



N A B E R S

NABERS Waste

# Introduction to the new Waste Rating

## NABERS Waste

### Introduction to the new NABERS Waste Rating

NABERS launched a new Waste Rating methodology and data platform in June 2018.

With waste billing and contractor data becoming more accessible and reliable in the last decade, the new method uses 12 months of actual waste collection data to determine the rating.

It's the first NABERS rating to be delivered through an online platform, which is simple in design, responsive and easy to use.

The new platform allows building managers and waste companies to upload data on a regular basis to a completely online site, encouraging them to visualise and monitor their waste performance.

Once sufficient data is available, the building manager can engage an assessor to complete the rating.

**This rating is a new approach for NABERS. It allows for more flexibility of tasks between the Assessor and building manager so the rating process can meet the needs of both parties.**



### Can I rate my building?

NABERS Waste is currently able to rate commercial office buildings across Australia.

Buildings that can currently generate a NABERS rating (e.g. Shopping Centres, Hotels, Data Centres) are able to access the platform, but will not yet be able to generate a rating as benchmarks have not yet been established.

Most other building types will be able to use the NABERS Waste Manager platform to help with



Office Base Building rating scale

waste data insights. If there is enough interest from a sector then NABERS will consider building a waste rating for that sector

### NABERS Waste Rating calculation

The NABERS Waste rating is based on a building's recycling rate:

$$\text{Recycling Rate} = \frac{\text{total recycling weight}}{\text{total waste weight}}$$

The rating requires 12 months of operational data for all mandatory waste types (see next page).

The calculation is also affected by two audit types:

1. Contamination audit
2. Site density audit

A building may achieve a better rating if they commission audits from a NABERS accredited assessor, following the method set out in the rules.

The platform applies a data uncertainty factor to this calculation to determine the final NABERS rating.

### Waste types included in the rating

NABERS Waste Rating recognises a variety of waste types. Data for a particular waste types is either mandatory or optional.

Mandatory waste types	Optional waste types
General waste	Secure paper
Dry Waste	Green waste
Mixed recycling	Soft plastics
Cardboard	Polystyrene
Paper	Cooking oil
Organics	e-waste
Glass	Printer cartridges
	Light globes/tubes
	Batteries

A rating can only be generated once there is 12 months of data on the platform for each of the mandatory waste types (collected in the building).

Any optional waste types are included in the rating calculation if the data is present on the platform, but the rating can proceed if there is less than 12 months of data.

Further waste types may be added in future as we roll-out ratings for other building types.

### Generating a rating

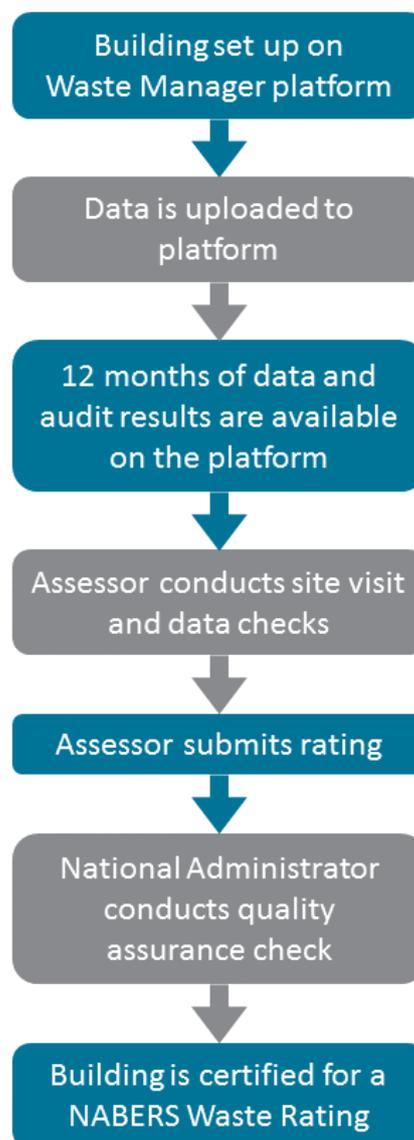
The new NABERS Waste rating is a little different to the other NABERS ratings.

The project delivered two related products: a rating and a data management platform. It is possible that a building that uses the Waste Manager platform may never generate a rating, but we hope they do.

This leads to a few possible pathways to lodge a rating. The diagram at right shows a simple linear pathway, but some of those steps could be managed by different entities, and the elapsed time between each step could be different. For instance:

**Building set up on platform.** Set up could be completed by the building owner, the building manager, or an accredited assessor.

**Waste data is uploaded.** The system as designed assumes data is uploaded by the building's waste contractor over a 12 month period. However, the data could also be uploaded by the building owner, the building manager, or an accredited assessor in one or more discrete uploads.



**NABERS assessor audits completed.** A rating does not require an assessor audit, although the building may achieve a better rating if they complete a NABERS accredited audit. More than one audit can also be completed. The timing and frequency of audits will vary from building to building. See audits page for more information.

The remaining steps are similar to the current NABERS Rate process.

## Audits

Waste audits are a very important part of the Waste rating process.

The rules define two types of audits to be completed for a rating:

1. Contamination audit
2. Site density audit

NABERS expects each building to complete at least one one-day contamination audit for each recycling bin type on the premises, and a density audit for each bin type where a bin tally is used to calculate waste weights.

Audit results should be uploaded to the Waste Manager platform, and will immediately adjust the waste data on the dashboard. If more than one audit is completed during the rating period then the average result is applied.

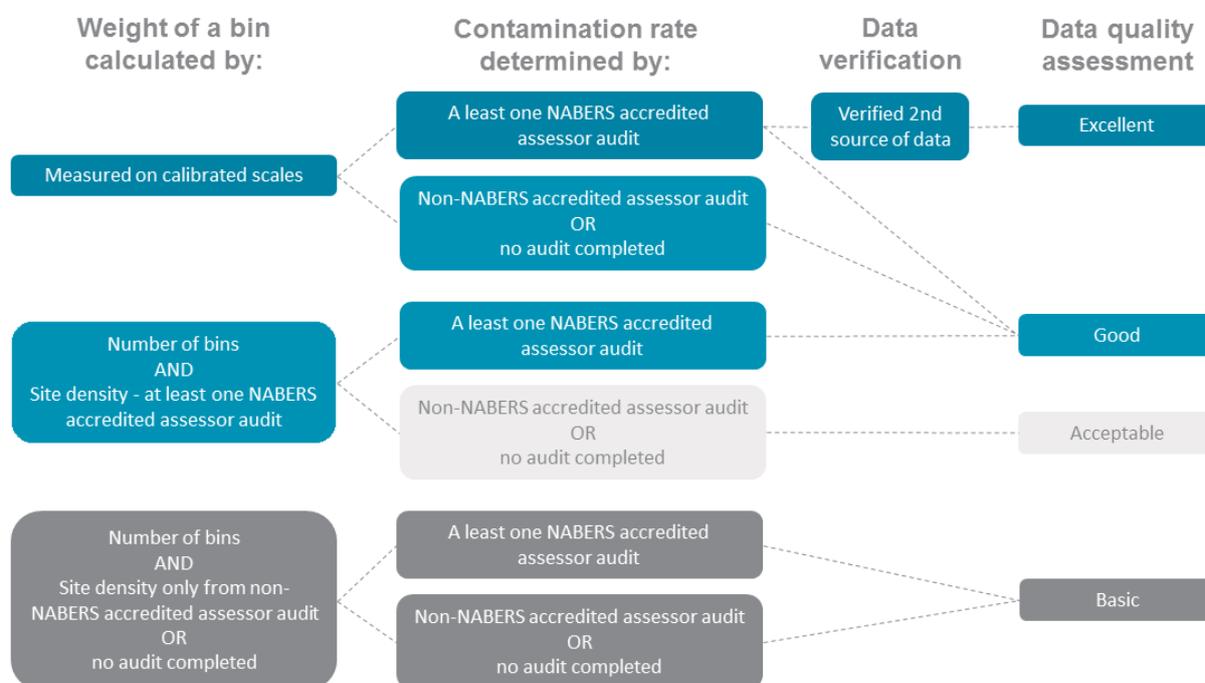
This differs from the previous version of the Waste Rating rules to make getting a rating less resource intensive for buildings.

The rules specify that a building does not need to complete any audits to obtain a rating. However, data quality will be reduced, and the rating will be affected.

## Data quality adjustment

Waste data is not yet as accurate and trusted as energy and water bill data. The NABERS Waste rating adjusts for this by applying a data quality assessment to each line of data. Data rated as excellent will be accepted as true. All other data will be weighted for uncertainty.

Assessors have a role in ensuring audits are completed as this has a strong impact on data quality for the building.



### Factors that affect the NABERS Waste data quality adjustment



## Waste Manager platform

To complement the rating, NABERS has developed Waste Manager, an online data management platform for operational waste in commercial buildings.

The new platform will encourage conversations between Building Managers, Facilities Managers and the waste professionals that service their building. They can use the platform to see:

- the frequency of waste collections
- how much is collected
- the type of material that is picked up.

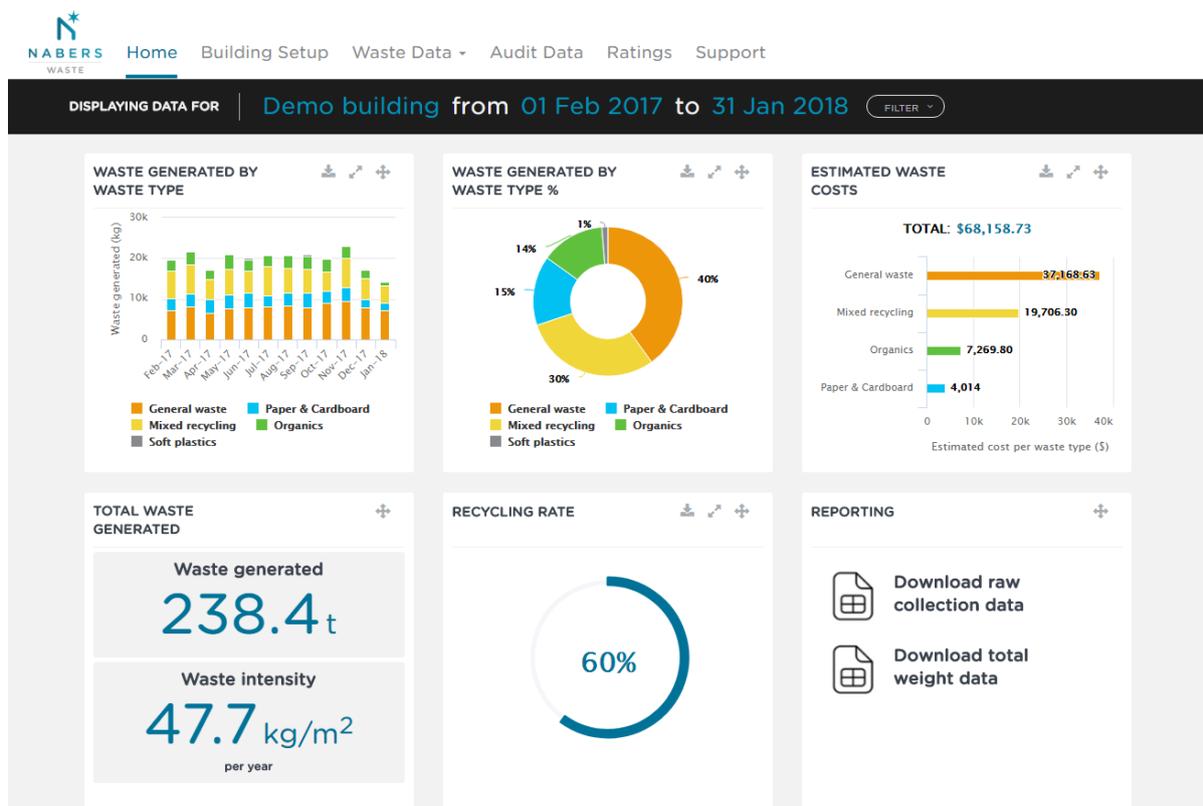
Data uploads can be done directly by waste companies, reducing admin load for building managers. This means NABERS accredited assessors can spend their time verifying performance data instead of doing data entry (compared to NABERS rate).

## Base vs Whole building

The Office Waste Rating has two options, base and whole building.

**Base building** captures only those waste streams managed under contract to the building owner or manager.

**Whole building** captures any waste stream that can be reliably measured whether under contract to the building owner or manager, or to a tenant.



The reporting dashboard on NABERS Waste Manager

## Role of the NABERS accredited assessor

The Waste Rating, like all NABERS ratings will need to be verified by a NABERS accredited assessor.

Tasks for NABERS assessors include:

- Conducting a site visit to ensure all waste streams and bins are accounted for
- Conducting one or more one-day contamination and density audits
- Verifying the validity of weight data through assessing a second independent source of data
- Checking all data conforms to the rating rules
- Lodging the rating with NABERS and responding to clarifications from the National Administrator

Optional tasks may include:

- Uploading data to the platform
- Setting up a building and its waste streams on the platform

## Rating development

Rules were developed in partnership with our Technical Working Group (TWG). The TWG has members from leading property management companies and leading waste consultants who advise the property industry.

NABERS assessors provided extensive feedback on proposed changes, especially around audit processes.

We've also been working closely with the Better Buildings Partnership in Sydney to test ideas and ensure our tool and rating aligns with their guidelines.

20 buildings, working with waste companies, piloted the Waste Manager data platform over 12 months.

## Rating changes

NABERS has been rating waste performance since 2008. This new rating makes the process easier, and improves data accuracy. Here's a summary of the main differences:

### Similarities

- Based on recycling rate (minus contamination)
- Uses audit data to support rating calculation

### Differences

- Requires 12 months of data for mandatory waste types
- New calculation takes data quality into account
- Old method required 10 days audit data, new has optional audits with minimum one audit required for improved data quality score
- Old method allowed for base building, tenancy and whole building ratings. The new method cannot rate tenancies.
- Data is collected on NABERS Waste Manager platform. NABERS Rate is no longer used for Waste ratings
- Tenancy rating has been removed



## What next?

We hope to launch a shopping centre rating at the end of 2018.

We are considering a further adjustment for choice of recycling facility, to reward better outcomes.

We'll continue to build the functionality of the Waste Manager platform to make it a valuable tool for a wide variety of building types to manage their waste data.

# Contact us

**NABERS is administered by the NSW  
Office of Environment and Heritage**

59 Goulburn Street  
Sydney NSW 2000

T (02) 9995 5000

E [nabers@environment.nsw.gov.au](mailto:nabers@environment.nsw.gov.au)

[nabers.gov.au](http://nabers.gov.au)

