MÉMOIRE

Plan Directeur de Gestion des Matières Résiduelles de l'agglomération de Montréal 2020-2025

PRESENTED FOR PUBLIC CONSULTATION BY

GROLOUP

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About GroLoup

GroLoup is a new initiative created by a group of people passionate about transforming our approach to urban organic waste management. We believe innovative technologies and approaches can be employed to rapidly decrease the negative impact of waste on society and the environment and increase the amount of healthy food grown in and around cities, starting with Montreal.

Context

Global environmental challenges

Montreal's approach to waste – a global environmental challenge – must be situated in our current context. We are not living in a vacuum and can no longer pretend (or plan) as if we are. The ongoing emission of greenhouse gasses into the atmosphere is a threat to life on earth, and the consequences of such are becoming increasingly devastating. Overconsumption, most evident in the needless, nearly endless stream of waste finding its way on to street corners, into waterways and eventually, into our bodies through the contamination of food, air, water, and land, is an urgent problem that we must address without further delay.

Climate Change

Every kilogram of organic matter sent into landfill generates methane and deprives soils of the nutrients they desperately need to grow healthy food. We cannot wait any longer to reduce waste and divert it from landfill, into composting initiatives that will produce better outcomes for society, the environment and the economy.

Food Security

A recently published United Nations report has warned of increasing threats to food security, as natural disasters exacerbated by climate change destroy crops and make agriculture more difficult to practice. Simultaneously, overfishing and pollution have decimated the oceans, and destructive practices such as the damming of rivers for hydro power have diminished fish stocks and damaged river ecosystems. Montreal has, at any given time, only three days' worth of food available to feed the city's inhabitants. It is imperative that we increase the resilience of our food systems, and massive scale up urban and proximal rural agriculture using organic methods – methods which depend on the availability of nutrient rich compost. Ninety-five percent of food grows in soil, and soils are under threat. It is the responsibility of all levels of government to proactively address these issues, before we are in a crisis situation and people suffer.

Soil Degradation

Globally, soils are under threat. Decades of chemical and machine-based agriculture have destroyed the biological resilience of soil, and we are witnessing widespread desertification and the decline of nutrient quality in food. The application of agriculture-grade compost to soil is perhaps the best strategy available to reverse this trend. Montreal, like most cities, is surrounded by farmland which would benefit from such.

Technological Innovation

We have become a technologically advanced society, with an endless array of tools available for the production, transformation, distribution, and management of goods, information and services. Yet our waste management infrastructure, communications and strategies are lagging far behind the latest innovations.

Smart Cities

Montreal was recently awarded a $50M grant from the federal government to become a ‘smart city’. We cannot expect to become such without taking a smarter approach to managing waste. Montreal must dedicate time, energy, and investment to developing a smarter approach to managing waste.

Concerns

Missing Targets

Montreal has consistently failed to reach targets in terms of both waste reduction and diversion from landfill. This is unacceptable, given the consequences of such failures and the urgency of changing course away from accelerated destruction towards resilience in the face of climate change and other global environmental threats. Greater discipline must be applied to reach our targets, and greater accountability is required from decision makers responsible for these failures.

Delays & Costliness

The current approach to treating organic waste relies on developing large scale, high technology composting and anaerobic digestion facilities which have faced serious opposition from the communities in proximity and the general public, concerned about the extremely high cost budgeted for these projects. These facilities are expected to take several more years to bring online, during which time organic waste will continue to go to landfills, or be composted in sub-optimal conditions, thus reducing the value of the finished product, which may then simply go to cover landfills or act as infill for construction and road projects – a serious waste of its carbon sequestration and nutrient replenishment potential. Other approaches are available, proven, viable, and lower-cost and should be considered and implemented post-haste.

Absence of Mention of Composting Facilities

In its 2020-2025 PDGMR (Strategy document, p. 8), the city asserts that there is only one municipal composting facility on the Island of Montreal, which is assumed to be the open-air compost site in St. Michel. However, a significantly sized outdoor, open air composting operation has been ongoing at 6000 Notre Dame O. since the 1990s, receiving and treating food waste since 2007. This facility has produced superior quality agricultural grade compost which has been used in community gardens and municipal planters and distributed to citizens in the spring. We are concerned by its absence from this document, as the success and

extremely low cost of this facility should be highlighted and replicated by other boroughs. In addition, there is no reference to a smaller compost site located in Ville Marie (Centre Sud), operated by the borough.

Lack of Transparency

In general, it is difficult to find accurate, up to date information about the status of waste management in and around Montreal, including its treatment. Numerous news stories in recent years have informed the public about mismanagement and criminal activity, including a failure to disclose contracts, the illegal dumping of waste outside the city, offshoring waste to the Global South, and the general failure of both recycling and composting contracts to achieve their stated aims, namely the actual recycling and composting of waste. We must take greater responsibility for the lifecycle of the materials we consume and the wastes we produce, and this starts with transparency about what is actually happening.

Elements We Support

Zero waste orientation

We are happy to see a focus on zero waste in the new PDGMR, however we think this ambitious orientation must be first met with achieving the basics, such as modern on-street waste receptables with sections for recycling, composting and garbage.

Focus on Innovation

Innovation quite often has more to do with the adoption of ideas (be they technologies, processes, or otherwise) than their invention. Innovation in the context of waste management must necessarily entail the diffusion and adoption of best practices, such as the recent growth of the zero-waste movement, including educational initiatives, fairs like the Zero Waste Festival, organizations dedicated to the cause and stores which support consumers to go zero waste.

Recommendations

Investigate and Optimize the Urban Metabolism Towards Developing a Robust Circular Economy

The concept of a circular economy, where the waste outputs or by-products of one process become the inputs for another, has seen increasing interest in recent years. The establishment of a truly circular economy requires a transformation in business practices which requires the development of expertise, targeted support and the provision of incentives such that organizations make changes in how they manufacture, distribute and manage products and services. Towards this end, investigating and optimizing the urban metabolism – that is, the flow of goods, people, services and wastes into, around, and out of the city – will help to identify opportunities for the development of a more sustainable economy.

Emphasize the Reduction of Waste

The easiest waste to manage is the one that never comes into existence. An enormous amount of our waste falls into this category and is easily preventable through changes in behaviour. The city must focus efforts in this area and develop collection and treatment capacity in line with the reduction of output.

Immediately, the city should initiate or support a massive campaign to reduce the use of disposable beverage cups, as these constitute a significant unnecessary stream of waste which can be easily eliminated through the use of on-site or to-go reusable dishware. A similar campaign for take-out containers should be launched shortly thereafter. Projects to support these changes have been developed and would benefit from increased support from the government.

Support Innovation in Organic Waste Management

The dominant approach of large scale, high-tech facilities to treat organic waste is rapidly proving to be costly, prone to failure, and produce low-quality compost. Numerous such

facilities across Canada have been forced to close or make significant renovations to continue operating without severely disturbing surrounding communities. Before investing additional resources in this strategy, the city should go investigate alternative approaches that may do the job better, at a lower cost and with less opposition.

Develop Smaller Compost Sites & Increase Support for On-Site Composting

The city should increase support for domestic and community-based composting and explore the potential to make use of un- or under-used spaces, such as basements, back yards, rooftops and empty lots.

Smaller scale compost sites more directly embedded into communities may produce better outcomes, including:

- Lower direct and externalized costs
- Greater job creation
- Reduced distance to treatment sites, resulting in lower greenhouse gas emissions associated with waste transport
- Higher quality compost, as contamination may be easier to control and reduce
- Greater participation from citizens, as they see the benefits of sustainable organic waste management
- The growth of urban agriculture, a critical tool for increasing food security and making cities more livable

The Institute for Local Self-Reliance provides a helpful map of community composting initiatives across the United States of America which can be looked to for inspiration: https://ilsr.org/composting/map/

The existing compost site in St. Michel should begin accepting food waste immediately. In addition, empty and abandoned lots around the city can have small scale (<10,000 tonnes) sites established with a relatively small investment in infrastructure and equipment.

Finally, small compost sites can be established on farms surrounding Montreal, as is done in numerous other jurisdictions, such as Boston.

Microbiogas

Microbiogas digesters are gaining popularity around the globe as a means of producing biogas for use in cooking and heating. The city should explore the potential for developing and implementing these technologies at the scale of buildings and neighbourhoods, recognizing the positive social and environmental outcomes they can produce, such as increasing energy security, developing the green economy, increasing energy efficiency and decreasing energy consumption as users are more conscious of where their energy comes from.

Employ Ecofiscality in Developing and Assessing Projects

Ecofiscality is an economic framework that facilitates a more holistic and sustainable approach to planning and development, as the externalized, upstream and downstream costs and benefits of a particular technology, process, or system are integrated into the project's impact assessment. This approach should be employed in designing and implementing a waste management strategy as it provides a truer picture of the project's value (or cost) to society.

Ensure Composting Projects Produce High Quality Products that are Integrated into Organic Urban and Rural Agriculture

Compost's greatest use is in the production of more food, effectively closing the loop in the food system; therefore, it is critical that organic waste treatment facilities produce an agricultural quality compost which is then used in agriculture. Projects that cannot guarantee this outcome should be deprioritized or penalized.

Prioritize Approaches that can be Quickly Implemented

We cannot afford to wait another five to ten years (or longer) to divert organic waste from the landfill and develop solutions that will make our city more livable in the face of increasing

climate disturbance, including temperature extremes, drought and flooding. We must develop and implement solutions in the short term, and the city should invest in such. To that end, the city should support composting at home and in community scale projects, as it is easily done, low cost and can produce many additional benefits for the city.

Transparency of Information and Processes

Information is critical for decision making and assessing progress towards a goal. To this end, the city should establish mechanisms and channels for the capture and communication of data about waste management initiatives, whether source reduction, collection, treatment and/or redistribution, and ensure that said data is accurate, timely and accessible.

Conclusion

We applaud the city of Montreal's efforts to go zero waste and believe there are strong elements to the 2020-2025 PDGMR, and areas which can be improved upon. We are happy to see the groundswell of interest in the challenge of waste reduction and management and look forward to tackling it in the spirit of openness, innovation and responsibility to future generations. We hope our perspective and recommendations are helpful to the Commission and are happy to provide additional detail or engage in future processes to improve the current PDGMR and future initiatives.

Contact

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