

History of Utility Regulation and Preliminary Deregulation Analysis

Waste Services has been a regulated utility since 2009, following approval of a recommendation made in the March 4, 2008 Asset Management and Public Works Department Report 2008PW0082.

The benefits of the utility structure were identified as far back as the 1994 Waste Management Strategic Plan, which recommended this structure due to a number of benefits. A utility model, with its predictable customer base:

- supports long-term planning and financing for major infrastructure investments. Whereas private sector investments in advanced waste processing technology may be delayed by the inherent risks of uncertain market adoption, a Waste Utility can more easily advance investments where a business case demonstrates value in achieving the City's long-term waste diversion targets.
- can be used to align rates to desired waste sorting and waste reduction habits. Even if the private sector were to align in enforcing rate models that incentivize waste reduction and effective waste sorting, only a utility model ensures that such pricing mechanisms are revenue neutral, with any rate revenue from behaviour-targeting fees or penalties reinvested by the utility for the benefit of ratepayers or returned to the entire customer base through future rate reductions.
- enables consistent, community-wide standards for residential waste sorting that are reinforced by proactive and customer-centric education, outreach and service support. This citywide consistency will be particularly relevant given the City's commitment to introduce three-stream sorting to the multi-unit sector, which is traditionally challenged by high turnover rates. By aligning the expectations for three-stream waste sorting in all dwelling types and supporting program participation and compliance with proactive education and outreach, the City, through the utility model, is able to mitigate the confusion and complacency that is otherwise common when residents moving from one multi-unit site to another, or to a single unit home from an apartment or condo (or vice versa) are expected to learn new waste habits.

These benefits are particularly relevant as the City implements the 25-year Waste Strategy, with new facilities and programs coming online and the diversion forecast expected to trend sharply upward as part of the ongoing transformation of the waste management system.

In addition to these generalized benefits, several enabling elements of the utility model are particularly valuable to achieving the long-term diversion and waste reduction objectives of the 25-year Waste Strategy, which support Edmonton's climate commitments and are a critical element of the Big City Move to be Greener as We Grow as defined in The City Plan.

Implications of a Regulated Utility Model

As a regulated utility, all units in the multi-unit sector pay the same utility rate and receive service from the City or the City's contractors. This ensures equitable access to service for all multi-unit residences regardless of size, location or complexity of service need. There are no provisions for multi-unit sites to choose a different service provider or a different level of service.

In addition to paying for the cost of collection and disposal, multi-unit rate payers contribute to the costs of Eco Stations, community recycling depots, waste education programs, management of the City's closed former landfill, and the operations of the Edmonton Waste Management Centre. The utility model enables long-term investments in assets to support responsible waste management and aggressive waste diversion targets, along with the associated debt and amortization costs of advanced waste diversion facilities like the City's Materials Recovery Facility, Anaerobic Digestion Facility and Refuse Derived Fuel Facility. This ensures all residents of Edmonton have access to the same services, pay for the shared responsibility of the closed landfill and share in achieving the City's waste diversion objectives.

Potential to Deregulate the Multi-unit Sector

The City provides a range of waste services for the benefit of Edmontonians and in support of the objectives defined by the 25-year Waste Strategy. There is no reasonable mechanism or rationale for restricting these services for the sole use and benefit of single unit residents. As a result, and in order to avoid burdening curbside collection customers for services provided to the community as a whole, any approach to deregulating the waste utility for the multi-unit sector must include a mechanism to recover ongoing costs for waste education and outreach, operation of processing facilities, recycling depots, Eco Stations and Big Bin events, along with the associated overhead of providing these services. Communal collection customers would need to continue to pay a utility fee to recoup their share of those costs.

For illustrative purposes, Administration conducted preliminary analysis of the cost implications of partially deregulating waste services to multi-unit customers who receive communal (bin-based) collection.

Cost Category	Cost	Options to Recover
Ongoing shared services (including recycling depots, Eco Stations, Big Bin events, education and outreach programs, etc.)	\$2.99/unit/month	Charged in perpetuity.
Waste collection	\$8.01/unit/month	Potential to eliminate if an opt-out option is created and exercised. Expected to increase for remaining communal collection customers, given an increased average cost to serve and lost economies of scale, in a partially deregulated model.
Waste processing	\$13.16/unit/month	Potential to eliminate if an opt-out option is created and exercised. Potential to increase for both curbside (single unit) and remaining communal collection customers if remaining waste volumes processed by and on behalf of the City result in lost economies of scale and underperformance of built assets.
Share of debt and amortization	\$6.54/unit/month	Charged until costs wind down per the average remaining asset life (approximately nine years) or recovered as a lump sum payment estimated at \$780 per unit.

No investigation or analysis has been conducted at the cost centre level to forecast future cost impacts and allocation of deregulation. This level of detailed analysis should be completed prior to any decision regarding deregulating part of the Utility and consideration should be given to having this analysis completed by a third party to ensure an accurate and unbiased review.

Sites opting out of City waste collection and processing would be required to secure private waste collection and processing services that align to the policy objectives defined by the 25-year Waste Strategy.

Whereas the rate impact of a source separated organics program for the multi-unit sector is expected to be mitigated by the prudent fiscal management of the waste utility, this transition should be expected to increase the cost of private sector waste collection. Further, no private sector waste collection company

currently has access to processing capabilities equivalent to the Edmonton Waste Management Centre, including pre-processing that helps recover additional organic material from the garbage stream, and the City's Refuse Derived Fuel facility, which converts residual waste to fuel.

Any approach to deregulation must address the risk that these waste processing facilities are underutilized to a level that is detrimental to the public good. To ensure the sustainability of the waste utility for the ongoing benefit of single unit residential customers, the City may choose to introduce new regulatory requirements, generally referred to as flow control, that would require private sector multi-unit waste haulers to tip waste at the Edmonton Waste Management Centre. The estimated flat rate tipping fee associated with a flow control model is \$209 per tonne for all streams, which reflects the advanced nature of the processing facilities that continue to come online at the Edmonton Waste Management Centre. This tipping fee would significantly impact the cost of private sector waste services.

It is also unlikely that available private sector quotes for service reflect the requirement to collect and tip residential waste separate from ICI waste. Although the City's ultimate goal is to achieve 90 percent diversion across all sectors, it is established best practice to manage, measure and monitor performance of the residential sector separately from the ICI sector in order to ensure that programs and services are designed to reflect the challenges and opportunities that are unique to each sector. Private sector costs would likely significantly increase if residential waste was hauled and tipped in separate collection vehicles from those currently serving commercial customers.

An alternative, such as allowing mixed residential and commercial waste, would require extensive review and planning by the City so as not to compromise fair access to facilities paid for exclusively by the residential sector, or the City's overall waste diversion objectives. Accepting waste from the ICI sector together with privately collected multi-unit waste at the EWMC would result in a lack of processing capacity for the remainder of the waste from the multi-unit sector. Administration has proposed a staged approach to enforcing a source-separation bylaw for the ICI sector, to allow time for private sector investment in new processing capacity that will be required as the sector adopts new regulations.

Additional work will be required to understand the timeline and diversion impacts associated with an approach to deregulation where the acceptance of mixed waste at the EMWC would result in some portion of the multi-unit sector being unable to secure sufficient processing capacity to comply with bylaw requirements to divert separated waste from landfill. This implementation complexity is likely to challenge the education, outreach and enforcement efforts

that will be required to support successful program adoption in the multi-unit sector.

As partially illustrated by these challenges, any approach to deregulation would also require additional resources for monitoring and enforcement, the impacts of which are yet to be evaluated. Based on preliminary research into the regulatory approaches used to monitor ICI sector program compliance in other jurisdictions, monitoring and enforcement demands are known to be significant. These costs would need to be borne by the tax levy as they would be for the non-regulated sector and out of scope for the regulated utility.

Anticipated Service Impacts of Deregulation

Deregulation would result in a loss of equitable access to service, particularly for buildings that are the most difficult to serve. In a partially deregulated model, buildings that are difficult to serve would more likely remain with the regulated service, resulting in a higher average cost of service and higher utility rates. In a fully deregulated model, these buildings may be subject to prohibitive private sector costs.

Those most at risk of losing access to an affordable, equitable service include buildings with containers in harder to service areas (e.g. tight areas, low clearance or indoors), buildings with high turnover of residents (resulting in more waste and higher rates of contamination) and buildings with inconvenient service locations. Some of these buildings are the least able to afford to pay more.

A partially deregulated model would also create risks that customers opt out of the utility model when prices are competitive and then request to opt back in when private sector service fees increase. This unpredictability would significantly compromise the effective financial management of the utility, and risks a scenario wherein profits are captured by the private sector while the burden of ensuring service continuity is borne by the utility.

Although deregulation might be expected to decrease the City's overall costs for operating the utility, a partially or fully deregulated model is not expected to completely eliminate the expectation that the City will intervene to address issues with private sector waste services. As is the case today, it is likely that the City will continue to receive requests from residents who believe it is within the City's responsibility, authority and/or influence to address issues related to private sector waste collection services, whether or not that is the case.

Anticipated Strategic Impacts of Deregulation

Partially or fully deregulating the multi-unit sector only 12 years after the creation of the utility would also compromise the transformative change in Edmonton's waste management system that the utility has enabled, and which is just now starting to be fully realized.

Over that timeframe, the City has achieved substantial progress on the capital investments needed to transform Edmonton's waste services delivery methodology from one that relies primarily on landfilling waste materials to one that is now forecast to achieve steady increases in waste diversion from landfill.

Following the results of a 2018 Waste Services Audit, which made several recommendations to improve the management of the City's Waste Services, the branch has significantly reshaped its operations, improving strategic alignment, performance management and reporting, business case development and asset management practices and processes. Although facility issues, including the early closure of the Edmonton Composting Facility, have compromised the waste diversion performance of the Waste Utility over the last three years, the City has addressed the deficiencies that caused these impacts. While the costs to address historical issues cannot simply be eliminated, and would not fairly be borne by the single unit sector alone, both the rate and performance forecasts of the branch now reflect the significant efforts to rebuild the waste system for the benefit of Edmontonians and in support of the objectives defined by the 25-year Waste Strategy.

In addition to compromising the impact of this transformation, deregulating is likely to impact the assumptions on which investment decisions were made with a risk that the intended benefits of those investments are never sufficiently realized. For example, without sufficient material flow as currently guaranteed by the utility's stable customer base, there is a risk that the waste diversion outcomes currently forecast for the facilities at the Edmonton Waste Management Centre will not be realized.

If the multi-unit sector were to be deregulated, there also would be a significant risk to the sector's ability to achieve the policy objectives confirmed by Council's approval of the 25-year Waste Strategy. By including the sector in the utility, all residents will have the ability to contribute to the 90 percent diversion goal by separating their food scraps and recycling. As part of the regulated utility, these efforts will be supported by site specific transition and change management efforts, citywide education and outreach, and ongoing technical assistance to help achieve program outcomes.

In jurisdictions where multi-unit buildings are grouped with the ICI sector, and even where regulations like those anticipated to be introduced to Edmonton's ICI sector are in place, the local government cannot guarantee that all buildings provide those diversion services to residents. Particularly in jurisdictions like Alberta without province-wide landfill bans, and where municipalities do not have the authority to enact disposal restrictions at all disposal facilities within driving distance, unregulated sectors consistently underperform in comparison with the waste diversion achieved by the regulated sector(s). As a consequence, the diversion rate in the multi-unit sector is often not tracked independently of the ICI sector, and/or is significantly lower than the diversion rate for the single unit sector.

Edmonton is also poised to significantly expand the number of multi-unit residences. The City Plan anticipates that 280,000 new medium-density dwellings and 220,000 new high-density dwellings will be added as the City grows to a population of two million. As the plan comes to life, medium and high density dwellings will increase to account for 59 percent of all dwellings citywide. As such, the multi-unit sector will play an increasingly larger role in achieving the citywide diversion target of the 25-year Waste Strategy, and any actions that would substantially decrease the sector's ability to reach the target in a reasonable timeframe should be avoided.