campbelltown
city council

2 August 2018

General Manager, Adjudication Branch
Australian Competition and Consumer Commission
Attention: Ms Tanya Hobbs

By email: adjudication@accc.gov.au

Also by hand: Level 20
175 Pitt Street
Sydney NSW 2000

Dear Sir/Madam

Proposed Application for Authorisation for Proposed Conduct (non-merger)
Applicants - Local Government Councils of Camden, Campbelltown, Liverpool, Wingecarribee and Wollondilly

On behalf of the above Applicants, please find attached the following:

1 Application for Authorisation for Proposed Conduct with appendices

(a) Confidential Version (full set of documentation), and

(b) Public Version (minus commercial in confidence information);

2 Proof of payment by EFT to the Commission in the amount of $7,500.00; and

3 Letter of Campbelltown City Council to the Commission dated 25 October 2017.

The Applicants seek an interim authorisation in order for the Applicants to commence the preparation of tender documentation, in anticipation of formally tendering to industry participants, for their future waste processing services of their kerbside collected streams of household waste.

Having regard to the long lead time for potential service providers to secure appropriate waste processing authorisations, premises, infrastructure and technologies for the commencement of such waste processing operations by the Applicants' required date of 1 June 2024, it is necessary for the Applicants to commence preparation of the tender process now, including preparing the proposed form of contract to be included with the tender. This is in order to provide tenderers with as long a lead time as possible to consider and compile their tenders having regard to the long term of the proposed contract(s), the significant capital that will be required to meet the Applicant's requirements, and for appropriate land, equipment, infrastructure and technologies to be acquired in order to carry out the required waste processing services.

It is not expected that the waste processing market will materially change, or that there will be any lessening of competition in the period of the proposed interim authorisation, nor will the market be impacted in any way by the interim authorisation. In all respects it can be anticipated that the waste processing market will be unaffected.

It should be noted that this Application has been delayed as one of the Applicants, Campbelltown City Council, initially lodged with the Commission for itself and on behalf of the other Applicants, an application for "Revocation of a Non-Merger Authorisation and Substitution of a New Authorisation" (ACCC doc. ref. sForm FC) under cover of the above letter to the Commission.

Mr Peter Rimmer of Campbelltown City Council attended a pre-lodgement meeting with the Commission's officers David Jones and Darrell Channing on 8 November 2017.

That meeting was followed by a telephone call on 17 November 2017 between Mr Rimmer and the Commission's officers Marie Dalins and Kaitlin Hanrahan to further discuss the proposed application. At that time Mr Rimmer was informed that due to recent legislative changes, a new form of application was required to be submitted by the Applicants with the required details.

As a consequence the Applicants have been delayed in preparing and submitting this new Application and to receive appropriate advice and assistance in relation to its preparation.

Having regard to the Applicants' current timeline for tender, contract execution and commencement of waste processing operations detailed in section 11 and Table 6 of the Application, the Applicants are concerned that any further delay in commencing the preparation of the proposed tender may be prejudicial to the Applicants. Delay may also disadvantage the tenderers who will benefit by having as long a lead time as is possible to fully investigate and prepare their tender responses, particularly having regard to a requirement of the tender for the utilisation of Alternative Waste Technology, which may have to be sourced from specialist technology providers or developers around the world.

Council's primary contact officer is Mr Peter Rimmer, Domestic Waste Service Coordinator who can be reached by email peter.rimmer@campbelltown.nsw.gov.au, phone 02 4645 4689 or mobile 0409 386 377 any time. Alternatively, I can be contacted at jim.baldwin@campbelltown.nsw.gov.au

Yours sincerely

Jim Baldwin

Director City Development

Attachments

Application for Authorisation for proposed conduct

(other than mergers or acquisitions)

Lodged by

Camden Council

Campbelltown City Council

Liverpool City Council

Wingecarribee Shire Council

Wollondilly Shire Council

In respect of:

collaboratively tendering and contracting for the services of qualified contractors able to receive, process, market and dispose (by sale or otherwise) of kerbside collected waste materials

Date: 26 July 2018

PUBLIC VERSION

Contact: Mr Peter Rimmer
Domestic Waste Services Coordinator
Campbelltown City Council
PO Box 57
Campbelltown NSW 2560
Tel: 02 4645 4689

Email: peter.rimmer@campbelltown.nsw.gov.au

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Appendices

1. Summary

1.1 By Final Determination Authorisation No. A90886 of the Commission dated 16 December 2004, Campbelltown, Camden, Wingecarribee and Wollondilly Councils were granted authorisation to collaboratively tender for the services of contractors to process, market or otherwise dispose of kerbside collected waste materials (excluding bulky waste materials).

1.2 The Authorisation expires on 30 June 2024.

1.3 Campbelltown, Camden, Wingecarribee and Wollondilly each duly contracted with WSN for the construction of waste processing infrastructure and thereafter for the processing of their kerbside collected domestic Waste Materials for a period of 15 years; including for recycling and resource recovery. Their contracts expire on 31 May 2024, from which date those councils will require new contracted waste processing arrangements to be in place.

1.4 Liverpool's contracted waste processing contracts will variously terminate between July 2021 and July 2024.

1.5 The Applicants now require to collaboratively tender and contract for the future processing of their kerbside collected waste materials for a similar period of operations of 15 years, with an extension option period of 5 years, from the expiration of the current contracted arrangements of Campbelltown, Camden, Wingecarribee and Wollondilly.

1.6 The Applicants are required by the NSW Government Waste Strategy to reduce waste generation, increase recycling of waste and direct more waste away from landfill. The Applicants intend to achieve these objectives by their proposed future waste processing contracts the subject of this application.

1.7 The market for the processing of the Applicants' Waste Material is competitive, however in relation to the disposal of Household Waste, Clean-Up Waste and Residual Waste, practically available landfill sites in the Greater Sydney Region are limited to two.

1.8 The Applicants intend to contract for each of their future waste processing requirements in order to achieve the key result benchmarks of the Waste Strategy and also for the lowest cost to the Applicants and accordingly for their householder ratepayers.

1.9 In order to meet both the objectives of the Waste Strategy and the lowest waste processing costs, the Applicants propose to guarantee the supply of the streams of Waste Material to any future contractor(s), so that a critical mass of streams of Waste Material will be made available to be processed over long term contracts and therefore will likely result in the lowest processing costs, as well as providing other public benefits.

1.10 The Applicants contend that the proposal for the Applicants to collectively tender and contract their future waste processing requirements is not likely to have the effect of substantially lessening competition and may encourage new entrants to the waste processing market.

1.11 The Applicants contend that the proposed arrangements will likely result in the following public benefits:

(a) potentially increasing competition by guaranteeing the volume of Waste Material for processing over a commercial term so to attract new investment in waste processing facilities, including Alternative Waste Technology;

(b) the development of one or more centralised systems for the processing of each of the generated waste streams is likely to result in transportation, materials handling and recycling efficiencies;

(c) waste processing cost savings to the Applicants as well as the successful service provider(s), including lower administrative costs, and therefore lower domestic waste management charges to ratepayers;

(d) environmental benefits by assisting to facilitate the development of Alternative Waste Technology, to reduce disposal of waste to landfill and conserve the limited landfill air space resource in the Sydney Metropolitan Area; and

(e) assist the Applicants to meet the waste avoidance, recycling and resource recovery, and reduction in disposal of waste to landfill targets of the Waste Strategy.

1.12 In all the circumstances, the Applicants contend that the public benefits to flow from the proposed arrangements are likely to outweigh any anti-competitive detriments.

1.13 The Applicants seek authorisation under section 88 of the *Competition and Consumer Act 2010* (Cth) to engage in the Proposed Conduct that may otherwise be potentially construed as likely to have the effect of substantially lessening competition within the meaning of section 45 of the Act.

1.14 The Applicants also seek an interim authorisation in order to advance their tender preparations.

2. Definitions

Alternative Waste Technology or AWT	means waste processing technologies that provide an alternative waste disposal process to landfill disposal, including automated systems for the separation of mixed solid waste into component streams, with the objective of producing higher value material and energy products, and also biological and thermal technologies that process Garden Organics only.
ANL Facility	means the Australian Native Landscape Garden Organics processing facility at Martin Road, Badgery's Creek, NSW.
Application	means this Application for authorisation for the Proposed Conduct.
Applicants	means Campbelltown, Camden, Liverpool, Wingecarribee and Wollondilly Councils.
Authorisation	means the Commission's Authorisation No. 980886 dated 16 December 2004, a copy of which is **Appendix 1**.
Benedict Recycling	means Benedict Recycling Pty Ltd, Riverside Road, Chipping Norton.
CC Act	means the *Competition and Consumer Act 2010* (Cth)
Clean-Up Waste	means household domestic waste including furniture, appliances, fittings and general bulky waste, however excluding chemicals, putrescible matter, trade waste, concrete, motor vehicles and parts and quantities of building materials.
Commission	means the Australian Competition and Consumer Commission.
Councils	means Campbelltown, Camden, Liverpool, Wingecarribee and Wollondilly.
Dry Recyclable Material	means paper, cardboard and containers separated from organic and other household mixed waste and having some value when processed to market specifications.
EPA	means the New South Wales Environment Protection Authority.
Garden Organics	means garden waste (grass clippings), non-woody garden waste; woody garden organics; trees and limbs; stumps and rootballs separated from inorganic and non-biodegradable materials.
GSR	means the Greater Sydney Region including the SMA and the Local Government Areas of the Applicants.
Household Waste	means general kerbside collected domestic waste including food and household waste intended for disposal to landfill.
JJ Richards	means J.J. Richards Pty Ltd and associated entities.
JR Richards	means J.R. Richards & Sons and associated entities.

LG Act	means the *Local Government Act 1993* (NSW).
Local Government Area	means the area of designated responsibility of the Councils as delineated on the Map of Local Government Areas which is **Appendix 5** to this Application.
Lucas Heights Facility	means the licensed waste processing facility including landfill operated by SUEZ at New Illawarra Road, Lucas Heights, NSW.
MRF	means a waste Materials Recovery Facility for the processing and sorting of commingled Dry Recyclable Waste.
ORRF	means an Organics Recovery and Recycling Facility for the processing of organic waste for recovery and sale.
POEO Act	means the *Protection of the Environment Operations Act 1997* (NSW).
Participating Councils	means Campbelltown, Camden, Wingecarribee and Wollondilly.
Proposed Conduct	has the meaning in section 5 of this Application.
Residual Waste	means any materials that cannot be separated into the Dry Recyclable Material or Garden Organics and different types of Waste Material mixed together in such a way as to be impractical to separate by Source Separation and contaminated Waste Material and Waste Material that cannot be processed by Alternative Waste Technology.
Resource Recovery	means the recovery of resources from waste by recycling, composting or generating energy from waste. Alternative waste technology could be defined as a combination of resource recovery systems.
SMA	means the Sydney Metropolitan Area.
Source Separation	means the sorting of Waste Material at the point of generation, for example, the sorting of household recyclables into the kerbside recyclable bin.
SUEZ	means SUEZ Recycling and Recovery Holdings Pty Limited.
SUEZ Contracts	means the Contract for the Processing of Waste, Recyclables and Garden Organics between SUEZ with each of the Participating Councils dated 14 August 2006, which is **Appendix 2** to this Application (excluding the referenced WSN Tender)
SUEZ Eastern Creek Facility	means the Alternative Waste Technology processing facility for Household Waste and Garden Organics operated by Global Renewals Limited under EPA Licence No. 11798 at Wallgrove Road, Eastern Creek NSW.
SUEZ Kemps Creek Facility	means the licensed waste processing facility operated by SUEZ at 1725 Elizabeth Drive, Kemps Creek, NSW.
SUEZ Spring Farm Facility	means the licensed waste processing and resource recovery facility operated by SUEZ at 275 Richardson Road, Spring Farm, NSW.

Transfer Station	means a waste handling facility used to transfer Waste Material from collection vehicles to bulk haul vehicles for transportation to a waste processing facility or for disposal to landfill.
Veolia	means Veolia Environmental Services (Australia) Pty Ltd.
Visy Facility	means the licensed waste processing facility operated by Visy Industries at 6 Herbert Place, Smithfield, NSW.
Waste Collection Industry	means the industry for Waste Material collection, including contractors that provide services for the collection, handling and haulage of Waste Material to locations for processing and disposal.
Waste Levy	means the Levy charged for each tonne of Waste Material received at a landfill facility under section 88 of the POEO Act.
Waste Material	means a collective term for Household Waste, Dry Recyclable Material, Garden Organics and Clean-Up Waste collected from households.
Waste Processing Industry	means the industry that provides waste processing, marketing and disposal (by sale or otherwise) of Waste Material.
Waste Strategy	means the State of NSW and Environment Protection Authority's NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21 which is **Appendix 6** to this Application.
Woodlawn Facility	means the licensed waste processing facility including landfill operated by Veolia at 619 Collector Road, Tarago, NSW.
WSN	means Waste Recycling and Processing Corporation t/as WSN Environmental Solutions and subsequently known as WSN Environmental Solutions Pty Ltd.

3. Application

3.1 This Application is made by the Applicants.

3.2 Three main sectors produce waste materials in the GSR, namely:

(a) the municipal sector;

(b) the commercial and industrial sector; and

(c) the construction and demolition sector.

3.3 This Application for authorisation by the Commission is concerned primarily with the municipal sector. Municipal waste comprises household Waste Material from kerbside collections.

3.4 While municipal councils including the Applicants are responsible for the kerbside collection and transportation of Waste Material to receiving facilities for processing, recycling, resource recovery and disposal; the responsibility for these is generally contracted by the Applicants to collection contractors.

3.5 Similarly, while the Applicants are responsible for the processing, recycling, resource recovery and disposal of Waste Material, these are contracted to waste processing contractors.

3.6 The Applicants seek the Commission's authorisation under section 88 of the CC Act to engage in the Proposed Conduct, more fully detailed in section 5 of this Application, including to:

(a) make a contract or arrangement, or arrive at an understanding, including collaboratively tendering for the provision of processing, marketing and disposal services in respect to the Applicants' Waste Material including provisions to guarantee that all the Applicants' collected Waste Material will be supplied for processing, marketing and disposal, which provisions would have the purpose, or would have or might have the effect, of substantially lessening competition within the meaning of section 45 of the CC Act;

(b) give effect to a provision of a contract or arrangement, or arrive at an understanding, including collaboratively contracting for the provision of processing, marketing and disposal services in respect to the Applicants' Waste Material, including provisions to guarantee that all the Applicants' collected Waste Material will be supplied for processing, marketing and disposal, which provisions would have the purpose, or would or might have the effect of substantially lessening competition within the meaning of section 45 of the CC Act;

3.7 The Applicants seek the Commission's authorisation that:

(a) the period of the collective tendering process be for a period of 18 months from the date of authorisation; and

(b) the term of the contracts entered into under the tendering process be for a period of up to 1 July 2049, i.e. being the period from expiry of the SUEZ Contracts on 31 May 2024 plus 5 years to commencement of operations plus 15 years for the term of operations plus 5 years for an optional extension period to the term.

3.8 The Applicants also seek the Commissions interim authorisation to enable them to commence the preparation of the collaborative tendering for the provision of their future processing, marketing and disposal services.

4. Applicants

4.1 The Applicants for this Application for authorisation of proposed conduct (other than mergers or acquisitions) under section 88 of the CC Act are:

(a) Campbelltown City Council (hereafter **Campbelltown**)
ABN 31 459 914 087

Cnr Broughton and Queen Streets
or Civic Centre, Queen Street
Campbelltown NSW 2560

Applicant's and Campbelltown's
Contact Person : Mr Peter Rimmer
Domestic Waste Services Coordinator
Tel: 02 4645 4689
Email: peter.rimmer@campbelltown.nsw.gov.au

(b) Camden Council (hereafter **Camden**)
ABN: 31 117 341 764

70 Central Avenue
Oran Park NSW 2570

Contact person: Mr Corey Stoneham
Manager waste and Compliance Services
Tel: 02 4654 7751
Email: corey.stoneham@camden.nsw.gov.au

(c) Liverpool City Council (hereafter **Liverpool**)
ABN: 84 181 182 471

33 Moore Street
Liverpool NSW 2170

Contact person: Mr David Brodie
Manager City Works
Tel: 02 9821 9657
Email: brodied@liverpool.nsw.gov.au

(d) Wingecarribee Shire Council (hereafter **Wingecarribee**)
ABN: 49 546 344 354

66 Elizabeth Street
Moss Vale NSW 2577

Contact Person: Mr Neil Townsend
Manager Business Services
Tel: 02 4868 0502
Email: Neil.Townsend@wsc.nsw.gov.au

(e) Wollondilly Shire Council (hereafter **Wollondilly**)
ABN: 93 723 245 808

62 – 64 Menangle Street
Picton NSW 2571

Contact Person: Ms Alexandra Stengl
Manager Environmental Outcomes
Tel: 02 4677 9577
Email: alexandra.stengl@wollondilly.nsw.gov.au

4.2 The Applicants' primary contact email is:

council@campbelltown.nsw.gov.au

Business activities of the Applicants:

4.3 The Applicants are local government authorities constituted under the LG Act to provide goods, services and facilities and carry out activities, appropriate to the current and future needs within their local communities and the wider public[1].

4.4 Under section 8 of Chapter 3 of the LG Act, the Applicant and the Other Councils are subject to a Charter to guide them in carrying out their functions including the following:

- *to provide directly or on behalf of the other levels of government, … appropriate services and facilities for the community and to ensure that the services and facilities are managed efficiently and effectively …*
- *to properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible …*
- *to engage in long term planning on behalf of the local community…*

4.5 Therefore the Applicants are responsible for the collection and processing of household generated Waste Material.

[1] section 24 of LG Act

5. The Proposed Conduct

5.1 The Applicants propose to engage in a contract or arrangement, or arrive at an understanding, for the collaborative tendering and subsequently the collaborative contracting, for the provision of services by one or more qualified contractors to receive, process, market and dispose of (by sale or otherwise) all of the Applicants' following four streams of kerbside collected Waste Material:

(a) Household Waste;

(b) Dry Recyclable Material;

(c) Garden Organics; and

(d) Clean-Up Waste,

(the **Proposed Conduct**).

5.2 Each of the Applicants propose to enter into separate, but identical contracts, with the successful tenderer(s) in respect to the processing, marketing and disposal of their respective Waste Material.

5.3 It is proposed that one contractor will be contracted by all of the Applicants in respect to one or more of their four streams of Waste Material. A guarantee of supply of all the Applicants' Waste Material is proposed in order to maximise the objectives of the Applicants as detailed in this Application including efficient and lowest cost waste processing and disposal.

5.4 The Proposed Conduct would or might be construed as conduct that would have the purpose, or would have or might have the effect, of substantially lessening competition within the meaning of section 45 of the CC Act.

5.5 The Applicants seek by this Application, authorisation under section 88 of the CC Act be granted to the Applicants to engage in the Proposed Conduct.

6. Background to Proposed Conduct

6.1 The Applicants' kerbside waste collection and waste processing operations are graphically detailed in **Appendix 3** to this Application that identifies the following distinct processes or operations involved in dealing with household generated Waste Material:

(a) householders generated waste;

(b) household waste is separated into waste stream bins of Household Waste, Dry Recyclable Material and Garden Organics and Clean-Up Waste left at the kerbside;

(c) kerbside waste collected and hauled to Transfer Stations;

(d) Waste Material is transported from Transfer Stations to waste processing facilities for:

(i) material recovery of Dry Recyclable Material and Garden Organics;

(ii) treatment of Waste Material by Alternative Waste Technology;

(iii) disposal to landfill of Household Waste and Residual Waste; and

(e) the recovery of:

(i) organic material for sale and agricultural site rehabilitation and civic uses, including soils; and

(ii) paper products, plastics, glass and metals separated for sale and reuse.

6.2 For the Participating Councils, their current waste processing services provided by SUEZ, will terminate on 31 May 2024.

6.3 Liverpool's current waste processing contracts are summarised in the following **Table 1**.

Table 1: Liverpool's contracts for waste processing

Contract Name	Contract No	Description	Term	Commencement date	Initial term expiry	Extended term expiry
SUEZ - Waste Acceptance , Treatment and Disposal	ST948	Disposal of contents of domestic General Waste red lid bins and Domestic Garden Waste green lid bins.	10 Years +5 year extension	Feb 2009	Feb 2019	Feb 2024
VISY - Processing of Recyclable Resources	ST1221A	Disposal of contents of domestic Recycle yellow lid.	10 Years +1 year extension	July 2009	July 2019	July 2024
JJ Richards - Provision of Waste Collection Services	ST1221	Collection of all Domestic waste bins- red, yellow and green	10 years +2 year extension which had been taken up	July 2009	July 2019	July 2021
Benedict Recycling - Receipt and Processing of Household Clean Up Material	ST2601	Processing of the general waste stream collected via the household clean up booked in service.	3 years 1+1 extension	July 2017	July 2020	July 2022

6.4 Liverpool's waste processing contracts will variously terminate, if extension periods are taken up, between July 2021 and July 2024.

6.5 As a consequence, the Applicants propose as soon as possible to undertake a tender process, preceded by industry consultation, to determine the Applicants' future waste processing arrangements and service provider(s).

6.6 Project planning in order for the future waste processing contract(s) to commence from 1 June, 2024, requires the Applicants to commence preparations as soon as possible, so that tenders can be called for by the end of 2018 and contracts awarded by the Applicants by the end of 2019.

6.7 A period of about 5 years from 2019 is anticipated as the time necessary for the Applicants to engage the successful tenderer(s) who will be required to secure land, obtain regulatory approvals, authorisations and licences, acquire technologies and to develop and commission the infrastructure necessary to meet the waste processing needs of the Applicants for a contract period of at least 15 years, with an extension option period of 5 years.

6.8 The new contracts will require processing of the Applicants' Waste Material, including the recovery of valuable resources for recycling of Dry Recyclable Material and Garden Organics for material return to the productive economy.

6.9 Residual Waste or fractions not suitable for recycling will be disposed either to landfill or by other preferable means such as waste to energy processing or by other Alternative Waste Technology as may be available at the time.

6.10 Household Waste and Clean-Up Waste, currently largely disposed to landfill, will be expected to continue to be disposed to landfill, excepting such waste as may be processed as waste to energy or by other Alternative Waste Technology in order to divert as much of such waste as possible from disposal to landfill.

6.11 It is the Applicants' intentions are to divert approximately 70% of all their Waste Material from disposal to landfill through the implementation of the proposed future waste processing contracts. This diversion rate will enable the Applicants to seek to achieve a key target of the NSW Government's Waste Strategy, namely to increase waste diverted from landfill from 63% (set in 2010-11) to 75% (proposed between 2014 and 2021).

6.12 The Applicants' strategy (as with the Waste Strategy), is to assist in the conservation of natural resources and to minimise the disposal of waste to landfill, thereby minimising the environmental, economic and social consequences associated with the unnecessary consumption of finite resources, such as, silica used to produce new glass bottles, trees used in the production of paper and cardboard, and air space in landfill sites, particularly at the Lucas Heights Facility; the last remaining landfill site within the SMA. That landfill space is estimated by the operator SUEZ, will be exhausted by 2034 or thereabouts.

6.13 The Applicants seek by the future contracts to secure long term processing, recycling and disposal solutions on behalf of their communities and residents that are environmentally and commercially satisfactory and sustainable. In light of the growing pressure on finite landfill capacity in the SMA, with the significant projected population growth in that area and in the Local Government Areas of the Applicants (see section 11 and Table 8) and commensurate additional waste generation, any predominantly landfill-based strategy for waste management for Household Waste and Clean-Up Waste is not considered either commercially or environmentally sustainable for both present and future generations.

6.14 In order for the Applicants to secure the most cost efficient waste processing services and that incorporate Alternative Waste Technology that will assist their target diversion rate from landfill, the Applicants propose to provide to their future waste processing contractor(s) a guarantee, that in respect of each stream of Waste Material, all or a nominated portion of the Applicants' kerbside collected Waste Material will be delivered for processing for the processing period agreed in the contracts.

6.15 For similar reasons, the Applicants propose to offer tenderers a substantial contract period for the processing of waste following the obtaining of necessary approvals, licences, land, infrastructure and AWT, namely about 15 years. This will repeat the current processing term secured by the Participating Councils with WSN under the current Authorisation. This period is generally acknowledged by the Waste Processing Industry as providing sufficient time for a service provider to amortise such costs and establish a commercially viable operation.

6.16 It is expected by the Applicants that the long lead time for any contractor(s) to be operationally ready to receive and process Waste Material, will be immediately following the expiry of the current processing contract for the Participating Councils, namely 1 June 2024. In the intervening period, the Applicants propose to undertake the tender and enter into the relevant contracts with the successful tenderer(s).

6.17 The Applicants anticipate that the cost of infrastructure and Alternative Waste Technology for the required services will be in the order of tens of millions of dollars to establish and maintain, having regard to the estimated tonnages of Waste Material to be processed as set out in section 11 and Table 10 .

6.18 Further, the Applicants propose to offer tenderers a 5-year extension of the period of their contracts, taking the period of waste processing operations to potentially 20 years from commencement. Again, this is intended to ensure for the successful contractor(s) a profitable business, including by the adoption of long term marketing strategies for sale of recyclable materials and to take advantage of new Alternative Waste Technology that may enter the market over time.

6.19 Having regard for the current Waste Strategy and policies focusing on more sustainable environmental outcomes, the extension period is also considered necessary for the successful contractor(s) and the Applicants, to all derive the benefits of new developments and technologies in the industry, as and when policy settings allow or require.

6.20 Further, commercial necessity dictates that any contractor committing such significant required capital, will require a guaranteed supply of feedstock waste for processing and in order to efficiently price the cost of processing, having regard to the anticipated volumes and tonnages of available waste and having regard for a contract term of about 15 years.

6.21 It is anticipated that by reason of the guarantees by the Applicants, there will be significant benefits for the Applicants also, who will be better able to achieve their intended community, regulatory and industry requirements, as well as predictable and cost-efficient services over the term of the contracts.

7. Previous Application and Authorisation A90886 and Conduct

7.1 By application to the Commission for authorisation (A90886) dated 16 October 2003, the Applicants sought authorisation under section 88(1) of the *Trade Practices Act 1974* (Cth) Act (**TP Act**) to make and give effect to a contract, arrangement or understanding which may have the purpose or effect of substantially lessening competition within the meaning of section 45 of the TP Act.

7.2 The Applicants sought authorisation to collaboratively tender for the services of qualified contractors, able to process, market or otherwise dispose of kerbside collected waste materials (excluding bulky materials).

7.3 Subsequently Liverpool withdrew as an applicant in that application.

7.4 By the Commission's Authorisation no. A90886, the Participating Councils were granted authorisation under section 88 of the TP Act to:

- *make a contract or arrangement, or arrive at an understanding, a provision of which would have the purpose, or have or might have the effect, of substantially lessening competition within the meaning of section 45 of the Act; and*
- *give effect to a provision of a contract, arrangement or undertaking which provision has the purpose or has or may have the effect of substantially lessening competition with the meaning of section 45 of the Act*.[2]

7.5 The Current Authorisation was granted for the following periods:

- *for the period of the collective tender process up to a maximum of 12 months from the date the final determination comes into effect; and*
- *for the term of the contracts entered into under the tender process up to a maximum of 15 years.*[3]

7.6 The Authorisation came into force on 7 January 2005.

7.7 By Determination Authorisation no. A90886 of the Commission dated 23 November 2005 the Authorisation was varied to provide as follows:

- *for the period of the collective tendering process up to a maximum of 18 months from the date the original authorisation came into effect (7 January 2005)*

7.8 The varied Authorisation came into effect on 15 December 2005.

7.9 The Authorisation was granted on the basis that the Commission concluded that:

> *…in all the circumstances the provisions of the proposed arrangements would or be likely to result in a benefit to the public and that the benefit would outweigh the detriment to the public constituted by any lessening of competition that would result, or be likely to result if the proposed arrangements were made and the provisions concerned were given effect to*.[4]

[2] p.67 of Authorisation

[3] pp 67-68 of Authorisation

[4] p.67 of Authorisation

SUEZ Contracts

7.10 Pursuant to the Authorisation, the Participating Councils jointly tendered for contractors who could provide services to each of them by individual contracts for waste processing services including the following:

(a) the processing of all four waste streams of the Waste Material of the Participating Councils'; and

(b) the construction of Alternative Waste Technology to process the Waste Material including a biological treatment plant to minimise the disposal of Residual Waste to landfill.

7.11 On 14 August 2006 each of the Participating Councils entered into the SUEZ Contracts for WSN to construct certain waste processing facilities, including AWT and waste processing services for the Councils' collected kerbside waste.

7.12 By statutory novation under the *Waste Recycling and Processing Corporation (Authorised Transaction) Act 2010* (NSW), in about 2011 all rights, assets and liabilities under the SUEZ Contracts were novated by WSN to SITA Australia Pty Limited. By reason of subsequent corporate restructures, the SUEZ Contracts are currently beneficially held by SUEZ.

7.13 In about 2011, the business of WSN was acquired by SUEZ and effectively since that time the SUEZ Contracts have been administered and the services under the contract(s) been provided by SUEZ.

SUEZ Contracts terms

7.14 Under the SUEZ Contracts, WSN's obligations included to construct, own and operate the following facilities:

(a) an advanced waste treatment facility at a landfill site known as Jacks Gully (now known as SUEZ Spring Farm Facility) to process Household Waste;

(b) a tunnel composting facility at the Jacks Gully landfill site to process Garden Organics;

(c) utilise the existing MRF at the Jacks Gully landfill site to process Dry Recyclable Material;

(d) a drop-off facility for kerbside Clean-Up Waste; and

(e) a landfill cell for disposal of non-putrescible, non-reusable waste.

7.15 Under the SUEZ Contracts the Participating Councils' obligations are principally to provide WSN minimum amounts of Waste Material for commercially viable operations for processing, and to pay WSN processing fees in consideration for the provision of the services, calculated according to the type of Waste Material processed.[5]

7.16 Under the SUEZ Contracts each of the Participating Councils are obliged to exclusively supply their Waste Material (defined as Input Streams) to WSN for waste processing.[6]

7.17 The waste processing services provided under the SUEZ Contracts commenced on about 1 June 2009, after a period permitted for WSN to construct the Facility (as defined including AWT and other infrastructure) and to obtain associated approval and arrange for necessary construction.[7]

[5] [redacted]

[6] [redacted]

[7] [redacted]

Benefits of the SUEZ Contracts

7.18 The SUEZ Contracts have provided the following substantial benefits to the Participating Councils and their ratepayers:

(a) Without being able to exclusively supply the successful contractor, i.e. WSN, with all the waste streams of the Participating Councils, the tendering contractors would not have been able to meet the requirements of the Participating Councils that AWT be utilised in order to maximise recycling, sale of available resource to earn income, and to minimise disposal to landfill with the additional expense of the Waste Levy for such disposal.

(b) The combining of waste streams and as a result the critical mass of waste tonnages for processing, secured the future waste stream available from waste processing and secured to the successful contractors projected income and profitability, sufficient to justify the investments required in order to construct and operate the required Facility as defined.

(c) It was because of the collective tendering process, the requirement to minimise disposal to landfill, the necessity for AWT, and the exclusive supply of waste for processing, that WSN was able to offer the Participating Councils the Ecolibrium facility and the employment of the then state of the art ArrowBio mechanical biological treatment technology.

[redacted]

(e) The SUEZ Contracts included the terms of the Participating Councils' Tender (clause 2.4(3) of the SUEZ Contracts), however that Tender is not included with the SUEZ Contracts in Appendix 2 to this Application.

(f) The Processing Fees under the SUEZ Contracts were highly competitive and inclusive of the Waste Levy. Each council is required to pay the processing fee for each stream of their respective Waste Material provided.

(g) The processing fee is constructed from the base fee as nominated in the SUEZ Contracts and a portion of the Waste Levy (commensurate with the level of resource recovery anticipated by the contractor). [redacted]

7.19 The SUEZ Contracts provide for a term of 15 years from the date WSN commenced receiving waste for processing.[9] Accordingly, the SUEZ Contracts expire on 31 May 2024.

7.20 The Authorisation expires on 30 June 2024, shortly after the time when new waste processing contract(s) will be required to commence to process the Applicants' Waste Material.

7.21 The Ecolibrium facility was operated by WSN from June 2009 until it was closed in early 2011 due to excessive odour problems. It was then converted by SUEZ as part of a new Transfer Station.

7.22 As a consequence of the closure, Household Waste and Clean-Up Waste has been diverted by SUEZ to either the SUEZ Kemps Creek Facility for processing or to the Lucas Heights Facility for disposal directly to landfill.

[8] [redacted]

[9] [redacted]

8. Applicants' responsibilities for collection and processing of Waste Material

8.1 The Applicants are responsible to collect and dispose of kerbside collected Waste Material generated within each of their respective Local Government Areas detailed on the Map of Local Government Areas of the Applicants, which is **Appendix 5** to this Application.

8.2 The Applicants are responsible for the collection and processing of the following streams of kerbside collected Waste Material within the respective Local Government Areas:

(a) Household Waste;

(b) Dry Recyclable Material;

(c) Garden Organics; and

(d) Clean-Up Waste.

Type of Waste Material for recovery and disposal

8.3 The characteristics of each type of Waste Material are more particularly described as follows:

(a) Household Waste:

(i) Household Waste consists of domestic waste including food waste that generally cannot be separated into streams of Dry Recyclable Material or Garden Organics.

(ii) The waste generally includes materials that are mixed together in such a way as to be impractical to separate by householders, including Dry Recyclable Material and Garden Organics that have not otherwise been separated into the provided Council bin at the kerbside.

(iii) In excess of half Household Waste by weight comprises putrescible (food) organics, although mixed with inorganic domestic waste.

(iv) With the forecast of significant increases in population in the areas the responsibility of the Applicants, they anticipate that there will be a commensurate increase in the quantity of Household Waste requiring disposal.

At present, as noted elsewhere in this application, approximately 97% of the Participating Councils' Household Waste is disposed to landfill at the Lucas Heights Facility.

(b) Dry Recyclable Material:

(i) All the Applicants collect Dry Recyclable Material in two streams, usually fibre (paper & cardboard) and containers commingled in the one bin.

(ii) Dry Recyclable Material is classified by types and generally treated as follows:

Paper products	Newsprint, cardboard, other paper generated by households (telephone books, all cardboard boxes, white paper etc). Paper products are sorted into three streams: newspaper, cardboard; and mixed paper. Paper is transported to recycling facilities in bales of 500kg to 750kg each.
Glass products	All glass bottles and jars such as beverage and other food containers of all colours and sizes. Window glass, light bulbs and other non-food containers are not collected.

	Glass is sorted according to colour, into three streams, amber, green and flint or clear glass. Other glass colours such as blue and red are mixed in with the three main colour streams in small quantities. Amber and green glass can be contaminated with up to 10% other glass while flint is limited to 1% contamination.
Metal products	Only food and beverage containers made of steel and aluminium are accepted. Metals are sorted into steel and aluminium streams.
Plastic products	All plastic food and beverage containers and other containers (for example, oil, shampoo and laundry products) of polymer types 1, 2, 3, 4, 5, 6 and 7are collected at present. Plastics are sorted accordingly to polymer type, baled and transported to recycling facilities in bales. PET and HDPE containers may be sorted into clear and coloured streams and baled accordingly depending upon market conditions.
Composite products	The other form of packaging material collected in kerbside recycling programs is called “liquidpaperboard”. These containers are mainly gable topped milk and juice cartons that consist of cardboard with a polyethylene lining, or aseptic containers (tetra paks) made of aluminium, cardboard and polyethylene lining (for example juice containers with drinking straws attached). Liquidpaperboard is either sorted for baling and transportation or mixed with the cardboard stream described above (in very small quantities). Aseptic containers are not recycled at present.

(iii) Plastic containers are also further identified by polymer type:

Polymer Number	Common Name	Technical Name	Typical Example of Containers
1	PET	Polyethylene Terepthalate	Carbonated soft drink, spring water, fruit juice, sports drink
2	HDPE	High Density Polyethylene	Milk packaging, dish washing liquid, shampoo, household cleaners
3	PVC	Polyvinyl Chloride	Cordial bottles
4	LDPE	Low Density Polyethylene	Garbage bin liners and bags, ice cream container lids
5	PP	Polypropylene	Ice cream containers (not lids), some cordial containers
6	PS	Polystyrene	Plastic cutlery, protective packaging
7		Other Plastics	Includes all other resins and multi materials; laminated plastics; some car parts

(c) Garden Organics:

(i) Garden Organics comprise organic materials that are compostable, i.e. biodegradable through aerobic decay.

(ii) Although plastics are organics they are not compatible with composting systems and are defined as a contaminant when found in the organic waste stream.

(iii) Other common contaminants include treated timber, garden hoses, garden pots (from pot plants) and bags of mixed waste. Overall contamination is approximately 5% in the material collected from the kerbside.

(iv) The Applicants provide a separate coloured bin for the disposal of Garden Organics.

(d) Clean-Up Waste:

(i) Clean-Up Waste is generally dry inorganic, bulky waste, not able to be conveniently placed into garbage or recycling bins and generally requiring disposal to landfill, excepting metals that may be recycled for recovery.

(ii) The clean-up stream is suitable for use as a feedstock in waste to energy (thermal) technologies. Clean-Up Waste from households consists of dry bulky waste which, upon delivery to a processing facility, can be separated into material type such as timber and textiles etc, and shredded to small particle sizes. The shredded material is then suitable for use in thermal or heat producing applications such as feedstock in cement kilns.

(iii) Technologies that process Clean-Up Waste are also suitable for dry waste from other sources such as from commercial and industrial waste. The Applicants are aware that a dry waste processing facility is soon to open in Wetherill Park, NSW. With the exception of this facility, landfill disposal appears to be the only option to dispose of this waste stream at present.

Kerbside waste collection arrangements

8.4 The Applicants collect Waste Material from households as a core function under the LG Act. Households typically receive a (standard) weekly collection of Household Waste, a fortnightly collection of Dry Recyclable Material, a fortnightly collection of Garden Organics, and Clean-Up Waste either as a scheduled collection service, e.g. twice yearly, or on-call where residents book a collection when needed. By exception, Camden provides its residents with a weekly collection of the 3-bin service.

8.5 The separation of waste into like streams by householders at the kerbside is designed primarily to divert Dry Recyclable Material and Garden Organics from disposal otherwise to landfill as an environmental objective and to meet public health requirements.

8.6 **Table 2** below summarises the Applicants' current household waste streams collection system arrangements.

Table 2 – Councils' household kerbside waste collection system arrangements:

Council	Household Waste	Dry Recyclable Material	Garden Organics	Clean-Up Waste
Camden	Weekly collection, 80L/120L/240 Litre bin options	Weekly collection 240 Litre bin	Weekly collection 240 Litre bin	2 clean ups per year on-call
Campbelltown	Weekly collection 140 Litre bin	Fortnightly collection 240 Litre bin	Fortnightly collection 240 Litre bin	4 clean ups per year on-call
Liverpool	Weekly collection 140 Litre bin	Fortnightly collection 240 Litre bin	Fortnightly collection 240 Litre bin	4 clean ups per year on-call
Wingecarribee	Weekly or fortnightly collection 80L/140L/240 Litre bin options	Fortnightly collection 140L/240L/360 Litre bin options	Fortnightly collection 240 Litre bin	Pre-paid service available as required
Wollondilly	Weekly collection 140 Litre bin	Fortnightly collection 240 Litre bin	Fortnightly collection 240 Litre bin	2 clean ups per year scheduled service

8.7 The Applicants utilise a 3-bin system for the collection of Household Waste, Dry Recyclable Material and Garden Organics, common across much of NSW. The system is designed to be easily recognised by standard bin lid colours and facilitate the diversion of as much recyclable material away from landfill as possible. This system of kerbside collection is designed to assist the Applicants to achieve the targets set out in the Waste Strategy.

8.8 Bin bodies and lids have a common colour coding that complies with Australian Standard AS 4123.7–2006 Mobile Waste Containers, to provide consistent recognition of waste and recycling systems from one Local Government Area to another. Each of the Applicants provides households with a bin system that complies with the AS 4123.7 bin colour coding as referred to in **Table 3** below.

Table 3 – Councils' bin colours for waste types:

Waste Category	Bin Body Colour	Bin Lid Colour
Household Waste	Dark green or black	Red
Recycling (commingled and containers)	Dark green or black	Yellow
Garden Organics	Dark green or black	Lime green

8.9 The Applicants combine commingled and container recycling with paper and cardboard into a single bin.

8.10 There are several waste collection contractors servicing the Applicants as identified in **Table 4** below, along with details of their respective collection fleets (refer to the number in brackets).

Table 4 – Councils waste collection service contractors (collection vehicle numbers in brackets):

Council	Household Waste	Dry Recyclable Material	Garden Organics	Clean Up Waste	Spare Vehicles
Camden	Own Day Labour (5)	Own Day Labour (5)	Own Day Labour (4)	Own Day Labour (2)	0
Campbelltown	SUEZ (8)	SUEZ (4)	SUEZ (5)	SUEZ (4)	4
Liverpool	JJ Richards (12)	JJ Richards (7)	JJ Richards (4)	Own Day Labour (6)	2
Wingecarribee	JR Richards (3)	JR Richards (2)	JR Richards (1)	JR Richards (2)	1
Wollondilly	JR Richards (3)	JR Richards (2)	JR Richards (2)	JR Richards (1)	1
TOTAL	31	20	16	15	8

8.11 Householders pay for kerbside waste collection and disposal services through the Applicants' annual rating system. The waste service charge includes the cost of new and replacement bins and kerbside waste collection and disposal. The charge appears as a separate charge on the householders' annual rates notice called the Domestic Waste Management Charge. Accordingly, householders are financially interested in the amount of the charge.

Procurement of the Applicants' kerbside waste collection services

8.12 Camden employs its own staff to provide all kerbside waste collection services, relying principally on its own day labour resources.

8.13 Procurement of contracted kerbside waste collection services by the other Applicants is undertaken by open tender processes where each of them invites submissions from waste collection contractors, for a designated scope of works. Tender invitations are typically advertised in the Sydney Morning Herald, and also via e-service providers such as Tenderlink.

8.14 Also, the Waste Collection Industry's representative, the Waste Contractors and Recycling Association NSW, advises its members when waste collection tenders are advertised.

8.15 Typically a tender specification or scope of works for kerbside waste collection describes, amongst other things, the number and location of bins to be collected, how often services are to be provided, and importantly the location(s) of waste processing/disposal sites to which the collected waste is to be delivered. This information is entered into the contract between each of the Applicants and the successful contractor to form a permanent part of the service arrangement.

8.16 Collection contractors are paid an agreed fee for them to provide all staff, vehicles and equipment, collect bins and transport the collected waste to nominated processing and disposal locations.

Current waste collection contracts

8.17 The Applicants' current waste collection service contracts are detailed in **Table 5** below. The contracts typically contain clauses providing that all Waste Material collected under each contract remains the property of the Applicant, until deposited at the processing/disposal facility.

Table 5 – Councils waste collection contracts:

Council	Commencement Date	Term	Expiry Date Initial Term	Extension Period	Expiry Date Final Term
Camden	Council's own day labour collection service - no contractors involved.				
Campbelltown	5/11/2013	9 yrs	4/11/2022	14 months	4/1/2024
Liverpool	1/7/2009	10 yrs	30/6/2019	2 yrs	20/6/2021
Wingecarribee	1/7/2014	10 yrs	30/6/2024	2 x 1 yr options	30/6/2026
Wollondilly	30/6/2015	10 yrs	30/6/2025	2 x 1 yr options	30/6/2025

8.18 By example, the collection contract of Campbelltown contains the following clause detailing ownership and transfer of ownership of waste:

> *6. Processing and Disposal*
>
> *6.1 Ownership of Material*
>
> *All materials collected from bins under the Contract (i.e. Mixed Solid Waste, Recyclables and Garden Organics) and all materials collected in General Kerbside Clean Ups and Bulky Garden Organics Clean Ups under the Contract, will remain the property of Council, until deposited at the disposal facility or facilities nominated by the Council Representative.*

8.19 Each waste collection service or contractor collects and transports Waste Material, however they are not required to provide waste processing and disposal services.

9. Current processing arrangements for kerbside collected Waste Material

9.1 The current arrangements for the processing and disposal of the Applicants' kerbside collected Waste Material are generally as follows, subject to particular arrangements stated below:

(a) Household Waste is delivered directly to a Transfer Station for bulking up and haulage, either for disposal to landfill or to a waste processing facility;

(b) Dry Recyclable Material is delivered to a MRF for decontamination and processing, for preparation for sale to market with Residual Waste for disposal to landfill;

(c) Garden Organics are delivered to an ORRF for decontamination, processing and preparation for sale to market and Residual Waste for disposal to landfill; and

(d) Clean-Up Waste is delivered either directly for disposal to landfill or to a Transfer Station for bulk haulage and later disposal to landfill.

Waste Material to SUEZ Spring Farm Facility

9.2 The collection contractors of Campbelltown, Camden and Wollondilly each deliver all their four streams of Waste Material from kerbside to the SUEZ Spring Farm Facility.

9.3 Wingecarribee delivers its waste from kerbside to its own Transfer Station at Moss Vale, before transferring Household Waste and Dry Recyclable Material to the SUEZ Spring Farm Facility, while Garden Organics and Clean-Up Waste are delivered to other licensed waste disposal facilities within the Wingecarribee Local Government Area.

9.4 Liverpool's contractors deliver kerbside collected waste streams for processing as follows:

(a) Household Waste is delivered to the SUEZ Kemps Creek Facility;

(b) Dry Recyclable Material is delivered to the Visy Facility;

(c) Garden Organics is delivered to the ANL Facility; and

(d) Clean-Up Waste is delivered to Benedict Recycling.

9.5 The SUEZ Spring Farm Facility contains several waste processing facilities including:

(a) A MRF to receive, sort and prepare commingled recyclables for onsale to various markets. Each collection vehicle is weighed at the weighbridge and a specific product code is issued on a docket, which identifies the Applicant providing the waste, product type, weight, date and time of arrival. The trucks proceed to tip their loads at the MRF where mixing with other loads occurs on the floor of the MRF. Each Applicant receives advice on the performance of the MRF each month to advise of the volumes delivered and net volumes processed (minus contamination).

(b) A Transfer Station which receives all deliveries of Household Waste for bulk transfer off site to landfill or processing. Each Applicant's collection vehicles are weighed at the weighbridge and a specific product code is issued on a docket, which identifies the Applicant, product type, weight, date and time of arrival. The trucks proceed to tip their loads at the Transfer Station where mixing with other loads occurs on the floor of the facility. Each Applicant receives advice on the volumes landfilled and the volumes processed each month.

(c) An ORRF to receive and process Garden Organics. The SUEZ facility also has an adjoining site called Camden Organics, also operated by SUEZ, to receive Garden Organics from Campbelltown because of the higher levels of contamination usually found in these loads. Each collection vehicle is weighed at the weighbridge and a specific product code is issued on a docket, which identifies the Applicant, product type, weight, date and time of arrival. The

trucks proceed to tip their loads at the designated location where mixing with other loads occurs on the floor of the factory. Each Applicant receives advice on the performance of the ORRF each month to advise of the volumes delivered and net volumes processed (minus contamination). Following composting the partially processed organics are delivered to other sites for maturation and subsequent onsale to markets typically located in the agriculture and site rehabilitation sectors.

(d) A Dry Waste Drop Off area for the receival and bulk transport to landfill of Clean-Up Waste.

9.6 Upon the expiry of the current collection contracts, each of the Applicants will need to have in place contracts or arrangements for kerbside collection services to remove household waste from their communities.

10. NSW Government Waste Strategy

10.1 The Waste Strategy provides a government framework for reducing waste and making better use of resources.

10.2 The Vision of the Waste Strategy is as follows"

> *The primary goal of this strategy is to enable all of the NSW community to improve environment and community well-being by reducing the environmental impact of waste and using resources more efficiently.*[10]

10.3 The Waste Strategy that seeks to avoid waste and recover resources is a requirement under the *Waste Avoidance and Resource Recovery Act 2001* (NSW) (the **WARR Act**).

10.4 The Waste Strategy is the primary strategic document to State and Local Government agencies, industry and the broader community in waste prevention and avoidance, re-use and recycling. The Waste Strategy established targets for waste avoidance and resource recovery and a framework for action.

10.5 The Waste Strategy is supported by regulations and policies, including the POEO Act and the Waste Levy, which is charged for disposal to landfill and so to discourage such disposal, as well as licensing requirements for waste processing facilities.

10.6 The objectives of the WARR Act are set out in section 3 of the Act and are as follows:

> *The objectives of the Waste Avoidance and Resource Recovery Act 2001 are as follows:*
>
> *(a) to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development;*
>
> *(b) to ensure that resource management options are considered against a hierarchy of the following order:*
>
> *(i) avoidance of unnecessary resource consumption;*
>
> *(ii) resource recovery (including re-use, reprocessing, recycling and energy recovery);*
>
> *(iii) disposal.*
>
> *(c) to provide for the continual reduction in waste generation;*
>
> *(d) to minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the re-use and recycling of waste;*
>
> *(e) to ensure that industry shares with the community the responsibility of reducing and dealing with waste;*
>
> *(f) to ensure the efficient funding of waste and resource management planning, programs and service delivery;*
>
> *(g) to achieve integrated waste and resource management planning, programs and service delivery;*
>
> *(h) to assist in the objectives of the Protection of the Environment Operations act 1997.*

[10] p. 1 of NSW Waste Avoidance and Resource Recovery Strategy 2014-21, NSW EPA.

10.7 The WARR Act requires the EPA, amongst other things, to develop a waste strategy for the State and every local government council is required to implement the Waste Strategy within its Local Government Area.

10.8 Section 14 of the WARR Act states that Resource NSW may request a local council to provide the reasons for any specified non-compliance by the local council with the objectives of the current Strategy.

10.9 The EPA is required to report progress against the Waste Strategy every two years.

10.10 The Waste Strategy is a framework for setting priorities and long-term goals and targets including for reduction of waste generation, increasing recycling and diverting more waste from landfill.

10.11 The Waste Strategy target for Key Result Area 1 is as follows:

> ***Target for reducing waste generation***
>
> *By 2021 – 22, reduce the rate of waste generation per capita* (page 13)

10.12 The Waste Strategy target for Key Result Area 2 is as follows:

> ***Target for increasing recycling***
>
> *By 2021 – 22, increase recycling rates for:*
>
> - *municipal solid waste from 52% (in 2010 – 11) to 70%* (page 15)

10.13 The Waste Strategy states that the Area 2 target takes into account:

> *… various waste actions, including … development of additional alternative waste treatment (AWT) facilities and diversion of recycling residuals to energy from waste.* (page 15)

10.14 The Waste Strategy states the Measurement of achievement of the target will include:

- *The recycling rate for a particular waste stream … is the preparation of all materials recycled from that waste stream in a given year (measured in tonnes) compared with the sum of all waste generated from that waste stream in the same year. (page 25)*

10.15 The Waste Strategy target for the Key Result Area 3 is as follows:

> ***Target for diverting more waste from landfill***
>
> *By 2021 – 22, increase the waste directed from landfill from 63% (in 2010 - 11) to 75%.* (page 17)

10.16 The Waste Strategy states:

- *Diverting waste from landfill decreases the impact of landfill on the environment and reduces the need to construct new sites. "Waste diversion" refers to the alternative pathways for materials entering the system that avoid disposal to landfill, such as recycling and energy recovery.* (page 17)

10.17 The Waste Strategy states the *Measurement* of achievement of the target will be:

- *The diversion rate is the proportion of all materials (measure in tonnes) that are either recycled or otherwise recovered (such as through an energy-from-waste facility) compared with total waste generation in a given year.* (page 25).

10.18 For Waste Material processed for the Participating Councils under the SUEZ Contracts, SUEZ has notified the Participating Councils that the performance of current waste collection systems diverts from landfill only about 43% of total Waste Material received, as compared to the objective for Key Result Area 3 of 75%.[11]

10.19 SUEZ has also advised those councils that approximately 97% of their Household Waste is presently being disposed to landfill and only about 3% is being diverted from landfill, substantially less than 75% target in Key Result Area 3 of the Waste Strategy.

[11] Refer to tonnage data in Table 6 for current councils (without Liverpool) i.e. total waste = 146,467t and total diversion (recycling + garden organics) = 67,448t, less 7% contamination = 62,726t therefore net recyclables diverted = 43%

11. Market information

11.1 In relation to the Waste Processing Industry, the Applicants contend that for the purposes of this Application, the relevant market in which the Applicants require to acquire waste processing services, is to be defined by all service providers that process household kerbside Waste Material within the GSR.

11.2 Within this market, some service providers are able to process all streams of Waste Material, whereas other service providers process only one or multiple streams of Waste Material. In that sense, the processing of each separate stream of Waste Material within the geographical area, can be viewed as a sub-market.

SUEZ and Veolia market dominance

11.3 The processing of Waste Material in the GSR is dominated by:

(a) SUEZ, by reason of its control of:

(i) Transfer Stations in the SMA at North Ryde, Belrose, Chullora, Auburn, Seven Hills, Wetherill Park, Rockdale and Artarmon; and

(ii) the Lucas Heights Facility, i.e. landfill.

(b) Veolia by reason of its control of:

(i) Transfer Stations in the SMA at Clyde and Banksmeadow; and

(ii) the Woodlawn Facility, i.e. landfill.

11.4 Only SUEZ and Veolia are capable of processing all streams of Waste Material in the GSR.

The Waste Processing Sub-Markets

11.5 There are four (4) distinct sub-markets for the processing, marketing and disposal (by sale or otherwise) for each of the following kerbside collected household Waste Material.

(a) Household Waste;

(b) Dry Recyclable Material;

(c) Garden Organics; and

(d) Clean-Up Waste,

(collectively the **Waste Processing Sub-Markets).**

11.6 Further to the above sub-markets, there is also another sub-market for the processing of Residual Waste; a by-product of the rejected materials of the above sub-markets.

11.7 Waste processors seek to recover commercial value from Waste Material by the use of technologies and at a number of operational stages of the processing process; typical stages of which are:

- weighbridge recording of each input load
- sorting, separation and decontamination of waste/non-recyclables
- manual and mechanical processing
- preparation for sale e.g. baling
- marketing and disposal by sale or otherwise
- weighbridge recording of each output load

11.8 Waste processing technologies, as an alternative to landfill disposal, are available in a variety of scale and forms. Each is designed to reduce the volume of Residual Waste disposed to landfill, for example by composting technologies to remove recyclables (plastics, steel and aluminium) and to convert organic components like food waste into compost products for sale into soil-based markets. Other technologies employ anaerobic digestion processes to convert organic waste into combustible gases to be used to produce "green" electricity.

11.9 Those waste processing sub-markets can be distinguished from the markets for the collection and transportation of kerbside Waste Material to locations for waste processing, marketing and disposal.

11.10 The Waste Processing Sub-Markets are competitive and serviced by a range of providers or participants who have capabilities to service one or more of the Waste Processing Sub-Markets. They are listed in section 16 hereunder.

11.11 Household Waste including putrescible waste is generally processed in 2 ways:

(a) substantially disposed to landfill; and

(b) using Alternative Waste Technology.

11.12 The competitive market for processing Household Waste in the SMA has reduced in recent years with the closure of licensed putrescible waste landfill sites as follows:

(a) at Belrose – closed in November 2014;

(b) at Jacks Gully – closed in about May 2016; and

(c) at Eastern Creek – closed in August 2017.

11.13 The single remaining putrescible waste landfill site in the SMA is the Lucas Heights Facility.

11.14 The only other waste to landfill site reasonably accessible for Household Waste and Residual Waste emanating from the SMA is the Woodlawn Facility, which is supplied with waste from Transfer Stations operated by Veolia at Clyde and Banksmeadow – suburbs of Sydney. The Woodlawn Facility is owned and operated by Veolia.

Household Waste sub-market

11.15 The sub-market for the receiving, handling, processing and disposal of Household Waste is determined by the necessity for the disposal of Household Waste to landfill. There are presently few options available for landfill disposal of Household Waste including putrescible waste in or relatively near the Applicants' Local Government Areas and the SMA. As indicated, the only practically accessible licensed waste processing sites for Household Waste emanating from those areas are:

(a) The Lucas Heights Facility is identified on the Map of Waste Processing Facilities at **Appendix 9** to this Application**.** The site is operated by SUEZ under Environment Protection Licence Number 5065[12]. Access to this facility is available to kerbside waste collection trucks and bulk haul trailers coming from Transfer Stations servicing the SMA.

SUEZ has estimated that the Lucas Heights Facility has a remaining operation life of approximately 16 years, with complete filling of the landfill expected by about 2034.

[12] NSW Environment Protection Authority

(b) The Woodlawn Facility is also identified on the Waste Processing Facilities Map. This site is operated by Veolia under Environment Protection Licence Number 11436[13]. Currently access to this facility is obtained only by rail from Veolia's Transfer Stations located at Clyde and Banksmeadow in the SMA. Veolia has advised the Applicants that the operational life expectancy of the landfill component of the Woodlawn Facility is approximately 30 years i.e. to about 2048. As a result from that time there will be no available landfill sites within the GSR unless new sites are established.

11.16 There are other putrescible waste landfills located outside the GSR at Blaxland in the Blue Mountain City Council area and at South Windsor in the Hawkesbury City Council area. Operators of these landfill sites however permit to receive only waste generated within their respective Local Government Areas and are therefore not available to the Applicants.

11.17 There are other putrescible waste landfills beyond these regions, namely at Woy Woy in the Central Coast Council area, Whytes Gully in the Wollongong City Council area, Dunmore in the Shellharbour City Council area and beyond. These sites are not practicably accessible for the Applicants by reason of the long distances from the Applicants' kerbside collection.

11.18 In any event, the established landfill sites outside of the SMA that service their local communities, would be unable to accommodate the volumes of Waste Material anticipated to be produced by the Applicants in the future.

11.19 Not all participants in each of the Waste Collection Industry and Waste Processing Industry offer the same services, which services depend on the nature of the waste streams for collection and processing. Also not all participants in the Waste Processing Industry can provide, or commercially they choose not to provide, waste processing facilities for all streams of Waste Material.

Dry Recyclable Material sub-market

11.20 MRFs are licensed by the EPA. They are designed to receive and process, for the purpose of disposal by sale or otherwise, household kerbside collected commingled papers and containers. The MRF removes any contamination such as bags of rubbish, by a combination of manual and mechanical separation processes and then sorts the mix of materials into a number of products for which buyers have agreed to purchase within defined product quality parameters. MRFs typically produce glass, aluminium, steel, paper, cardboard and mixed plastic products. The amount of contamination which appears in the delivered materials is approximately 12% at the Suez Spring Farm MRF.

11.21 By way of example, aluminium cans are separated from the main flow of commingled material by the use of an eddy current (reverse magnet system). They are then baled and transported to purchasers for reuse in the manufacture of new aluminium cans. Markets for MRF outputs are available locally and overseas and the price paid is governed primarily by volume and quality parameters.

11.22 The market for commingled kerbside recyclables in the SMA is approximately 369,704 tonnes[14]. The Applicants collected 51,200 tonnes in FY2017, which represents approximately 14% of the SMA market. This figure will increase commensurate with population growth to approximately. 98,000 tonnes in FY2036, a growth of 91%.

[13] [NSW Environment Protection Authority Environment Protection Licence.

[14] NSW Local Government Waste and Resource Recovery Data Report 2014-2015, NSW EPA March 2017.

11.23 The kerbside Dry Recyclables market, like other waste markets is defined by the distance kerbside collection vehicles can travel from a collection zone to the drop-off location two to three times each day and return, within the hours of operation of the facility. Camden, Campbelltown and Wollondilly currently deliver kerbside Dry Recyclables direct to the Suez Spring Farm MRF facility which is located within the GSR. Wingecarribee delivers its kerbside Dry Recyclables to its Moss Vale depot before being bulk hauled approximately 85km to the Suez Spring Farm MRF for processing.

11.24 The current MRF operators in Sydney are:

(a) Visy Recycling, with facilities at Smithfield and Taren Point;

(b) Polytrade Recycling, with facilities at Rydalmere and Enfield; and

(c) Suez, with a facility at Spring Farm.

11.25 Visy Recycling has the largest share of the council Household Waste market through its two MRFs. Visy sorts the commingled material into several commodity streams both for its own use as a manufacturer of packaging and for onsale to downstream markets. Visy also collects Dry Recyclables in some council areas in the GSR.

Garden Organics Material sub-market

11.26 Garden Organics processing systems are designed to convert organic material collected from kerbside and other sources into saleable organic products that are suitable for beneficial land application purposes, for example the replenishing organic-depleted soils in agriculture. The product outputs may vary depending on the feedstock, type of processing undertaken, product quality, proximity to and availability of markets.

11.27 Organic (solid) waste is generated by households typically in the form of food waste (termed 'food organics' to confirm that the material is not in fact a waste but a resource) and garden waste (Garden Organics). There are other organic wastes generated such as nappies, however the primary organic matter generated by households is from food and garden origins.

11.28 Food organics represent approximately 40% to 50% of Household Waste and its gradual decay in landfill is largely responsible for the production of harmful greenhouse gases (**GHGs**) such as methane. The diversion of organic matter from landfill delivers a twofold benefit whereby GHGs are not generated and valuable organic materials are recovered and processed so that they may be returned to the soil to improve soil characteristics and to replenish organic matter and nutrients essential for plant growth.

11.29 Each Applicant currently provide residents with a separate bin for the collection of Garden Organics. The material is collected from households each fortnight (weekly in Camden) and delivered to the SUEZ Spring Farm facility for decontamination and processing at the ORRF.

11.30 The SMA is serviced by 5 major organics processing companies operating across 8 separate sites:

(a) Suez, with facilities at Spring Farm, Kemps Creek, Lucas Heights and Eastern Creek;

(b) Bettergrow, with a facility at Vineyard;

(c) Australian Native Landscapes, with a facility at Badgery's Creek;

(d) Kimbriki Environmental Enterprise, with a facility at Terry Hills; and

(e) Soilco, with a facility at Kembla Grange in the Illawarra region

11.31 Bettergrow has also obtained development approval and an EPA license for the construction of a facility at Wetherill Park in the SMA, to also receive and process garden and food organics. The facility is expected to be operational early to mid-2019.

11.32 Wingecarribee has its own Garden Organics processing arrangements at its Moss Vale Resource Recovery Centre. This facility is designed for low volume throughputs and does not receive material from out of area. Wingecarribee markets the material locally to farmers and various agricultural pursuits.

11.33 Unlike landfills, which eventually reach their design capacity, organics processing facilities either receive and process incoming organic material or act as aggregation points for organics, prior to transfer to regionally based larger scale processing facilities closer to end markets. Finished products are subsequently on-sold to a range of markets. In either case a continuous throughput process is in operation. The resulting products are sold to markets that are located locally or within commercially reasonable transportation proximity of the processing facility.

11.34 Approvals for an ORRF may not be as difficult to obtain as for other forms of waste processing facilities, however any new facilities in the GSR will need to be enclosed, as exemplified at ANL's new facility at Badgerys Creek, the proposed Bettergrow facility at Wetherill Park and the ReGroup facility at Shellharbour. The EPA controls the licensing of Garden Organics processing facilities to manage odour and any other environmental consequences of composting; accordingly facilities are located well away from residential areas to minimise nuisance.

11.35 The market for the processing of household Garden Organics is defined by the distance that kerbside collection vehicles can travel from and return to the collection zone. In the case of the Applicants, kerbside vehicles currently deliver directly from the collection zone to the SUEZ Spring Farm Facility.

11.36 Given the number of established organics processing companies in the SMA, the Applicants anticipate that a competitive outcome would be achieved through a regional process. Although SUEZ has a dominant position by virtue of its extensive infrastructure located across the SMA and its position near the geographical centre of the Applicants' Local Government Areas, there is still an opportunity for new entrants into the market to service the Applicants' processing needs because of the volume of Garden Organics, the proposed duration of the future contract term, and future population and therefore waste growth anticipated in those areas.

11.37 Consideration may need to be given to the opportunity for the location of an aggregation point within the combined Local Government Areas of the Applicants, to allow any new entrant the opportunity to aggregate the Applicants' Waste Material whilst maintaining minimum transport distances for collection vehicles to minimise collection costs.

11.38 The generation of Garden Organics is a function of the number of households in a Local Government Area, as opposed to the number of residents (which is the measure to assess generation of Household Waste and Dry Recyclables). The increasing density of urban living will gradually reduce the generation rate of Garden Organics due to decreasing lot sizes, such as when two or more dwellings are constructed on a traditional building block. Accordingly the Applicants will adjust service levels over time to meet the decrease in Garden Organics.

11.39 The market for kerbside garden organics in the SMA is approx. 369,700 tonnes[15]. In FY2017 the Applicants collected 34,995 tonnes of Garden Organics and by FY2036 this is expected to grow to 100,450 tonnes, an increase of approximately 92% based on current generation rates and dwelling

[15] NSW Local Government Waste and Resource Recovery Data Report 2014-15, NSW EPA March 2017.

growth estimates. When compared to the remainder of the kerbside Garden Organics market in the SMA, the Applicants' volume represents approximately 13% of the total generation by Sydney Councils.

Lack of competition in Residual Waste sub-market

11.40 SUEZ and Veolia are practically the only waste processing service providers in the GSR that can provide putrescible waste disposal services to landfill and only at their Lucas Heights Facility and Woodlawn Facility, respectively.

11.41 Moreover given the projected end of life of operation of the Lucas Heights Facility in about 2034, in the absence of any additional landfill capacity within, or in reasonable proximity to the SMA or the Local Government Areas of each of the Applicants, there will likely be limited landfill availability for disposal of Household Waste, Clean-Up Waste and Residual Waste from that time. For this reason it is vital that the Applicants seek and procure Alternative Waste Technology from a contractor(s) well prior to the expiration of the SUEZ Contracts and with a long lead time for the construction of infrastructure and any approved Alternative Waste Technology.

11.42 Potential tenderers for the future waste processing contract of the Applicants will require to provide both Alternative Waste Technology, as well as a landfill disposal option for Residual Waste. This will require that they arrange with either SUEZ or Veolia to access their landfill sites, or seek alternative sites.

11.43 The Applicants estimate that the successful contractor(s) will require a minimum of 4 years in order to secure land for a waste processing site, and to obtain appropriate planning approvals from the Department of Planning and Environment and appropriate environment protection licensing from the EPA. This period is also necessary to acquire, develop, install and construct the required Alternative Waste Technology and landfill facilities, as will be necessary to process the projected quantities of Waste Material likely to be generated by the Applicants.

11.44 In the market for processing of Residual Waste, there are very few competitors and operators with the financial standing to propose, procure and successfully implement the Applicants' required Alternative Waste Technology in order to minimise, over time, the necessity to dispose of Residual Waste to landfill. In that sense the Applicants may be considered "price takers", and somewhat beholden to very few immediately available potential waste processing contractors.

11.45 In order to attract a larger number of potential waste processing service providers, the Applicants must provide to them (including potential new entrants to the market), sufficient time to prepare a tender, to execute the contract and to develop the necessary infrastructure and secure the appropriate Alternative Waste Technology ahead of the commencement of waste processing and disposal.

11.46 If competing service providers are not given sufficient time to establish the required operations, they will be disadvantaged in the tender process compared to contractors with access to landfill disposal, existing licensed waste processing facilities and the current financial standing to develop or acquire the necessary waste processing facilities including Alternative Waste Technology.

11.47 The indicative timetable of tasks necessary to develop the required waste processing capabilities by a contractor(s) is detailed in **Table 6** below. By undertaking such a timetable the Applicants are seeking to substantially increase competition for the processing, marketing and disposal of Waste Material including Residual Waste.

Table 6 – Applicants' indicative timetable for the proposed waste processing tender process

Task	Duration	Timing	Responsibility
Application to ACCC	6 months	May 2018 – November 2018	Applicants
Prepare Tender Documents	3 months	June 2018 – August 2018	Applicants
Industry Consultation (only after Interim Authorisation)	2 months	September 2018 – November 2018	Applicants
Advertise Tender and Preparation of Responses	10 months	November 2018 – July 2019	Applicants and Tenderers
Close Tender		July 2019	Applicants
Assess Tender	3 months	August 2019 – October 2019	Applicants
Award Contract		November 2019	Applicants
Acquire land (if necessary)	12 months	December 2020 – December 2020	Contractor(s)
Develop facilities / infrastructure/AWT	3 years	January 2021 – January 2014	Contractor(s)
Start to receive and process Waste Material	Ongoing	1 June 2024 – 31 May 2039 + 5 year extension option	Contractor(s)

11.48 The Applicants intend to await the outcome of this Application for authorisation prior to tendering for the proposed contract; however the Applicants seek an interim authorisation to enable progression of other pre-tender activities.

Dominance of Household Waste and Residual Waste sub-markets by SUEZ and Veolia

11.49 By reason of SUEZ's ownership and control of the SUEZ Spring Farm Facility, the SUEZ Kemps Creek Facility, SUEZ Eastern Creek Facility and the Lucas Heights Facility, all within the SMA, and the ownership and control by Veolia of the Woodlawn Facility and their Transfer Stations at Clyde and Banksmeadow, that provide processing/disposal of Residual Waste, SUEZ and Veolia currently dominate the markets for Household Waste and Residual Waste.

11.50 By collaboratively tendering the Applicants will be able to provide sufficient Waste Material for service providers without established infrastructure or lacking a guaranteed supply of waste material from other sources, to submit a competitive proposal and pricing. Therefore it is submitted that a likely effect of the proposed collaborative tendering process will be to increase competition relative to existing market arrangements and capable waste processors.

Existing waste processing infrastructure

11.51 **Table 7** below details the currently available waste processing facilities, operations and locations of facilities practically available to the Applicants in the GSR.

Table 7 – Waste processing facilities in the Greater Sydney Region:

Stream	Facility Type	Operator	Location	Comments
	Landfill	SUEZ	New Illawarra Road Lucas Heights	Estimated operational lifespan until 2034
	Landfill	VEOLIA	Woodlawn	Currently landfilling waste from SMA of approx. 900,000 tonnes per annum
	Transfer Station	SUEZ	Richardson Road Spring Farm, Narellan	Currently receiving waste from the Participating Councils and bulk hauling to landfill or to processing as directed by Suez
	Waste Processing	SUEZ/Global Renewables	Wallgrove Road Eastern Creek	Currently processing household waste approx. 220,000 tonnes per annum
	Waste Processing	SUEZ	Elizabeth Drive Kemps Creek	Currently processing household waste approx. 134,000 tonnes per annum
Dry Recyclable Material	MRF	SUEZ	Richardson Road Spring Farm, Narellan	Currently processes dry recyclables from the Participating Councils
	MRF	Visy	Cumberland Highway Smithfield	Processes Councils' dry recyclables
	MRF	Polytrade	South Street Rydalmere	Processes Councils' dry recyclables
Garden Organics	ORRF	SUEZ	Richardson Road Spring Farm, Narellan	Currently processes garden organics from Participating Councils and other Councils in the Suez network
	Organics Processing	SUEZ	Elizabeth Drive Kemps Creek	Processes Councils' Garden organics, Mixed Waste and combined food/garden organics
	Organics Processing	Australian Native Landscapes (ANL)	Martin Road Badgery's Creek	Processes council garden organics and combined good/garden organics

Applicants' populations – actual and projected

11.52 The Applicants had the following populations for FY17, and estimate their projected populations, as summarised in the **Table 8** below. The actual and projected populations are extracted from the more detailed population projections as contained in **Appendix 7** to this Application, which projections have been obtained from the NSW Department of Environment and Planning.

11.53 **Table 8 –** Councils' FY17 actual, FY24 projected and FY36 projected populations.

Council	**FY16 Population**	**Projected FY24 Population**	**Projected FY36 Population**	**Projected % Increase FY16 – FY36**
Camden	80,900	132,470	224,550	177.5%
Campbelltown	164,400	189,320	233,150	41.8%
Liverpool	214,100	261,640	331,000	54.6%
Wingecarribee	47,750	49,820	51,800	8.5%
Wollondilly	49,350	54,930	72,600	47.1%
All total	**556,500**	**688,180**	**913,100**	**64.1%**

Applicants' waste tonnages – actual and projected

11.54 The Applicants have ascertained that the tonnages of Waste Material collected and processed for FY17 as detailed in **Table 9** below:

Table 9 – Councils' FY17 collected and processed waste tonnages.

Council	**Household Waste**	**Dry Recyclable Material**	**Garden Organics**	**Clean-Up Waste**	**Total**
Camden	16,608	8,664	8,978	2,323	36,573
Campbelltown	33,650	14,101	16,641	7,005	71,396
Liverpool	47,971	17,048	15,640	5,392	84,504
Wingecarribee	7,217	4,913	4,976	71	17,177
Wollondilly	9.580	4,775	4,400	2,565	21,320
All Total	**115,026**	**49,501**	**50,635**	**17,356**	**231,970**

11.55 The Applicants have projected the tonnages of Waste Material they anticipate they will likely collect and have to process through to FY37 as detailed in **Table 10** below. These tonnages have been extracted from the more detailed Annual Waste Tonnage Projections FY2017 to FY2044 as contained in **Appendix 8** to this Application.

Table 10 – Councils' estimated waste tonnage for FY37 (CDS[16] impacts not included).

Council	Household Waste	Dry Recyclable Material	Garden Organics	Clean-Up Waste	Total
Camden	71,697	37,401	38,759	10,029	157,886
Campbelltown	52,000	20,953	24,728	10,409	108,089
Liverpool	77,077	27,392	25,130	7,785	137,383
Wingecarribee	7,682	5,230	5,297	121	18,329
Wollondilly	14,235	7,095	6,538	3,811	31,680
Group Total	**222,691**	**98,071**	**100,451**	**32,154**	**453,368**

11.56 The waste tonnage projections in Table 10 and Appendix 8 have been calculated having regard to the Applicants' respective actual waste tonnage collection per capita for the Applicants for FY17, and applying that rate to the projected populations of the Applicants through the Applicants' respective projection periods shown in Appendix 7.

11.57 By reason of the very significant population increases of 64.1% anticipated for the Applicants as a group from FY17 through to FY37, it is anticipated that there will be a very significant commensurate increase in waste tonnages to be collected and processed by the Applicants.

11.58 In particular, waste tonnages to be processed by the Applicants are projected to increase from 232,518 tonnes in FY17 to approximately 300,000 tonnes in FY24 and to exceed 450,000 tonnes in FY37, i.e. an increase of 93%.

11.59 Further, based on a continuation of similar population growth of the Applicants, it is estimated that approximately 490,000 tonnes of kerbside collected waste will likely be generated by the Applicants per annum by FY50 - the period 15 years from FY25 (after the expiry of the SUEZ Contracts on 31 May 2024). This indicates the Applicants' necessity for very significant additional waste processing capacity, including AWT, that will be required in the period proposed for the future waste processing contracts.

Guaranteed supply of Waste Material and critical mass

11.60 In addition to the lack of competition in the Residual Waste Material market in the GSR, there is a related issue of supplying to the successful contractor(s), a critical mass of Waste Material overall and for processing by an AWT, in order to justify the construction and operation of an AWT over the term of the proposed contracts.

11.61 It is considered that the Applicants will likely receive the most competitive pricing and processing fees for Waste Material the greater their supply of Waste Material, due to the advantages of scale and the security of supply.

11.62 It is considered that a minimum 10, but more realistically a 15 year contract period of operation from commencement, will be required by tenderers for commercial viability of the proposed contracts.

[16] Container Deposit System, as introduced by the NSW Government in December 2017, paying $0.10 for each eligible container returned to approved outlets.

11.63 Without guaranteeing a critical mass of each stream of Waste Material to a single service provider, the Applicants will be obliged to seek Residual Waste disposal services from service providers with an established AWT or landfill operation .

11.64 Current landfill operations in the GSR have been detailed above. In the case of more remote landfill operations, to utilise these will involve significant additional cost of transportation, which is estimated could add about $35.00 per tonne to travel 85 kilometres to landfill, additional to a more local operation in or close to the GSR.

11.65 In the SMA the current AWT operations that process Household Waste and Garden Organics and to divert them from disposal to landfill are:

(a) the sorting operation at SUEZ Kemps Creek Facility, and

(b) the SUEZ Eastern Creek Facility.

11.66 The SUEZ Eastern Creek Facility can only be accessed by contract with SUEZ, and its current capacity is fully subscribed and therefore not available to the Applicants.

11.67 The Veolia Woodlawn Facility offers the following services:

(a) landfill; and

(b) an AWT.

11.68 By ensuring the maximum amount of Waste Material for tenderers to process one or more stream of Waste Material, will likely provide Applicants with minimum processing costs by reason of an expected discount for volume/tonnage of waste supply.

11.69 With sufficient quantities of Waste Material to process over an appropriate term, waste processors will be able to invest in more efficient equipment and infrastructure, and amortise their costs over greater volume of material. The inevitable result and benefits for the Applicants and therefore the household ratepayers will be respectively lower per tonne processing fees and lower Domestic Waste Management Charges.

Supply in the Market

11.70 By collaboratively tendering it may be said that the Applicants may reduce the number of potential suppliers of waste processing services. The Applicants however represent a relatively small proportion of the overall supply of Waste Material in the SMA[17] . Of the estimated 954, 985 tonnes[18] of Waste Material collected by councils in the SMA, the Applicants currently represent approximately 112,380 tonnes or about 12% of the total market for all waste processed in the SMA.

Geographical boundaries of markets

11.71 The geographical boundaries of the Waste Processing sub-markets are defined primarily by the time and cost limitations of transportation distance from kerbside waste collection either directly to or via Transfer Stations and on to waste processing facilities and landfill.

[17] The Councils are 5 among 31 councils in the Sydney Metropolitan Area.

[18] NSW Local Government Waste and Resource Recovery Report 2014-15 NSW EPA

11.72 Processing infrastructure outside the SMA is not competitive because of the substantial additional time and cost to transport Waste Material over longer distances in an unprocessed form. Inter-modal facilities (transfer from truck to train) would otherwise need to be developed for Household Waste and Residual Waste, to take advantage of remote infrastructure waste processing and notably landfill disposal.

11.73 Accordingly the Waste Processing sub-markets are confined to the GSR and to the extent limited by ready access to rail infrastructure in order to access the Woodlawn Facility.

The distance from kerbside collection to delivery for waste processing

11.74 Generally, Household Waste collection vehicles servicing the Applicants, are allocated a specific collection or service zone each day, comprising approximately 1,000 households. Each garbage truck has a load holding capacity of about 29m^3, which holds on average about 7.5 tonnes of waste per load. (Recycling waste trucks have a larger holding capacity of up to 34m^3 due to the lighter weight of recyclable materials). One truck will collect approximately 450 bins per load, before necessitating travel to the disposal site – this process is repeated until the allocated households have been serviced for the day.

11.75 The distance from the service zone to the disposal site will vary for each load and can take on average 1 – 1.5 hours to tip and return. SUEZ Spring Farm Facility is open for business between 6.00am and 4.00pm Monday to Friday.

11.76 Collection vehicles are not permitted under the Applicants' collection arrangements to commence kerbside collection before 6.00am to ensure neighbourhood amenity is not unreasonably disturbed.

11.77 Accordingly, the putrescible landfill sites other than the Lucas Heights Facility and the Woodlawn Facility that require to be accessed via the SUEZ Transfer Station at Spring Farm or the Veolia Transfer Stations at Clyde and Banksmeadow, are not practically feasible for processing the Applicants' collected waste.

11.78 Excepting for landfill disposal, other putrescible Household Waste in the SMA is processed at the following processing facilities:

(i) the SUEZ Kemps Creek Facility, using technologies to produce compost products and recover recyclable materials. The site is owned and operated by SUEZ under Environment Protection Licence Number 12889. Currently this facility is fully subscribed and has no available processing capacity for the Applicants to access the facility.

(ii) the Eastern Creek Facility, although currently this facility is also fully subscribed and not available for the Applicants to access. Additional processing capacity may however become available in the future depending on demand for waste processing facilities, such as will be provided by the Applicants' proposed tender.

12. Future Waste Material Processing and Disposal costs

12.1 The Applicants' waste processing and disposal costs, following the expiration of the SUEZ Contracts will include for the following aspects of receival, processing and disposal of waste at a waste facility licensed under the POEO Act:

(a) Household Waste – received and weighed on a weighbridge and predominantly disposed to landfill, comprising an engineered solution for space allocation, waste compaction and landfill management including the processing, recovery and disposal of residual gases, leachate and odours. Without innovative technologies, the present landfilling of 97% of the Participating Councils' Household Waste is likely to continue.

(b) Dry Recyclable Material – received into either a licensed waste processing facility or a MRF, then weighed, sorted, decontaminated and recovered for sale to available markets.

(c) Garden Organics – received into a processing facility, weighed and processed for conversion for sale as organic garden and agricultural materials.

(d) Clean-Up Waste – received into a processing facility, weighed and generally disposed to landfill as with Household Waste.

12.2 The conversion of Dry Recyclable Material and Garden Organics provides for resource recovery and sale for income for waste processing contractors.

12.3 The landfilling of Household Waste and Clean-Up Waste offers processing contractors no material resource recovery for sale other than combustible gases for electricity generation, and is costly without off-setting income recovery.

12.4 Waste processing contractors who operate licensed waste facilities (as used for the storage, treatment, processing, sorting or disposal of waste – per definition of "scheduled waste facility" in the NSW EPA Waste Levy Guidelines), are required under s.88 of the POEO Act to pay to the EPA the prescribed Waste Levy, presently $138.20 for each tonne of waste received at a licensed waste facility. The Waste Levy has increased by 552% since being set at $21.20 on 1 July 2004. The Applicants anticipate that the Waste Levy will continue to increase in the future, particularly as there are now only two landfill facilities in or accessible to the GSR.

13. Effect on Competition

13.1 The Applicants understand that there is potential for the Proposed Conduct to have a detrimental effect on competition in the relevant markets, in that by acting collectively and entering into a contract or contracts on such terms, the Proposed Conduct may have the purpose, or may have the likely effect, of substantially lessening competition. The Applicants however contend that:

(a) as an overall impact to the market, the Proposed Conduct will not have the purpose, or likely effect, of substantially lessening competition; and

(b) the likely public benefit from the Proposed conduct outweighs any likely public detriment.

13.2 The test for any lessening of competition was stated in *Stirling Harbour Services Pty Ltd v Bunbury Port Authority* (2000) ATPR 41-752, by the Federal Court of Australia (Full Court) as follows:

> *Conduct has the effect of lessening competition in a market only if it involves a reduction in the level of competition, which would otherwise have existed in the market but for the conduct in question. … The Comparison required is between practical alternatives likely to be adopted; not between theoretical models.*
>
> per Burchett and Hely JJ at page 66

13.3 The Applicants submit that the relevant alternatives for such comparison or inquiry are:

(a) where the Application is *authorised*, and the Applicants are permitted to collectively tender for the provision of, and subsequently collectively enter into a contract(s) with the provider(s) of waste processing services (the **Authorised Scenario**); and

(b) where the Application is *denied*, and the Applicants must each in their own right tender for the provision of, and subsequently separately enter into contracts with providers of waste processing services (the **Denied Scenario**).

13.4 The Applicants say that in the event of the Denied Scenario, there can be no guarantee that the waste processing services will be provided by different entities. Moreover it is reasonable to anticipate that should one particular service provider demonstrate a competitive advantage, so as to be successful in tendering for the services of one Applicant, then that provider may also be successful to provide similar services to another, if not all, of the Applicants concerned.

13.5 The Applicants concede that by entering into an arrangement with one or more service providers for processing their streams of Waste Material, they will only utilise such one or more service providers (and not others in the market), however there is also potential for the guaranteed supply of Waste Material intended to be offered by the Applicants acting collectively, to attract one or more new entrants into the market.

13.6 Furthermore, there is a real possibility that for some waste processing providers in the markets, it may not be commercially viable for them to invest in the necessary infrastructure and Alternative Waste Technology in order to process the volume of waste from just each Applicant separately and with a significantly less waste tonnage than the Applicants as a group. Therefore, unless a significant supply of Waste Material can be guaranteed from the Applicants as a group acting collectively, the Applicants will have no alternative but to utilise existing waste processing facilities, both limited in capabilities and technologies.

13.7 In any event, the Applicants consider that any detrimental impact on competition will be outweighed by the benefits to the public as detailed in section 14 of this application, including lower cost and operational efficiencies.

13.8 Timing

13.9 The waste processing market in the SMA and GSR is currently dominated by Suez and Veolia, who each have waste processing facilities and who control landfill sites and could readily handle the Applicants' current and projected waste tonnages, subject to available processing and disposal capacity. It is estimated that potential waste processing service providers without such comprehensive facilities, will take between two to four years to secure land, gain planning approval, and construct transfer stations and/or processing facilities. In order to attract a number of potential service providers, including SUEZ and Veolia, the Applicants must give potential providers sufficient time to prepare their tenders, seek the relevant approvals and develop the infrastructure.

13.10 If competing current and potential future service providers are deprived of sufficient time to respond to the tender process (in particular, to seek arrangements whereby they may acquire land for such facilities), they may be disadvantaged compared to those service providers with established sites and facilities.

13.11 Table 6 above outlines the anticipated timeframes from making this application through to the commencement of waste processing operations for the receiving, processing and disposal of Waste Material. The Applicants intend to afford as long a timeframe as is practical for potential tenderers and contractors in order to generate as much competition as possible.

Guaranteed supply and critical mass

13.12 In order to justify the required investment in the infrastructure of a facility, including AWT a critical mass of Waste Material must be guaranteed to be delivered to the facilities for processing for revenue. A supply of up to 100,000 tonnes per year is considered at this time the minimum to commercially justify construction of the Alternative Waste Technology. This is particularly the case in light of anticipated rising waste processing disposal fees and increase in the Waste Levy for disposal of Residual Waste to landfill.

13.13 Currently no one Applicant produces enough Residual Waste to justify the design development and construction of an AWT facility. Therefore without a critical mass of guaranteed waste by the Applicants acting collectively, the Applicants will otherwise have to seek processing services from existing service providers and facilities. With most AWT facilities at capacity, this would necessarily divert more waste to landfill.

13.14 Although the processing facilities required for Dry Recyclable Material and Garden Organics requires less sophisticated infrastructure than an AWT facility, the commercial viability of such facilities relies nonetheless on a secure supply of material to process. Less infrastructure intense and technology delivered solutions are possible, however they typically deliver lower quality and quantity of recovered resources.

13.15 Without a critical mass of material, individual Applicants will only be able to attract service providers with established facilities to process the Waste Material. The guaranteed supply of Waste Materials provided by the Applicants acting collectively opens the available market potentially to other competitors without such established facilities, and may in some cases, overcome the barriers to entry of entrants not currently in the market. With sufficient quantities of materials service providers can invest in more efficient equipment and amortise that equipment over greater quantities of material, resulting in cost savings to the service provider(s), the Applicants and ultimately the householder ratepayers.

Effect on Supply

13.16 Whether the Applicants act collectively or individually, the overall amount of Waste Material generated and supplied for processing should be the same. However, as indicated, streamlining each Applicants' waste streams to a single facility will most likely lead to greater resource recovery.

14. Public Benefit

14.1 The benefits likely to be derived from the Proposed Conduct will include:

(a) increased competition due to new entrants into the market;

(b) improved coordination and efficiency of services;

(c) increased transportation and materials handling efficiencies;

(d) improved recycling and resource recovery;

(e) Compliance with the Waste Strategy targets

(f) lower costs to household ratepayers; and

(g) environmental benefits.

14.2 By acting collectively, the Applicants will guarantee a level of Waste Material that could not be provided by each Applicant in its own right. Prospective service providers will be incentivised to invest in the necessary infrastructure and streamline their processes to meet the greater supply of Waste Material and leading to the above public benefits.

Increased Competition

14.3 The Proposed Conduct will guarantee the market with a critical mass of Waste Material for processing. Prospective service providers face significant capital outlays in order to provide facilities for waste processing, regardless of the expected supply of Waste Material – with a guarantee of greater volume(s) of Waste Material, investment in the facilities, infrastructure and AWT will have greater justification. This offering may attract new entrants into the market who would not otherwise participate but for the guaranteed supply of Waste Material in order to overcome the high costs of entry into the market.

14.4 Further, in seeking a long tender period, the Applicant hopes to afford potential service providers the opportunity to research and utilise new technology for the provision of AWT. The tender period affords an opportunity for positive engagement with the industry, thereby encouraging greater participation from a range of service providers which will lead to an improved understanding of the current state of AWT and the development of future technologies. As previously foreshadowed, by not providing a critical mass, the Applicants are doubtful that there will be such a proactive industry response and therefore the benefits delivered to the community from the processing of Waste Materials will not be maximised.

Improved Coordination and Efficiency

14.5 The proposed processing contract(s) will provide a formal mechanism for coordination between the Applicants and the service provider(s). Without such agreement(s), each individual Applicant would have to tender, negotiate and enter into contracts with each service provider, which would operate independently and require separate administration and for higher cost. The Proposed Conduct would allow such administration to be streamlined, both for Applicants and for the service provider(s), and would also allow the service provider(s) to achieve an operational efficiency in coordination the Waste Material of the Applicants together, rather than on an individual basis.

Increased Transportation and Materials Handling Efficiencies

14.6 Centralised processing and handling of Waste Materials is likely to increase transportation and materials handling efficiencies. A larger guaranteed supply of Waste Material will more fully utilise infrastructure, equipment and staff, which should attract particular benefits to the smaller Applicants, i.e. Wingecarribee and Wollondilly, that may not accrue the critical mass of Waste Material needed to justify such processing. As it is unlikely that a landfill site could be established at the same site as a new facility in the any of the Applicants' Local Government Areas, Residual Waste will most likely need to be transported from any facility to a landfill. By consolidating each of the relevant waste streams of the Applicants to one facility for each or all streams, those transportation costs and arrangements of the service provider(s) will be streamlined.

Improved Resource Recovery

14.7 Consolidating the waste streams of the Applicants will ensure that the resource recovery processes at the relevant facility are tuned to handle a higher volume of waste material, thereby reducing contamination and leading to a higher rate of resource recovery. Further, a guaranteed supply of Waste Material by the Applicants acting collectively may attract new entrants to the market with potentially more efficient technology, leading to improved recovery.

Lower Costs to Households

14.8 The aforementioned efficiencies will most likely be reflected in a lower fee paid by householders for Domestic Waste Charges to each Applicant for waste collection and disposal services. Additionally, increased competition from attracting new entrants to the market may lead to more competitive pricing of the services, further leading to downward pressure on the prices paid by householders.

14.9 The success of the tender process will be measured in part by the capability of proponents to demonstrate that the Applicants will benefit financially from the services, either as reflected in a competitive rate in terms of $/tonne of Waste Material received for processing, or in reduced transport distances to the processing facilities (which should also result in lower collection and haulage services costs). As the LG Act requires that the Domestic Waste Management Charge levied on ratepayers must reflect the reasonable cost of the provision of the services, any savings from the service providers would necessarily be passed on to ratepayers.

Environmental Benefits

14.10 The aforementioned likely increased level of resource recovery, increased efficiency in terms of transportation and waste processing operations, potential for Advanced Waste Technology and new entrants to the market, will minimise the level of Residual Waste that goes to landfill, rather than if the Applicants were to enter into arrangements on an individual basis.

14.11 Further, it is assumed that consolidating the processing of the Applicants' Waste Material may also necessarily require only one site for the operations, rather than potentially multiple sites if the Applicants were required to tender and contract individually. With severely limited available landfill air space in the SMA, the construction of one site that could accommodate the waste stream(s) of all Applicants rather than multiple sites will utilise less space, thereby preserving more areas for green or residential purposes.

15. Public Detriment

15.1 The Applicants consider that there would be minimal, if any, public detriment caused by the Proposed Conduct.

15.2 The Applicants concede that by entering into contracts on a collective basis, necessarily contracted service providers will be committed to 5 Councils for the contract duration, rather than perhaps multiple service providers being able to contract with each Council on an individual basis. Further, there is the chance that one service provider will be able to cater for multiple or all of the Applicants' streams of Waste Material, thereby locking out other service providers from being able to process the Waste Material for the contract duration. In addition, should processing of one or multiple streams of Waste Material be provided by the current dominant providers in the markets, the Proposed Conduct may serve to further those providers' share of the market.

15.3 Notwithstanding the Applicants strongly believe that any potential detriment is far outweighed by the above public benefits, detailed at section 14 of this Application.

15.4 The current contractual arrangements under the SUEZ Contracts have demonstrated significant economic benefits to the Participating Councils and their communities. The Applicants consider that the benefits from the current contracts can be replicated under the proposed new contracts. Since entering into the current arrangement, whereby all streams of the Participating Councils have been processed by one entity, which was at the time of award the dominant market force, competition in the market has increased. Accordingly, the Applicants consider that by once more entering into such arrangements on a collective basis should not have a significant detrimental impact on market competition.

15.5 In light of the new and forecasted growth in the region and the expansion of competition in the markets, a collective arrangement should deliver the most efficient, pragmatic and sustainable solution for the Applicants and the public.

16. Relevant Market Participants

16.1 The relevant market participants or parties likely to be interested as actual or potential competitors or key suppliers of the waste processing services intended to be tendered and contracted for by the Applicants in relation to their waste streams (the **Interested Participants**) are:

(a) Household Waste

(i) SUEZ

(ii) Veolia

(iii) Cleanaway

(iv) ReGroup

(v) Remondis

(b) Dry Recyclable Material

(i) SUEZ

(ii) Visy

(iii) JJ Richards

(iv) Polytrade

(c) Garden Organics

(i) SUEZ

(ii) Veolia

(iii) JJ Richards

(iv) Australian Native Landscapes

(v) Soilco

(vi) Bettergrow

(d) Clean-Up Waste

(i) SUEZ

(ii) Veolia

(iii) JJ Richads

(iv) Cleanaway

(v) ResourceCo

(vi) Benedict Recycling

16.2 None of the Interested Participants has yet been formally consulted by any of the Applicants in relation to the Proposed Conduct. Several industry participants were consulted informally during August and September 2017 to assess interest in the proposed tender and contract. Further the common response was of support in that the lead-time of approx. 4-5 years to establish a site including obtaining approvals and arranging construction was appropriate. Also there was support for a guaranteed supply of large volumes of waste and the growth of the South West Sydney region as a whole, were considered an attractive combination of factors.

16.3 **Appendix 10** to this Application is the discussion guide and List of Interested Participants consulted by the Applicants.

17. Conclusion

For the reasons detailed in this Application, the Applicants respectfully seek the Commission Authorisations as sought in section 3 of this Application.

Dated: 26 July 2018

Declaration by Applicant(s)

Authorised persons of the applicant(s) must complete the following declaration. Where there are multiple applicants, a separate declaration should be completed by each applicant.

The undersigned declare that, to the best of their knowledge and belief, the information given in response to questions in this form is true, correct and complete, that complete copies of documents required by this form have been supplied, that all estimates are identified as such and are their best estimates of the underlying facts, and that all the opinions expressed are sincere.

The undersigned undertake(s) to advise the ACCC immediately of any material change in circumstances relating to the application.

The undersigned are aware of the provisions of sections 137.1 and 149.1 of the *Criminal Code* (Cth).

Signature of authorised person

DIRECTOR CITY DEVELOPMENT

Office held

JIM BALDWIN

(Print) Name of authorised person

7 AUGUST 2018

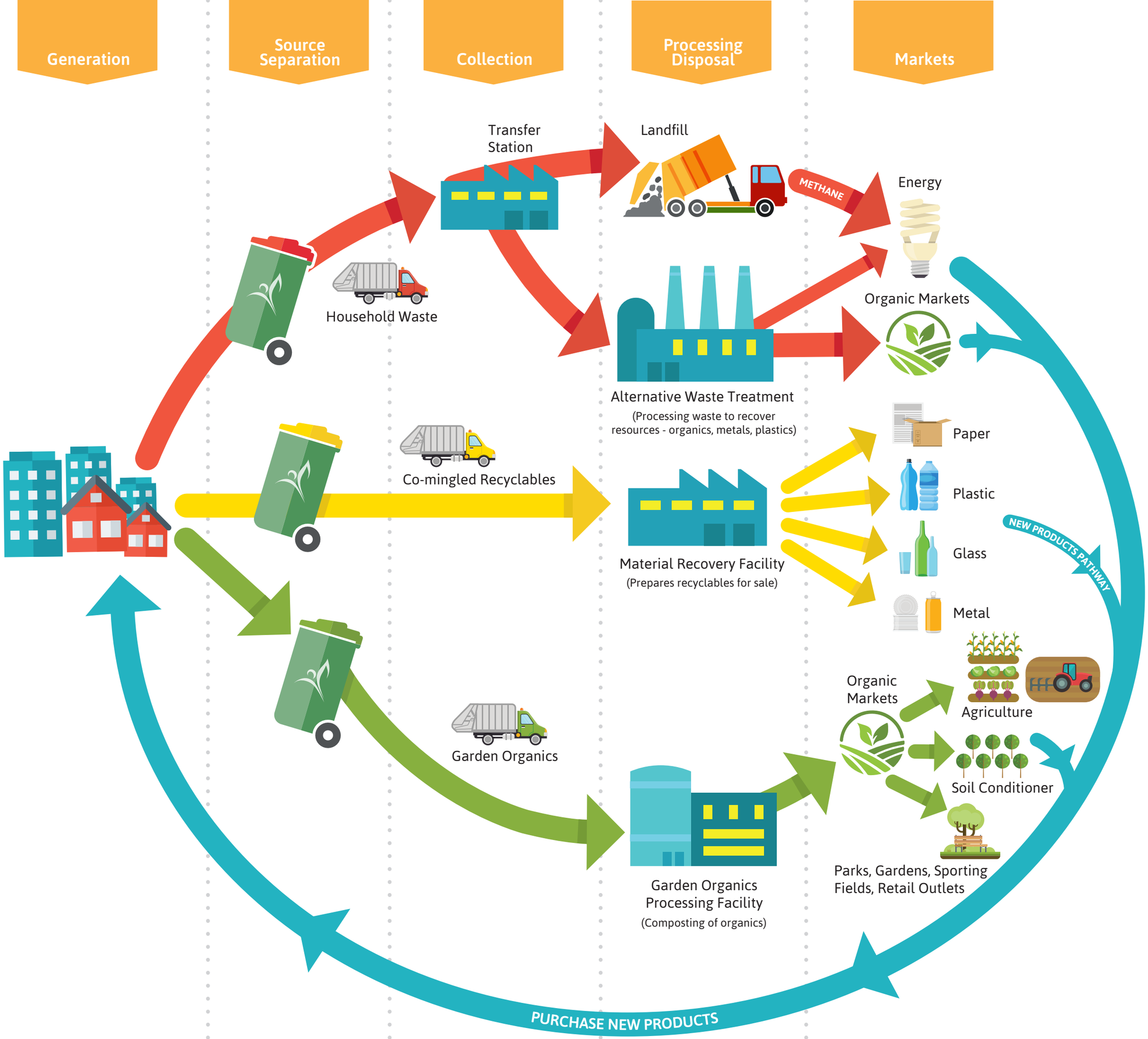
This [insert day] day of [insert month] [insert year]

Note: If the Applicant is a corporation, state the position occupied in the corporation by the person signing. If signed by a solicitor on behalf of the Applicant, this fact must be stated.

campbelltown
city council

HOUSEHOLD WASTE CIRCULAR ECONOMY

Minimising Waste to Landfill and Maximising Recovery of Resources



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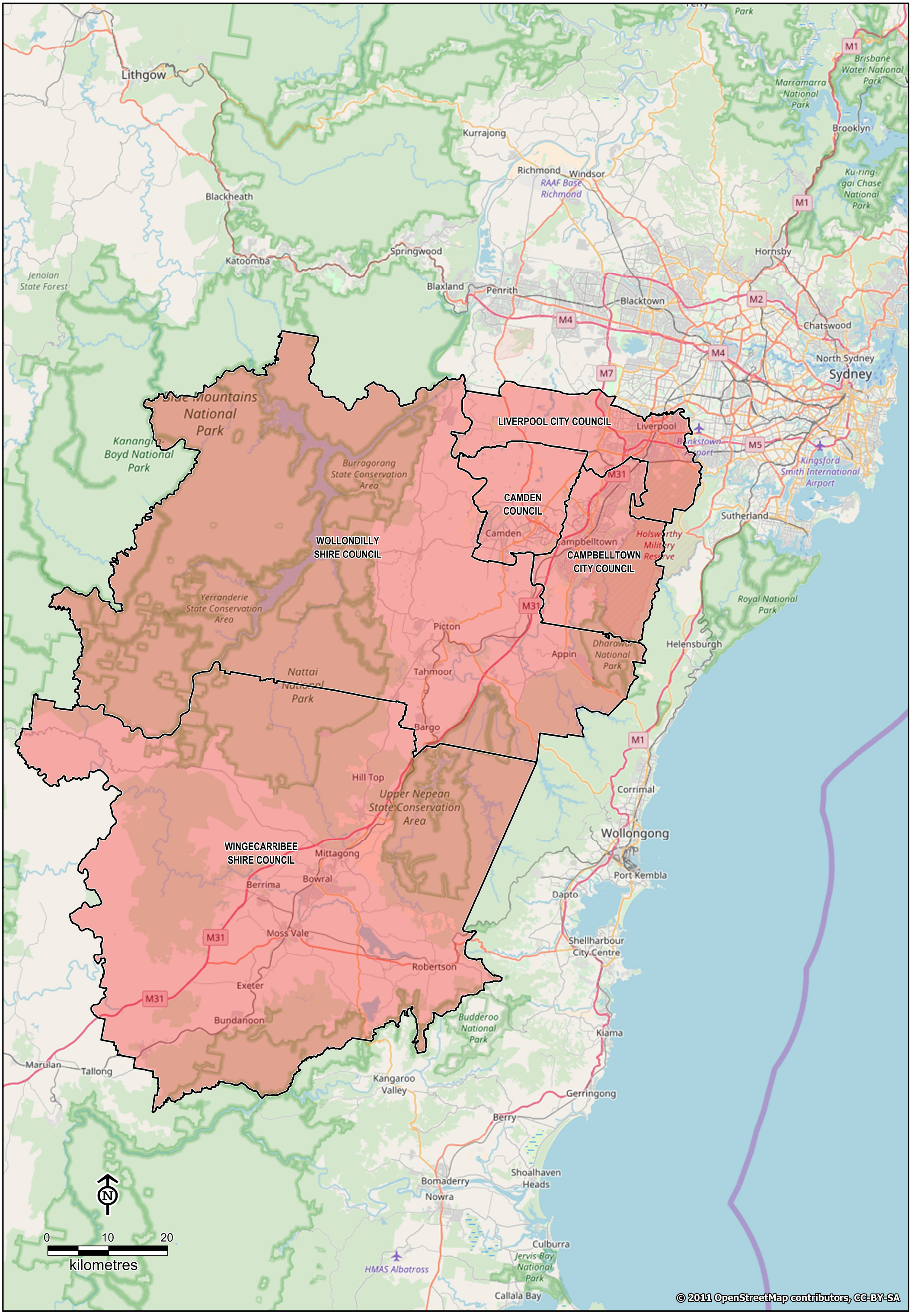
LIVERPOOL CITY COUNCIL
CAMDEN COUNCIL
CAMPBELLTOWN CITY COUNCIL
WOLLONDILLY SHIRE COUNCIL
WINGECARRIBEE SHIRE COUNCIL
Lithgow
Blackheath
Katoomba
Springwood
Kurrajong
Richmond
Windsor
RAAF Base Richmond
Blaxland
Penrith
Blacktown
Liverpool
Camden
Campbelltown
Hornsby
Brooklyn
Chatswood
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Sutherland
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Port Kembla
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Gerringong
Berry
Shoalhaven Heads
Bomaderry
Nowra
Culburra
Callala Bay
Corrimal
Mittagong
Bowral
Berrima
Moss Vale
Robertson
Exeter
Bundanoon
Picton
Tahmoor
Appin
Bargo
Hill Top
Marulan
Tallong
Kangaroo Valley
Jenolan State Forest
Kanangra-Boyd National Park
Blue Mountains National Park
Burragorang State Conservation Area
Yerranderie State Conservation Area
Nattai National Park
Upper Nepean State Conservation Area
Dharawal National Park
Royal National Park
Budderoo National Park
Jervis Bay National Park
Marramarra National Park
Brisbane Water National Park
Ku-ring-gai Chase National Park
Kingsford Smith International Airport
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NSW Waste Avoidance and Resource Recovery Strategy 2014–21

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Foreword

NSW has a proud history of recycling; indeed, recycling rates in NSW have never been higher. We are, however, generating more waste than ever before. This places increased pressure on our environment to not only absorb disposed waste, but also to provide more natural resources for new materials. Government, businesses, households and communities will need to continue to work together to identify opportunities for waste reduction and resource recovery in all areas of our lives.

The NSW Waste Avoidance and Resource Recovery Strategy 2014–21 provides a clear framework for waste management over the next seven years and aligns with the NSW Government's waste reforms in *NSW 2021: A plan to make NSW number one*. The key result areas identified in the WARR Strategy will support investment in much-needed infrastructure, encourage innovation and improve recycling behaviour. They will also promote the development of new markets for recycled materials and reduce litter and illegal dumping. Support from the Government for the waste management industry and councils will in turn create more jobs and build better communities.

I would like to thank those in our community who provided submissions to the WARR Strategy and participated in workshops around the state. I am also indebted to the members of the Expert Reference Group who oversaw the development of the strategy. The community support for our ambitious targets, which remained unchanged throughout the strategy's development, reflects the broad and ongoing commitment that will be required to achieve them.

Businesses and community groups are encouraged to continue to draw upon the NSW Government's $465.7 million *Waste Less, Recycle More* initiative, which has already supported significant new recycling and waste infrastructure, litter programs and illegal dumping strategies across the state.

I look forward to continuing work with all sectors of the community to reduce the environmental impact of waste and promote the efficient use of our resources into the future.

Rob Stokes MP
Minister for the Environment

Contents

WARR Strategy 2014–21 objectives and targets

Avoid and reduce waste generation

By 2021–22, reduce the rate of waste generation per capita

Increase recycling

By 2021–22, increase recycling rates for:

- municipal solid waste from 52% (in 2010–11) to 70%
- commercial and industrial waste from 57% (in 2010–11) to 70%
- construction and demolition waste from 75% (in 2010–11) to 80%

Divert more waste from landfill

By 2021–22, increase the waste diverted from landfill from 63% (in 2010–11) to 75%

Manage problem wastes better

By 2021–22, establish or upgrade 86 drop-off facilities or services for managing household problem wastes statewide

Reduce litter

By 2016–17, reduce the number of litter items by 40% compared with 2011–12 levels and then continue to reduce litter items to 2021–22

Reduce illegal dumping

From 2013–14, implement the *NSW Illegal Dumping Strategy 2014–16* to reduce the incidence of illegal dumping statewide

As part of this strategy, by 2016–17:

- reduce the incidence of illegal dumping in Sydney and the Illawarra, Hunter and Central Coast regions by 30% compared with 2010–11
- establish baseline data to allow target-setting in other parts of the state

1. Introduction

Effective waste management is a fundamental responsibility for the NSW community as well as the global community. Without it, we risk compromising our environment, our health and our economy.

The NSW Government has set priorities for waste reform in *NSW 2021: A plan to make NSW number one* and commits to developing long-term strategies that encourage resource recovery and prevent unnecessary waste.

> *Vision*
>
> The primary goal of this strategy is to enable all of the NSW community to improve environment and community well-being by reducing the environmental impact of waste and using resources more efficiently.
>
> Using resources efficiently and keeping materials circulating in the productive economy can also help to create jobs and grow the NSW economy.

The NSW Waste Avoidance and Resource Recovery (WARR) Strategy 2014–21 is a key component of the Government's vision for the environmental, social and economic future of the state that will be supported financially by the *Waste Less, Recycle More* initiative.

This document outlines in Section 2 the impact of waste on our environment, industries and economy as well as the health and well-being of our community. The driving factors behind the development of the WARR Strategy 2014–21 are discussed in Section 3 in the context of the waste hierarchy, which outlines the preferred approaches for efficient resource use, and the framework for achieving waste management goals is covered in Section 4.

An important part of developing new long-term goals has been to assess the current state of waste management in NSW and the progress made against existing targets as detailed in Section 5. The WARR Strategy 2014–21 is based on these findings and provides long-term targets across the six key result areas covered in Section 6:

- Key Result Area 1: Avoid and reduce waste generation
- Key Result Area 2: Increase recycling
- Key Result Area 3: Divert more waste from landfill
- Key Result Area 4: Manage problem wastes better
- Key Result Area 5: Reduce litter
- Key Result Area 6: Reduce illegal dumping.

Section 6 also provides specific strategies that will pave the way towards the targets in each key result area and Section 7 outlines how we will monitor and measure progress. Everyone's responsibilities for reducing the impacts of waste are provided in Section 8.

The WARR Strategy 2014–21 seeks to drive opportunity and outcomes by providing policy certainty and a long-term focus. The strategy does not work in isolation and other key elements that set the framework include:

- implementation plans to focus action over shorter time periods – the *NSW Illegal Dumping Strategy 2014–16* is the first of these and others will follow to detail the delivery of the priorities set out in this strategy

- evaluation of progress towards the goals using a variety of methods and reported every two years in WARR Progress Reports
- recognition that everyone in the community has a role to play in avoiding waste and increasing resource recovery to improve environmental and community well-being.

Why review the WARR Strategy?

The NSW *Waste Avoidance and Resource Recovery Act 2001* reflects the importance the community places on minimising waste and maximising resource recovery by requiring the WARR Strategy to be reviewed and replaced every five years.

Section 12 of the Act specifies that the strategy must:

- include targets that address waste reduction, resource recovery and diversion of waste from landfill
- be benchmarked against international best practice
- undergo a public consultation process.

Section 12 also requires that targets for waste reduction, resource recovery and diversion of waste from landfill disposal are developed by an expert reference group (see Section 9).

The WARR Strategy has become part of the NSW landscape over time. Industry, local councils and community groups now use the strategy to set their waste agenda and focus effort.

The review and community consultation on a new strategy in 2013–14 provided an opportunity to reset the targets that were first established in 2003 and reaffirmed in 2007. These initial targets have either already expired or are due to expire in 2014.

2. Understanding the impacts of waste

The impact and importance of waste can be measured across the economy, our environment and society.

Waste and the economy

Waste management is a significant part of the economy. The Australian Bureau of Statistics estimated that the supply of waste management services nationwide in 2009–10 was worth over $9.5 billion, including income from recycling waste products valued at $4.5 billion.[1] As NSW generates 31% of Australia's gross domestic product, the value of waste management services to the NSW economy can be estimated at $2.9 billion – $1.3 billion of this coming from resource recovery.

Just over 17 million tonnes of material entered the NSW waste management system in 2010–11, up from 16.3 million tonnes two years earlier. While a large percentage of this material was ultimately recycled, this still represents a significant amount of material moving through the economy as well as physically through our neighbourhoods by road and rail. Waste collection, transport, processing and recovery/disposal have a major impact on existing infrastructure and increase demand for new infrastructure.

The economy depends on the environment to provide raw materials and absorb the waste and emissions we produce. Reusing, recovering and recycling these valuable materials keep them in the productive economy for longer. This has the dual benefits of lowering demand for new resources and reducing the need to absorb waste. Waste going to landfill is not only a loss of valuable resources, it reduces landfill space.

Recycling generates jobs

In 2009, Access Economics[2] estimated that more than 22,000 full-time equivalent staff were engaged directly in recycling in Australia. Nearly 7000 staff were involved in landfill operations with over 24,000 indirect jobs flowing from this. This means there are 9.2 full-time equivalent employees directly involved in recycling for every 10,000 tonnes of material processed, compared with only 2.8 jobs for an equivalent amount of waste sent to landfill.

Recycling saves money

In 2012, the cost to Australian businesses (excluding mining and agriculture) of managing the waste they generated was an estimated $2.2 billion.[3] In addition, businesses spent an estimated $24.3 billion on materials that were discarded as part of the creation of a product. For NSW businesses, this equates to about $825 million for disposal and recycling services and $7.8 billion in wasted materials every year.

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[1] Australian Bureau of Statistics 2013, *Waste Account, Australia, Experimental Estimates*, Canberra, www.abs.gov.au/ausstats%5Cabs@.nsf/mediareleasesbyCatalogue/58479FBF0D1B7171CA257B16000E1913?Opendocument

[2] Access Economics Pty Ltd 2009, *Employment in Waste Management and Recycling*, report for Department of Environment, Water, Heritage and the Arts, Canberra

[3] Encycle Consulting, SRU 2013, *A Study into Commercial and Industrial (C&I) Waste and Recycling in Australia by Industry Division*, report for Department of Sustainability, Environment, Water, Population and Communities, www.environment.gov.au/resource/study-commercial-industrial-ci-waste-and-recycling-australia-industry-division

This inefficient use of resources highlights waste that could be avoided and money saved.

Waste and the environment

Managing and disposing of waste presents risks to the environment. Impacts include odour, noise, dust, litter, dumping, greenhouse gas emissions, potential contamination of land and groundwater, and harm to flora and fauna. The risks to the environment rise as more waste is generated and are reduced by increasing recycling.

The NSW EPA's Recyculator can be used to calculate the resource benefits of recycling different materials, based on a detailed Australian life cycle analysis. For example, a business recycling 1000 tonnes of office paper can save:

670 tonnes of carbon dioxide –
equal to permanently removing 161 cars from NSW roads

2630 gigajoules of energy –
equal to the average annual energy used by 122 households

370 megalitres of water –
equal to a million four-minute showers

4400 cubic metres of landfill space –
equal to about 18,333 full wheelie bins.

Waste and society

The community feels the impact of improperly managed waste in many different ways. It can be detrimental to public health through odour, noise, dust, vermin and toxic substances, while wastes of particular concern, like asbestos, can cause significant health problems. The same issues can impact the amenity of local communities to the detriment of public well-being. Waste can also pollute our environment and leach toxins or nutrients into groundwater and land.

Litter and illegal dumping can reduce the amenity of public spaces and are anti-social behaviours. Landfills remove space from the community and may compromise the use of land into the future.

People in NSW have high expectations about waste and recycling

Waste-related issues have consistently been identified by the NSW community as environmental issues of concern in the *Who Cares About the Environment?* survey. The survey – which has been running since 1994 and is the only one of its kind in Australia – tracks the attitudes, knowledge and behaviour of people in relation to the environment.

In 2012, the NSW community again identified waste among the leading issues they expect the Government to address. Litter was identified as a specific issue.

WARR Strategy 2014–21, supported with *Waste Less, Recycle More* funding, is meeting community expectations that recycling, recovery and reuse will increase and thus reduce the impacts of inputs into the system and the negative consequences of outputs from a less efficient waste management system.

3. The waste hierarchy

The WARR Strategy 2014-21 is driven by our desire to improve the way we live and make sure that future generations enjoy the same or an improved quality of life. This stretches across all aspects of life and covers environmental, social and economic areas. The Strategy adopts the principles of ecologically sustainable development as defined in Section 6 of the Protection of the Environment Administration Act 1991. The WARR Strategy 2014–21 is also informed and driven by the waste hierarchy which underpins the objectives of the *Waste Avoidance and Resource Recovery Act 2001*.

There are costs associated with managing waste and the waste hierarchy helps to focus attention and efforts where the greatest efficiencies in cost, time and resources can be achieved.

The waste hierarchy (shown in Figure 1) provides guidance on the order of preference of approaches to achieve efficient resource use.

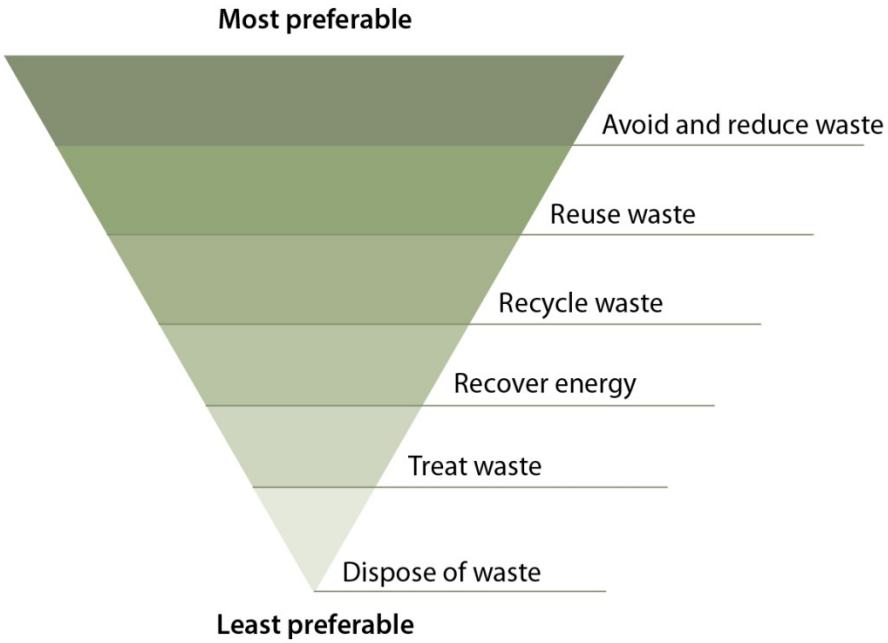


Figure 1: The waste hierarchy

At the top of the hierarchy, **avoiding and reducing the generation of waste** is the most preferred approach. This is because it preserves resources, avoids the use of additional resources to manage waste that would have been generated, and aims to eliminate disposal costs. The goal is to maximise efficiency and avoid unnecessary consumption through such positive behaviours as:

- selecting items with the least packaging or that require the least resources to produce
- avoiding disposable goods or single-use materials
- buying products that are recycled, recyclable, repairable, refillable, reusable or biodegradable
- using leftover food rather than throwing it away.

Where avoiding and reducing waste is not possible, the next most preferred option is to **reuse the materials** without further processing, avoiding the costs of energy and other resources required for recycling. For example, many household and industrial items can be repaired, reused, sold or donated to charities.

The next step in the hierarchy is **recycling,** which involves processing waste materials to make the same or different products. This includes composting, which recycles nutrients back into the soil. Recycling keeps materials in the productive economy and benefits the environment by decreasing the need for new materials and waste absorption. Recycling a product generally requires fewer resources than drawing virgin materials from the environment to create a new one.

Where further recycling is not feasible, it may be possible to **recover the energy** from the material and feed that back into the economy where this is acceptable to the community.

Some materials may be inappropriate to reuse, recycle or recover for energy and instead require **treatment** to stabilise them and minimise their environmental or health impacts.

Finally, the waste hierarchy recognises that some types of waste, such as hazardous chemicals or asbestos, cannot be safely recycled and direct treatment or **disposal** is the most appropriate management option.

4. Framework for achieving WARR Strategy 2014–21 objectives

A range of approaches and solutions are needed to achieve WARR Strategy 2014–21 objectives with businesses, industry, state government agencies, local government and the broader community working together to meet the targets and goals.

Strategy and targets

The targets in WARR Strategy 2014–21 clarify the state's long-term goals and priorities. These targets are recognised across the community as important drivers for change and innovation and were broadly supported by industry, state and local governments and the community during the strategy's consultation phase.

Implementation plans

Implementation plans will support WARR Strategy 2014–21 by providing shorter term priorities, actions and milestones within each of the key result areas. These plans are designed to provide a clear path toward the strategy targets and will be reviewed and updated regularly as new opportunities arise.

Investment and incentives

Continued investment in innovation and change is needed to improve our waste and environmental outcomes. The WARR Strategy 2014–21 sets clear priorities and provides long-term policy stability and direction as the foundation for significant private and public investment.

Funding to achieve the strategy's targets is being delivered through *Waste Less, Recycle More* which came as a direct result of the independent review in 2012 of the Waste and Environment Levy ('Waste Levy'). The initiative provides $465.7 million from Waste Levy revenue over five years for grants and programs that align with the key result areas in WARR Strategy 2014–21. The funding will support investment in recycling infrastructure, encourage innovation, improve recycling behaviour and develop new markets for recycled materials, as well as tackle littering and illegal dumping.

Regulations and policies

WARR Strategy 2014–21 is supported by regulations and policies. The *Protection of the Environment Operations Act 1997* (POEO Act) and associated regulations work to minimise the impact of waste on human health and the environment. The POEO Act established the Waste Levy, as well as licensing requirements for waste facilities and activities, offences for illegal dumping and littering, and a pathway for recovered resources to be used on land and for fuel.

The POEO (Waste) Regulation 2014 came into effect on 1 November 2014 and modernises waste regulation in the context of WARR Strategy 2014–21 and the *Waste Less, Recycle More* initiative. It includes the introduction of the proximity principle which addresses the environmental and human health impacts in NSW associated with the unnecessary transportation of waste over long distances and ensure local communities play an active role in waste management by taking greater responsibility for the waste they generate.

Waste policies provide clarity and direction on particular waste issues. These can be guidance or technical notes (such as landfill and composting guidelines), environmental standards (such as for the reuse of processed waste) and protocols.

An important policy step to maximise resource efficiency is the *NSW Energy from Waste Policy Statement* which was released in 2014 after extensive consultation. This provides regulatory clarity to industry and the community on the criteria that apply to NSW facilities proposing to thermally treat waste for energy recovery. Inclusion of resource recovery criteria in the policy ensures that the availability of energy recovery in NSW will not undermine current or future material resource recovery.

Supporting national initiatives

The NSW Government also supports initiatives under the *National Waste Policy*. Most notably this has included establishment of an Australian framework for product stewardship, which has been a long-standing focus in NSW. The Commonwealth *Product Stewardship Act 2011*, which provided the first national approach to voluntary and regulated product stewardship schemes, involves industry taking greater responsibility for the environmental impacts of their products, particularly where they become waste.

NSW continues to support the development of national rather than state-based solutions in the product stewardship area because many products are sold in national markets and are problematic in all jurisdictions. Management at a national level can provide consistent action to achieve these goals effectively.

Compliance and enforcement

Compliance will only be achieved by setting clear rules and fair licensing standards, supported by diligent and consistent enforcement. The NSW Government has strengthened the enforcement powers of the Environment Protection Authority in the development of the revised POEO (Waste) Regulation 2014. Effective compliance is crucial to reduce the risk of environmental impacts from waste and ensure a 'level playing field' so that responsible businesses can thrive. Illegal activity can compromise recycling outcomes, lead to clean-up costs for communities and have an adverse impact on human health and the environment.

Polluter pays principle identified as part of ecologically sustainable development in the Protection of the Environment Administration Act 1991 is key to the NSW Government's approach to enforcement and compliance, that is, those who generate pollution and waste should bear the costs for avoiding, reducing and managing waste.

Education and behaviour change

Significant improvements in resource consumption and waste management will only occur if we continue to change the way we think and act. Education to encourage behaviour change will be fundamental to achieving WARR Strategy 2014–21 goals. All implementation plans designed to deliver the strategy's targets will include an education and behaviour change element.

Economic instruments

The Waste Levy provides a strong economic signal by reflecting some of the external environmental costs of waste disposal and making waste avoidance, reduction and recycling more financially attractive than disposal to landfill. It is a key policy tool for

driving waste diversion from landfill in NSW and achieving the targets in WARR Strategy 2014–21.

Waste Levy revenue re-invested through *Waste Less, Recycle More* will increase the effectiveness of resource recovery and reduce litter and illegal dumping.

Monitoring and evaluation

The *Waste Avoidance and Resource Recovery Act 2001* requires progress against the targets in WARR Strategy 2014–21 to be reported every two years. This report collects data across all three waste sectors and provides information on the strategy's effectiveness, as well as making it accountable to the NSW community. This reporting sits alongside a number of other ongoing data collection and evaluation projects.

Figure 2: Elements that together will achieve WARR Strategy 2014–21 objectives

5. Waste and resource recovery to date

Progress in recycling and diversion across all waste sectors is reported every two years in the WARR Strategy Progress Report. The most recent data from 2010–11 shows NSW continues to make good progress in improving recycling and diversion from landfill disposal (Table 1).

Table 1: Progress in recycling and diversion from landfill in NSW

Recycling by waste stream	2002–03	2004–05	2006–07	2008–09	2010–11	Previous 2014 recycling targets*
Municipal Solid Waste (MSW)	30%	33%	38%	44%	52%	66%
Commercial and industrial (C&I)	34%	38%	44%	52%	57%	63%
Construction and demolition (C&D)	64%	62%	67%	73%	75%	76%
Overall % of waste diverted from landfill**	45%	46%	52%	59%	63%	n/a

*Set in NSW WARR Strategy 2003
** Diversion through recycling alone

Other key findings

Total waste generated (waste recycled + waste disposed to landfill) continued to increase

The total amount of waste generated in NSW increased from 16.3 million tonnes in 2008–09 to 17.1 million tonnes in 2010–11, an increase of 5.2%. Waste generation rates continued to outstrip the population growth of 3.4% during this period.

Successful diversion of waste from landfill

Despite continued increases in the waste generated, the amount sent to landfill fell in absolute terms from 6.7 million tonnes in 2008–09 to 6.4 million tonnes in 2010–11. The amount of waste sent to landfill in 2010–11 was lower than the waste landfilled in 2002–03, when the first targets were set.

Figure 4 shows the amount of waste diverted (recycled) compared with that disposed of for each waste sector in 2010–11. The tonnes of waste shown are provided as rounded figures.

Waste recycled in 2010–11 was more than double the amount recycled in 2002–03

Recycling absorbed the additional waste generated and reduced the amount of waste sent to landfill. In 2010–11, NSW recycled 10.8 million tonnes compared with 5.3 million tonnes in 2002–03.

Recycling increased across all regions in NSW

Recycling rates in the Hunter, Central Coast and Illawarra regions increased from 59% in 2008–09 to 68% in 2010–11. Estimated recycling rates in regional and rural areas increased from 42% to 50% over the same period.

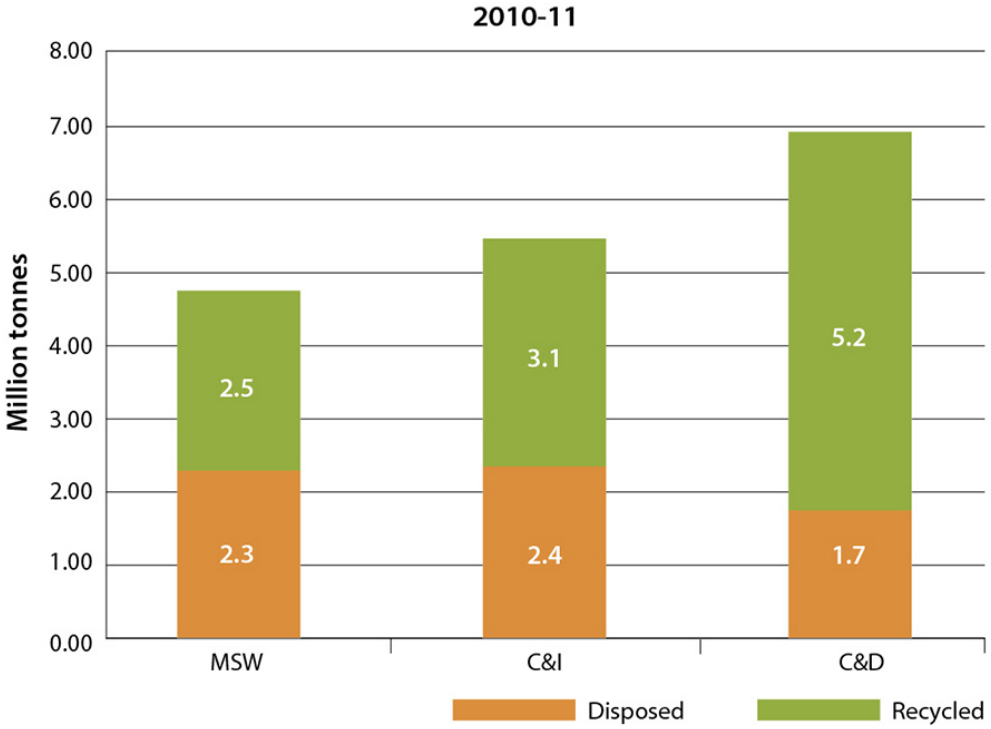


Figure 4: Amount and type of waste recycled or disposed of in NSW during 2010–11

Littering decreased

Despite significant annual fluctuations, litter in NSW decreased by 28% between 2005–06 and 2011–12, while the volume of littered items decreased by 40% (see National Litter Index). The litter count in NSW is about average in comparison to other states and territories, but well below the best performing state. See the NSW Litter Report series for more information.

6. WARR Strategy 2014–21 targets to 2021–22

NSW WARR Strategy 2014–21 has six key result areas that continue the intent of the 2003 and 2007 strategies, but have been broadened to enable more targeted action:

- Key Result Area 1: Avoid and reduce waste generation
- Key Result Area 2: Increase recycling
- Key Result Area 3: Divert more waste from landfill
- Key Result Area 4: Manage problem wastes better
- Key Result Area 5: Reduce litter
- Key Result Area 6: Reduce illegal dumping

WARR Strategy 2014–21 is a high-level framework for setting priorities and long-term directions. This is reflected by the statewide goals and targets.

Regional, rural and metropolitan councils or industries may have differing priorities within their particular areas. These will be addressed through implementation plans, along with issues of distance and economies of scale.

Key Result Area 1: Avoid and reduce waste generation

Target for reducing waste generation

By 2021–22, reduce the rate of waste generation per capita

Introduction

The target in this key result area aims to improve the efficient use of materials across the community and avoid generating unnecessary waste.

In NSW, ‘waste generation’ refers to the total amount of material that enters the solid waste management system. This includes all materials disposed of to landfill as well as those that are recovered from the waste stream for recycling or energy recovery.

Many of our activities – living in a built environment, consuming food, buying clothes, and communicating and storing information – involve products and materials that eventually enter the waste stream and count towards waste generation, even if they are recycled and put back into the productive economy. With this in mind, a certain level of waste generation is an unavoidable outcome of human activity.

Many of these activities could be undertaken using fewer materials, which would lead to less waste. Resource efficiency is important from an avoidance perspective. Inefficient resource use increases demands for the environment to provide additional raw materials that require further resources (such as energy, water and other materials) to process. It also places more pressure on the environment to absorb these materials and emissions when they go to waste.

Waste avoidance and reduction is difficult to measure because it essentially aims to monitor material that is no longer entering the waste management system. Waste generation is also driven by a number of factors, including economic activity, population growth, climatic conditions and consumer behaviour.

In 2010–11, a total of 17.1 million tonnes of waste and recycled materials was generated in NSW, an increase of 5.2% from 2008–09. Over the same period, the population grew by 3.4% and the NSW economy by 4.6%, as measured by Gross State Product (GSP). Recent analysis suggests that waste generation rates may

have become more closely related to economic activity than population growth: that is, waste generation is outstripping population growth.

Given this relative divergence from population growth, NSW WARR Strategy 2014–21 retains an ambitious target to reduce the rate of waste generated in NSW per capita. However because a number of factors can influence waste generation, ongoing trends will be measured against a number of parameters to better understand the best way to monitor progress in this area and influence change.

For example, the rate of change in waste generation per capita will be compared with the rate of change in NSW GSP, which is a measure of economic activity across all waste sectors. Comparing these on a per capita basis will allow population growth to be taken into account. Trends will be monitored using 2012–13 as a starting date while measurement of this target is explored.

Reporting periods for achievement against all targets in the strategy will remain unchanged at every two years as reported in the WARR Strategy Progress Reports to date.

The new target for reducing waste generation by 2021–22 is an aspirational goal, given the current growth in waste, but one that should remain an important focus.

Approaches to reducing waste generation

NSW WARR Strategy 2014–21 recognises that many positive examples of waste avoidance already occur in NSW with significant amounts of material circulating in the economy without entering the waste management system. Activities such as home composting and reusing building demolition materials on-site (for fill or road-making for instance) will continue to be encouraged as positive waste avoidance activities. Product life is extended in these cases, with material kept in the productive economy and out of the waste management system.

Economic incentives

We will increase pressure on generators to focus on waste avoidance. The Waste Levy will continue to provide an economic incentive for waste generators to reduce their waste management costs. This will be a particular incentive for the commercial and industrial sector and construction and demolition sector, where generators are more directly exposed to these costs.

Behaviour change

Education and behaviour change are key elements of an effective avoidance program. The goal is to encourage and facilitate behavioural changes that ensure fewer resources are wasted. The focus is on more efficient use of materials, rather than simply expecting people to consume less.

The successful *Love Food Hate Waste* program is a good example of this approach that can be extended into other areas as opportunities arise. The program focuses on giving people the skills to make better purchasing decisions, improving food storage techniques, using leftovers so that food is eaten rather than thrown away, and saving money. The *Waste Less, Recycle More* initiative increases funding to *Love Food Hate Waste*.

Product stewardship

Most of a product's environmental impact is set at its design stage. Downstream waste generation can be reduced if products are designed with waste avoidance in mind, such as through light-weighting products and minimising packaging. Product stewardship is a key approach for improving product and packaging design. NSW will continue to work with the Australian Government to introduce product stewardship

initiatives at the national level under the Commonwealth *Product Stewardship Act 2011*.

Industrial ecology

Industrial ecology involves using the by-products of production in one process or company as a resource in another. Linking companies directly will keep these materials out of the waste stream as they can use each other's by-products. *Waste Less, Recycle More* is funding an expansion of industrial ecology networks in NSW.

See Section 7 for details on performance measurement in this key result area.

Key Result Area 2: Increase recycling

Target for increasing recycling

By 2021–22, increase recycling rates for:

- municipal solid waste from 52% (in 2010–11) to 70%
- commercial and industrial waste from 57% (in 2010–11) to 70%
- construction and demolition waste from 75% (in 2010–11) to 80%.

Introduction

The target in this key result area aims to increase the amount of material that is recycled and put back into the productive economy. Using recycled materials helps to reduce the waste going to landfill and can potentially save energy, water and other resources that would have otherwise been used to produce new materials. The production of competitively priced recycled materials can also help economic growth through the development of the recycling industry and the industries that use the recycled materials.

Energy recovery is not included as part of this recycling target but as part of the diversion target in KRA3.

The targets address all three waste streams and are based on an independent modelling study conducted on behalf of the EPA. This study assumed continued population growth, scheduled increases in the Waste Levy to 2016 and funding from the *Waste Less, Recycle More* initiative. It also took into account various waste actions, including reducing waste generation, improved kerbside recycling, better source-separation of commercial and industrial waste, recovery of food and garden waste, development of additional alternative waste treatment (AWT) facilities and diversion of recycling residuals to energy from waste.

The new targets are based on the modelled cumulative recycling rates that could be achieved from combining the various waste actions. They have been rounded to account for variability in current waste data and forward projections as well as likely improvements in systems and technologies over time. The new targets represent a significant increase in the total tonnage that will be recycled by 2021–22, even though they may appear to be only an incremental increase on the 2014 targets.

Increasing the current recycling rate of municipal waste from 52% to 70% by 2021–22 will require an additional 1.2 million tonnes of materials to be recycled when continued waste generation and population growth rates are taken into account. On top of the 2.5 million tonnes already being recycled, this represents an increase of 33% in total tonnage recycled. Across all three waste streams, the modelling indicates an additional 3.3 million tonnes will need to be recycled to achieve the 2021–22 targets – 31% more than current levels.

Approaches to increase recycling

The targets will drive action and long-term investment in recycling and be supported by significant funding from the NSW Government's *Waste Less, Recycle More* initiative.

A significant part of the initiative will address infrastructure to improve recycling and resource recovery. The EPA will establish an interagency group to identify and facilitate opportunities for the development of waste infrastructure.

An analysis of the municipal, commercial and industrial, and construction and demolition waste data for 2010–11 indicates that there is significant potential to increase recycling.

In the municipal solid waste (MSW) stream, the major untapped waste sources are food and garden organics, which account for almost half of the average household waste. Significant quantities of paper/cardboard, glass, plastics and metals in household waste bins also go to landfill. Based on this, tackling household food and garden waste and increasing the effectiveness of kerbside recycling systems are clear priorities.

Areas for priority recycling action in the commercial and industrial (C&I) sector also include addressing food waste, along with paper/cardboard, plastics and timber wastes.

An analysis of the construction and demolition (C&D) waste stream indicates that recycling of C&D materials is already quite high: NSW has almost reached its 2014 target. Opportunities to improve recycling in the C&D sector are limited by the presence of contaminated soils, which are difficult to recycle and make up a significant part of the C&D waste stream. Relatively small gains can be made with concrete/brick, sand/soil/rubble and timber wastes.

The *Waste Less, Recycle More* initiative provides incentives to key stakeholder groups, such as local government and the waste industry, to deal with these issues through education and behaviour change, system improvement and new recycling infrastructure across all three waste streams.

Increase the effectiveness of kerbside recycling

Ninety-six per cent of NSW households have access to kerbside recycling. This system has been very effective with increased household recycling rates, but there is still room for significant improvement. For example, 23% of the materials in the average 'red lid' household garbage bin could be recycled through the 'yellow lid' kerbside recycling bin. More of these materials could be recovered through community education and behaviour change.

The location of the collection service influences the types of materials that can be recovered through the kerbside system. Kerbside recycling rates could be further improved by standardising kerbside services across NSW and increasing the range of materials accepted for recycling.

Target food and garden organic waste in the C&I and MSW sectors

Significant quantities of garden waste continue to be discarded to landfill each year, despite well-established collection and composting in many areas. Audits show about 40% of waste in household red lid bins sent to landfill is food and garden waste that could be composted. Investment in new infrastructure will see significant amounts of this material collected and processed into valuable compost.

Invest in infrastructure for C&I recycling

The commercial and industrial waste stream presents a number of significant challenges. Different organisations produce very different wastes and the large numbers of small- to medium-sized enterprises in NSW also pose significant logistical challenges.

The *Waste Less, Recycle More* initiative provides funding for business waste audits, incentives to improve source-separation and funding to invest in new equipment and/or infrastructure to improve their recycling rate. Funds are also available to larger organisations develop industrial ecology networks.

Remove problem wastes

The *Waste Less, Recycle More* initiative is funding a statewide network of permanent drop-off points and collection events for common household wastes, like paint, oils, batteries, gas bottles, fluorescent lights and smoke detectors. These materials can contaminate recycling streams and removing them will create opportunities to improve the recycling of other materials.

Develop markets and encourage innovation

The *Waste Less, Recycle More* initiative is also providing funding to help establish new markets for recycled materials and encourage innovation in recycling technology.

Build capacity for developing regional recycling plans

The *Waste Less, Recycle More* initiative supports local councils to develop regional strategies that identify and address recycling needs in their communities, with funding available to put the plans into action. The funding for local communities recognises the vital role of local government in delivering on the recycling targets and the potential to improve recycling performance through regional collaboration and long-term strategic planning.

See Section 7 for details on performance measurement in this key result area.

Key Result Area 3: Divert more waste from landfill

Target for diverting more waste from landfill

By 2021–22, increase the waste diverted from landfill from 63% (in 2010–11) to 75%

Introduction

Diverting waste from landfill decreases the impact of landfills on the environment and reduces the need to construct new sites. ‘Waste diversion’ refers to the alternative pathways for materials entering the system that avoid disposal to landfill, such as recycling and energy recovery.

Even though the 2003 and 2007 WARR Strategies had no specific key result area or target associated with landfill diversion, significant improvements still occurred in NSW. The total waste diversion rate increased from 45% in 2002–03 to 63% in 2010–11. Despite a 45% increase in the amount of waste generated over this period, the material sent to landfill declined from 6.5 to 6.4 million tonnes. The additional waste generated from 2003 to 2011 was either reused or recycled, as there were no significant waste-to-energy facilities as a pathway for diverting waste.

Reuse and recycling will remain the main avenues for diverting waste from landfill with energy recovery providing a new means of future diversion from landfill for

residual waste remaining from recycling operations. While the aim is to reduce waste going to landfill, we will still need to have appropriate, approved landfills to service our needs.

The EPA's *NSW Energy from Waste Policy Statement* sets a framework for the operation of purpose-built facilities to recover energy from residual wastes that are unable to be recycled and would otherwise be disposed of to landfill. The policy statement aims to increase investment in energy from waste infrastructure and provide regulatory certainty to industry and confidence to the wider community.

Approaches to divert more waste from landfill

Initially, more waste will be diverted from landfill by increasing recycling through the actions detailed under KRA2. In future, the recovery of energy from waste may also make a contribution to diversion. The *Waste Less, Recycle More* initiative provides $60 million over five years to co-fund large-scale infrastructure and bring forward viable resource recovery projects, including funding for potential energy-from-waste projects.

Generally, there is low community acceptance of new and expanded landfill to the extent that in some parts of NSW there is diminishing supply of approved landfill capacity. While increased recycling and diversion of waste from landfill will continue to offset our need for greater landfill capacity, the EPA with the Department of Planning and Infrastructure will investigate Greater Metropolitan Sydney's landfill needs to ensure there is appropriate approved landfill capacity.

See Section 7 for details on performance measurement in this key result area.

Key Result Area 4: Manage problem wastes better

Target for managing problem wastes better

By 2021–22, establish or upgrade 86 drop-off facilities or services for managing household problem wastes statewide

Introduction

Some household products and materials cause problems in the waste and recycling streams because of their potential to harm human health and the environment. They can also make the recovery and recycling of other materials more difficult or uneconomic. The target of this key result area aims to reduce the impact of these household materials by separating them from household waste and recycling streams and treating them appropriately. Problem wastes can include paint, batteries, smoke detectors, fluorescent lamps, gas bottles, motor oils and fluids, and other toxic and hazardous household products.

Since 2003, the NSW Government has been tackling problem wastes in two ways by:

- working with other jurisdictions and industry to establish product stewardship schemes
- organising and funding household chemical collection events.

Product stewardship occurs when producers take responsibility for the products they make throughout their life cycles, including at end-of-life. NSW has been a leader in the product stewardship debate in Australia and has strongly supported national rather than state-based solutions for product groups identified for stewardship action which occur in national markets and are problematic in all jurisdictions. State-based

action could lead to inconsistencies and inefficiencies and potentially contravene the *Mutual Recognition Act 1992*.

The Television and Computer Recycling Scheme is the first product stewardship scheme to roll out under the Commonwealth *Product Stewardship Act 2011*. NSW is working with the Commonwealth and other state and territory governments to ensure the scheme operates effectively at a local level and develop further national schemes for problem wastes.

NSW has also supported a number of other industries that have introduced voluntary national product stewardship schemes. These include agricultural and veterinary chemicals (ChemClear) and their packaging (drumMuster), fluorescent lamps from commercial and public lighting (FluoroCycle), mobile phones and batteries (Mobile Muster) and PVC (Vinyl Council Product Stewardship Program). NSW continues to work with these industries to improve the effectiveness of these schemes.

NSW has been actively involved in household problem waste collection across the state through periodic collection events. In the greater Sydney area (Sydney, the Hunter and Illawarra), the EPA in partnership with local councils, organises collection events under the Household Chemical CleanOut program. In regional areas, the EPA supports collection events organised by regional councils. Problem waste collection is available to households once or twice a year on average. The products and materials collected range from high-volume materials, such as paints and batteries, to low-volume, but highly toxic chemicals like DDT and mercury.

The NSW Government has also commenced a trial of the Householders' Asbestos Disposal Scheme across 23 councils to assess different approaches to encourage the proper handling and disposal of the asbestos waste produced by home renovators. The trial will run until August 2015 and the results will inform the NSW Government on the best approach to reduce the dumping of asbestos waste.

The independent *Review of Waste Strategy and Policy in NSW* in 2010 recommended increasing service by establishing permanent drop-off sites for high-volume, low-toxicity materials that make up the bulk of the problem wastes delivered. Permanent drop-off facilities that are open on a regular basis would significantly improve service and increase the community's ability to separate problem wastes from the existing waste and recycling streams.

The Government has accepted this recommendation and incorporated a commitment in *NSW 2021: A plan to make NSW number one* to 'support community drop-off centres to make it easier for people to recycle and remove problem waste from bins'.

The *Waste Less, Recycle More* initiative is providing $70 million over five years for dealing with problem wastes.

Approaches to improve the management of problem wastes

Enhanced community services for the collection and safe disposal of problem wastes will be delivered by:

- funding the roll-out and servicing of permanent drop-off facilities and upgrade of existing facilities throughout NSW so a consistent 'core' list of high-volume, low-toxicity materials can be more easily collected, including paints, oils, batteries, gas bottles, smoke detectors and fluorescent lamps. Further funding will allow local communities to expand the facilities to collect other local priority materials, such as mattresses, expanded polystyrene and e-waste
- continuing event-based collections for the low-volume, high-toxicity materials, allowing occupational health and safety risks to be tightly controlled

- trialling alternative collection methods, such as mobile collection facilities, in high density or remote areas where permanent collection sites may not be available
- continuing to work closely with the Commonwealth, other state and territory governments, and key stakeholders to help implement additional product stewardship initiatives at the national level.

See Section 7 for details on performance measurement in this key result area.

Key Result Area 5: Reduce litter

Target for reducing litter

By 2016–17, reduce the number of litter items by 40% compared with 2011–12 levels and then continue to reduce litter items to 2021–22

Introduction

Litter continues to be a prime focus and concern of the community. Litter damages pride in the local environment, is linked to other anti-social behaviours, and affects land, fresh water and marine environments.

'Litter' refers to material that ranges in size from very small to very large items, a characterisation which allows a broad application of littering offences to be applied if required. Common types of litter include cigarette butts, small pieces of paper, chip and confectionery wrappers, fast-food packaging, bottle caps, plastic straws, broken glass, drink containers and plastic bags.

'Illegal dumping' generally covers larger, more bulky items and is covered in KRA6.

Littering and illegal dumping of waste are treated as separate issues in the WARR Strategy 2014–21 as the attitudes and behaviours behind these issues, along with the location and material types, differ.

The NSW Government recognises that litter levels are still too high and has committed to further reducing the problem. The litter reduction target in *NSW 2021: A plan to make NSW number one* has set a goal for NSW to be the best performing state in Australia by 2016.

According to the 2011–12 National Litter Index, Victoria had the lowest litter count in Australia, with an average of 36 items per 1000 square metres compared with 58 items in NSW. These results reflect the investment Victoria has made in litter reduction in recent years. To better Victoria's performance, the NSW litter count of 2011–12 would need to fall by 38%. While the National Litter Index results are not directly comparable between different jurisdictions, they do indicate the performance level that is possible and the improvements NSW can and should make. The strategy target of 40% litter reduction was developed on this basis.

The new litter target reflects the aspiration and time frame for improvement by 2016 outlined in *NSW 2021* and seeks to continue to improve litter performance to 2021.

Approaches to reduce litter

Effective litter prevention and reduction will require coordinated action by all stakeholders with an interest in, and responsibilities for, litter. The *Waste Less, Recycle More* initiative is providing $20 million over five years to reinvigorate action on litter, backed up by a targeted Litter Prevention Strategy that will act as an implementation plan. Elements of this coordinated approach are outlined below.

Education

Changing social norms around litter behaviour through education and anti-litter campaigns is a key objective. A new statewide litter campaign will be rolled out across NSW by state and local governments to raise awareness about the environmental and social impacts of litter.

Regulation and enforcement

Increasing the number of state and local government officers with powers to enforce litter regulations will boost enforcement activity against litterers. The community will be encouraged to participate in reporting litterers while opportunities to improve enforcement efforts with new technologies, such as smart phone applications, will be explored.

Infrastructure and clean-up of litter hot spots

The very presence of litter provides an incentive for people to litter more. Identifying and cleaning up litter hot spots and providing litter bins and appropriate signage can reduce littering.

The NSW Government will provide significant grant funding to councils and local communities to tackle local litter hot spots, including the state's most highly littered areas and materials.

The Government will continue to work on litter issues with other parties at the national level, including the packaging industry through the Australian Packaging Covenant and collaboratively with other jurisdictions. National options to increase the recovery of packaging waste and reduce packaging-related litter will be further investigated. A new method for measuring litter that will allow for more accurate comparisons of litter performance between jurisdictions will also be developed as part of this work.

Measuring and evaluation

Measuring our litter and understanding our behaviour are foundation steps to building targeted, effective action. Evaluating programs helps design even more effective approaches. This increased knowledge and information will be shared across all stakeholders to coordinate statewide action.

The key approaches outlined here will be further detailed in a Litter Prevention Strategy to be released in 2014.

See Section 7 for details on performance measurement in this key result area.

Key Result Area 6: Reduce illegal dumping

Target for reducing illegal dumping

From 2013–14, implement the *NSW Illegal Dumping Strategy 2014–16* to reduce the incidence of illegal dumping statewide

As part of this strategy, by 2016–17:

- reduce the incidence of illegal dumping in Sydney and the Illawarra, Hunter and Central Coast regions by 30% compared with 2010–11
- establish baseline data to allow target-setting in other parts of the state

Introduction

'Illegal dumping' is the disposal of waste materials on private or public land where no planning approval or environment protection licence has been granted for the activity.

Illegal dumping can range from the disposal of small bags of rubbish or household waste in an urban environment to larger scale dumping of materials, such as construction and demolition waste, in more isolated areas. This waste may also include dangerous materials like asbestos.

The attitudes and behaviours that drive illegal dumping, the type of materials involved and where it occurs differ from littering. For this reason, NSW WARR Strategy 2014–21 treats litter and illegal dumping as separate issues.

Illegal dumping can seriously pollute the environment, potentially endanger human health, harm wildlife, affect local amenity and reduce a community's pride of place. It can be expensive for local councils, landowners, land managers and the community to clean up dumped material. Illegal dumping also distorts the market by undercutting legitimate waste operators and creating an uneven playing field for business.

The EPA and local councils both have key regulatory responsibilities in relation to illegal dumping under the *Protection of the Environment Operations Act 1997*. The EPA also provides financial and operational support to Regional Illegal Dumping (RID) Squads. These squads bring together groups of local councils, who pool their enforcement capacity and operate across council boundaries to investigate and enforce breaches of NSW regulations on illegal dumping and landfilling. NSW currently has four active RID Squads.

Gathering accurate information on the nature and extent of illegal dumping is challenging, because dumping often occurs out of sight, undetected and anonymously. As a result, information on illegal dumping in many parts of NSW is limited, which makes setting statewide targets difficult. Generating good baseline data on illegal dumping is a key priority, so that illegal dumping programs can be tailored to meet local needs and progress against the targets measured.

The target for dumping in the Sydney, Illawarra, Hunter and Central Coast areas reflects the availability of relatively robust baseline data for these areas.

While the target in the initial period to 2016–17 focuses on data collection and illegal dumping incidents in the greater Sydney region, efforts to reduce the problem in other regions and deal with smaller scale incidents will continue during this period.

The NSW Government has identified illegal dumping as a key priority in *NSW 2021: A plan to make NSW number one* and is providing $58 million over five years in the *Waste Less, Recycle More* initiative to combat illegal dumping across the state.

Approaches to reduce illegal dumping

The *NSW Illegal Dumping Strategy 2014–16* has been released following an extensive public consultation period and will function as an important implementation plan under NSW WARR Strategy 2014–21.

Dealing with illegal dumping will require a multi-pronged response, involving those with regulatory powers (state and local government) working together with landowners and managers, industry and local communities.

Key action areas include:

- establishing strong and collaborative partnerships between the State Government, local councils, Aboriginal communities, RID Squads, industry and the community to increase opportunities for people to look after their own environments

- building capacity at the local level so that councils, landowners, land managers and the community have the knowledge and expertise to implement practical regional solutions
- ramping up compliance and enforcement activities to detect, investigate and prosecute illegal dumping
- conducting education campaigns to inform the community about the impacts of illegal dumping and correct disposal options
- recognising and promoting cooperative efforts and regional successes so that other communities can learn from these activities and illegal dumpers will understand that illegal dumping is being targeted
- building a robust evidence base through data collection and analysing illegal dumping incidents, attitudes and behaviour to help regulatory authorities, land managers and communities identify, prioritise and target local needs as well as monitor and evaluate the effectiveness of their actions
- trial a program to make it easier for home renovators to dispose of small amounts of asbestos waste.

See Section 7 for details on performance measurement in this key result area.

7. Measuring progress

Progress against WARR Strategy 2014–21 will be reported every two years as required under the *Waste Avoidance and Resource Recovery Act 2001*. Each progress report will provide an assessment of performance against the targets in each key result area. The parameters for measuring progress against each of the key result areas are provided and discussed below.

Key Result Area 1: Avoid and reduce waste generation

Target

By 2021–22, reduce the rate of waste generation per capita

In NSW, 'waste generation' refers to the total amount of material that enters the solid waste management system. This includes all materials disposed of to landfill, as well as those that are recovered from the waste stream for recycling or energy recovery.

This target will be compared to Gross State Product (GSP) and population growth to better understand the best way monitor progress in this area.

Measurement

- Waste generation is measured in tonnes.
- Waste generation is the sum of the tonnage of all materials sent to landfill plus the tonnage of all materials diverted from landfill through a resource recovery processor.
- Materials that do not go to landfill or through a resource recovery processor are considered to be avoided because they have not entered the waste management system. Thus when materials are reused without being processed (such as at a second-hand clothing store), they are not counted in the waste generation measurement.
- Growth in waste generation is the difference between the total tonnes of waste generated in the current period minus total tonnage of waste generated in the last period divided by the total tonnage of waste generated in the last period. Since progress towards WARR Strategy 2014–21 targets is measured every two years, growth in waste generation is measured in two-year increments.
- NSW population growth is determined by the Australian Bureau of Statistics (ABS).
- Gross State Product (GSP) is reported annually by the ABS.

Key Result Area 2: Increase recycling

Target

By 2021–22, increase recycling rates for:

- municipal solid waste from 52% (in 2010–11) to 70%
- commercial and industrial waste from 57% (in 2010–11) to 70%
- construction and demolition waste from 75% (in 2010–11) to 80%.

In NSW, 'recycling' refers to the waste stream which is reprocessed to make the same or different products and put back into the economy. It does not include energy recovered from waste.

Measurement

- The recycling rate for a particular waste stream (MSW, C&I, C&D) is the proportion of all materials recycled from that waste stream in a given year (measured in tonnes) compared with the sum of all waste generated from that waste stream in the same year. Recycling excludes recovery of energy from waste processes.
- Measurement of waste generation is described under KRA1.

More detail on the collection of data and calculation of recycling rates can be found in the Quality Declaration: Waste Avoidance and Resource Recovery Strategy - Recycling Rates

Further information on what is captured under each of the three waste streams is available on the EPA waste glossary webpage.

Key Result Area 3: Divert more waste from landfill

Target

By 2021–22, increase the waste diverted from landfill from 63% (in 2010–11) to 75%

'Waste diversion' refers to the alternative pathways for materials entering the waste system that avoid disposal to landfill, such as recycling and energy recovery.

Measurement

- The diversion rate is the proportion of all materials (measured in tonnes) that are either recycled or otherwise recovered (such as through an energy-from-waste facility) compared with total waste generation in a given year.
- Measurement of waste generation is described under KRA1.

Key Result Area 4: Manage problem wastes better

Target

By 2021–22, establish or upgrade 86 drop-off facilities or services for managing household problem wastes statewide

'Problem wastes' refers to some household products and materials in the waste and recycling streams that pose potential harm to the environment and human health and/or make the recovery and recycling of other materials more difficult or uneconomic.

Measurement

The establishment or upgrade of 86 drop-off facilities or services will aim to provide a reasonable level of geographic coverage across the state to address problem wastes by 2021–22. The location of facilities or services for the NSW community will use the following criteria as a starting point and be refined where necessary:

- one facility per 50,000 households in metropolitan populated clusters
- one facility per 20,000 households in regional population centres
- generally less than 100 kilometres between facilities in remote locations.

The drop-off facilities established or upgraded will be required to collect a consistent 'core' list of materials: paint, oil, batteries, gas bottles, smoke detectors and fluorescent lamps.

The event-based collections of more hazardous materials through Household Chemical CleanOut events will continue.

Key Result Area 5: Reduce litter

Target

By 2016–17, reduce the number of litter items by 40% compared with 2011–12 levels and then continue to reduce litter items to 2021–22

'Litter' is a broad term for material inappropriately disposed of in public places (including land, freshwater and marine environments) and ranges in size from very small to very large items. Common types of litter include cigarette butts, small pieces of paper, chip and confectionery wrappers, fast-food packaging, bottle caps, plastic straws, broken glass, drink containers and plastic bags.

Measurement

Currently, the average number of littered items in NSW is measured using the Keep Australia Beautiful National Litter Index methodology, which is based on two visual surveys per year at 151 sites in NSW, normalised against a 1000-square-metre area.

A new national litter methodology is being developed to replace the National Litter Index and this may establish a different means of measuring litter levels in NSW. Once the new methodology is applied, a revised baseline will be established and further reductions then compared against the new baseline.

Key Result Area 6: Reduce illegal dumping

Target

From 2013–14, implement the *NSW Illegal Dumping Strategy 2014–16* to reduce the incidence of illegal dumping statewide

As part of this strategy, by 2016–17:

- reduce the incidence of illegal dumping in Sydney and the Illawarra, Hunter and Central Coast regions by 30% compared with 2010–11
- establish baseline data to allow target-setting in other parts of the state

'Illegal dumping' refers to the disposal of waste materials on private or public land where no planning approval or environment protection licence has been granted for the activity. Illegal dumping can range from the disposal of small bags of rubbish in an urban environment to larger scale dumping of materials, such as construction and demolition waste, in more isolated areas.

Measurement

- The number of illegal dumping incidents will be based on the number of such incidents greater than 200 cubic metres detected by the EPA. This includes incidents that are detected as a result of the EPA's own searches or those reported to the EPA by local government, other agencies, RID Squads and community members.
- Databases for smaller scale illegal dumping incidents and incidents outside the Sydney, Illawarra, Hunter and Central Coast regions will be developed as part of the Illegal Dumping Strategy. Once completed, they will allow a baseline to be established against which further reductions in illegal dumping can be measured.

8. Responsibilites for delivering WARR Strategy 2014–21

Everyone can help to reduce the impacts of waste and move towards a more sustainable future. We are all critical to delivering a new vision for NSW where our valuable resources are kept moving through the economy and not sent to landfill.

Every sector of the community has a role to play in effective waste management and these responsibilities are outlined below. If we meet our responsibilities and change our waste management behaviours quickly, then we will reach our goals at a faster rate.

Commonwealth Government

Partner with all jurisdictions to deliver the agreed objectives under the *National Waste Policy*

NSW Government agencies

Responsibilities generally applicable to all agencies:

- support the WARR Strategy 2014–21 through complementary policies and programs, including sustainable procurement
- incorporate resource recovery and waste reduction objectives in their own operations
- comply with regulations.

Environment Protection Authority

- Provide clear and consistent regulations for waste disposal, recovery and recycling
- Collaborate and build partnerships with key stakeholders in government, industry and the community to reduce waste, increase recycling and tackle litter and illegal dumping
- Provide information and support to help build capacity, knowledge and skills in the community to tackle waste, littering and illegal dumping
- Provide support to local communities to tackle problem wastes
- Undertake research, data collection and analysis to ensure a robust evidence base is available for decision-making
- Report back to the community on waste and resource recovery issues and performance
- Enforce environmental regulation

Environmental Trust

- Deliver *Waste Less, Recycle More* grants to local government, industry, research institutes, community groups and other stakeholders to help reduce the impact of waste and achieve the targets in NSW WARR Strategy 2014–21
- Provide grants to industry as an incentive for investment in waste, recycling and recovery infrastructure as well as improved collection systems

NSW Department of Planning and Infrastructure

- Plan for waste and resource recovery as essential services in our communities
- Establish a coordinated planning assessment process for major resource recovery infrastructure projects
- Identify areas where resource recovery facilities could be situated to maximise value from available land and infrastructure

NSW Trade and Investment

Assist the resource recovery industry to identify suitable locations and develop new resource recovery infrastructure and jobs in NSW

WorkCover NSW

Assist the waste industry, local government and the community in the safe management of problem wastes in the workplace

Local government

- Work collaboratively with neighbouring local government areas to develop and implement regional waste and resource recovery strategic plans that provide a clear pathway for delivering the outcomes in NSW WARR Strategy 2014–21
- Provide their communities with best practice waste and resource recovery services, including (where appropriate) kerbside collection systems, public place litter infrastructure, drop-off facilities for problem wastes, resource recovery infrastructure and well-managed landfill
- Provide information and work with their communities to improve waste and resource recovery outcomes
- Ensure compliance and enforcement of waste, litter and illegal dumping regulations
- Provide timely assessment of local planning and development applications for resource recovery operations and infrastructure
- Tackle litter and illegal dumping
- Specify and purchase recycled materials, such as compost for use on parks and playing fields
- Comply with regulations

Environment and community groups and non-government organisations

Provide information and work with the State Government, local government, industry and the community to change attitudes and behaviour towards waste, resource recovery, litter and illegal dumping

Industry and businesses

- Reduce and avoid waste generation through improved resource efficiency measures and industrial ecology partnerships

- Separate recycling streams at source to enable collection separate from residual waste
- Work with suppliers to reduce packaging and waste in supply chains
- Implement and maintain best practice resource recovery systems
- Actively seek other businesses that may use your waste as an input material in their business
- Ensure that waste and recycling streams are collected by legitimate operators and taken to appropriate facilities
- Specify and purchase recycled materials
- Work with other producers to take responsibility for the end-of-life management of problem wastes
- Comply with regulations

Waste and resource recovery industry (such as collectors, waste managers, recyclers)

- Provide best practice resource recovery and waste services
- Work with businesses and industry to improve resource recovery outcomes
- Invest in new and upgrade existing resource recovery infrastructure to recover additional types of material and increase the amount of material put back into the productive economy
- Comply with regulations

Individuals

- Avoid and reduce waste generation by making smart purchasing decisions, such as purchasing products with less packaging, rejecting plastic bags, only purchasing food that is needed and storing and using perishable goods appropriately and within use-by dates
- Ensure that waste and recycling materials are deposited in the correct bins at home or in public places to avoid contamination and maximise recovery
- Avoid littering
- Support local businesses that recycle material and create local jobs
- Use drop-off locations for problematic wastes, such as e-waste and televisions
- Provide authorities with the details and accounts of illegal dumping or other fraudulent waste activities
- Comply with regulations

9. Expert reference group

An independent expert reference group oversaw the development of NSW WARR Strategy 2014–21 in accordance with section 12 of the *Waste Avoidance and Resource Recovery Act 2001*.

The Expert Reference Group comprised:

- Ms Julie Savet Ward (Chair) – EPA Board member
- Ms Christine Covington – EPA Board member
- Mr Tony Wright – Wright Corporate Strategy
- Mr Vaughan Levitzke – Chief Executive, Zero Waste SA
- Mr Robert Verhey – Local Government NSW.

Glossary

Alternative waste treatment (AWT)	Generally refers to a facility that applies a combination of mechanical, biological and (sometimes) thermal processes to separate organic materials from a mixed residual waste stream (usually household waste)
Commercial and industrial waste (C&I waste)	Solid waste generated by businesses, industries (including shopping centres, restaurants and offices) and institutions (such as schools, hospitals and government offices), but not C&D waste or MSW – more details on what is counted as C&I waste: www.epa.nsw.gov.au/wr/glossary.htm
Construction and demolition waste (C&D waste)	Solid waste sourced from construction and demolition works, including building and demolition waste, asphalt waste and excavated natural material – more details on what is counted as C&D waste: www.epa.nsw.gov.au/wr/glossary.htm
Diversion rate	The proportion of all recycled materials or those otherwise recovered (through an energy-from-waste facility) compared to the total amount of waste generated
Energy from waste	The process of recovering energy from waste materials: the energy is used to produce useable heat, steam, electricity or a combination of the above
E-waste	End-of-life electronic equipment, such as televisions, computers, mobile phones, stereos and small electrical appliances (but not whitegoods)
GSP (Gross State Product)	A measure of economic activity: an estimate of the total value of all goods and services produced within the state within a specific time frame
Industrial ecology	Refers to using the by-products from the production process in one company as a resource in another
KRA (key result area)	Refers to the key outcomes the strategy seeks to achieve
Materials recovery facility (MRF)	An MRF handles a range of recyclables which typically have already been separated from other waste streams (such as by householders or businesses at the collection stage). At the MRF, the materials are sorted into individual material streams before being sent for recycling. Components of the incoming material which are not suitable for recycling will be separated as ‘contaminants’ at the MRF.
Municipal solid waste (MSW)	Solid waste from households and local government operations, including waste placed at the kerbside for local council collection and waste collected by councils from municipal parks and gardens, street sweepings and public council bins – more details on what is counted as MSW: www.epa.nsw.gov.au/wr/glossary.htm
Problem wastes	Some household products and materials in the waste and recycling stream that pose potential harm to the environment and human health and/or make the recovery and recycling of other materials more difficult or uneconomic

Recycling	Set of processes (including biological) for converting materials, that would otherwise be disposed of as wastes, into useful materials or products
Recycling rate	Proportion of all recycled materials compared to the total amount of waste generated – does not include energy from waste
Red lid bin	Refers to the Australian Standard (AS 4123.7-2006 Mobile Waste Containers – Part 7: Colours, markings and designation requirements) bin-lid colours for household kerbside waste and recycling bins. The red lid bin is for residual waste.
Reducing waste	Refers to reducing waste generation by avoiding or preventing the creation of waste where possible along the various parts of the supply chain. The aim is to use less material to achieve the same or equivalent outcome.
Resource recovery	In NSW this currently refers to the recycling of waste material. Recovery may also include extracting embodied energy from waste through thermal processes.
Solid waste	Refers to unwanted solid materials and does not include liquid waste
Waste avoidance	Waste that does not enter the waste management system
Waste management system	Waste materials from MSW, C&I and C&D sectors that are collected at the kerbside, recovered from the waste stream for recycling or energy recovery or disposed to landfill
Yellow lid bin	Refers to the Australian Standard (AS 4123.7-2006 Mobile Waste Containers – Part 7: Colours, markings and designation requirements) bin-lid colours for household kerbside waste and recycling bins. The yellow lid bin is for ‘dry’ recyclable materials. Generally, dry recyclables include paper, cardboard, glass, some hard plastics and ferrous and non-ferrous metals. The type of recyclable materials collected in the yellow lid bin can vary depending on the facility where the materials are taken for further separation and the availability of further downstream markets for the materials.

POPULATION

6194

Table 1 - Population Estimates per Council 2016-2036 (NSW Planning & Environment)

Estimated Population	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Camden Council	80,900	86,600	92,300	98,000	103,700	109,400	117,090	124,780	132,470	140,160	147,850	155,400	162,950	170,500	178,050	185,600	193,390	201,180	208,970	216,760	224,550
Liverpool Council	214,100	219,660	225,220	230,780	236,340	241,900	248,480	255,060	261,640	268,220	274,800	280,060	285,320	290,580	295,840	301,100	307,080	313,060	319,040	325,020	331,000
Campbelltown Council	164,400	167,080	169,760	172,440	175,120	177,800	181,640	185,480	189,320	193,160	197,000	200,420	203,840	207,260	210,680	214,100	217,910	221,720	225,530	229,340	233,150
Wollondilly Council	49,350	49,740	50,130	50,520	50,910	51,300	52,510	53,720	54,930	56,140	57,350	58,770	60,190	61,610	63,030	64,450	66,080	67,710	69,340	70,970	72,600
Wingecarribee Council	47,750	48,020	48,290	48,560	48,830	49,100	49,340	49,580	49,820	50,060	50,300	50,480	50,660	50,840	51,020	51,200	51,320	51,440	51,560	51,680	51,800
TOTAL	556,500	571,100	585,700	600,300	614,900	629,500	649,060	668,620	688,180	707,740	727,300	745,130	762,960	780,790	798,620	816,450	835,780	855,110	874,440	893,770	913,100
5-Year Growth (%)						13.12%					15.54%					12.25%					11.83%
20-Year Growth (%)																					64.08%

DWELLINGS

2096

Table 2 - Dwelling* Estimates (No.) per Council 2016-2036 (source NSW Planning & Environment)

Council	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Camden Council	28,450	30,530	32,610	34,690	36,770	38,850	41,650	44,450	47,250	50,050	52,850	55,620	58,390	61,160	63,930	66,700	69,610	72,520	75,430	78,340	81,250
Liverpool Council	72,500	74,580	76,660	78,740	80,820	82,900	85,320	87,740	90,160	92,580	95,000	96,980	98,960	100,940	102,920	104,900	107,150	109,400	111,650	113,900	116,150
Campbelltown Council	59,500	60,610	61,720	62,830	63,940	65,050	66,530	68,010	69,490	70,970	72,450	73,750	75,050	76,350	77,650	78,950	80,400	81,850	83,300	84,750	86,200
Wollondilly Council	18,200	18,410	18,620	18,830	19,040	19,250	19,740	20,230	20,720	21,210	21,700	22,260	22,820	23,380	23,940	24,500	25,150	25,800	26,450	27,100	27,750
Wingecarribee Council	22,700	22,930	23,160	23,390	23,620	23,850	24,030	24,210	24,390	24,570	24,750	24,900	25,050	25,200	25,350	25,500	25,600	25,700	25,800	25,900	26,000
TOTAL	201,350	207,060	212,770	218,480	224,190	229,900	237,270	244,640	252,010	259,380	266,750	273,510	280,270	287,030	293,790	300,550	307,910	315,270	322,630	329,990	337,350
5-Year Growth (%)						14.17%					16.03%					12.67%					12.24%
20-Year Growth (%)																					67.54%

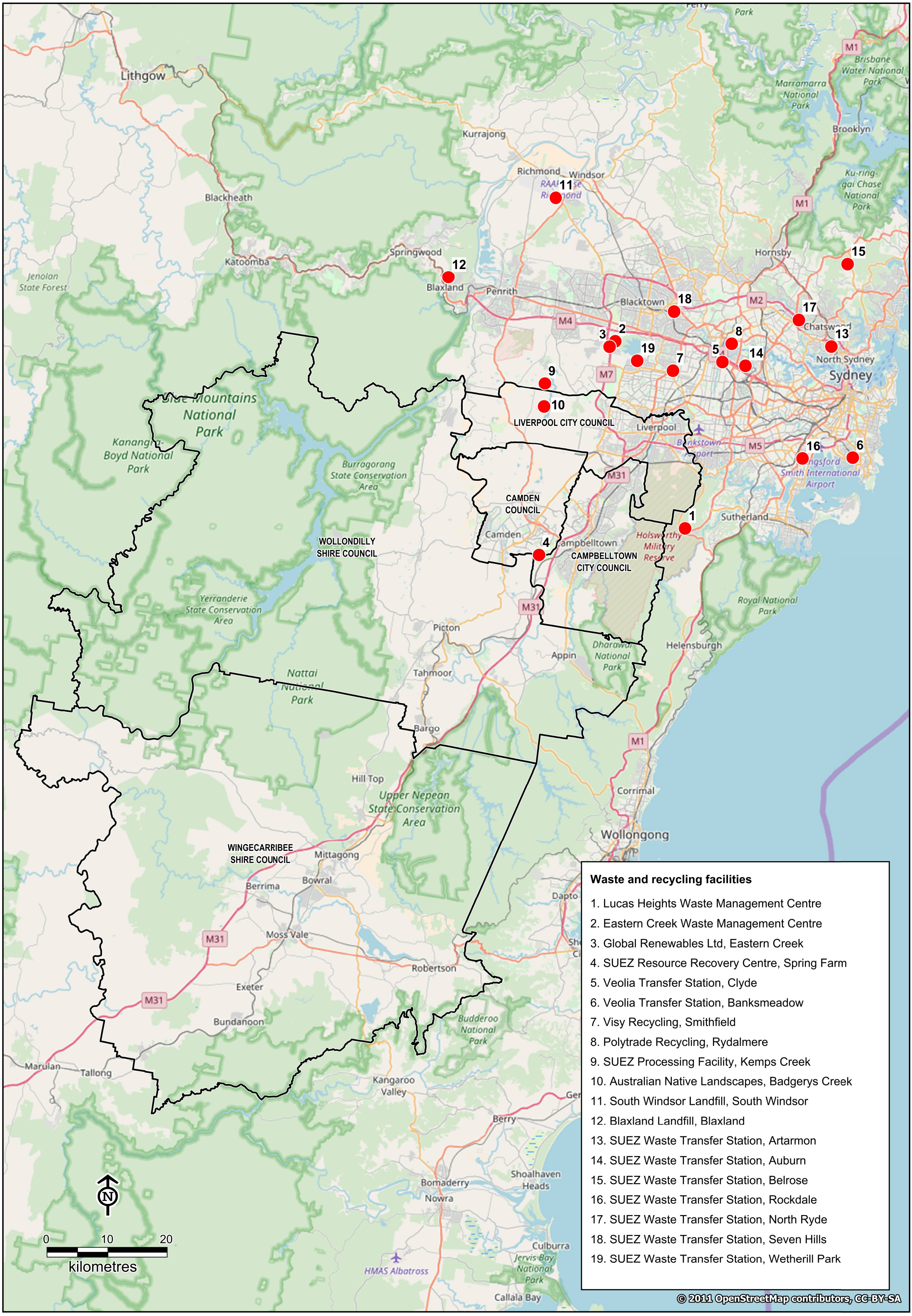
TONNAGE DATA

Table 1 - Annual Tonnages per Stream per Council

Estimated TPA per Council	CURRENT CONTRACT PERIOD EXPIRES 2024								NEW CONTRACT PERIOD (2024 + 15 YEARS)																OPTIONAL TERM + 5 YEARS				
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43	2043/44
CAMDEN COUNCIL	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 16	Yr 17	Yr 18	Yr 19	Yr 20
General Waste	16,608	18,234	19,860	21,486	23,438	25,389	27,340	29,617	31,894	34,170	36,447	38,998	41,728	44,649	47,775	51,119	54,697	58,526	62,623	67,006	71,697	76,716	82,086	87,832	93,980	100,558	107,598	115,129
Recycling	8,664	9,512	10,361	11,209	12,227	13,245	14,263	15,451	16,638	17,826	19,013	20,344	21,768	23,292	24,922	26,667	28,533	30,531	32,668	34,955	37,401	40,020	42,821	45,818	49,026	52,457	56,129	60,059
Garden Organics	8,978	9,857	10,736	11,615	12,670	13,725	14,780	16,010	17,241	18,472	19,703	21,082	22,558	24,137	25,827	27,634	29,569	31,639	33,853	36,223	38,759	41,472	44,375	47,481	50,805	54,361	58,166	62,238
Bulky Waste	2,323	2,550	2,778	3,005	3,278	3,551	3,824	4,143	4,461	4,779	5,098	5,455	5,837	6,245	6,682	7,150	7,651	8,186	8,759	9,372	10,029	10,731	11,482	12,285	13,145	14,066	15,050	16,104
Total Tonnes	36,573	40,154	43,735	47,316	51,613	55,910	60,207	65,221	70,234	75,247	80,261	85,879	91,891	98,323	105,206	112,570	120,450	128,882	137,903	147,557	157,886	168,938	180,763	193,417	206,956	221,443	236,944	253,530
LIVERPOOL COUNCIL																												
General Waste	47,971	49,266	50,596	51,963	53,365	54,806	56,341	57,918	59,540	61,207	62,921	64,180	65,463	66,772	68,108	69,470	70,929	72,418	73,939	75,492	77,077	78,696	80,348	82,036	83,759	85,517	87,313	89,147
Recycling	17,048	17,508	17,981	18,467	18,965	19,477	20,023	20,583	21,159	21,752	22,361	22,808	23,264	23,730	24,204	24,688	25,207	25,736	26,277	26,828	27,392	27,967	28,554	29,154	29,766	30,391	31,030	31,681
Garden Organics	15,640	16,062	16,496	16,941	17,399	17,869	18,369	18,883	19,412	19,955	20,514	20,924	21,343	21,770	22,205	22,649	23,125	23,611	24,106	24,613	25,130	25,657	26,196	26,746	27,308	27,881	28,467	29,065
Bulky Waste	4,845	4,976	5,110	5,248	5,390	5,535	5,690	5,850	6,013	6,182	6,355	6,482	6,612	6,744	6,879	7,016	7,164	7,314	7,468	7,625	7,785	7,948	8,115	8,285	8,459	8,637	8,819	9,004
Total Tonnes	85,504	87,813	90,184	92,619	95,119	97,687	100,423	103,235	106,125	109,097	112,151	114,394	116,682	119,016	121,396	123,824	126,424	129,079	131,790	134,558	137,383	140,268	143,214	146,221	149,292	152,427	155,628	158,896
CAMPBELLTOWN COUNCIL																												
General Waste	33,650	34,390	35,147	35,920	36,710	37,518	38,343	39,187	40,049	40,930	41,831	42,751	43,691	44,653	45,635	46,639	47,665	48,714	49,785	50,881	52,000	53,144	54,313	55,508	56,729	57,977	59,253	60,556
Recycling	14,101	14,383	14,670	14,964	15,263	15,568	15,879	16,197	16,521	16,851	17,188	17,532	17,883	18,241	18,605	18,977	19,357	19,744	20,139	20,542	20,953	21,372	21,799	22,235	22,680	23,133	23,596	24,068
Garden Organics	16,641	16,974	17,314	17,660	18,013	18,373	18,741	19,116	19,498	19,888	20,286	20,691	21,105	21,527	21,958	22,397	22,845	23,302	23,768	24,243	24,728	25,223	25,727	26,242	26,766	27,302	27,848	28,405
Bulky Waste	7,005	7,145	7,288	7,433	7,582	7,734	7,888	8,046	8,207	8,371	8,539	8,709	8,884	9,061	9,242	9,427	9,616	9,808	10,004	10,204	10,409	10,617	10,829	11,046	11,267	11,492	11,722	11,956
Total Tonnes	71,396	72,892	74,418	75,977	77,568	79,193	80,852	82,546	84,275	86,041	87,843	89,684	91,563	93,482	95,441	97,441	99,483	101,568	103,696	105,870	108,089	110,355	112,668	115,030	117,442	119,904	122,418	124,985
WOLLONDILLY COUNCIL																												
General Waste	9,580	9,772	9,967	10,166	10,370	10,577	10,789	11,004	11,224	11,449	11,678	11,912	12,150	12,393	12,641	12,893	13,151	13,414	13,683	13,956	14,235	14,520	14,810	15,107	15,409	15,717	16,031	16,352
Recycling	4,775	4,871	4,968	5,067	5,169	5,272	5,377	5,485	5,595	5,707	5,821	5,937	6,056	6,177	6,301	6,427	6,555	6,686	6,820	6,956	7,095	7,237	7,382	7,530	7,680	7,834	7,991	8,150
Garden Organics	4,400	4,488	4,578	4,669	4,763	4,858	4,955	5,054	5,155	5,258	5,364	5,471	5,580	5,692	5,806	5,922	6,040	6,161	6,284	6,410	6,538	6,669	6,802	6,938	7,077	7,219	7,363	7,510
Bulky Waste	2,565	2,616	2,669	2,722	2,776	2,832	2,889	2,946	3,005	3,065	3,127	3,189	3,253	3,318	3,384	3,452	3,521	3,592	3,663	3,737	3,811	3,888	3,965	4,045	4,126	4,208	4,292	4,378
Total Tonnes	21,320	21,746	22,181	22,625	23,077	23,539	24,010	24,490	24,980	25,479	25,989	26,509	27,039	27,580	28,131	28,694	29,268	29,853	30,450	31,059	31,680	32,314	32,960	33,619	34,292	34,978	35,677	36,391
WINGECARRIBEE COUNCIL																												
General Waste	7,217	7,232	7,251	7,271	7,308	7,325	7,347	7,371	7,396	7,419	7,442	7,466	7,489	7,513	7,536	7,560	7,584	7,608	7,633	7,657	7,682	7,706	7,731	7,756	7,781	7,805	7,830	7,855
Recycling	4,913	4,924	4,937	4,950	4,975	4,987	5,002	5,018	5,035	5,051	5,067	5,083	5,099	5,115	5,131	5,147	5,163	5,180	5,197	5,213	5,230	5,247	5,263	5,280	5,297	5,314	5,331	5,348
Garden Organics	4,976	4,987	5,000	5,013	5,039	5,051	5,066	5,083	5,099	5,116	5,132	5,148	5,164	5,180	5,197	5,213	5,230	5,246	5,263	5,280	5,297	5,314	5,331	5,348	5,365	5,382	5,399	5,417
Bulky Waste	71	72	74	77	84	85	88	92	95	99	102	106	109	112	116	119	119	120	120	121	121	121	122	122	122	123	123	124
Total Tonnes	17,177	17,215	17,262	17,311	17,406	17,448	17,503	17,564	17,625	17,685	17,743	17,803	17,861	17,920	17,980	18,039	18,097	18,155	18,213	18,271	18,329	18,388	18,447	18,506	18,565	18,625	18,684	18,744
REGIONAL TOTALS																												
General Waste	115,026	118,894	122,821	126,806	131,192	135,615	140,160	145,098	150,104	155,175	160,319	165,306	170,521	175,980	181,694	187,681	194,026	200,681	207,663	214,992	222,691	230,782	239,289	248,238	257,657	267,576	278,025	289,040
Recycling	49,501	51,197	52,917	54,656	56,599	58,549	60,544	62,734	64,948	67,187	69,450	71,704	74,070	76,554	79,163	81,906	84,816	87,877	91,100	94,494	98,071	101,842	105,820	110,017	114,449	119,130	124,077	129,306
Garden Organics	50,635	52,368	54,123	55,899	57,884	59,876	61,911	64,146	66,405	68,690	70,998	73,317	75,750	78,306	80,992	83,816	86,809	89,959	93,275	96,769	100,451	104,335	108,431	112,755	117,321	122,145	127,244	132,635
Bulky Waste	16,809	17,359	17,918	18,486	19,110	19,737	20,379	21,077	21,782	22,496	23,220	23,942	24,694	25,481	26,304	27,165	28,071	29,020	30,015	31,059	32,154	33,304	34,513	35,783	37,119	38,526	40,006	41,565
Total Tonnes	***231,970***	***239,819***	***247,780***	***255,846***	***264,784***	***273,778***	***282,994***	***293,055***	***303,239***	***313,549***	***323,988***	***334,269***	***345,036***	***356,320***	***368,154***	***380,568***	***393,722***	***407,536***	***422,053***	***437,314***	***453,368***	***470,263***	***488,053***	***506,794***	***526,547***	***547,376***	***569,352***	***592,546***

ASSUMPTIONS

Tonnage projections are estimates only and do not take account of systems such as CDS or similar deposit return systems, the impact of high density development nor current development trends towards small lot dwellings.



Waste and recycling facilities

1. Lucas Heights Waste Management Centre
2. Eastern Creek Waste Management Centre
3. Global Renewables Ltd, Eastern Creek
4. SUEZ Resource Recovery Centre, Spring Farm
5. Veolia Transfer Station, Clyde
6. Veolia Transfer Station, Banksmeadow
7. Visy Recycling, Smithfield
8. Polytrade Recycling, Rydalmere
9. SUEZ Processing Facility, Kemps Creek
10. Australian Native Landscapes, Badgerys Creek
11. South Windsor Landfill, South Windsor
12. Blaxland Landfill, Blaxland
13. SUEZ Waste Transfer Station, Artarmon
14. SUEZ Waste Transfer Station, Auburn
15. SUEZ Waste Transfer Station, Belrose
16. SUEZ Waste Transfer Station, Rockdale
17. SUEZ Waste Transfer Station, North Ryde
18. SUEZ Waste Transfer Station, Seven Hills
19. SUEZ Waste Transfer Station, Wetherill Park

PRELIMINARY INDUSTRY CONSULTATION

Current contract:

- Current contract with 4 councils (CCC, CMD, WLD, WNG) expires June 2024
- Current contract is for 4 streams
- Currently 4 councils:
    - MSW: 72,000 TPA
    - Recycs: 35,000 TPA
    - Orgs: 35,000 TPA
    - Bulky Waste: TBA

Next contract:

- To commence late June 2024
- Looking for a contract term of 15 + 5 years
- ACCC application currently being prepared
- Hoping for addition of another large council partner
- Next tender may include another partner council, with an additional 47,000 TPA MSW, 20,000 TPA Recycs, 20,000 TPA Orgs (based on TODAY's tonnages, not 2024 tonnages). This would give us a total of > 110,000 TPA MSW at today's tonnages, in one of Sydney's fastest growing areas, so a 15-year contract is likely to yield conservatively 2.5 million tonnes over the contract term. At today's market rate this is will be contract worth in the vicinity of $1 billion.

Purpose of discussion with industry players prior to tender:

- Our key objective is to ensure that when we go to tender, there will be sufficient competition in the market between the major players in the industry
- Our objective is to write a RFT and Contract document that will be attractive and bankable for the industry while being beneficial to the councils' communities: profitable for the contractor, positive outcomes for the community, balanced risk sharing, flexible to variations given the length of the contract.

Other considerations:

- We're aware that SUEZ is at a distinct advantage given the proximity of their Spring Farm facility, because when we evaluate tenders we'll need to take into account the cost of transporting our waste to the successful bidder's processing facilities. SUEZ's Spring Farm facility is only a short drive from all the partner councils
- The partner councils are investigating building, owning and operating a transfer station for all 4 streams. This would hopefully create a more level playing field for tenderers.

Timetable for next tender:

- If the successful tenderer for the next contract in 2024 has to build a new processing facility, they'll need say 2 years to gain approvals plus 3 years to build. So the contract will need to be awarded by say mid-2019
- It will take us probably 3 months to evaluate tenders: say April to June 2019
- We want to give tenderers at least 4 months to prepare tenders, so tenders would need to be advertised November 2018 (allowing a month off for the festive season)

- Before that, we're considering an industry consultation paper rather than an EOI, with invitations to make submissions – what industry considers positive features of RFTs, and what features of RFTs the industry considers to be barriers to tendering. This will help us prepare an RFT for a sensible and bankable contract

Basic features of RFT and Contract:

- Considering all 4 domestic waste streams, but happy to listen to industry. For example, given market fluctuations for recyclables, possibly separate shorter term contract. Similarly, shorter term for organics? Maybe just MSW only for 15+5 year contract? Maybe annual 'basked of goods' price review for recycs?
- We're looking for solutions to assist us to meet NSW Govt landfill diversion targets, so advanced technology for red-lid will be needed
- Won't be able to guarantee specific minimum tonnages, but will guarantee to deliver everything we pick up (possible geographical split of one of the major partners depending on location of processing facility/facilities)
- The group is 'technology agnostic': we have no preference for a specific technology: the industry players are the experts, not council staff
- Not averse to Energy from Waste
- Not particularly committed to FOGO unless there's a compelling case in a tender. Preference is to maintain the current 3-bin system, but will listen to alternatives
- The RFT and Contract will be outcomes-driven, avoiding strongly prescriptive content
- We will be prepared to share some elements of risk, BUT the one risk we will not share is the success or failure of the proposed technology: the industry has operated various technologies around the world for long enough to know what works and what doesn't
- Escalating energy costs will need to be a consideration – (refer recent liquidation of Adelaide plastic recycler). Not sure that straight CPI adjustments will be enough
- We're likely adhere to a Price Part A + Part B structure rather than payment based on actual landfill diversion – too hard to do checks and balances on actual landfill diversion
- Would like to distribute draft RFT to the industry for comment, but this will be subject to approval
- Contamination rates in organics and recyclables varies between councils. While we won't take responsibility for contam, we're contemplating allowing the tenderer to submit different rates per tonne for orgs and recycs for each council. This would not disadvantage the councils that have contam under control

Other matters:

- Interested in view on the following ideas:
    - a two-tiered S.88 levy: full rate for a non-engineered landfill, and a reduced rate for an engineered landfill, provided that energy production yielded a specified minimum kilojoules per input tonne;
    - councils to be permitted to engage in a contract for more than 5 years for disposal at an engineered landfill.

DATE	COMPANY	REPRESENTATIVE
8/9/17	Cleanaway	Paul Antony Alex Smith
7/9/17	United Resource Management URM	David Johnston
24/8/17	Veolia	Alex Kanaan, Christine Hodgkiss
3 or 4 May 2017	Suez	Phil Carbins, John Hassett
2/6/17	Visy	Richard Adams
5/10/17	Toxfree	Karl Baltpurvins
5/6/17	Remondis	Susie McBurney, Brad Williams
2/6/17	ANL	Rob Niccol and Andrew Schleck
6/6/17	ReGroup	Garth Lamb
15/8/17	Waste and Recycling Contractors Association NSW	Tony Khoury