

Environment Protection Authority

# Circular Economy in the construction sector

Driving an increase in construction and demolition  
recovery and recycling & material substitution

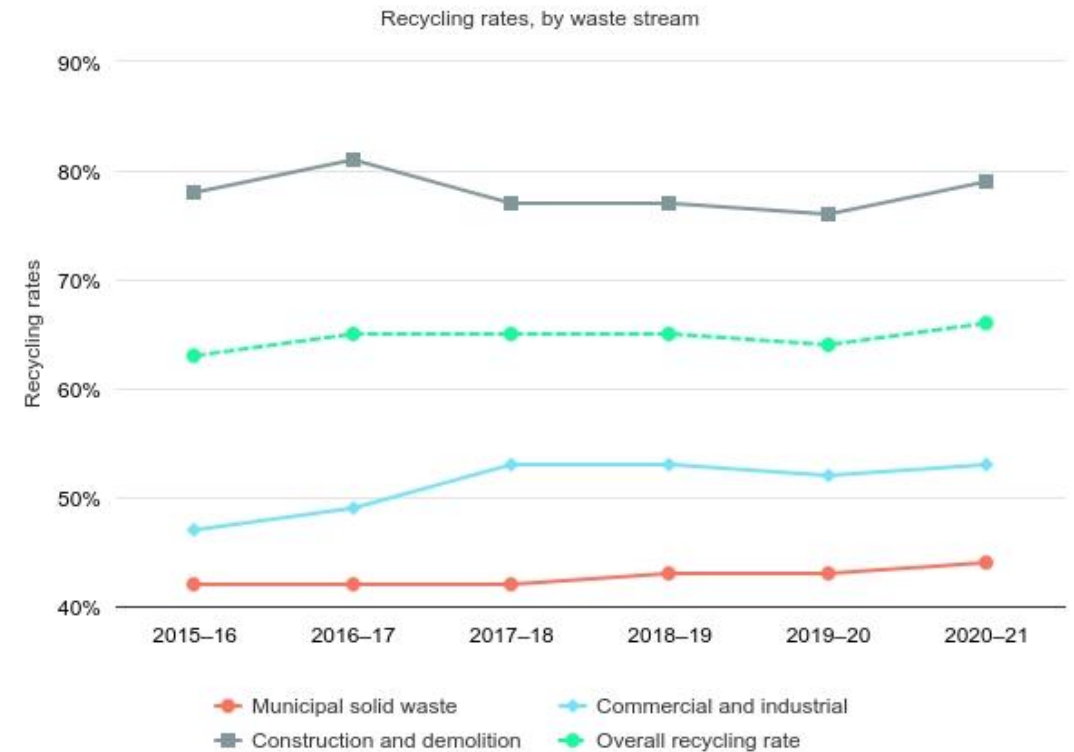
Kathy Giunta, Director Major Programs

August 2023



# C&D waste in NSW

- C&D recycling consistently between 75-80%
- \$108 million of NSW Govt funding delivered 3.2 million tonnes additional recycling capacity
- Opportunities for the construction sector to be a significant market for recycled materials



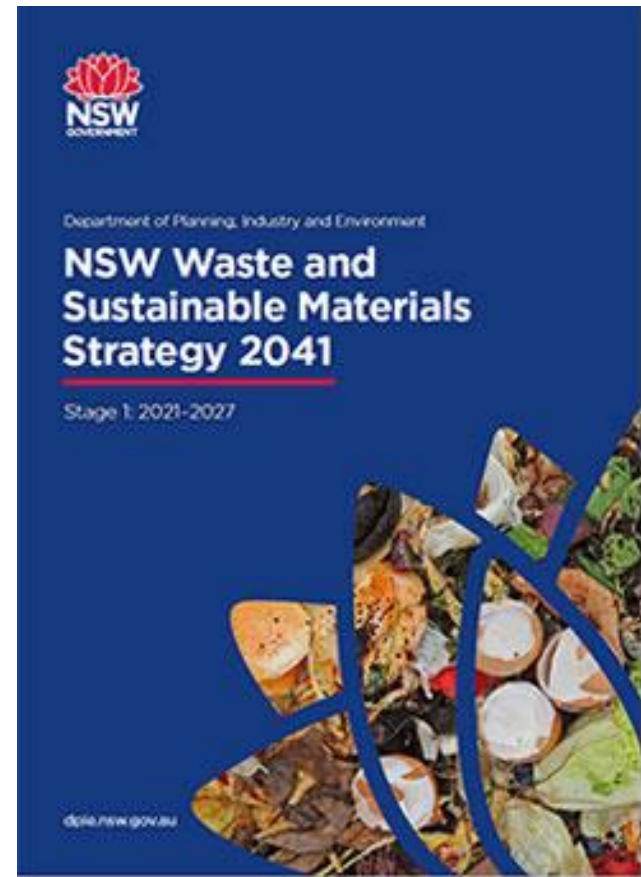
Source: [Waste performance data](#)

EPA NSW



## How is the NSW Government supporting the shift to a Circular Economy?

- \$24 million Strategic Infrastructure Fund
- Sustainable Government Procurement
- Innovative trials







# Strategic Infrastructure Fund

- Residual waste infrastructure needs assessment
  - Landfill airspace and transfer station audit
- Commercial and Industrial waste audit
  - Determine composition of C&I waste and comparison to 2014
- NSW Waste Infrastructure Plan
  - Determine critical waste and recycling infrastructure needed in the future





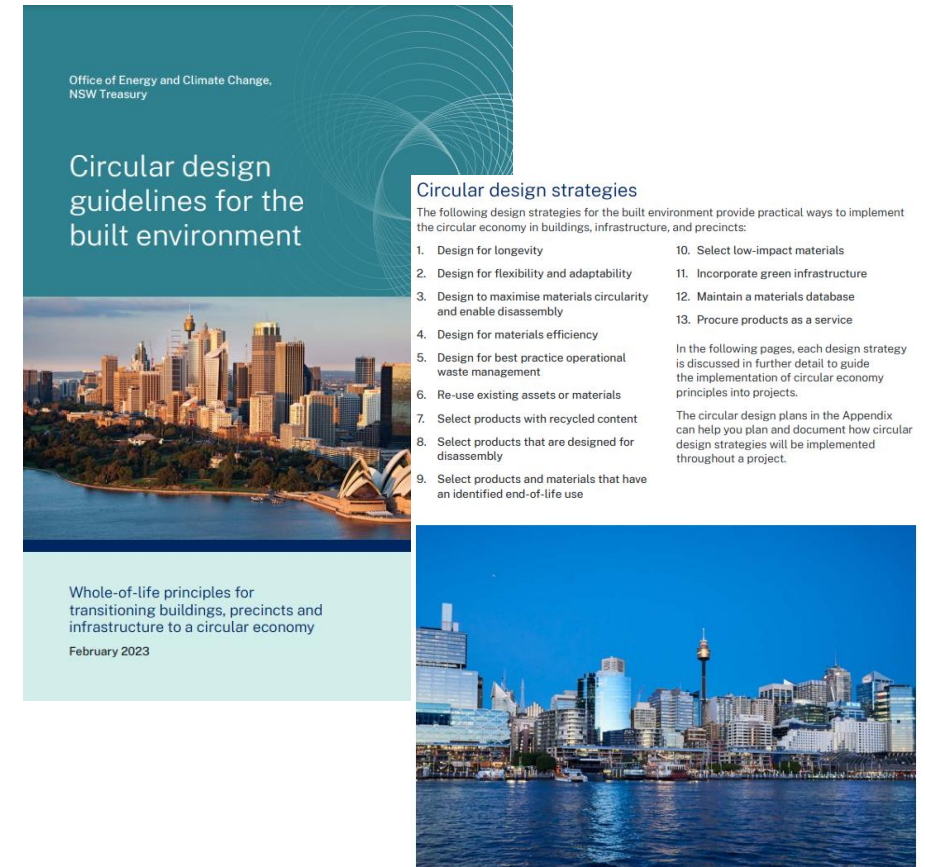
# Government Procurement of Recycled Content

- NSW Government departments now required to procure products that contain recycled content on an ‘if not, why not’ basis
- Some key initiatives to help build up supply of and demand for recycled materials include:
  - Education and awareness raising of recycled materials (e.g. training, events, case studies)
  - Tools and resources for circular government procurement
  - Developing specifications for priority recycled materials
  - Working with Investment NSW to identify industry investment opportunities in NSW’s recycling and manufacturing sectors
  - Publishing a directory of recycled material suppliers, along with a register of upcoming government infrastructure and construction projects that will procure recycled material
  - Building framework to help government agencies report on use of recycled content in procurement



# Circular Design Guidelines for the Built Environment

- Published in February 2023
- Framework for embedding circularity in building, precinct or infrastructure projects
- Details 13 circular design strategies, providing practical ways to implement 3 key circular design principles:
  - Design out waste and pollution
  - Keep products and materials in use
  - Regenerate natural systems







## Support for small business

Bin Trim - Total 800 construction businesses

- 72% total waste going to landfill
- Highest landfilled materials
  - By weight - wood and textiles
  - By volume – plastic, wood, cardboard, textiles



Construction businesses achieved an average increase in diversion of waste from landfill of 12% (based on annual volume) through participation in Bin Trim.

Reopen Bin Trim rebates for equipment & technology & DIY Bin Trim app



## Case studies

- \$100,000 to Rhyle Pty Ltd to install a fuel-efficient Reclaiming Screening machine to sort and provide market opportunities for reclaimed concrete and brick rubble
  - **5,270 tonnes masonry recovered.**
- \$62,000 to Albury City Council to increase diversion, recycling and reuse of plasterboard
  - **713 tonnes diverted from landfill.**



[EPA Bin Trim Monaro Timber Case Study - YouTube](#)





## EPA sustainable construction grants

- Fulton Hogan and State Asphalts are incorporating recycled glass in asphalt
- The recipe for low carbon Geopolymer Concrete containing crushed glass will be made available publicly
- The concrete will meet all associated TfNSW specifications
- [John Holland video](#)

