

# Commercial & Industrial (C&I) Food Waste Recycling Survey

WASTE CONTRACTORS &  
RECYCLERS ASSOCIATION  
OF NSW



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RECYCLERS ASSOCIATION  
OF N.S.W



# Commercial & Industrial (C&I) Food Waste Recycling Survey

# 2022



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## Executive Summary

WCRA received a 98% response rate (156 of 160) for the survey. Many Members were reluctant to share their data due to its commercial sensitivity. Through both professional and personal relationships, WCRA was able to use its influence to secure significant member input.

Telephone interviews proved the most effective method of data collection. Being able to personally assure the Members that all data will be anonymised and aggregated was key to our success.

The survey sample week was from Monday 16 May to Sunday 22 May 2022.

The total number of premises provided with a C&I food waste recycling collection service during the sample week was 2,743.

The total number of individual postcodes of the premises provided with a C&I food waste recycling collection service during the sample week was 284.

The total number of trucks used for more than 10 hours to collect C&I food waste recycling during the sample week was 43.

The total number of premises provided with a mixed putrescible C&I waste collection service which was landfilled during the sample week was 51,837.

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Background

The purpose of this project is to monitor the growth of the Commercial and Industrial (C&I) food organics (FO) recycling collection service.

A partnership has been formed between Waste Contractors and Recyclers Association of NSW and the NSW EPA.

The 2022 survey results set a baseline with two waves of surveys (2023 & 2024) to track movement of C&I FO recycling collection services.



# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Methodology

- The survey was conducted by sending the questions via email then if no response after 21 days follow up phone call/s. (See appendix 1).
  - All data collected was anonymised and aggregated.
  - 160 surveys were sent to WCRA Members with the nominate representative being the first point of contact by email and phone. If the nominated representative didn't have the information to complete the survey, they referred us to the best person within the Members organisation to supply the information required to complete the survey.
  - 30 minute interviews were conducted by NSW EPA & WCRA with 5 WCRA Members of various sizes who all provide C&I FO recycling collection services. The questions can be found in appendix 2 of this report, along with appendix 3 that contains a summary of the interviews with the 5 WCRA Members.
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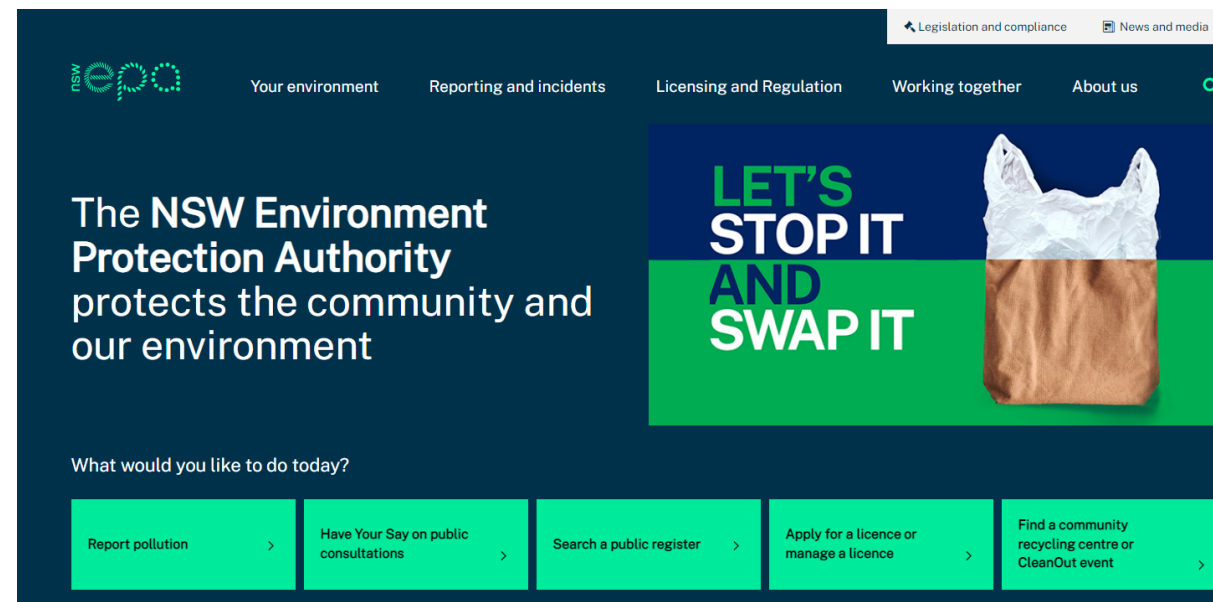
# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Output

Report on the WCRA website and shared at the NSW EPA website.



# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Question 1

*What was the **total number of premises** your business provided a **C&I food waste recycling collection services** to during the sample week? (only count premises services on multiple days once).*

2,743 premises with C&I food waste recycling collection service. This number forms a base for comparison next year.

Be aware that each premises has a data point value of “1” no matter the size or amount of C&I food waste recycling collected.

For example, a premise with 1 x 240L bin collected once a week weighing 15kgs has the same value as a premise with 1 x 30m3 compactor collected daily weighing a total of 70,000kgs.

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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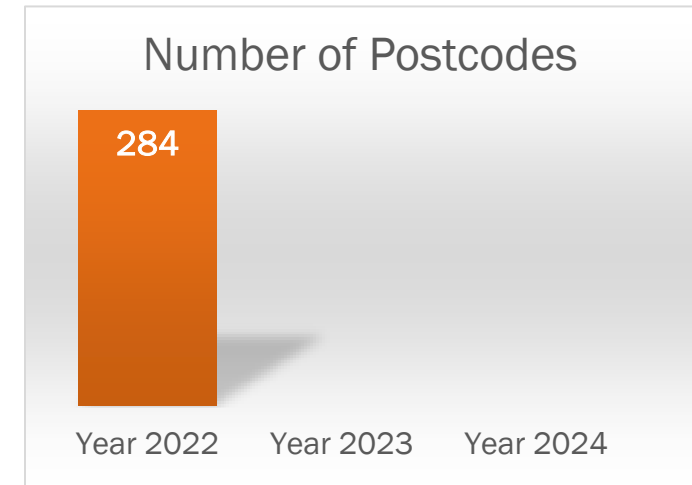


## Question 2

*List the suburbs or postcodes of the premises your business provided a C&I food waste recycling collection service to during the sample week.*

284 individual postcodes with C&I food waste recycling collection service.

This number forms a base for comparison next year.



# Commercial & Industrial (C&I) Food Waste Recycling Survey

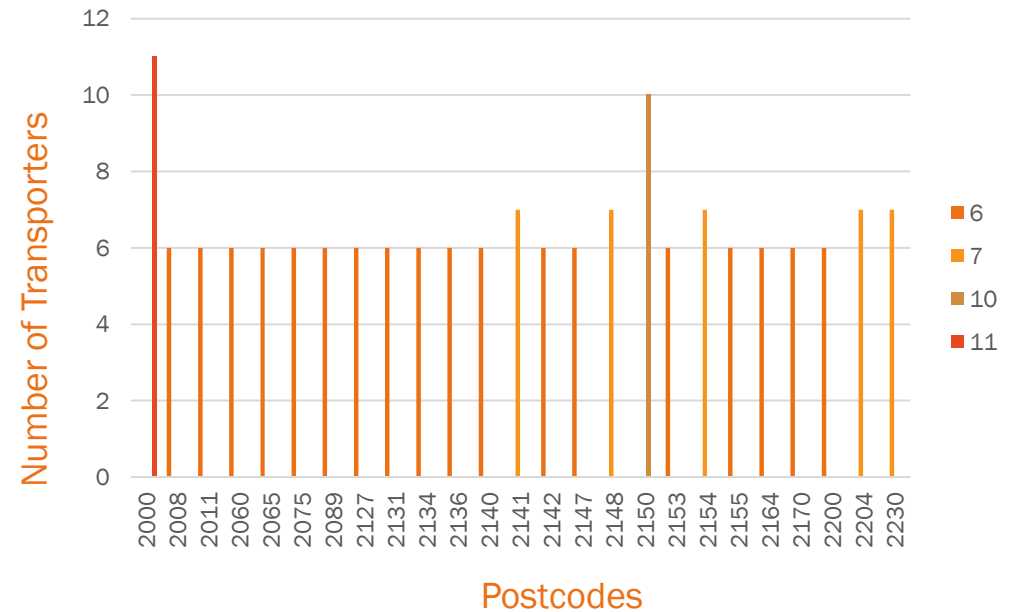
# 2022



## Question 2

### Count of Postcodes (Snapshot)

| 11   | 10   | 7    | 6    | 5    | 4    | 3    | 2    | 1    |
|------|------|------|------|------|------|------|------|------|
| 2000 | 2150 | 2141 | 2008 | 2007 | 2018 | 2016 | 2021 | 2045 |
|      |      | 2148 | 2011 | 2009 | 2020 | 2023 | 2030 | 2047 |
|      |      | 2154 | 2060 | 2010 | 2022 | 2024 | 2033 | 2061 |
|      |      | 2204 | 2065 | 2015 | 2026 | 2025 | 2041 | 2069 |
|      |      | 2230 | 2075 | 2017 | 2029 | 2027 | 2043 | 2071 |
|      |      |      | 2089 | 2019 | 2038 | 2028 | 2044 | 2076 |
|      |      |      | 2127 | 2037 | 2042 | 2031 | 2049 | 2079 |
|      |      |      | 2131 | 2066 | 2048 | 2032 | 2073 | 2080 |
|      |      |      | 2134 | 2067 | 2064 | 2034 | 2081 | 2082 |
|      |      |      | 2136 | 2068 | 2072 | 2035 | 2106 | 2083 |
|      |      |      | 2140 | 2077 | 2074 | 2036 | 2121 | 2084 |
|      |      |      | 2142 | 2093 | 2087 | 2039 | 2125 | 2090 |
|      |      |      | 2147 | 2095 | 2088 | 2040 | 2139 | 2092 |
|      |      |      | 2153 | 2100 | 2099 | 2046 | 2162 | 2094 |
|      |      |      | 2155 | 2113 | 2101 | 2050 | 2178 | 2096 |
|      |      |      | 2164 | 2120 | 2102 | 2062 | 2190 | 2104 |
|      |      |      | 2170 | 2122 | 2103 | 2063 | 2211 | 2105 |
|      |      |      | 2200 | 2126 | 2107 | 2070 | 2222 | 2108 |





# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Question 3

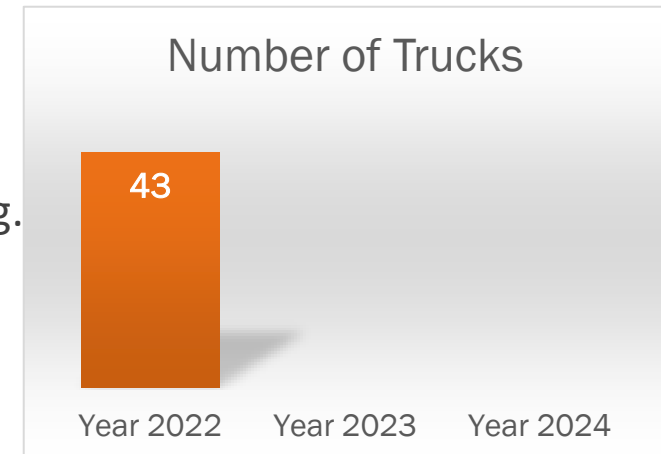
*How many trucks did you have on the road that were used for more than 10 hours in the week to collect C&I food waste recycling services?*

43 trucks used for more than 10 hours to collect C&I food waste recycling.

This number forms a base for comparison next year.

The Members were very cautious in sharing truck usage data.

Be aware that some of the 43 are dedicated vehicles being used 100% of the time (50-60 hours) for C&I food waste recycling collection. Others, especially in the bulk waste system, change the waste type they carry load by load.



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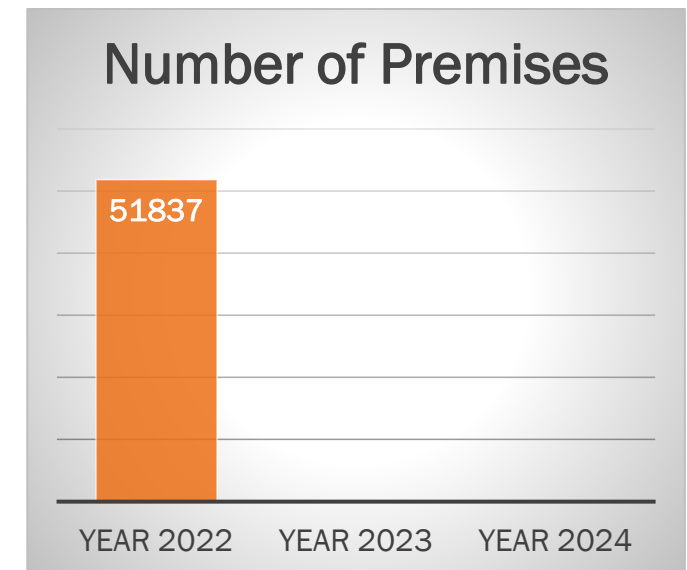


## Question 4

*What was the **total number of premises** your business **provided a mixed putrescible C&I waste collection service** which was landfilled during the sample week? (only count premises serviced on multiple days once)*

51,837 premises provided with a mixed putrescible C&I waste collection service which was landfilled. This number forms a base for comparison next year.

Be aware that each premises has a data point value of “1” no matter the size or amount of mixed putrescible C&I waste collected. For example, a premise with 1 x 240L bin collected once a week weighing 15kgs has the same value as a premise with 1 x 30m<sup>3</sup> compactor collected daily weighing a total of 70,000kgs.



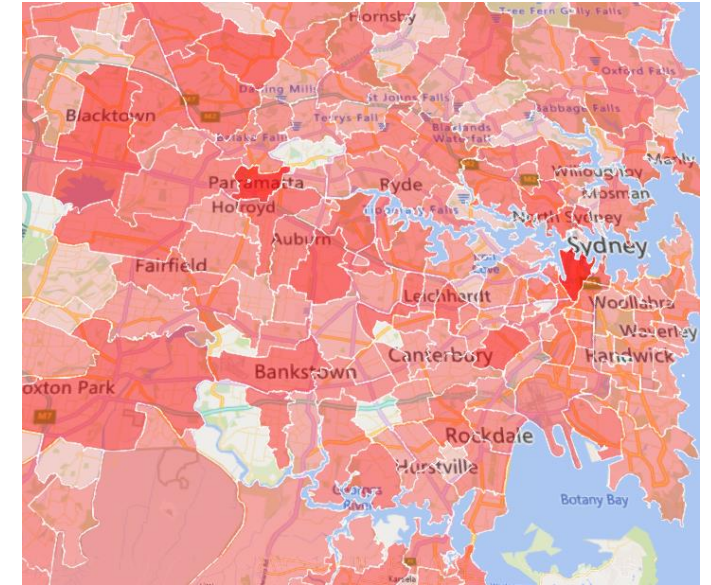
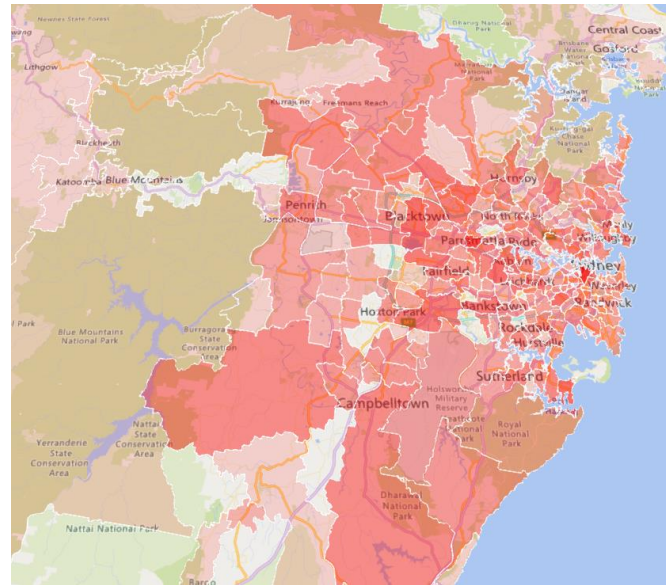
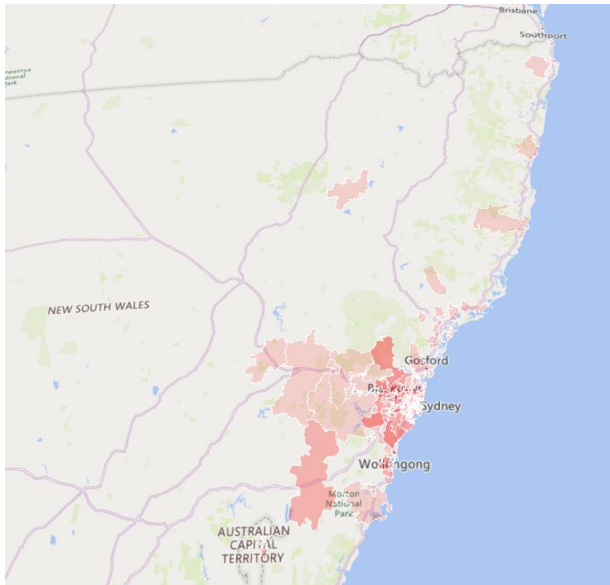
# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## REGION MAP

Locality of premises that Members provided a C&I food waste collection service to during the sample week



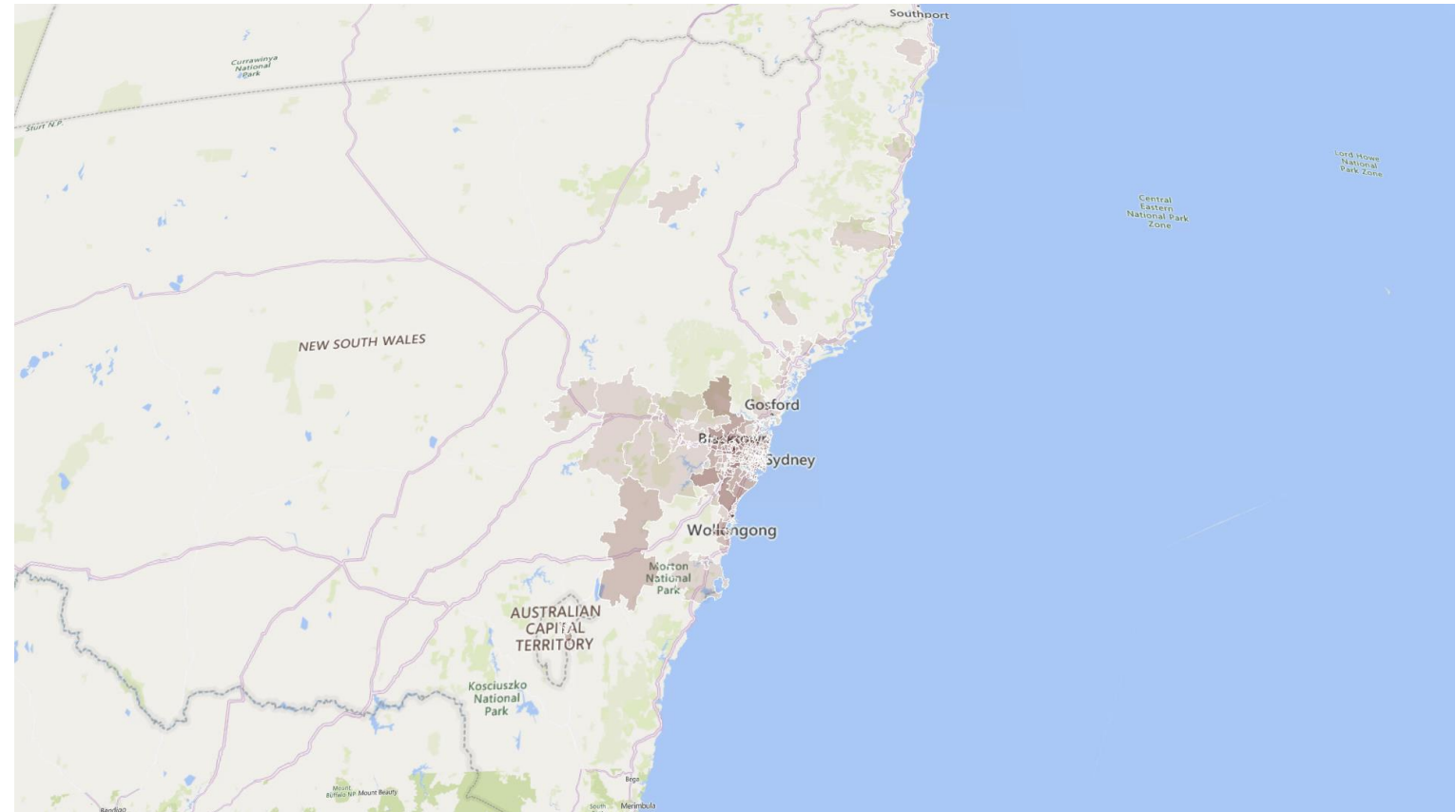
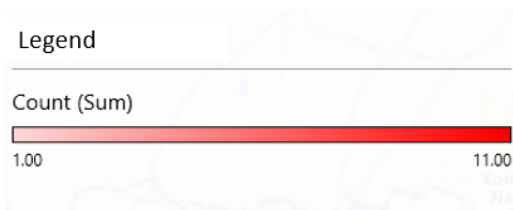
# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## REGION MAP

Locality of premises that Members provided a C&I food waste collection service to during the sample week



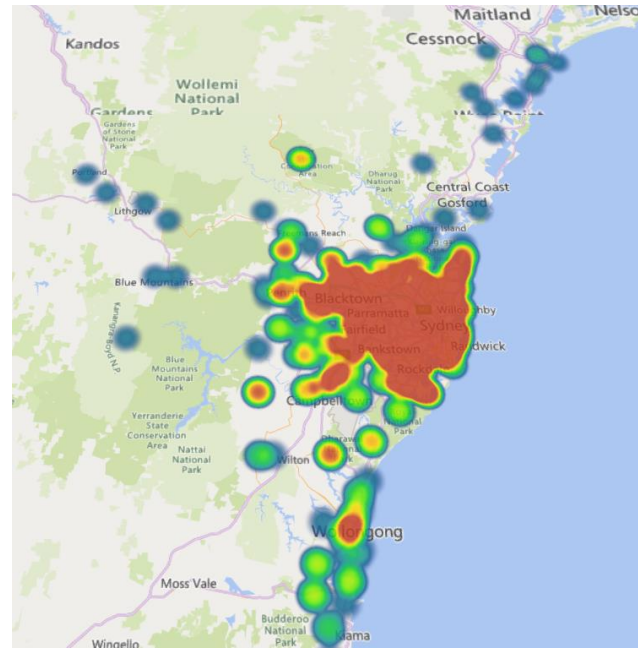
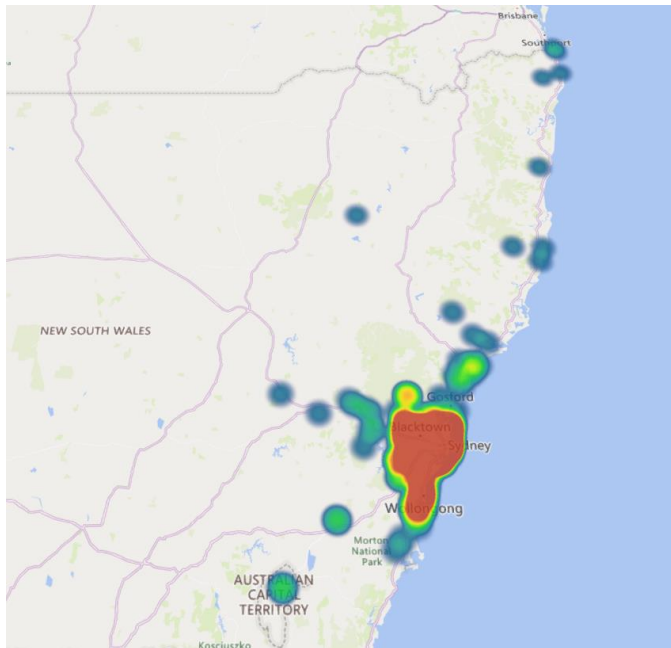
# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## HEAT MAP

Premises that Members provided a C&I food waste collection service to during the sample week



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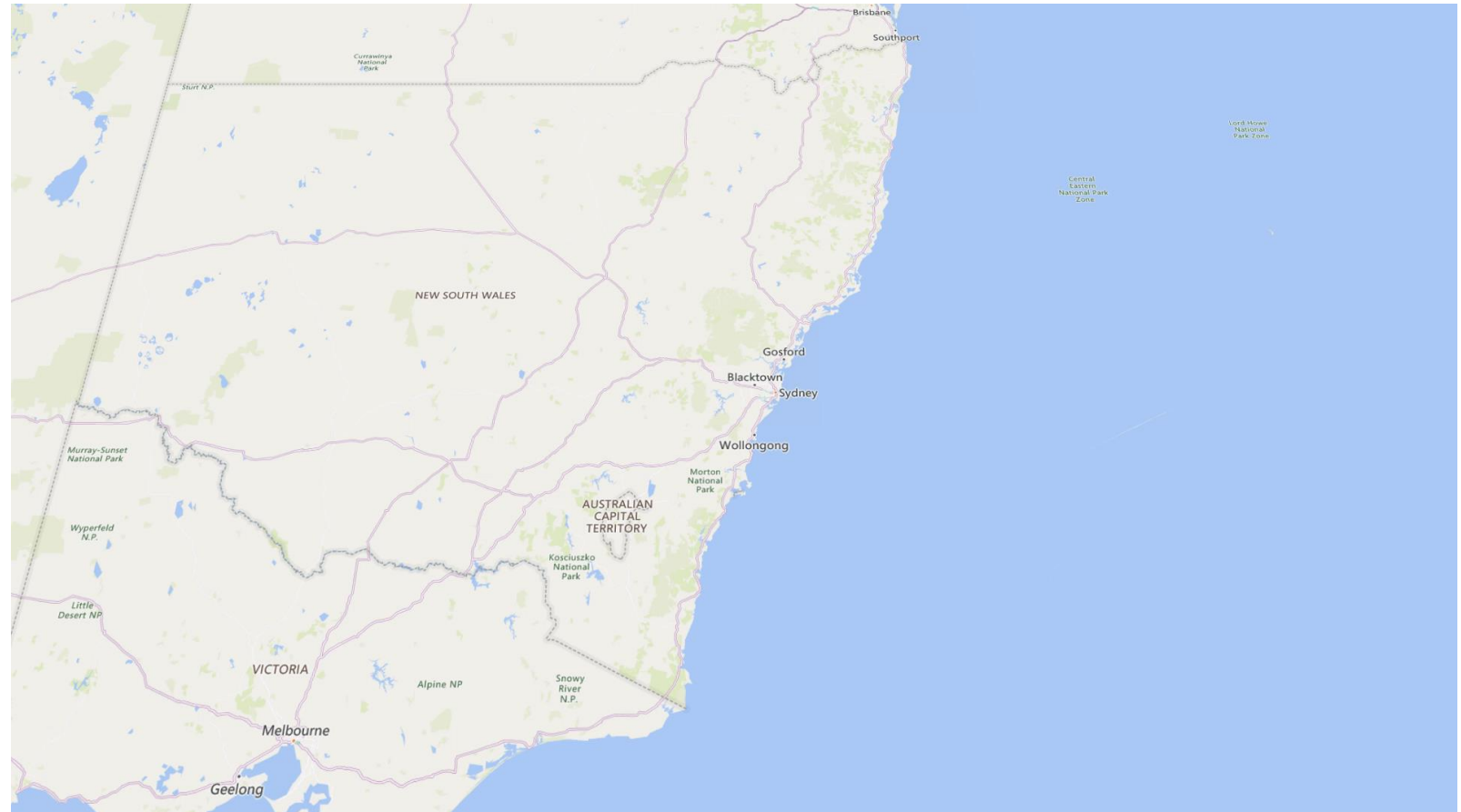


## HEAT MAP

Premises that Members provided a C&I food waste collection service to during the sample week

### Legend

Count (Sum)



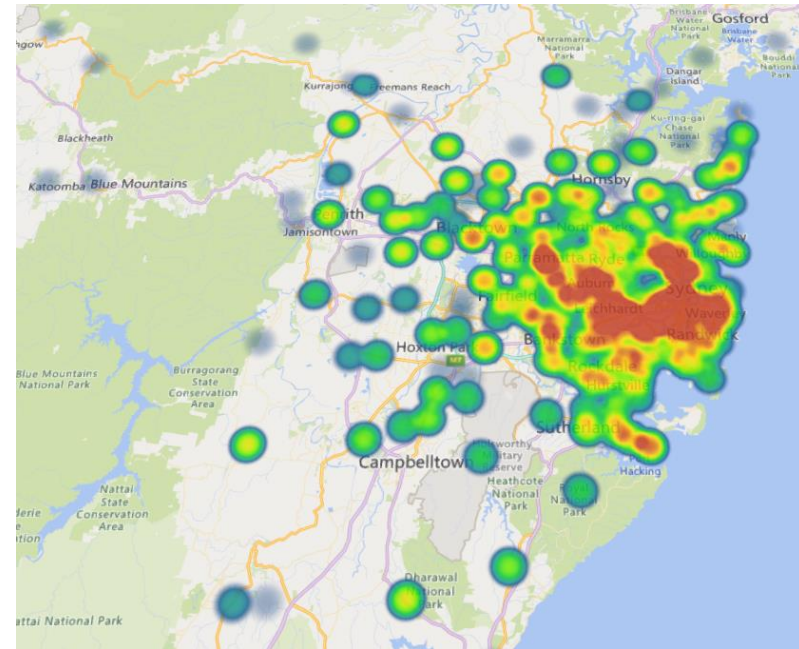
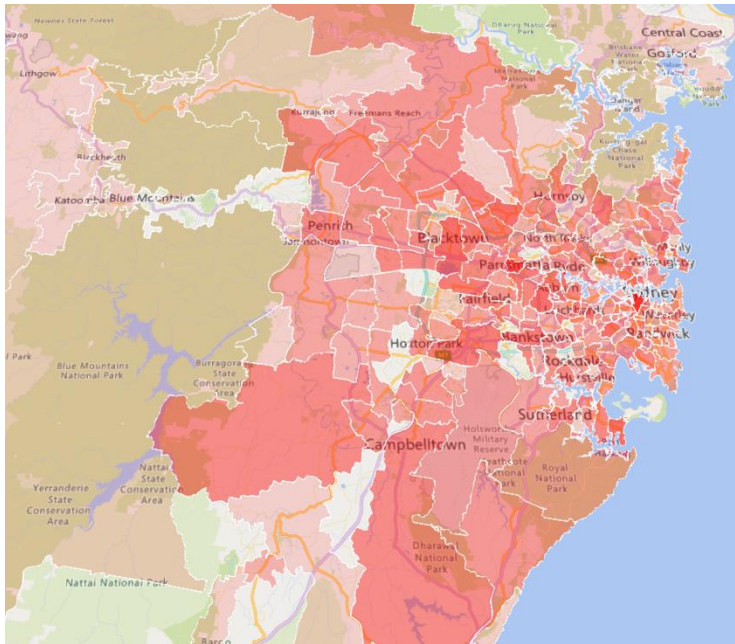
# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## REGION & HEAT MAP VIDEO

Premises that Members provided a C&I food waste collection service to during the sample week









# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Lessons learnt and recommendations for 2023 & 2024 track surveys

- Ensure confidentiality of all Members data
- Ensure all data is anonymised and aggregated
- Ensure same questions and parameters are used in all track surveys  
for direct data comparison and analysis.



# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 1

Email sent to WCRA Members  
regarding C&I Food Waste  
Recycling Collection Survey



Dear WCRA Members,

### C&I Food Waste Recycling Collection Survey

WCRA has committed to conducting this Member survey in 2022, 2023, and 2024 to monitor the changes in food organics collection in the C&I (Commercial & Industrial) sector in NSW. This study will identify potential expansion opportunities for industry. The outcome from comparing the current number of food waste recycling collections and putrescible waste to landfill collections will demonstrate the need for the NSW government to invest in food waste awareness-raising and source separation education to support additional food waste recycling.

The sample week we will be surveying is **Monday 16<sup>th</sup> May 2022 to Sunday 22<sup>nd</sup> May 2022**. Only count premises serviced on multiple days once. Don't include work that is subcontracted out. All data collected will remain anonymous & aggregated. Attached is a copy of the survey form. We would appreciate your assistance in completing this form & returning by email to [memberservices@wcra.com.au](mailto:memberservices@wcra.com.au) by Tuesday **31<sup>st</sup> May 2022**, or you can simply call the office to complete.

WCRA will be following up with a phone call if we haven't received a response by Tuesday 7<sup>th</sup> June 2022.  
Thank you for your time and support.

With best regards,  
**Ms Jamal Alameddine**, Executive Assistant to Tony Khoury  
**Waste Contractors & Recyclers Association of NSW**  
t. 02 9604 7206 e. [memberservices@wcra.com.au](mailto:memberservices@wcra.com.au)  
Suite 2, First Floor, 12-16 Daniel Street, Wetherill Park  
PO Box 6643 Wetherill Park BC NSW 2164



*WCRA – celebrating 73 years of service to the waste management industry*

The information contained in this email and any attachments is of a confidential nature and purely intended for the use of the addressee only. Please observe proper business protocols in the use and/or distribution of this information. If there are any problems with any aspect of this email and/or attachments please advise Waste Contractors and Recyclers Association of NSW on 02 9604 7206.

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 1

### C&I Food Waste Recycling Collection

### Survey sent to WCRA Members



**Commercial & Industrial (C&I)  
FOOD WASTE & RECYCLING SURVEY**

To track the progress of C&I food waste recycling collection services through yearly analysis of a sample week of service data. **SAMPLE WEEK = from Monday 16<sup>th</sup> May to Sunday 22<sup>nd</sup> May 2022.**

**Note: Do not include work that is subcontracted out**

1. Does your business provide C&I food waste recycling collection services?  
NO  YES   
*If NO, go to question 5* *If YES, go to question 2*

2. What was the **total number of premises** your business provided a C&I food waste recycling collection services to during the sample week? (only count premises services on multiple days once)  
  
Number of premises \_\_\_\_\_

3. List the suburbs or postcodes of the premises your business provided a C&I food waste recycling collection service to during the sample week.  
  
Suburbs or postcodes, separate by comma \_\_\_\_\_

4. How many trucks did you have on the road that were used for more than 10 hours in the week to collect C&I food waste recycling services?  
  
Number of trucks \_\_\_\_\_

5. Does your business provide mixed putrescible C&I waste collection services which are landfilled?  
NO  YES   
*If NO, survey finished* *If YES, go to question 6*

6. What was the **total number of premises** your business provided a mixed putrescible C&I waste collection service which was landfilled during the sample week? (only count premises serviced on multiple days once).  
  
Number of premises \_\_\_\_\_

All data collected will be anonymised & aggregated.

Date completed \_\_\_\_/\_\_\_\_/\_\_\_\_

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 2

## Interview with the waste contractors and recyclers

### 1. Thirty-minute interview and questions to be posed

As you are probably aware the NSW Government is requiring large food waste generating businesses to source separate food waste from 1 July 2025 and councils to provide FOGO collections to all households by 2030.

- How do you see these organics' mandates in relation to your business?
- What are your plans to meet the anticipated increased demand for collections?

We are proposing a three-stage phasing in of the mandates, starting with the highest food-waste generating business in 2025 with weekly residual volumes of plus 4,000 litres.

- Can you please estimate the number of your customers that will be captured by this requirement?
-

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 2

## Interview with the waste contractors and recyclers

### 2. C& I survey data collection

The EPA, working with WCRA, has committed to member surveys, this year and for the next two years to gain a better understanding of how businesses are tracking organics source separation services, before the organics' mandates come in.

Data collection has been challenging, different systems and confidentiality, etc. Can you please provide feedback on:

- The level of interest among customers to move to source separated organics – the number of unsolicited enquires you generally receive requesting this type of service?
-

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## Appendix 2

## Interview with the waste contractors and recyclers

### 2. C& I survey data collection (cont'd)

- We want to track and measure progress towards the C & I mandate and identify gaps in service provision so we can target support. How feasible is it to set up reporting systems with you that would include:
    - Postcodes
    - Tonnes
    - The number of bins
    - ANZSIC code
  - What might be the challenges? For example, the additional storage space required for additional bin types
  - Are there any other thoughts from an industry perspective on how we track and measure growth?
-

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 2

## Interview with the waste contractors and recyclers

### 3. Net Zero Emissions

- What do you think about weight-based billing? From an EPA perspective, this would provide more accurate data on the volumes diverted
- As we are working towards carbon neutral emissions collectively, is there any plan for your business to improve carbon emissions and efficiency? If yes, in what areas of the business are there particular areas of support you might need from the NSW Government





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## Appendix 2

## Interview with the waste contractors and recyclers

### 4. On-going education

A clean stream is critical to reducing the frequency of contaminated loads having to go to landfill.

- In your understanding, what is the current level of contamination rate of commercial FO collection?
  - What are the main contaminants? Is there variation in contamination from different business types?
  - How can we better educate your consumers to avoid contamination?
  - Is that something you would like to lead on?
  - If the EPA developed resources for customers, would you distribute them?
  - Are there branding/marketing considerations?
  - Are there other ways we could incentivise customers to reduce contamination?
  - Cost reductions/penalties etc?
  - Who along the supply chain needs education?
  - How could you see that happening?
-

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 2

## Interview with the waste contractors and recyclers

### 5. In order to ensure a long-term high-quality product,

the NSW EPA released the household FOGO position statement stating that the FOGO and FO bins should only be for food and garden waste. Have you:

- Received many inquiries or concerns from customers?
- Operational concerns about the position or other feedback?
- Thoughts on how can we best work together to tackle the packaging issue on FO bins?
- Current levels of contamination, the main contaminants, variation in contamination from different business types?



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Appendix 2

Interview with the waste contractors and recyclers

## 6. Final question

- What other ways can the EPA work with you to support your business to collect more commercial organics?



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## Appendix 3

## Interview with 5 WCRA Members (summary / feedback)

- WCRA engaged representatives from five food organics collection members to participate in online interviews on 18 October 2022.
  - The purpose of the interview was to seek feedback and input on
    - Impact of the 2025 organic mandates
    - Improving data collection to monitor the growth of C& I food organics collection services
    - Tackling contamination
    - Addressing the issue of better access to processing sites and / or transfer stations
    - Any other feedback to EPA
-

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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Appendix 3

Interview with 5 WCRA Members (summary / feedback)

## Key summary of the interviews

Attitude towards the Food Organics (FO) source separation mandates:

- the mandates will drive FO collections and participants have plans to expand their FO services to support their customers
- Space and cost for additional FO bins have been identified as barriers for food businesses in metropolitan areas
- Cost is the major driver to acquire changes in the C & I sector, and profitability is important for motivating recyclers to invest in FO services.
- Need more transfer stations accepting C&I food organics to bring down processor's operational costs and bring down the FO collection costs to make FO source separation more attractive/ affordable to food businesses.
- the geographical location of new processing facilities and transfer stations is an important factor in minimising carbon emissions and operational costs.
- Need more organics processing facilities to meet the expected increased supply and competition could bring down the gate fee

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 3

## Interview with 5 WCRA Members (summary / feedback)

1. C& I survey and monitoring FO collection progress in the C&I sector
    - Customers have been requesting weight-based reports to measure their sustainability or carbon emission performance, but the industry feels the need to do more work, including improving the consistency and accuracy of the system, before implementing weight-based charges
    - businesses are happy to discuss and support the EPA in the growth of the FO collections, providing there are no confidentiality concerns
-

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 3

## Interview with 5 WCRA Members (summary / feedback)

### 2. Contamination/ Keep it clean

- Plastics/ plastic packaging, cutlery and glass are the major contaminants found in the organics outputs
- The EPA to work with the supply chains like packaging companies to reduce contamination when possible
- Contamination also happens at the loading dock or at kerbside. The ability to lock the bins once it leaves the site i.e. kitchen, is an effective strategy to prevent further contamination
- On-going education, including acceptable & unacceptable material to FO bins is essential, and passing down knowledge to employees from management is critical
- Financial incentives/penalties are effective to prevent contamination i.e. additional charges to landfill when bins are contaminated
- Keep the bin clean e.g. sanitizing the bin every time it is emptied and keep the FO bin in the kitchen
- Participants are happy to work with the EPA to educate their customers including the distribution of leaflets, bin stickers, and information on bills
- On-going face-to-face staff engagement is critical to managing the high turnover rate in hospitality
- Screening can be added to the processing equipment, onsite or at the facility, but small plastics from stickers on fruits, or butter and jam portion containers will be visible in the output

# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 3

## Interview with 5 WCRA Members (summary / feedback)

### 3. Feedback to the EPA

- Participants indicated an interest to expand their licensing or build transfer stations but need support from the EPA to avoid an unnecessary long approval process
  - Emphasised the importance of working with the supply chains to minimize the contaminants like fruit stickers, packaging, and non-compostable packaging
  - Investors are keen to invest but need assurance and support to simplify the licensing process and increase their chances of success, as well as an assurance that RROs, regulations and laws will not change. For example, MWOO & recovered fines
  - A geographical approach is needed to support organics facilities establishment or transfer stations to reduce the cost and carbon emission from transporting FO to facilities. The new facility proposals are mostly located in Western Sydney
  - Review the Resource Exemption framework and consider allowing minimal contamination like 0.005 for soil injection to agricultural land
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# Commercial & Industrial (C&I) Food Waste Recycling Survey

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## Appendix 3

## Interview with 5 WCRA Members (summary / feedback)

The NSW EPA appreciates the participants' frank feedback. The EPA values the input from WCRA and its members and looks forward to continuing to work with WCRA in the 2023 and 2024 C& I surveys to monitor changes in the FO collection in the C& I sector.

The NSW EPA organics unit is available to assist WCRA members with information regarding the source separation mandates. Contact Sarah Chen at [sarah.chen@epa.nsw.gov.au](mailto:sarah.chen@epa.nsw.gov.au).

For information about the Resource Recovery Orders and Exemptions, visit <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption> or email the EPA Regularity Practice & Environmental Solutions team at [waste.exemptions@epa.nsw.gov.au](mailto:waste.exemptions@epa.nsw.gov.au)

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