

# Waste and recycling systems in new developments

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Rawtec



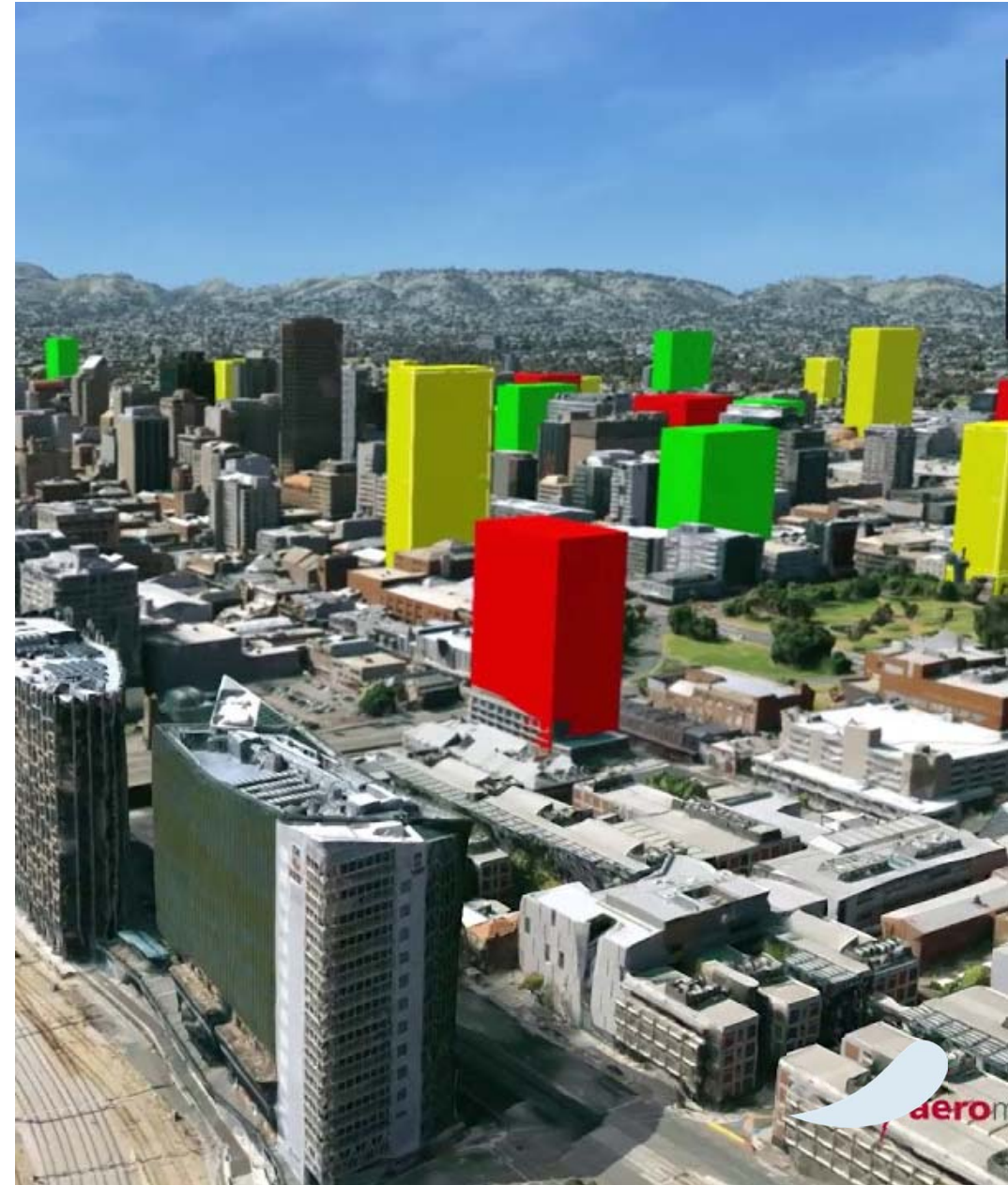
# Rawtec

Independent waste, recycling and resource management consultancy.

Provide a range of services:

- Waste audits and reviews
- Strategy development
- Infrastructure and service planning and reviews
- Behavioral change strategies
- Waste management plans

We have prepared over 50 waste management plans to support the development application process.



# Waste management plans (WMPs)

## Waste and recycling is not often front of mind when designing a new building

- Electricity, water, heating and cooling and other services are pretty popular
- Waste is often an afterthought.

## This has been changing, Councils are now often requiring waste management plans

- These outline to planning authorities that waste and recycling can be managed appropriately in a new building



# WMPs

## **What we do:**

- Calculate the estimated waste generation
- Calculate the number of collections per week
- Design the waste and recycling management system
- Design the layout of the bin room

## **Balance the needs of the developer and the architect with the requirements of Council and future tenants/residents**

## **The earlier we are involved, the better**

- These buildings may have a 50+ year life, so its important to avoid locking in bad systems





# Environmental benefits of good waste management systems

## Encourages recycling

- 30 to 40% of the general waste bin is organics

## Contributes to the circular economy

- Resources are kept out of landfill
- Beneficial reuse of materials
- Avoids the need for virgin materials



# Other benefits of good waste management systems

## It can reduce long term costs

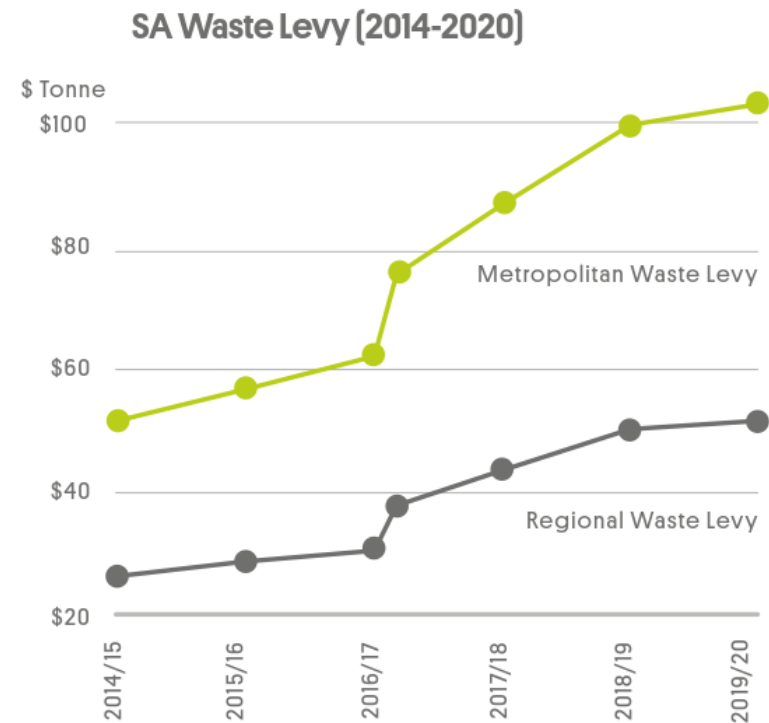
- Increases in the waste levy

## Allows the building to operate efficiently and safely

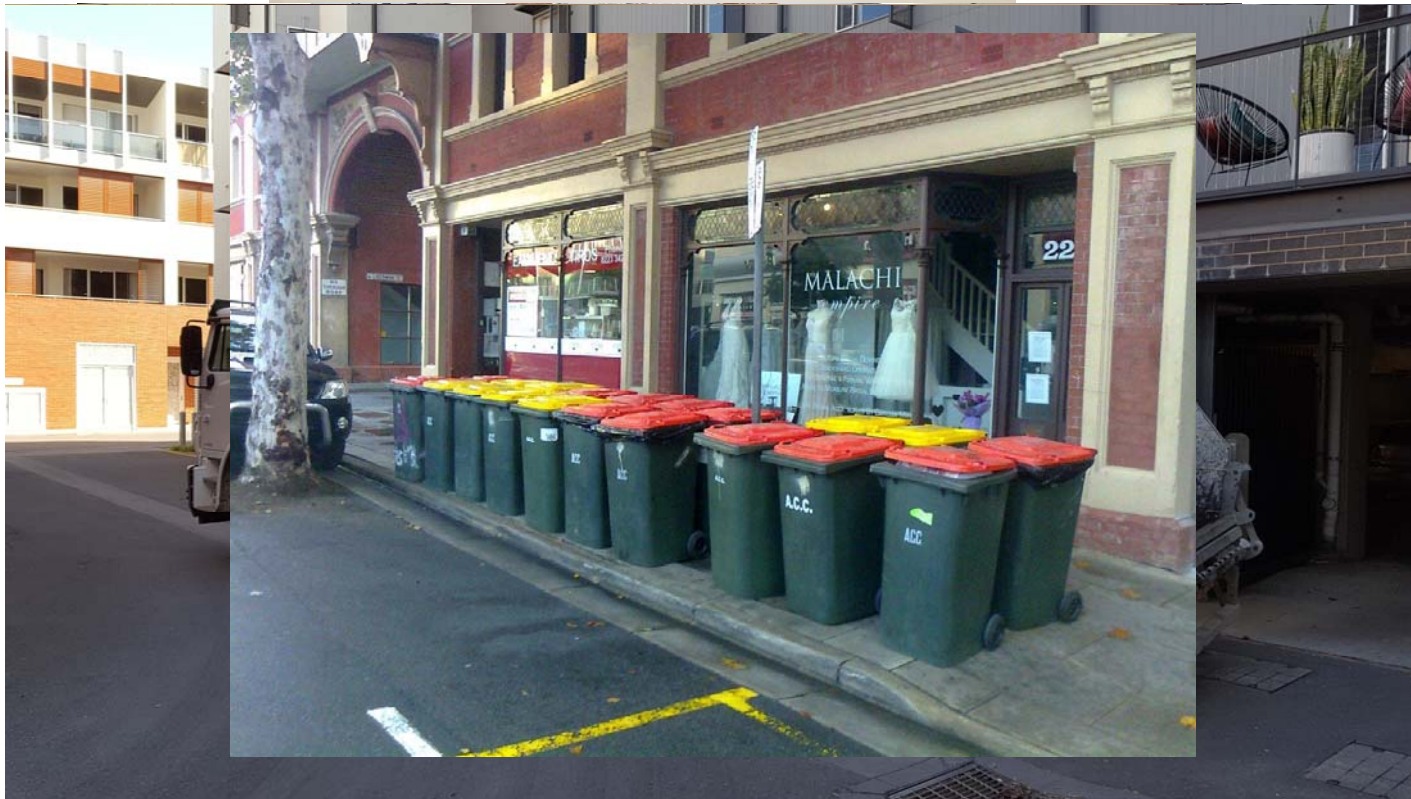
- Considers impacts of collection vehicles

## Liveability

- Reduces the impact on tenants/residents
- Considers things like access, amenity etc.



# What not to do





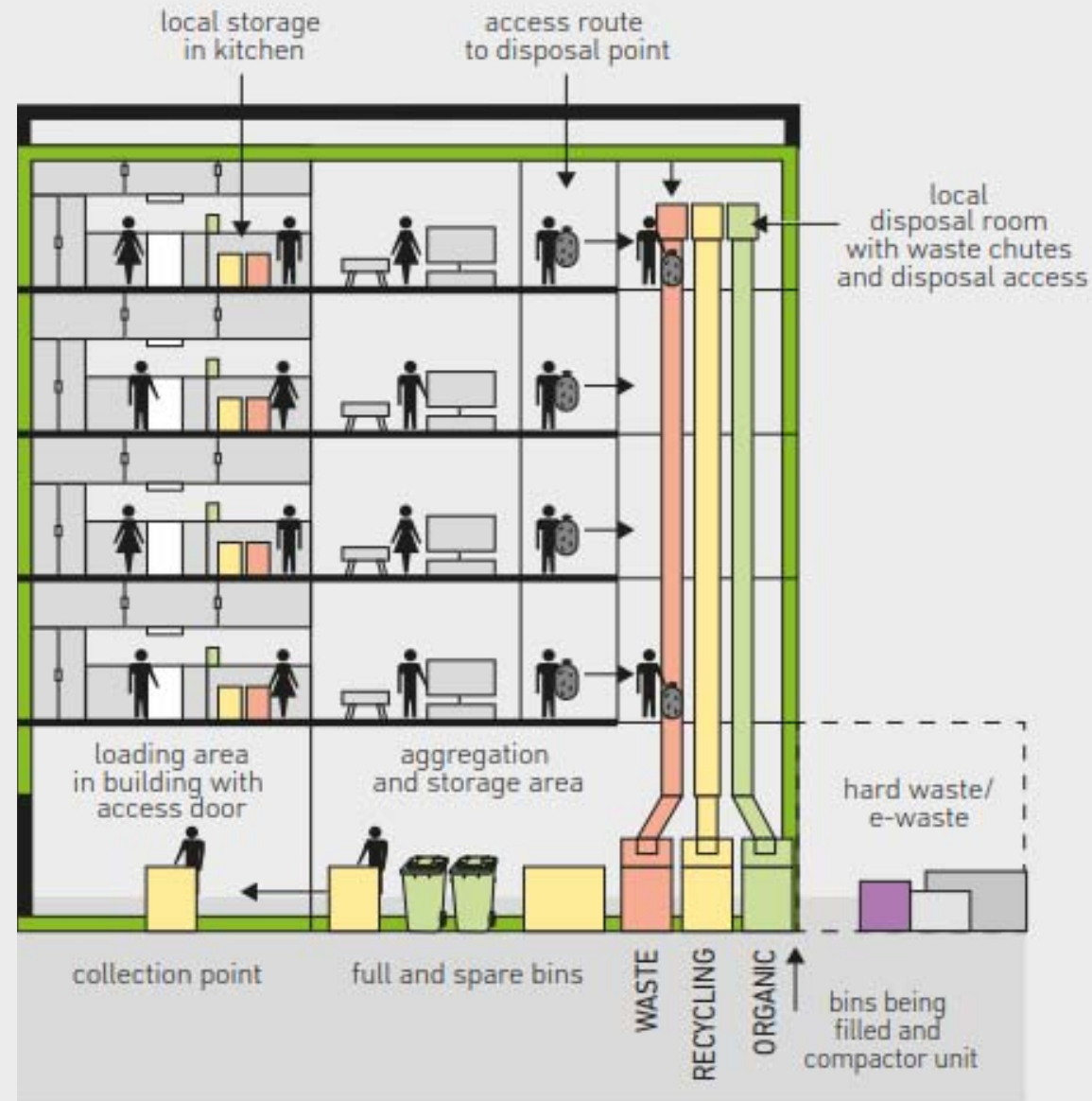
# What to do

## Make it intuitive and easy for residents/tenants

- Make sure the bins match the services
- Make disposal points close to residents/tenants

## Consider the size of the waste room

- Balance number of bins with number of collections
- Provide space for hard waste





# What to do

## Have clear signage and educate

Don't assume people know what goes where

- Provide resident induction packs
- Train staff and cleaners

Use colours and pictures to outline which bin is which and what goes in it.

- Australian standards for bin colours

Colour code the bin room

- Contractors put the bins back in the same place



# What to do

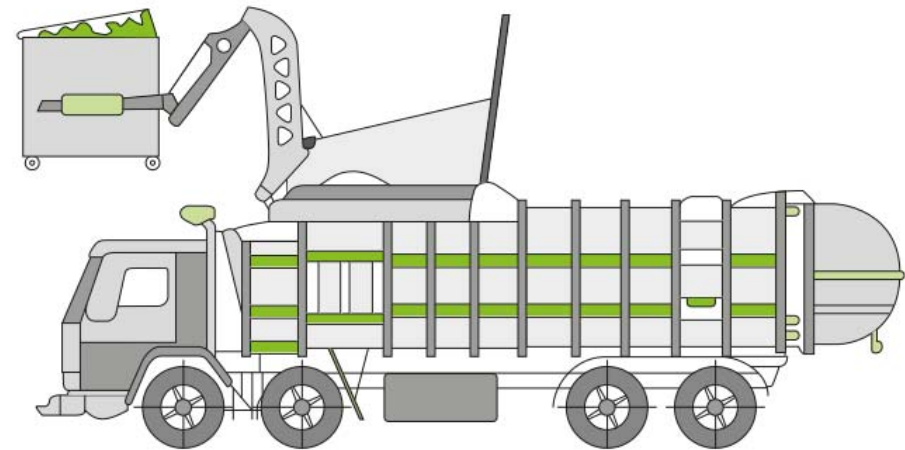
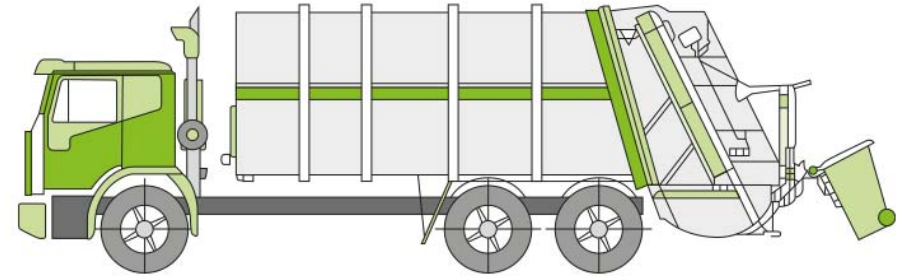
## Think of the collection method

Don't have:

- Stairs
- Steep ramps
- Large distances to drag bins

Most councils prefer onsite collection

- What size truck will be used
- Where can the truck park
- Think of the height clearance
- Where does the truck enter the development, truck turn around and exit



# Conclusion

## **There are still a range of challenges:**

- Balancing the needs of different stakeholders (e.g. cost, space)
- Large number of people in these buildings
- No real incentive to reduce waste and recycle more
- Continuous changeover of tenants, staff and residents

## **A practical and flexible system:**

- Make recycling easy, otherwise it won't happen
- Minimise the time and resources needed to manage the waste and recycling system
- One solution is not going to suit all developments
- Keep the design open for a large number of service providers





Thank you

