

WORDLE CONTENT

According to you, what should be Canada's research opportunities or priorities in Solid Waste Management?

Response content

- Addressing the lack of data and information about the entire field
- Conversion of solid wastes into value-added energy, fuels and chemicals products
- The general application of all alternatives for solid waste management should be available without some of the political impediments. This will require good science expressed in a clearly understandable that does not overwhelm the public with data or speak down to them so that we can convince both the politicians, and maybe more importantly the public, that the alternatives are all practical..
- Resource recovery, waste reduction, and energy from waste
- Canada should aim to become a leader in zero waste technologies. Priorities should be on recycling and reclamation of all waste streams. Organic waste management for nutrient recycling in conventional and urban agriculture is of special interest in order to assure sustainability of biomass (food, fiber, fuel) production over the long term.
- How to create economic price indicators that include the true full cost of waste disposal versus recycling so as to allow market forces to provide the appropriate price indicators
- Landfilling and LFGTE is still the most common and economic method for waste management. Several other waste to energy alternatives exist but the sector is driven by policy and public perception. Research is needed to ensure that we have an integrated waste management strategy; e.g. does it make sense from an LCA of energy consumption and total emissions to divert organics from a landfill which is mandated to collect LFG and where LFGTE is viable. One of the uncertainties or arguments against bioreactor landfills is fugitive methane emissions; research is needed to develop methods to measure these emissions. Comparative LCA studies are needed to assess the advantages and disadvantages of different technologies and different waste management strategies to allow cities and municipalities to make informed choices.
- Reducing waste, managing ICI waste, extended producer responsibility & increasing household waste diversion
- How to extract value from discarded materials and improve cost efficiency of material handling
- Conversion of waste biomass to bio-chemicals and bio-materials (e.g. volatile fatty acids platform development); forest biorefinery
- Our group is interested in making better use of waste as a resource, particularly for energy.
- Looking at ways to optimize recyclability of materials and developing a supportive market for recycled materials
- Conversion of biomass to value-added materials and fuels
- Development of extended producer responsibility and other policies that incentivize resource recovery and reutilization of materials associated with products that result in waste
- Better information on material flows, environmental standards, and clear, consistent definitions for waste
- Energy efficient water removal and enhancing anaerobic digestion of biosolids are two important areas. Developing 'green chemicals/technologies' for