

ITEM 4. DRAFT LEAVE NOTHING TO WASTE STRATEGY AND ACTION PLAN 2017–2030 – PUBLIC EXHIBITION**FILE NO: S104891.004****SUMMARY**

This draft Waste Strategy (the Strategy) sets targets, priorities and actions for waste management within the City of Sydney to 2030. The Strategy focuses on waste management in four key areas: City buildings, public spaces, residents and businesses. The Strategy also includes the City's advocacy position on broader reaching initiatives required beyond our local government area boundary.

The vision for the City of Sydney area is to be zero waste by 2030. The Strategy aims to achieve this by encouraging waste avoidance and recycling, promoting innovation in the way waste and materials are managed, and demonstrating leadership in sustainable waste management.

Residential and other municipal waste from the City's parks and public spaces is about 76,000 tonnes per year and represents approximately 10% of the total waste produced in the local government area (excluding construction and demolition waste). The City's businesses and other institutions produce an estimated 700,000 tonnes of waste per year. Construction and demolition waste is estimated at 1.3 million tonnes.

The Strategy proposes adopting the State Government 2021 resource recovery targets for the City's buildings, residential and business waste streams. The City is not responsible for collection and management of business waste but will encourage and support changes through sustainability programs, grants and advocacy initiatives.

The City has also introduced a separate recycling target of 35% by 2021 for residential waste. This demonstrates the City's commitment to achieving better environmental outcomes by separating out as many recyclable materials as possible before the remaining waste is sent to a facility for further treatment and energy recovery.

New recycling initiatives proposed in the Strategy include the introduction of separate e-waste, textiles and food waste collections for city residents over the next two to three years. A new community recycling drop off facility in Alexandria will also provide residents with the opportunity to take problem waste to a Council facility year round.

To achieve a zero waste target by 2030, and in line with international best practice, a waste to energy facility in NSW is required to manage the non-recyclable part of the City's waste streams that would otherwise go to landfill. The City is still investigating the most appropriate and available solutions to managing this residual waste stream in the long term.

RECOMMENDATION

It is resolved that:

- (A) Council approve the draft Leave nothing to waste: Managing resources in the City of Sydney area, Waste strategy and action plan 2017–2030 (the Strategy) as shown at Attachment A to the subject report for public exhibition, for a minimum of six weeks; and

- (B) the Chief Executive Officer be requested to report to Council following public exhibition, and stakeholder and community feedback.

ATTACHMENTS

Attachment A: Leave nothing to waste: Managing resources in the City of Sydney area, Waste strategy and action plan 2017–2030

Attachment B: Report for the City of Sydney, Commercial Waste Data Review, Edge Environment 2017

Attachment C: Waste Strategy Community Consultation Report, City of Sydney, Elton Consulting 2016

BACKGROUND

1. The City collects and manages around 65,000 tonnes of waste each year from more than 115,000 households and around 11,000 tonnes from City-managed assets, parks and public places.
2. Businesses are responsible for arranging collection of their own waste and produce around 700,000 tonnes annually, or more than 90% of the city's total waste. The commercial and industrial waste stream represents a significant proportion of the total emissions created by waste going to landfill.
3. Construction and demolition activities are believed to produce more than 1.2 million tonnes of waste annually. The waste produced from these activities is largely inorganic or inert which means it does not decompose or generate greenhouse gases, however, the embodied energy of a building is over 30 times the annual operating energy of an office building.
4. The City oversees responsible management practices of commercial waste operations and construction and demolition activities through its Waste Policy (*Local Approvals Policy for Managing Waste in Public Places*). The Policy covers responsibilities of the City, residents and businesses in managing waste services and activities in public places.
5. The City's existing *Interim Waste Strategy* (adopted by Council in April 2012) set a landfill diversion target of 66% for residential waste by 2014. The City currently diverts 69% of residential waste through a range of recycling services and by sending the general waste component for further treatment to stabilise the organic portion for use in rehabilitation of landfill or mine sites. The new Strategy when adopted will supersede the *Interim Waste Strategy* and includes actions to address any outstanding resolutions.
6. In December 2014, the NSW State Government released the Strategy that included a 70% recycling target for municipal waste. The recently adopted *Environmental Action 2016 – 2021 Strategy and Action Plan* includes the state targets for the diversion of waste from landfill by end of June 2021 for City operations and within the local government area.

LEAVE NOTHING TO WASTE STRATEGY AND ACTION PLAN 2017–2030

Overview

7. The draft Strategy sets the targets, priorities and actions for waste management by the City to 2021. In line with international best practice, and our overarching *Sustainable Sydney 2030* commitments, the Strategy also sets the long-term target of 90% diversion of waste to landfill by 2030.
8. The Strategy focuses on waste management in four key areas: City buildings, public spaces, residents and businesses. The Strategy also includes the City's advocacy position on broader-reaching initiatives required beyond our local government area boundary.

9. The Strategy identifies six priority areas as a focus to achieving our targets and objectives. These are:
- (a) **Promote innovation to avoid waste** – advocate for and assist the city's residents and business community to facilitate innovation and reduce waste.
 - (b) **Improve recycling outcomes** – optimise the use of existing City services, reduce contamination and explore new services.
 - (c) **Sustainable design** – increase focus on planning for waste in new developments.
 - (d) **Clean and clear streets** – maximise amenity improvements and efficiency of waste and recycling collections around the city.
 - (e) **Better data management** – improve monitoring, reporting and verification of data.
 - (f) **Future treatment solutions** – secure a long term solution for the treatment of non-recyclable waste using alternative waste treatment technology.
10. The document acknowledges that outside of our own operations and the services we provide to residents, the City is restricted in the control it has to implement change at the local government level.

Strategic Objectives and Targets

11. The strategic objectives of the Strategy are:
- (a) to reduce the amount of waste produced;
 - (b) to recycle as much as possible; and
 - (c) to treat what is left over in the most sustainable way.
12. The long-term goal of the City is to reduce waste and to achieve maximum resource recovery, so materials we use are not just used once and then disposed of. Many international cities have adopted zero waste targets. These are defined as greater than 90% of waste diverted from landfill.
13. The Strategy targets are set for medium (2021) and long term (2030):
- (a) By June 2021
 - (i) Targets for City operations:
 - a. To divert 50% of waste from City parks, streets, and public places away from landfill.
 - b. To divert 70% of waste from City-managed properties away from landfill.
 - c. To divert 80% of construction and demolition waste, generated and managed by City operations, away from landfill.

- (ii) Targets for city residents:
 - a. To divert 70% of waste (with a minimum of 35% as source separated recycling) away from landfill.
- (iii) Targets for city businesses:
 - a. To divert 70% of waste from operating businesses in the local government area away from landfill.
 - b. To divert 80% of waste from construction and demolition activities in the local government area away from landfill.
- (b) By 2030
 - (i) Targets for City operations:
 - a. To divert 90% of waste from City parks, streets, and public places from landfill.
 - b. To divert 90% of waste from City-managed properties from landfill.
 - c. To divert 90% of waste from construction and demolition, generated and managed by City operations, from landfill.
 - (ii) Targets for city residents:
 - a. To divert 90% of waste (with a minimum of 35% as source-separated recycling) from landfill.
 - (iii) Targets for city businesses:
 - a. To divert 90% of waste from operating businesses in the local government area from landfill.
 - b. To divert 90% of waste from construction and demolition activities in the local government area from landfill.
- 14. Achieving zero waste will depend on sustained advocacy to reduce the impact of product manufacture. We also need alternative technologies, such as a waste-to-energy facility, for any remaining waste.

Key Strategy Actions

- 15. The Strategy includes a number of actions to achieve the City's targets and objectives. Below are some of the priority actions we will be delivering over the next four years for our residents, businesses and organisation.
 - (a) Residential community actions:
 - (i) We will introduce free, weekly separate e-waste, metals and white goods collections for all City of Sydney residents.
 - (ii) We will create a community waste drop off point for problem waste.

- (iii) We will investigate providing all City of Sydney residents with regular clothing and textiles collections for recycling.
 - (iv) We will develop and implement a subsidised trial food waste collection scheme for residents.
- (b) City buildings and public spaces actions:
 - (i) We will introduce separate food waste collection infrastructure, where appropriate, to City properties.
 - (ii) We will investigate ways to improve public place recycling.
 - (iii) We will prepare the City's operations depot to collect and store illegally dumped waste separately from other public waste to improve recycling outcomes.
 - (iv) We will address illegal dumping and litter with targeted education and patrols by City Rangers.
- (c) Business community actions:
 - (i) We will encourage and support building owners and tenants within business sectors to improve their waste avoidance, re-use, recycling and recovery performance.
 - (ii) We will provide and promote funding opportunities for innovative technologies and ideas to address problem waste streams not currently managed in a sustainable way.
 - (iii) We will provide improved planning guidance for managing waste in new developments.

KEY IMPLICATIONS

Strategic Alignment - Sustainable Sydney 2030 Vision

16. *Sustainable Sydney 2030* is a vision for the sustainable development of the City to 2030 and beyond. It includes 10 strategic directions to guide the future of the City, as well as 10 targets against which to measure progress. This Strategy is aligned with the following *Sustainable Sydney 2030* strategic directions and objectives:
- (a) Direction 1 - a globally competitive and innovative city - managing resources in a more responsible way creates social and economic opportunities by moving away from traditional disposal to reuse and recycling of materials and adopting a more circular economy approach. The Strategy encourages community members to apply for City grants to support innovation for problem wastes.
 - (b) Direction 2 provides a road map for the City to become a leading environmental performer - emissions from waste account for 8% of the total emissions from our local government area. Achieving the targets in the Strategy will divert waste away from landfill reducing methane emissions and provides opportunities to re-use, recycle and recover resources displacing the demand for virgin materials.

- (c) Direction 6 – resilient and inclusive local communities – waste and recycling is a core service provided by the City to residents and represents an opportunity to have a tangible impact on achieving environmental targets. Initiatives such as the sharing economy and collaborative consumption promote social inclusion as well as reducing waste.
- (d) Direction 9 - sustainable development, renewal and design – the impact of increased growth and development in our city has a direct impact on the amount of waste produced. Actions to ensure adequate consideration is given to the waste and resource implications of new developments will reduce the impact waste management services have on the amenity of our streets.
- (e) Direction 10 - implementation through effective governance and partnerships – waste management transcends local and state government boundaries. The Strategy includes a number of advocacy actions to progress broader planning, regulation and policies on waste and recycling to assist with achieving the City's long-term objectives.

Organisational Impact

- 17. In developing the draft Strategy actions and implementation plan, extensive consultation was undertaken with all relevant City staff. Actions to commence in the 2017-18 financial year have been adopted by the responsible business units and addressed in their business plans.
- 18. Achievement of the 2021 City target will require changes in organisational practices and procedures, changes to some service contracts, staff education and behaviour change.
- 19. City business units that will have responsibility for delivery of the waste actions include the City Properties and Projects team, City Planning, Development and Transport and Sustainability Programs. Actions for the City's Operational Division will be resourced using existing staff.
- 20. Implementation of the actions will largely be undertaken with existing human resources. Some business units identified the need for increased resources to accommodate the actions proposed in this Strategy. These resources have been identified in the draft environmental accelerated actions as part of the 2017/18 budget process.

Risks

- 21. The Strategy includes targets and actions for our own operations, our residents and businesses. The City's level of control to achieve the draft targets will be impacted by external factors such as availability of recycling and waste treatment capacity.

22. The City provides collection services to all residents and can facilitate positive outcomes through provision of greater opportunities to recycle (more services), targeted education programs and support through our community networks. The risks are that not all residents will be engaged enough to change behaviour, or - because of a high turnover of residents in rental accommodation - not all messages will be effectively communicated. The Strategy seeks to mitigate these risks by providing targeted education programs to those residential buildings or areas identified as having low participation levels or high instances of contamination of recycling. The City will also run a program to engage more with building caretakers and management companies to assist with educating tenants.
23. Waste produced by the commercial sector is more than ten times the volume produced by residents. Businesses are responsible for arranging collection of their waste and therefore our ability to control and influence change is reduced. The risks are; the cost of managing waste for small businesses is not great enough to stimulate demand for change, business premises are not optimised to accommodate changes in storage and collection, and the recycling industry has insufficient recycling capacity to respond to demand. The Strategy seeks to mitigate these risks by: creating actions to engage with businesses highlighting waste improvement opportunities, making grant funding available for innovative waste avoidance and recycling initiatives, and creating strong advocacy positions with state government agencies to increase recycling capacity in the region.

Social / Cultural / Community

24. This Strategy does not propose interventions for specific cultural groups. However, the management of waste and recycling represents a core service provided by the City to residents and the community. The Strategy is expected to deliver the following social and community benefits:
 - (a) Residents can directly contribute to the City's improved environmental outcomes through actively participating in existing and new recycling services.
 - (b) New development applications will have an increased focus on securing increased space and access for enabling recycling and re-use opportunities for building residents and tenants.
 - (c) Community groups can utilise available grant funding to combine innovative community based waste avoidance and recycling initiatives and better social outcomes.
 - (d) Actions targeting illegal dumping and litter management will assist with maintaining clean and accessible streets and public spaces for residents, workers and visitors.
 - (e) Businesses can reduce waste and in many instances reduce cost by utilising assistance and advice provided by the City's Sustainability Programs teams.

Environmental

25. Landfilled biodegradable or organic waste produces methane many years after the waste is deposited. Methane is a powerful greenhouse gas with a global warming potential 25-28 times the effect of the same amount of carbon dioxide and contributes significantly to global atmospheric change.

26. Emissions from waste account for approximately 8% of the total emissions from our local government area.
27. Sending waste to landfill represents the least environmental benefit. While waste disposal costs continue to increase, reusing and recycling materials often has a market value and reduces the need to extract virgin materials.
28. Waste that is incorrectly placed or discarded on public footpaths and spaces can increase risks of pests and odour.
29. The Strategy targets and actions focus on reducing the amount of waste sent to landfill, increasing re-use, recycling and recovery and minimising the impacts of waste management on our footpaths and public spaces.

Economic

30. The recycling industry in NSW is reported to be worth over \$3 billion per year (*Inside Waste Industry Report 2014-15*).
31. The ratio of job creation is much higher for recycling than disposal. Nationally it has been estimated that for every 10,000 tonnes of waste produced 9.2 jobs are created for recycling and 2.8 jobs for landfill disposal (Access Economics, 2009, Australian Government: <http://www.environment.gov.au/protection/national-waste-policy/publications/employment-waste-management-and-recycling>).
32. Local community-based reuse and recycling solutions can provide direct economic benefits within our own local government area.
33. Disposal represents lost opportunities to reuse and recover valuable resources and a long-term liability for management of landfill facilities many years after they have closed.

BUDGET IMPLICATIONS

34. The cost and resource implications of actions in the Strategy for years 1–2 that will be additional to business as usual have been included in the 2017/18 operational budget and forward estimates.
35. Actions for residential waste services will be cost recoverable under the Domestic Waste Management Charge; this is included annually in the City's fees and charges. City residents pay some of the lowest waste service charges in the wider Sydney metropolitan region.
36. New services such as separate organics and textiles collection may have an impact on the residential waste charges. These services are to be provided in the first instance on a trial/pilot basis, from which a business case for providing these services at scale for the long term can be developed.
37. Resource and operational costs directly related to improvements within City Properties and Projects have been included in the City's draft 2017/18 budget and are subject to the usual Council approval process.
38. The implementation of actions beyond the next financial year, e.g. large scale roll out of organics collection, will seek approval from Council in accordance with existing financial delegation and budget approval processes.

RELEVANT LEGISLATION

39. The Strategy focuses on voluntary commitments and opportunities associated with improved waste management and recycling performance at the organisational and Local Government Area level. In general, these matters are not the subject of legislation with which the City has to comply. City operations are affected by numerous environmental regulatory requirements. The City ensures compliance with these regulatory requirements through the operation of its Environmental Management System.

CRITICAL DATES / TIME FRAMES

Commencement of public exhibition period of 8 weeks	27 June 2017
Conclusion of public exhibition	22 August 2017
Final Strategy submitted to Council for endorsement	Late 2017 – dependent upon feedback received in the public exhibition period.

OPTIONS

40. There were no materially different options considered for developing a long-term approach to waste management.

PUBLIC CONSULTATION

41. As part of the development of the Strategy, two community engagement sessions were organised with city residents in August and September 2016. The purpose of the sessions were to understand the waste and recycling issues that are important to our residents. The sessions also provided an opportunity to explain how we currently manage waste and recycling from the community, and to discuss the options for future management of waste and recyclables.
42. Overwhelmingly, the residents supported the proposed targets for increased landfill diversion. There was strong support for more recycling services, although there was confusion around what can be recycled. The Strategy has responded to the request for more education and information as part of its actions for residential services and has actions for the expansion of recycling services where we feel there is an appropriate environmental benefit.
43. The development of the Strategy was also informed by engagement with an external reference group, comprised of state government representatives (NSW Environment Protection Authority), businesses, waste industry and a Sydney-based not-for-profit environmental association. The stakeholder group was provided with details of the draft Strategy content and asked to provide feedback and comments.

44. Following endorsement by Council, the draft Strategy will be placed on public exhibition for eight weeks. During the exhibition period a stakeholder briefing is proposed.

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