissions at both firehalls. This will contribute to meeting the Net Zero Target



Generalized Report: Municipal Facility – Firehall Asset Renewal

Climate Opportunities/Interventions

- The fire stations utilize ground-based geothermal systems to provide heating and cooling to the facility. The heart of the systems are two heat pump units installed working in tandem in each facility.
- Recommendation is to replace heat pump units and natural gas units to provide heating for fire station heating systems.
- Council declared a Climate Emergency and committed to achieving net-zero carbon by 2030.
- Meeting this target for the Town's operations requires swift action to reduce the consumption of fossil fuels, including natural gas at Town facilities.



Generalized Report: Firehall Asset Renewal

Crowdsourced Questions to Consider:

- Has an energy audit already been completed?
- What is the emissions factor being used to determine the GHG emissions?
- What is the fuel source for back-up power supply?
- Are there other energy efficiency measures? (I.e., leak sealing, thermal improvements)
- Are there any site-level stormwater management measures?
- Will there be EV charging readiness for support vehicles?
- Has a life-cycle cost analysis been undertaken?
- Have biodiversity opportunities on the site been identified (ex. pollinator garden etc.)?



- Will this decision result in increased energy use? If so, will that energy use result in GHG emissions? How much?
- Have energy use and GHG reduction opportunities been considered and incorporated into energy planning for development? If so, how? If not, why not?
- Will this development use existing infrastructure or require additional infrastructure? If additional infrastructure is required has an analysis taken place to understand if servicing and rehabilitation of that infrastructure will be covered by property tax base for that land use archetype (financial sustainability of development based on development, servicing and rehabilitation costs).
- Will this development support active transportation, EV readiness, and reduced vehicle usage? If so, how? If not, why not?



- Does this development incorporate green development standard metrics? (Active transportation, green space, EV readiness, etc.)
- What type of resident parking is part of the design? (Underground, above-ground, EV readiness?)
- Has embodied carbon been factored into analysis/decision making?
- Has analysis of alternate use of land been considered? Is this really the best use of land and if so what other uses have considered?
- Is more information required to assess the impacts? If so, what research is needed?



- What is the flood risk within the development?
- Will it result in loss of permeable surfaces? Have the opportunities to maintain permeable surfaces within the community been identified?
- How much precipitation will be dealt with on-site? What interventions have been incorporated into the development plans to decrease stormwater demands?
- Does this development liquidate natural capital assets? Have any planning decisions been made to protect natural capital assets?
- Have green development standards that advance soil health and tree canopy been incorporated into development? If so, how?
- What other high-level questions do you think would be best able to tease out climate implications related to resilience/adaptation?
- Is more information required to assess the impacts? If so, what research is needed?



- [Climate Implications Repository Demonstration](#)
- [Climate Implications - Submitting Reports](#)





- At present, there is a lack of robust and diverse climate implications associated with different decisions
- There is the need to develop a wider diversity of implications across municipal decisions
- What value may result from crowdsourcing climate implications?





- Do you think a repository of climate implications brought together has value? Is it useful? What may make it more useful?
- What decision buckets would be of most use for this collective effort? Where do we start? What would you ideally like to see this climate repository become? What would you like it to achieve?





Crowdsourcing Effort

- 80% of participants in the survey said they would participate in and find value in crowdsourcing climate implications/interventions
- 44% of participants surveyed said they would submit climate implications, while 55% said they were saying yes but it was likely to drop off their radar
- 90% of participants surveyed preferred a quarterly crowdsourcing effort
- 100% of participants surveyed found the webinar very useful



How the Climate Implications Repository can be improved

- Possibly a tool or a checklist to ensure they are conducting a robust assessment, including equity, diversity and inclusion considerations
 - Tool, checklist, dropdown list of questions that can be applied to any council decision

How to increase Climate Implications Repository Submissions

- Recognition, more staff resources, feedback on the submitted climate implications – how robust is it – and feature or give recognition to municipalities who participate and who ensure their CI's are robust