3.1. Waste Management Incentivisation

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ATTACHMENTS: Nil

PURPOSE:

This report responds to the resolution of the Environmental Reference Group meeting held on 11 April 2022:

THAT a report on the 'Domestic waste (red bin) charges and incentivisation for waste reduction' presentation be bought back to the next Environment Reference Group Committee.

EXECUTIVE SUMMARY:

To incentivise is to encourage someone to take a particular course of action; in this case, to reduce the amount of waste placed in the red lidded bin ("red bin") for collection and disposal by NSC's waste collection and disposal contractors.

This can take the form of rebates or cash carrots such as discount vouchers for other Council services, or having the knowledge, and satisfaction, of doing what's right, that is, knowing that your effort may have a positive impact on the environment. This report outlines current domestic waste minimisation practises and discusses incentives including the use of rebates and other alternatives, such as free issued compost, worm farms, green waste and recycling bins.

The use of rebates identifies the impediments and challenges of offering a financial rebate to those residents who seek to either (i) reduce the number of red bins not used or (ii) minimise the volume of waste in both multi-unit dwellings and single detached dwellings.

FINANCIAL IMPLICATIONS:

Not currently known. Will depend on the strategy (if any) and direction taken following the Environment Reference Group meeting and subsequent Council Resolution.

RECOMMENDATION:
1. THAT the waste management incentivisation report be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

5. Our Civic Leadership
5.4 Council's service delivery is well supported

BACKGROUND

Council encourages waste minimisation through its volume-based garbage charge bin system. A standard red bin available to all residents is an 80 litre mobile bin; although with Council approval, a 60 litre carry bin is offered to residences with storage constraints. Should a resident request a larger red bin for the disposal of general household waste, Council offers 120 litre and 240 litre mobile bin options, both at additional cost. The annual charge for the 80 litre red bin is currently $424, increasing to $707 for the 120 litre option and to $1,242 for the 240 litre bin. The objective of the differential pricing for larger red bins is to discourage waste disposal by incentivising residents to consider their waste disposal practices.

It should also be noted that in 2005, North Sydney Council (NSC) was a founding Council in the red bin processing industry. Prior to late 2018, the NSW EPA permitted red bin processing facilities to convert the organic fraction of the waste into a compost-like product which could then be used in broad agricultural applications or mine rehabilitation. NSC's red bin waste was processed at such a facility. However, due to increased environmental concerns, the EPA banned the use of mixed waste organic material (predominantly made from the organic fraction of the red bin) on agricultural land and mine rehabilitation. Consequently, Council's mixed waste is currently being disposed of at landfill. However, Council continues to monitor industry trends and will consider any processing options in the future.

CONSULTATION REQUIREMENTS

Community engagement is not required.

DETAIL

1. **Current Waste Minimisation Practices**

Whilst only having a marginal impact on the material placed in the red bin for disposal, Council actively promotes recycling via the yellow lidded bin, disposal of green waste as a separate collection and provides a generous on-call booking system for the collection and disposal of bulky household waste. Additionally, Council is a partner with other regional councils (NSROC) in operating a Community Recycling Centre ("CRC") for the disposal of hazardous household waste products such as unused paint, household and car batteries and e-waste. Through the Coal Loader, Council provides disposal options for household products such as light globes and batteries. In conjunction with several local pharmacies, NSC provides a medical sharps collection service. In a major initiative to reduce the amount of organic material, most notably food scraps, NSC is undertaking a Food Scraps collection trial which will assist Council in determining whether residents are supportive of a separate food waste collection and

processing service. Additionally, the RecycleSmart program offers a pickup and delivery service for recycled textiles, soft plastics, e-waste and other items such as batteries and printer cartridges. RecycleSmart are a convenient service for people that do not have a car or are unable to drop off small amounts of, for example, e-waste to the CRC.

To support these initiatives, Council undertakes continuous and widespread education programs aimed at reducing waste generation and disposal and encouraging residents to be actively involved in such practices.

2. Bin Composition

Prior to the current waste management contracts being awarded, NSC undertook a waste audit of the red bin. On average, the composition of the red bin was as follows: -

- Food 34%
- Containerised food and liquid 8.0%
- Paper/cardboard 7.0%
- Contaminated soiled paper 7%)
- Recyclables 18%
- E-waste/hazardous waste 2%
- Other including nappies, feminine hygiene products 24%

If the Food Scraps Trial proves successful, there is some scope for reducing the amount of waste disposed of in the red bin. Council provides yellow bins for the collection and recycling of recyclable material and it is incumbent upon residents to dispose of recyclables in the yellow bin and not the red bin. Council assists in providing tailored education materials to multi-unit dwellings and single houses and can arrange additional recycling bins should the need arise. E-waste and hazardous waste can be safely disposed of at the CRC or via RecycleSmart. Increasing the amount of education and waste awareness programs may help to reduce the amount of red bin waste but Council's demographics generally hinder such initiatives.

3. Challenges/Impediments with Incentive Schemes

3.1 Demographics

The North Sydney LGA is characterised by an above average rate of multi-unit/ high-density dwellings. The latest data shows that 89% of the dwellings in the North Sydney council area are medium or high-density; this compares to 44% for the Greater Sydney area. Additionally, 46.5% of households were renting (compared to 31.8% for Greater Sydney). These demographics add to the complexities of waste management. For example, a large transient population is generally less likely to adopt waste management practices that are beneficial to the wider community as they generally have no strong affiliation to the area. Also, due the high incidence of medium and high-density dwellings, shared red bins are prevalent – it would be difficult for Council to determine which resident in a high-rise building is doing the right thing regarding waste disposal as opposed to the resident who places all of their household waste, including recyclables, in the red bin.

For the majority of multi-unit dwellings, residents are able to aggregate the number of bin entitlements, rather than have individual garbage bins; this is a function of available space. The standard general waste service for multi-unit dwellings is one 240litre bin shared between three units; however, the waste collection charges incurred by Council are still based on the number of parcels of rateable land for which the service is available and not the number of bins.

In order to make domestic waste management affordable and equitable, NSC subscribes to the principle of average pricing. Within the realm of the private commercial sector, waste collected and disposed of is charged on a user pays weight basis. Unfortunately, a weight-based system for councils would be administratively cumbersome and expensive as council domestic collections systems are not designed for individual data recording. Accordingly, councils have relied on average pricing to distribute the costs of providing all waste services across their respective areas. As with all average pricing models, some residents will gain whilst others lose. To make exceptions to this rule by introducing rebates would compromise the integrity of the whole system and would require additional resourcing and software management systems to monitor ongoing changes. Council's software system does not cater for an incentivisation system to be automated. This would have to be manually performed on an individual property basis.

The pricing model adopted by Council only allows for the recovery of its costs associated with providing all waste management services; these costs are in effect fixed. Council needs to price its services on the basis of 100% take up. Should one unit block not fully utilise its red bin allotment a rebate is not possible as the shortfall would need to spread across the remainder of the LGA. On what basis is the rebate to be calculated – weekly, monthly or annually? How can Council ascertain with certainty the exact number of bins presented each week at a particular household? Undertaking a weekly audit is not feasible. What if on the day of the audit the dwelling presents, say 6 bins, but subsequently presents 7 (or vice versa)? How do we account for the change? Again, this would involve extensive auditing and record keeping.

3.2 Weight-based System

As stated previously, NSC, as all councils, abide by the generally agreed principle of equitably distributing the domestic waste charges across all ratepayers. The only real way to determine an individual household's obligation would be to weigh the amount of waste deposited in the red bin and charge them accordingly (by applying the landfill disposal charge and the appropriate collection fee). As stated previously, this in impractical for various reasons:

- The collections contractor is not able to record the weight of each individual bin and invoice accordingly; any weight-based scheme requires the complete buy-in of the collections contractor otherwise issues relating to the integrity of the data will arise.
- Such a system would rely heavily on honesty – how do you stop neighbour/s from placing rubbish in another neighbour's bin?
- How do you allow for the medium and high-density dwellings, who share bins?

3.3 Issues with Council being able to pass on savings to residents

For the reasons outlined previously, theoretically, it may be easier to establish a base for single dwellings as opposed to multi-unit complexes. This is not to say it is possible. Within the North Sydney LGA, there are approximately 3,760 single houses, which accounts for around 11% of the total property types. If we assume that this percentage holds for waste disposal, then single properties dispose of around 1,600 tonnes of general waste annually. If this entire sector reduced the amount of waste in the red bin by, say, 10%, this would lead to potentially a $10 per household saving. However, not every single household would, or could, reduce the waste they dispose of. Additionally, why should Council exclude residents from multi-units complexes – shouldn't they too be able to partake in any savings scheme? However, we cannot effectively establish any base lines for these residents, certainly not in the short term. Any schemes that benefit one group of residents over another would not be equitable and probably should not be implemented.

To complicate the matter, reducing waste in the red bin will not remove the requirement for bin collection. Even a small amount of waste placed in the red bin will still incur full collection charges. Currently, the costs associated with the collection of the red bins and the disposal of the material collected represents approximately 40% of the total Domestic Waste Management charges incurred by Council (red bin disposal costs amount to 27 % whilst red bin collection costs represent 14 %). As mentioned previously, collection costs will remain constant, even with the removal of bins, as Council is obliged to pay the Contractor the current tendered rate on a per property service, but some savings may be achieved in the disposal area – the question is how does Council pass on these savings to residents who are actually reducing their waste generation and disposal? Using the above scenario of a 10% reduction in waste disposed of by single houses, there are no discernible differences to the overall Domestic Waste Management charges incurred by Council – disposal costs fall to around 26.4% of the total DWMC while the costs of administering an incentivisation system would be high.

Greenwaste, recyclables and bulky waste collection services are a valued addition to Council's main requirement of collecting and disposing of household garbage. In the event that residents reduce the amount of household garbage, to the extent that this service becomes unviable either, the provision of the other collection services could become unsustainable at the current service and cost levels. Council can only provide the suite of waste management services at current prices due to the tendering process which relies on heavily on economies of scale being offered to potential contractors.

As mentioned previously, NSC allows for bin aggregation in multi-unit dwellings. In some cases, the full bin allotment may not have been taken up by the dwelling. It could be argued that the dwelling is entitled to a rebate of that proportion of the Domestic Waste Management Charge ("DWMC") allocated to waste disposal; remembering that the collection costs are still incurred by Council. The disposal component of the DWMC is 27%; therefore, a rebate of up to $112.50 may be applicable. However, as mentioned earlier, Council applies average pricing to determine the per household DWMC. Who pays for the shortfall in revenue – other dwellings or does Council absorb the cost (if so, would this lead to a degradation of

other waste management services)? Additionally, any rebate would need to paid to a body corporate, which, in itself presents problems such as:

- Accountability – how would the body corporate receipt and account for the income? Can the body corporate legally accept a rebate considering the owners pay the rates and not the body corporate?
- Is the body corporate prepared to assume other waste management responsibilities such as illegal dumping or incorrect bin presentation?
- Additional costs – Council would need to undertake additional audits to ensure bin presentation remains constant. Councill may need to employ additional resources to manage the auditing and reimbursement process.

3.4 IPART and the Local Government Act 1993

The Local Government Act requires all councils to charge its ratepayers a domestic waste management charge. This fee is charged irrespective of a waste service being utilised or not. The Independent Pricing and Regulatory Tribunal of NSW (IPART) is currently reviewing domestic waste management charges imposed by local councils and is due to report imminently. It is widely expected that IPART will impose a waste peg on councils and introduce further regulations which will limit a council's ability to increase its domestic waste fees.

Both the LGA requirements and the impending IPART decision will impinge on a council's ability to provide value for service waste management policies.

4. Other Considerations

4.1 Free issued Bins

As mentioned earlier, it would be extremely difficult to provide a monetary incentive to residents who live in multi-unit dwellings. Council could, however, provide at Council's cost but no cost to residents who can demonstrate waste minimisation (how this would be validated has not yet been considered):

- **Compost and worm farm bins** to encourage recycling on appropriate organic material; however, space limitations could impact on the effectiveness of such considerations.
- **Additional recycling bins and greenwaste bins;** this may only have a marginal impact on the material disposed of in the red bin and would also need space considerations as not all units could accommodate additional bins.

4.2 Future Waste Processing Options (Dirty MRF and Waste to Energy)

One option that may avail itself to NSC is sending its red bin waste to a dirty Materials Recycling Facility (MRF). Currently, the yellow bin material is transported to Visy for processing – each stream (paper/cardboard, metals, plastics and glass) are separated for further processing and recycling. This is generally known as a clean or dry MRF.

A dirty MRF processes the red bin waste, extracting recyclables such as metals and plastics from the general waste stream. The residual is then sent to landfill. It must be noted that such an option is not yet available to NSC and that there are additional costs associated with such processing. Council continues to monitor developments within the waste industry and will duly consider any such options.

One other waste processing development that may appear on the horizon is waste to energy. This involves processing the red bin to extract valuable recyclable materials before sending the residual to a specifically designed facility for generating energy. Again, this option currently does not exist, and Council would seek feedback from the community before agreeing to such a policy.

However, such waste processing options that deals with waste that has been placed in the red bin does not address the issue of incentivising waste reduction.