

Thunder Bay's Community Energy and Emissions Plan: Survey 2 Summary

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Introduction

Between March and May 2020, the City of Thunder Bay conducted an online survey to gather information about the public's priorities for climate actions. The survey, which was part of Phase 2 of public engagement efforts for the design of Thunder Bay's Community Energy and Emissions Plan (CEEP), gave residents an opportunity to share their preferences for climate actions related to key areas in which the community must reduce emissions to meet its climate targets, including buildings, transportation, and energy. The results will inform the selection of low carbon actions, as well as the criteria needed to develop an implementation plan of the CEEP. The actions selected will lay out a roadmap for Thunder Bay to reduce energy consumption and greenhouse gas emissions towards 2050. The City is aiming to reduce emissions to net zero by 2050.

Key Findings

The top four priorities that respondents said they would like the City to consider with respect to a range of climate actions were:

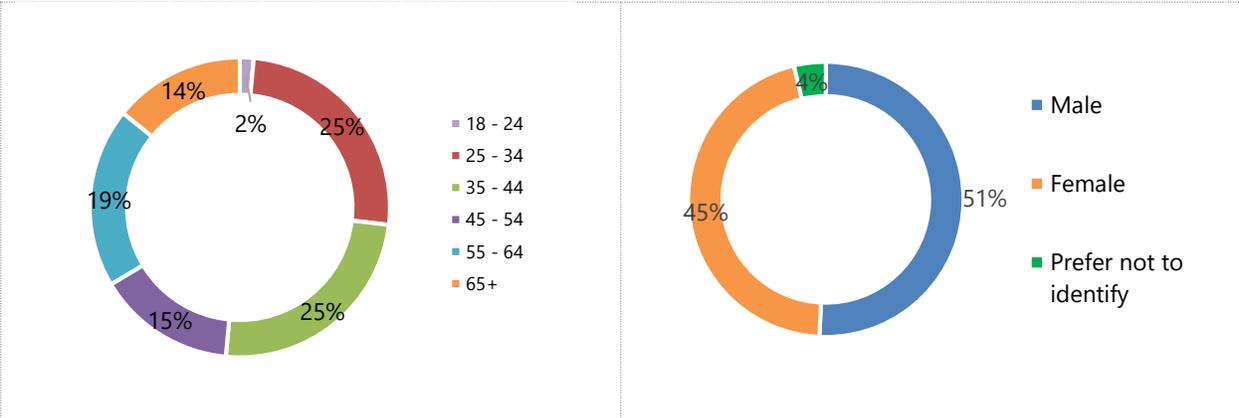
- 1. Reducing the most GHG emissions;
- 2. Lifestyle and health impacts;
- 3. Creating jobs and local economic activity; and
- 4. Fair and unbiased actions.

Reducing the most GHG emissions was the most popular consideration, falling among the top three selected priorities for six of the seven action categories, including community-wide actions, retrofitting buildings, new buildings, active and public transportation, personal and commercial vehicles, renewable energy, and fuel switching away from fossil fuels. Lifestyle and health impacts were the second most popular consideration. Creating local jobs and economic activity, as well as fair and unbiased actions, were also widely prioritized by respondents.

Notably, none of the top priorities were selected by a significant majority of respondents for any action categories. Depending on the category, the top priorities were selected by about one-third to half of respondents. This may reflect a need for broader public engagement around the benefits and nature of climate action. Even so, many more respondents expressed support for the top four priorities—reducing GHG emissions, lifestyle and health, economic impacts, and fairness— than expressed support for prioritizing cost, which indicates significant support for investments in reducing GHG emissions and improving quality of life.

Survey Participation

134 people from a range of age groups responded to the Phase 2 Survey. Half of the participants identified as between the ages of 25 and 44, while most of the rest identified as 45 or older. Just 2 participants were under 24.



Figures 1 & 2. Age and gender of survey respondents

Respondents were roughly split along gender lines, with 50% (68) identifying as male, 46% (61) identifying as female, and 4% (5) choosing not to identify their gender.

How should climate actions be prioritized?

In order to understand how the public might prioritize climate actions, the survey asked respondents what considerations, ranging from reducing greenhouse gases to cost, should be prioritized in relation to the following categories for climate action:

1. Community-wide actions;
2. Retrofitting buildings;
3. New buildings;
4. Active and public transportation;
5. Personal and commercial vehicles;
6. Renewable energy;
7. Waste and wastewater; and
8. Fuel switching away from fossil fuels.

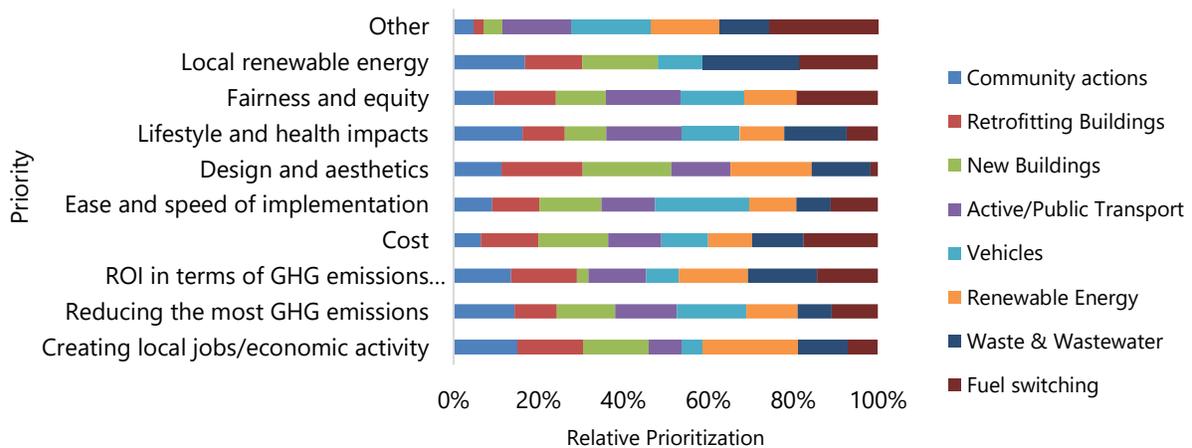


Figure 3. Relative prioritization of community-wide actions

Reducing greenhouse gas emissions, the lifestyle and health impacts of climate actions (e.g. reduced air pollution, access to green space), creating jobs and local economic activity, and fair and unbiased actions were a high priority for respondents across all types of climate actions.

Reducing the most GHG emissions was the most popular consideration, falling among the top three selected priorities for all actions other than those related to waste and wastewater. About half of respondents said it should be a priority for actions related to personal and commercial vehicles (54%, 72 respondents), active and public transportation (48%, 64 respondents), community-wide actions (47%, 63 respondents), and new buildings (45%, 60 respondents).

Lifestyle and health impacts were the second most popular consideration. About half of respondents said lifestyle and health consideration should be a priority for actions related to active and public transportation (51%, 68 respondents) and community-wide actions (46%, 62 respondents). In addition, four out of 10 respondents indicated lifestyle and health impacts should be a priority for actions related to waste and wastewater (42%, 56 respondents) and personal and commercial vehicles (39%, 52 respondents). Actions that improve access to active transport, add more nature and open space, and reduce reliance on personal vehicle trips can be the key outcomes of these priorities.

Creating local jobs and economic activity, as well as fair and unbiased actions, were also widely prioritized by respondents. About half of respondents said creating local jobs and economic activity should be a priority for actions related to renewable energy (48%, 64 respondents), while one-third identified economic impacts as a priority for retrofitting buildings (33%, 44 respondents), new buildings (33%, 44 respondents), and community actions (32%, 43 respondents). Fairness among the top 3 priorities for fuel switching (43%, 58 respondents), active and public transportation (40%, 53 respondents), personal and commercial vehicles (34%, 46 respondents), and retrofitting buildings (33%, 44 respondents).

Some survey respondents flagged this in their comments, saying that it would be hard for Thunder Bay to move forward without more public education on climate actions and the role of the public.

Even so, many more respondents expressed support for the top four priorities—reducing GHG emissions, lifestyle and health, economic impacts, and fairness— than expressed support for prioritizing cost, which indicates significant support for investments in reducing GHG emissions and improving quality of life.

Community-Wide Actions

The top two priorities respondents selected for community-wide climate actions were reducing the most GHG emissions (47%, 63 respondents) and lifestyle and health (46%, 62 respondents). The third most selected priority was the creation of local jobs and economic activity (32%, 43 respondents), followed closely by the amount of local renewable energy used (30%, 40 respondents). Notably, just 13% of respondents (18) said cost should be a priority, indicating that, on the whole, respondents were more concerned about the positive impacts of climate actions, rather than the cost.

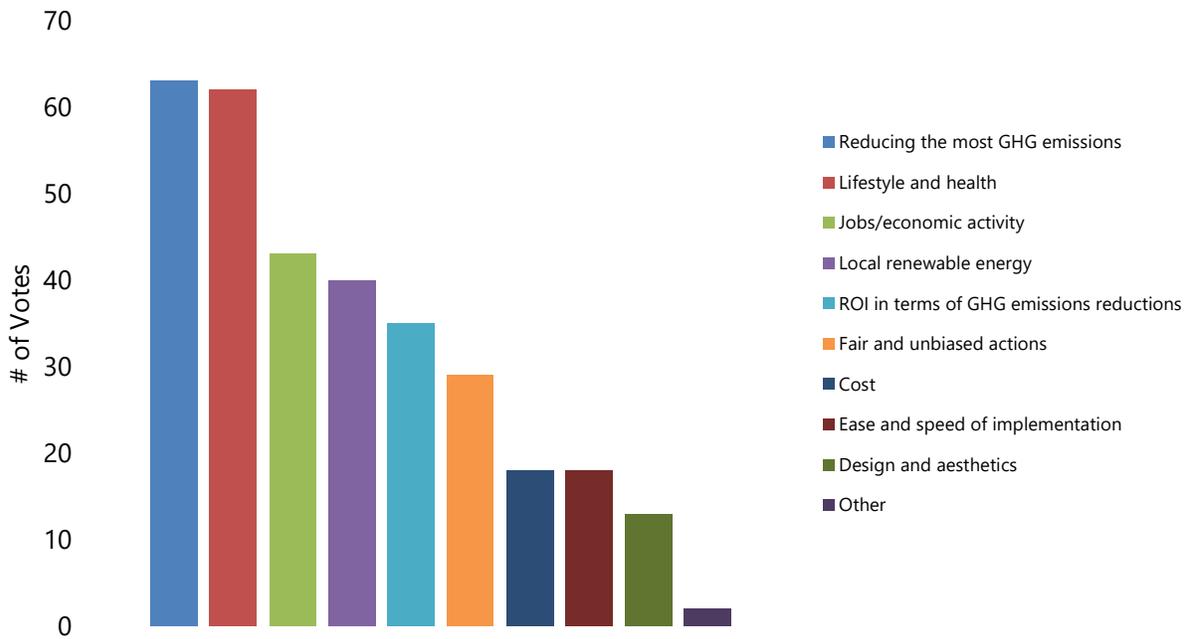


Figure 4. Community priorities for a low carbon Thunder Bay

Buildings

The survey asked respondents about two major types of actions related to buildings: retrofits of existing buildings and new buildings codes and standards. For both categories, reducing the most GHG emissions, as well as creating local jobs and economic activity, were the top two selected priorities. Reducing the most GHG emissions was a higher priority for new buildings, with about half of respondents (45%, 60 respondents) saying it should be a priority compared to about a third of respondents for retrofits (33%, 44 respondents). In contrast, the same number of respondents (33%, 44 respondents) selected economic impacts as a priority for both retrofits and new buildings.

Respondents also indicated that cost considerations should be a higher priority for new buildings than retrofits, with about a third (34%, 46 respondents) saying it should be a priority compared to about a quarter for retrofits (28%, 38 respondents). In contrast, respondents were far more concerned about the return on investment for retrofits in terms of GHG emissions reductions per dollar spent: 30% (40 respondents) said it should be a priority for retrofits compared to just 5% (7 respondents) for new buildings. Respondents also prioritized fair and unbiased actions, with 33% (44 respondents) saying it should be a consideration for retrofits and 27% (36 respondents) saying it should be a consideration for new buildings.

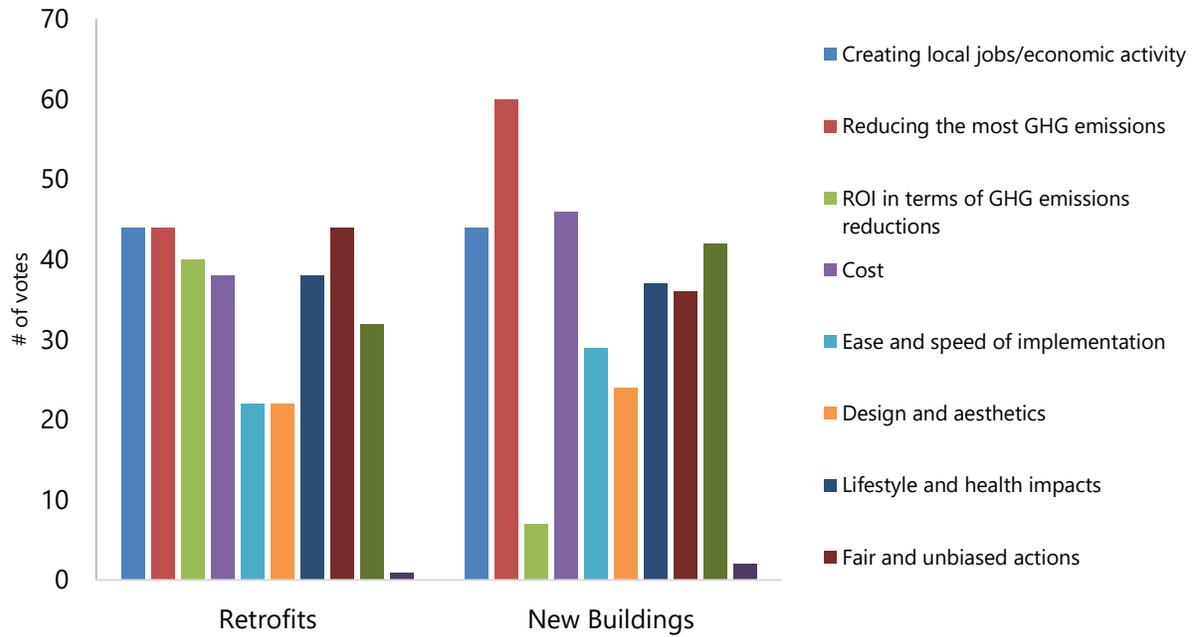


Figure 5. Priorities for low carbon buildings

Transport

The survey asked respondents about their priorities with respect to two major areas for climate action related to transport: active and public transportation, and personal and commercial vehicles. For both categories, respondents placed a high priority on reducing the most GHG emissions, lifestyle and health, and fair and unbiased actions.

For personal and commercial vehicles, reducing the most GHG emissions was the top priority (54%, 72 respondents), followed by lifestyle and health impacts (39%, 52 respondents), and fair and unbiased actions (34%, 46 respondents). In contrast, the most popular priority for active and public transportation was lifestyle and health impacts (51%, 68 respondents), followed closely by reducing GHG emissions (48%, 64 respondents), and fair and unbiased actions (40%, 53 respondents).

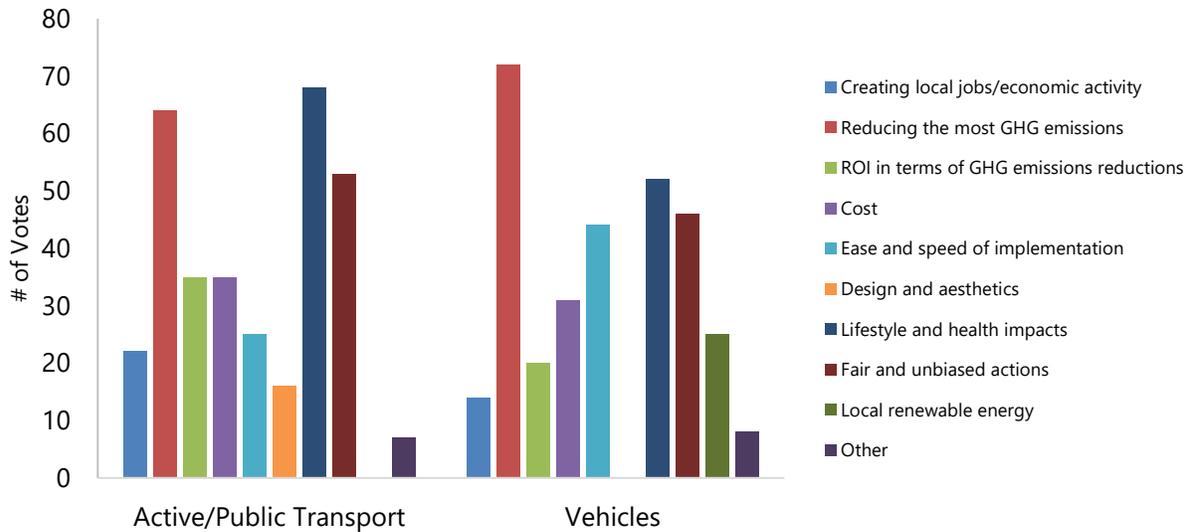


Figure 6. Priorities for Low Carbon Transportation

These priorities were reflected in responses to an open-ended question that asked respondents to describe any other priorities or actions they wanted the City to consider. Respondents expressed support for electric vehicles, as well as policies that would reduce urban sprawl and disincentivize people from using fossil fuel powered vehicles. Cycling and pedestrian infrastructure were the most frequently mentioned topic in the comments, with many respondents highlighting the benefits of such infrastructure for quality of life.

“I would like to see active transportation prioritized as a way of reducing GHG emissions in Thunder Bay since this also affects health and quality of life in the city,” one explained. Another respondent who identified as a frontline worker explained: “This lockdown period has made clear to me and to many of my colleagues that once in the habit of walking/biking to work, it is easy to maintain. In a city with poor health outcomes such as Thunder Bay, this could make a big difference.”

Energy

The survey asked respondents about two key areas for actions related to energy: renewable energy and fuel switching away from fossil fuels. While reducing the most GHG emissions was among the top three priorities for both categories of actions, other priorities differed significantly. These differences hint at key public concerns around each type of action.

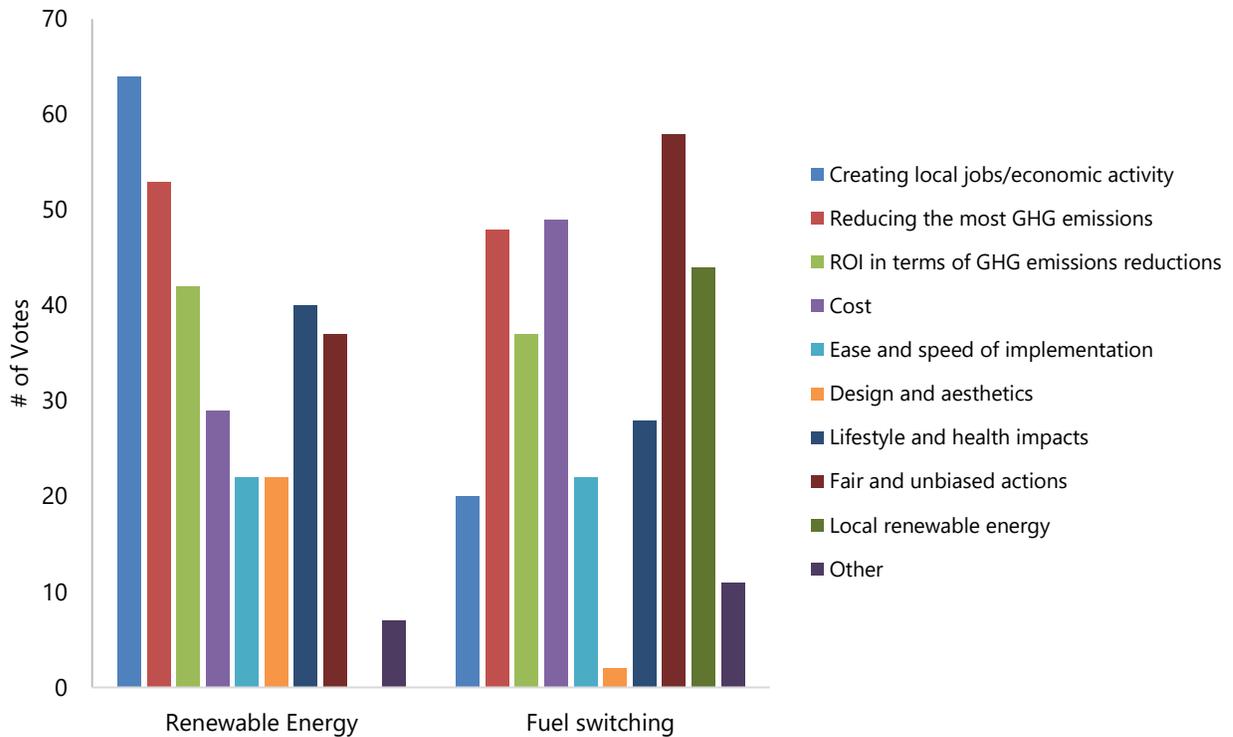


Figure 7. Priorities for Energy in Thunder Bay

A significant share of respondents saw renewable energy as an economic opportunity. Almost half (48%, 64 respondents) said creating local jobs and economic activity should be prioritized for renewable energy actions. The second most popular priority was reducing the most GHG emissions (40%, 53 respondents), followed by the return on investment in terms of GHG emissions reductions per dollar spent (31%, 42 respondents).

In contrast, the respondents' priorities for fuel switching away from fossil fuels related to the expense of doing so. Their top priority was for fair and unbiased actions (43%, 58 respondents), followed by cost (37%, 49 respondents). Reducing the most GHG emissions was the third most popular priority, selected by just over a third of respondents (36%, 48 respondents). The concern around cost and fairness related to fuel switching likely arises from two realities in Thunder Bay. First, as some respondents noted in their comments, natural gas—currently the dominant fuel source for heating buildings—is cheaper than hydro electricity, the current dominant source of renewable energy.

At the same time, the respondents also recognized the economic opportunity of fuel switching to renewable energy with a third (33%, 44 respondents) selecting the use of local renewable energy as a priority for fuel switching. The use of local renewable energy was also a relatively high priority across a number of other action categories, including waste and wastewater, new buildings, and community-wide actions (see below). Respondents also expressed support for renewable energy

investments in their response to the open-ended question and suggested the City provide financial incentives for homeowners to adopt small-scale renewable technologies.

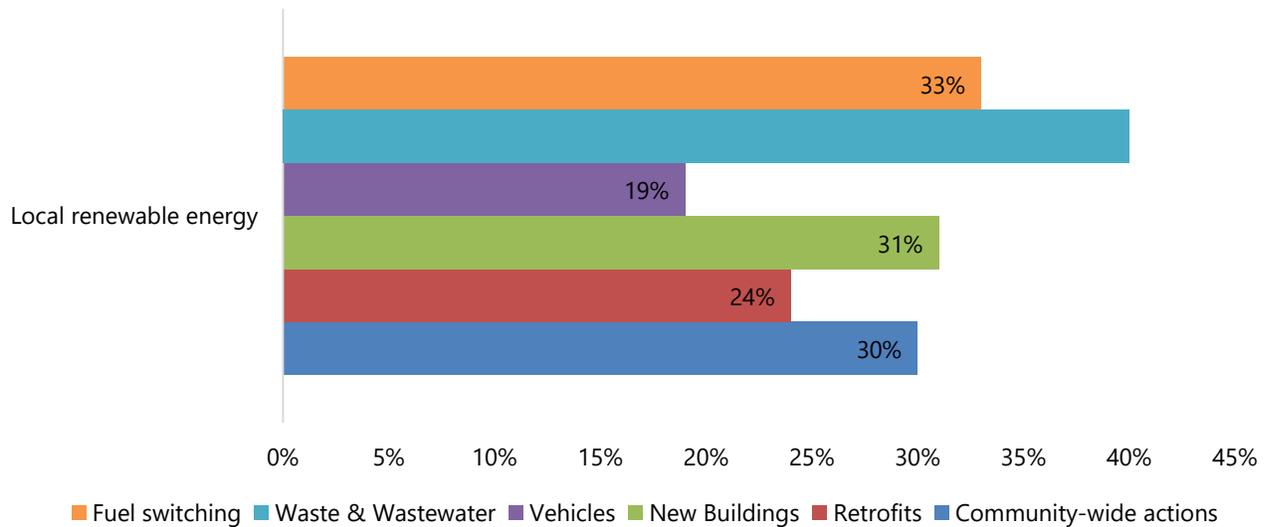


Figure 8. Prioritization of local renewable energy actions

Waste and Wastewater

Actions related to waste and wastewater were the only area for which reducing the most GHG emissions was not among the top three priorities for respondents. Instead, respondents identified lifestyle and health impacts (42%, 56 respondents), followed closely by the use of local renewable energy (40%, 54 respondents), as their top priorities. This signals a desire to have an efficient waste stream that does not pollute the environment of Thunder Bay. The respondents' third most common concern was the return on investment in terms of GHG emissions reductions per dollar invested (31%, 42 respondents). About one fourth of respondents indicated that creating local jobs and economic activity (34 respondents, 25%), reducing the most GHG emissions (35 respondents, 26%), and cost should be a priority (34 respondents, 25%). One way to address these priorities could be through a pathway incorporating waste-to-energy technologies.

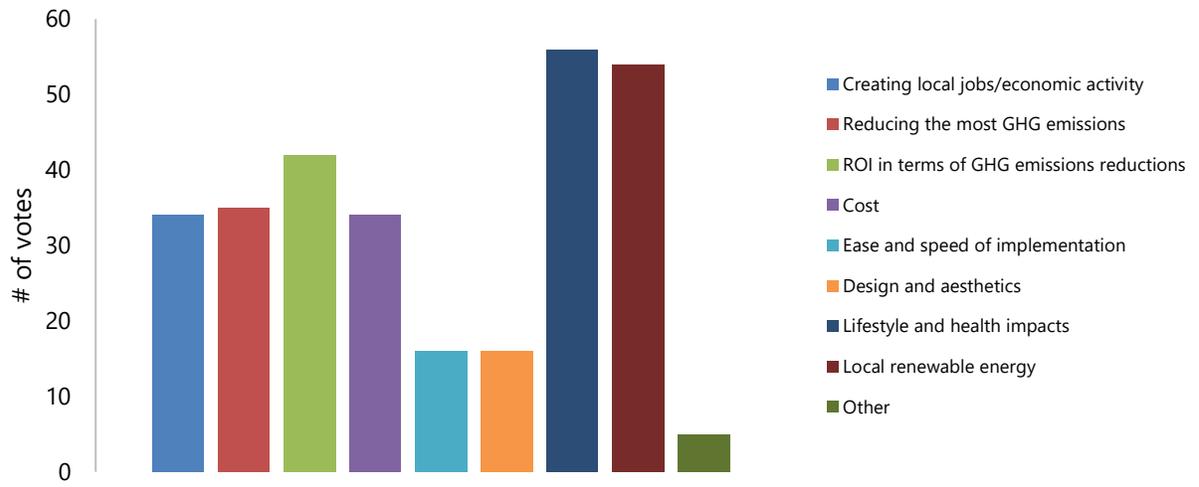


Figure 9. Prioritization of wastewater actions