



MASTER BUILDERS **SMART WASTE** **SUNDOWNER**

THANK YOU TO OUR SPONSORS



James Hardie



SMART WASTE SUNDOWNER

Tuesday 10 May 2016

- Discover Smart Waste ways to avoid the landfill levy
- Hear about Waste Authority rebates, waste hot topics & good news stories
- Take the opportunity to tell us what you need to help you reduce waste

It's about making a Smart Waste choice

KEEP PACE WITH BUILDING INDUSTRY LEADERS BY REDUCING WASTE

The Smart Waste program is supported by funding from the Waste Authority through the Waste Avoidance and Resource Recovery Account



HEAR FROM:



Michael Norriss | Master Builders WA Smart Waste consultant

- Smart Waste ways to avoid the landfill levy; and other waste related hot topics

Nadja Kampfenkel | LendLease: Sustainability Manager WA, Communities

- LendLease's role as a developer driving down building waste

Marcus Geisler | Waste Authority Chairman

- The Recycled Construction Products Program (RCPP) and how to get rebates

✓ *And take the opportunity to tell us what you need to help you reduce waste*



MICHAEL NORRISS | MASTER BUILDERS WA SMART WASTE CONSULTANT

Smart Waste ways to avoid the landfill levy; and other waste related hot topics

- The levy increase and how to cut waste and cut costs
- WGV – LandCorp driving sustainable development
- Brick strap recycling
- Illegal dumping
- Sediment control
- Water meters (theft and loss of water)

✓ **Members have your say on waste**



THE LANDFILL LEVY

LANDFILL LEVY RATES



LANDFILL LEVY WILL INCREASE BY UP TO 25% ON 1ST JULY.

Period	Putrescible Rate/tonne	Approx. inert rate per tonne*	Inert Rate/m ³
To 31 December 2014	\$28	\$8	\$12
1 January 2015 to 30 June 2016	\$55	\$40	\$60
1 July 2016 to 30 June 2017	\$60	\$50	\$75
1 July 2017 to 30 June 2018	\$65	\$60	\$90
1 July 2018 to 30 June 2019	\$70	\$70	\$105
1 July 2019 onwards	\$70	\$70	\$105

The Landfill Levy is only paid on waste going to landfill!

*One cubic metre of inert waste in situ within the landfill is treated as equivalent to 1.5 tonnes

source: www.der.wa.gov.au/about-us/media-statements/112-landfill-levy-rates-to-rise-from-january-2015

Avoid, Reduce, Reuse & Recycle

- ✓ Less waste to landfill
- ✓ Less Landfill Levy &
- ✓ Less environmental impact

(i.e. Improve your practices to cut your waste & cut your waste costs & reduce your impact)



DEVELOPMENT

CONSTRUCTION

OCCUPATION

PLANNING

Waste management plan/
Site management plan

DESIGN

Design out waste

PRE-CONSTRUCTION

Implement Waste management plan/
engage waste recovery service

DEMOLITION/ DECONSTRUCTION

Plan/implement
Demolition management plan

CONSTRUCTION

Engage, communicate, supervise best practice, and monitor

POST-CONSTRUCTION/ HANDOVER

Evaluate and incorporate continuous improvement

At WGV builders are developing Waste Management Plans aiming to:

- Cut waste to less than 10% of all materials
- Recycle 95% of waste
- Send less than 2% to landfill

Home Buyers Centre have won the Master Builders WA Excellence in Recycling award for designs and actions that reduce waste.

At Alkimos Beach, many builders are using on-site waste services, including a clearing house for spare materials.

At WGV, builders are required to submit a Waste Management Plan and collect Certificates of Disposal (or equivalent evidence)

Master Builders WA are today launching a member survey to benchmark current waste issues and identify best practice.



SMART WASTE IS HELPING THE INDUSTRY TO TAKE PRACTICAL ACTION

On site options & strategies:

- The Smart Waste infographic is providing guidance on options and strategies to achieve best practice and cut waste and waste costs.

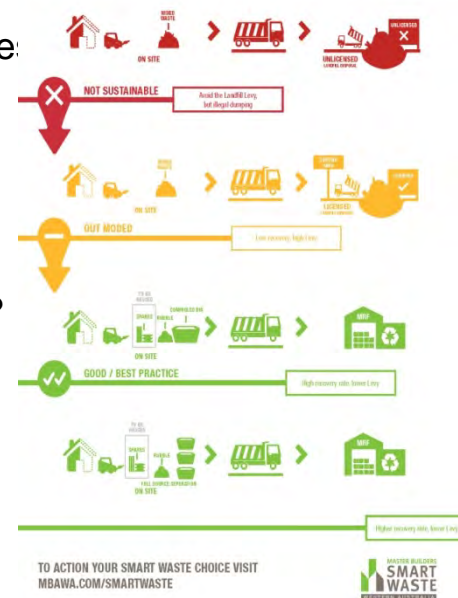
And smart builders are reviewing their on site waste practices and asking their waste service providers:

- Where their waste is going (and is the carrier compliant & facility licensed)?
- How much is recovered and recycled (and what evidence they provide)?
- What hints & tips can they offer to help you cut waste & waste costs?

- The Smart Waste infographic is available on the Smart Waste website: www.mbawa.com/smartwaste



MAKE A SMART WASTE CHOICE



RECOVERY & RECYCLING

Construction & demolition (C&D) waste streams that are recovered and recycled:

- Sand, concrete & rubble (> roadbase: see the RCPP rebates)
- Timber (> animal bedding: e.g. for chooks & guinea pigs)
- Green waste
- Paper & cardboard
- Metals
- Brick straps
- Plasterboard*
- Plastics*



* some is recycled, or trials are underway



BENEFITS OF WASTE BEST PRACTICE



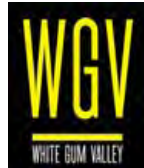
- ✓ Keep pace with building industry leaders
- ✓ Avoid the Landfill Levy
- ✓ Comply with regulatory requirements
- ✓ Meet customer expectations
- ✓ Cost competitive
- ✓ Good environmental outcome
- ✓ Clean & Safe site (no Litter fines)



WGV SMART WASTE IS BECOMING A PART OF SUSTAINABLE DEVELOPMENT REQUIREMENTS

WGV is WA's first One Planet Community, which will demonstrate the economic and social benefits of sustainable communities and set new benchmarks for the development industry.

LandCorp have partnered with Master Builders WA to create a Smart Waste Zone.



- ✓ More details on the WGV Smart Waste Zone are on the Smart Waste website: mbawa.com/smartwaste

WGV
WHITE GUM VALLEY

THIS IS A
YOU ARE ENTERING THE WGV
SMART WASTE ZONE

WE AIM TO

- REDUCE**
Limit waste to less than 10% of materials
- REUSE**
Save spare materials for the next job
- RECYCLE**
Sort and recover 95% of our waste
- CONTROL SEDIMENT AND LITTER**
Keep our streets and drains clean
- CONSERVE OUR RESOURCES**
Minimise water usage

TO BE PART OF IT, CHECK THE WASTE PLAN ON YOUR SITE
MAKE SMART WASTE CHOICES: MBAWA.COM/SMARTWASTE



WGV
WHITE GUM VALLEY

THIS IS A
SMART WASTE SITE

AS PART OF THE WGV SMART WASTE ZONE THIS BUILDER AIMS TO:

- ✓ **LIMIT WASTE TO LESS THAN 10% OF MATERIALS**
- ✓ **REUSE OR RECYCLE 95% OF OUR WASTE**
(That means less than 2% of materials going to landfill!)

TO ACHIEVE THIS, EVERYONE ON THIS SITE NEEDS TO:

- AVOID**
waste by ordering just what we need!
- REDUCE**
waste by measuring, twice and cutting once
- REUSE**
materials by using offcuts for other parts of the job or for returns to the supplier

RECYCLE BY SORTING WASTE INTO:

- ✓ Clean sands and rubble (S&R) in a pile
- ✓ Separate soil timber offcuts that cannot be reused, read the bin signs and separate materials
- ✓ Never get food scraps, containers or general rubbish in the skips (take it home instead)

A CLEAN SITE IS A SAFE SITE, REDUCE HAZARDS FOR YOUR MATES BY:

- ✓ Putting high water packaging material etc in the cage
- ✓ Cleaning up after every job
- ✓ Minimum dust
- ✓ Load bins efficiently and avoid over-filling

To make your smart waste choice, visit mbawa.com/smartwaste
Call the Site Supervisor to discuss any waste problems.



BRICK STRAP RECYCLING

SIGN UP TO A LOCAL RECYLING INNOVATION

Builders are now recovering brick straps for re-processing into brick pack slats and plastic star pickets

BENEFITS

- Removes problems and safety risks brick straps cause
- Values a 'problem' item
- Cuts waste (and costs of waste) to landfill

HOW TO DO IT

Straps are placed in a bag (supplied at no cost) and the filled bags are:

- delivered to the re-processor (Fibopost, in Malaga) www.fibopost.com
- collected from your waste service provider, or
- collected from agreed locations



9 out of 10 tradies I speak with already do, or agree to do an activity to reduce, reuse, recover and recycle waste on site. (Michael Norris)*

*based on site recording data from Alkimos, Baldivis, and Ellenbrook pilot sites

➤ **Alert your waste service provider to the benefits and ask them to help you re-process brick straps into a product (instead of sending them to landfill)!**



ILLEGAL DUMPING

The illegal dumping of waste causes increases costs, contamination of waste streams, hazards on site, and increased littering.

Master Builders WA are working with industry stakeholders to prevent, clean up and pursue illegal dumping.

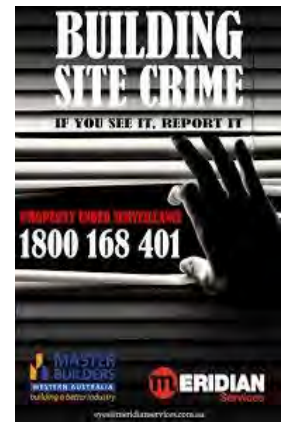
To be part of the solution, builders can take a number of steps including:

- ✓ keeping a clean site with waste sorted and contained

Illegal dumping offences carry a maximum fine of \$125,000!

The Smart Waste program is also developing campaigns to help prevent, or pursue illegal dumping.

- ✓ **There is more detail on the Smart Waste website Illegal dumping page:**
mbawa.com/smartwaste
- ✓ *Illegal dumping is a hot topic – see our Home in WA segment on the Smart Waste website*



DUMPING rubbish,
building materials or furniture here
IS ILLEGAL

Penalty
up to
\$125,000

Call **1800 168 401**

Help to Keep Australia Beautiful (and avoid a fine)
by using your own bin, skip or the Council Transfer Station.

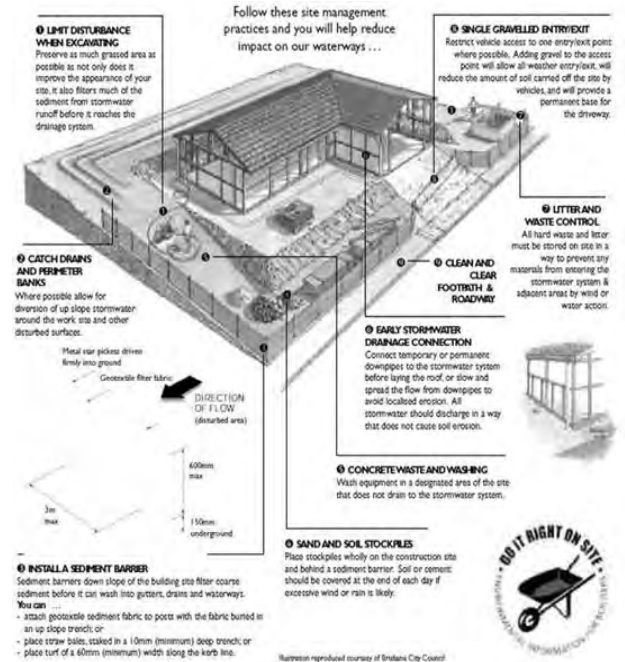
SMART WASTE WESTERN AUSTRALIA
Keep Australia Beautiful WA
MERIDIAN Services
For more information, or to report illegal dumping at this site contact Meridian Services eyes@meridianservices.com.au



SEDIMENT CONTROL

The what, why and how of Sediment control

Sediment is material such as silt, sand, solvents and gravel (incl. vegetation & litter) that is washed or blown into storm drains and waterways – if not controlled it can cause damage to our waterways, and Sediment control is a regulatory requirement.



✓ There is more detail on the Smart Waste website Sediment Control page: mbawa.com/smartwaste

✓ Sediment Control is a hot topic – see our Home in WA segment on the Smart Waste website



WATER METERS

The removal, loss and /or theft of water meters - & the subsequent loss of water due to unmatched fittings – is a reported issue.

Master Builders WA are aware of this issue and:

- are working with the Water Corporation
- have corresponded with WA Police
- are monitoring the issues, notably theft is identified as being difficult to manage even with tagged meters.

No market for the meters has been identified to date.

Various strategies and devices are being considered to eliminate theft.

- Report theft of water meters to the WA Police and Water Corporation

Updates on progress of solutions will be sent to members.



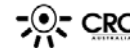
MASTER BUILDERS WA ARE ACTING TO CUT WASTE COSTS & REDUCE ENVIRONMENTAL IMPACT

The Smart Waste program provides:

- Practical guidance and support through:
 - Website; Smart Waste Guide; Consultant
 - Training & induction; Events and workshops
 - Advocacy for services to prevent or pursue illegal dumping
 - Research into waste streams and sediment
- Advocacy for practical action from industry stakeholders:
 - Developers; builders, local authorities & waste service providers
- Support for waste reduction initiatives, e.g.
 - RCPP; brick strap recycling; plasterboard recycling trials

ACTION:

- ✓ Where to go for more help: mbawa.com/smartwaste



SUMMARY



The Landfill Levy (only on waste going to landfill) increases by up to 25% on 1 July.

WHAT TO DO NEXT:

- Review and improve your current practices
- Put Smart Waste Management Planning in place
- Employ strategies to avoid Illegal dumping
- Use Sediment control practices to avoid sediment (and penalties)
- Recycle your brick (and other) straps

ACTION:

- Take our survey to tell us how you manage waste and what you need from Master Builders Smart Waste services.



- Where to go for more help: mbawa.com/smartwaste

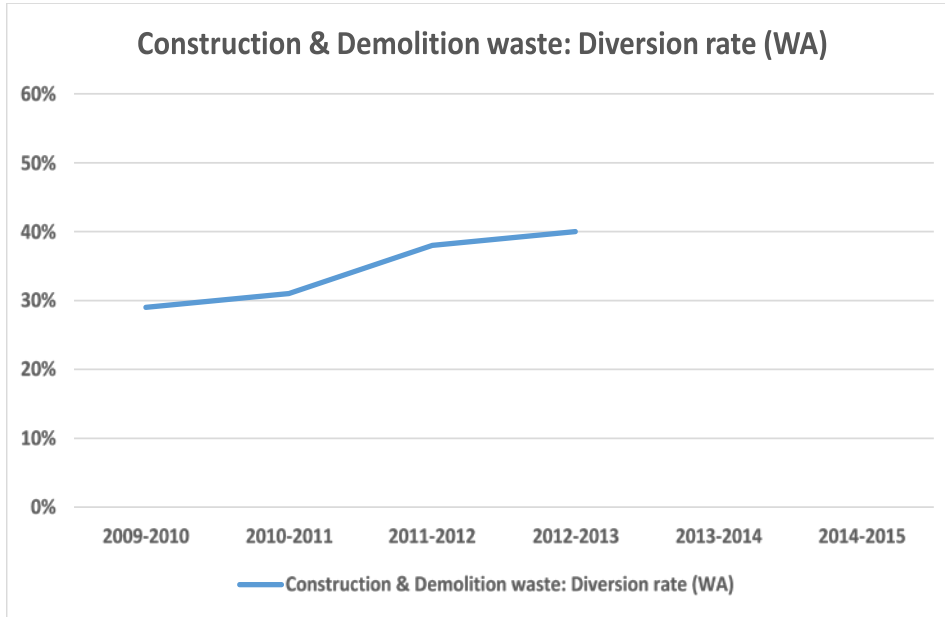


TARGETS

In 2012/13 around 6,125,000 tonnes of waste was generated in WA

C&D waste made up almost half of the total

The C&D sector recycled about 40% of it's waste



2009 – 2010: 29% 2010 – 2011: 31% 2011 – 2012: 38% 2012 – 2013: 40%

source: *Western Australian Waste Strategy – March 2012, Waste Authority WA /*

Recycling activity in Western Australia 2012-13, ASK Waste Management Consultancy Services (25/3/14)

	Waste Strategy Targets (1)	Waste Strategy Targets (2)
Sector	2015	2020
C&D	60% (WA)	75% (WA)



SOME C&D WASTE GENERATION FIGURES - HOUSING

Waste an 'average' house generates

- 15 – 40m³*
- up to 40m³ (approx. 30 tonnes)*
- approx. 50% is Sand*



*Waste planning and best practice
reduces waste and waste costs*

Associated costs:

Landfill Gate fees: from \$125 - \$200 per tonne

Recovery facility Gate fees: from \$15 - \$45 per m³ (clean) / up to \$90 per m³** (contaminated)**

Skip bins to Recovery facilities: approx. \$650 - \$750 (10m³)

[all prices are pre the 1 July 2016 Landfill Levy increase]

* based on previous studies; industry feedback; & Murdoch University construction waste study 2015#

** does not include transport

the study had acknowledged limitations and identified gaps



Driving Down Building Waste @ ALKIMOS BEACH

Nadja Kampfhenkel, Sustainability Manager WA,
Lendlease Communities
10 May 2016



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BEACH

Project Overview

ALKIMOS BEACH



ALKIMOS BEACH

Project

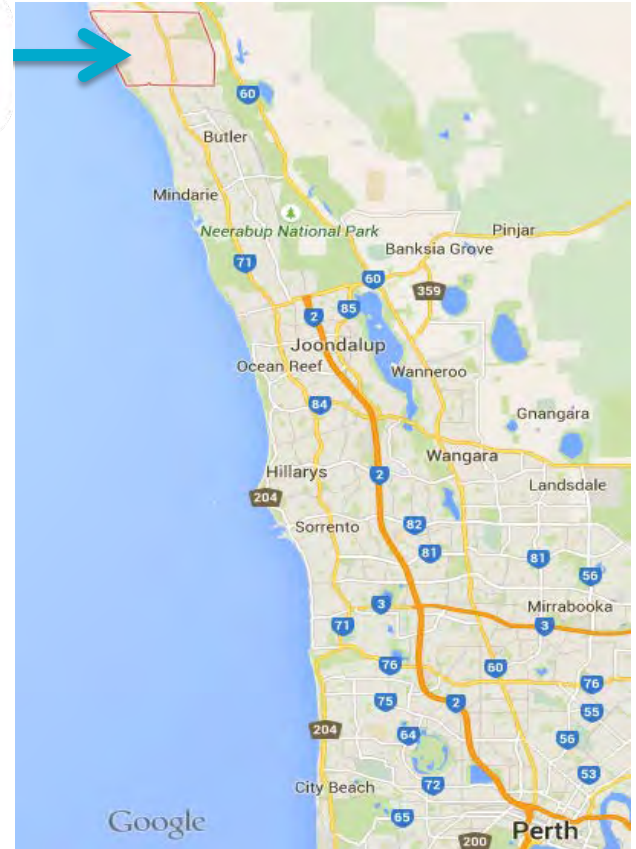
- Development partnership between developers Lendlease and LandCorp

Location

- 16km north of Joondalup, 40km north of Perth in the highly sought after north-west coastal corridor

Timeframe

- 11 years (2012 to 2023) approximately



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BEACH

Size / Population



THE VISION

Alkimos Beach achieves a new benchmark for sustainable living while sympathetically blending the superb natural environment with authentic development.

A myriad of lifestyle options and amenities support an inspired, engaged community. Alkimos Beach is a community of connected citizens, truly engaged and inspired to participate in their own future.

Alkimos Beach delivers community, recreational, learning and business facilities early, driven by strong community leaders striving to achieve a new benchmark in masterplanned living.

Embracing and building on the sheer natural beauty of the site and respecting the landform, Alkimos Beach achieves an authentic blend of architecture, landscaping and breathtaking ocean views that inspire a connected coastal lifestyle. A myriad of sustainable lifestyle options set within distinctive villages encourage people of all life stages to build a life together.

Working towards a carbon neutral community, Alkimos Beach takes a long term view to ensure the commercial, retail, employment and lifelong learning opportunities created today are relevant and sustainable in the future.

Alkimos Beach rises in the West as the true benchmark for what is possible when uncompromising passion for creating special places is thoughtfully planned and delivered.



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Delivering on the vision

Leadership in Sustainability

- First Australian 6 Star Green Star Communities rating awarded by the Green Building Council of Australia
- First WA project to be awarded all 6 leaves under UDIA's Envirodevelopment initiative
- Recognised by the Water Corporation under the new Waterwise Development Program



enviro
DEVELOPMENT™



ALKIMOS
BEACH

Snapshot Sustainability Initiatives



"I was impressed with the way Earthcare managed public protection today on your site when operating the Bobcat with the use of danger signs, traffic cones and a spotter."

Rob van Grootel
Group Work Health & Safety
Manager
BGC Residential Group



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Builders Waste Program

ALKIMOS BEACH



Why

LC Sustainability commitments



Resource efficiency - Doing more with less is an important 21st century challenge with increasing demand and pressure on natural systems and finite resources. This requires efficient use of water in a drying climate, as well as efficient use of energy and material resources.

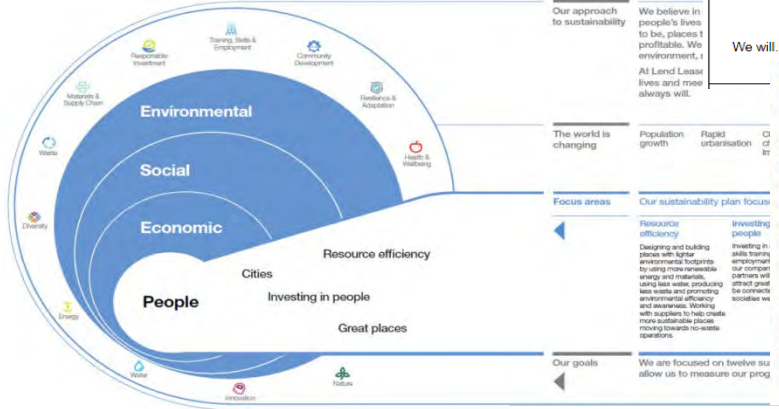
There is significant opportunity for improved waste management. The Western Australian State Waste Strategy sets a target for construction and demolition waste recycling of 65 per cent by 2019-20. At present, Western Australia has some of the highest disposal rates for construction and demolition waste, and the lowest recycling rates in Australia. To close the loop the challenge will be to avoid, reduce, and recycle before disposal as a last resort.

EXECUTION

(civil works/construction, sales)

Value is created at this stage through contractor and construction jobs and the physical establishment of social and economic infrastructure to support land delivery. We influence the social and environmental performance of our supply chain through the procurement process.

LL Sustainability



WASTE

We will... Eliminate

- ▶ Increase waste diversion from landfill via re-use and recycling.
- ▶ Reduce total waste generated on site.
- ▶ Reduce waste to landfill intensity by 20% by 2020 in all our operations (based on FY14)

Resource efficiency

Designing and building places with lighter environmental footprints by using more renewable energy and materials, using less water, producing less waste and promoting environmental efficiency and awareness. Working with suppliers to help create more sustainable places moving towards no-waste operations.



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Why

Project KPI

11	To minimise the use of resources (including through use of materials with low embodied energy and increased recycling).	Efficient resource use in civil construction (including reduced embodied energy and low or non-toxic materials) Decrease volume of waste output to landfill	24. Develop and implement a Construction Waste Management Strategy, which identifies targets for use of sustainable materials in construction and targets for reduction of waste to landfill. At a minimum: ≥ 60% reduction of waste output (by mass) to landfill as outlined in the Construction Waste Management Strategy.
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≥60% reduction in construction waste output to landfill



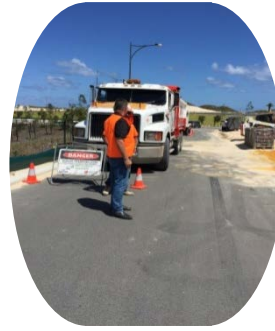
Safer, cleaner sites



Partnerships



Benefits



INTEGRATED SUSTAINABLE DEVELOPMENT

COMMUNITY WELLBEING
Creating communities that are safe, healthy and enjoyable places to live and work, with access to appropriate and affordable housing and creating opportunities to foster active local communities.

DESIGN EXCELLENCE
A built environment that creates attractive, accessible, adaptable places that contribute to a distinctive identity and sense of place.

ENVIRONMENTAL RESPONSIBILITY
Protecting and managing nature systems, habitat and biodiversity, and efficiency and innovatively managing energy, water, resources and materials.

ECONOMIC HEALTH
Maximising economic development opportunity, while optimising the environmental, social and economic benefits in accordance with State Government strategies.



We will...
Eliminate Waste.



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Results

Recycled YTD – ~90%!!!!



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Challenges



Building Approvals
March 2016

	Current Monthly Result	Feb-16 to Mar-16 % Change	Mar-15 to Mar-16 % Change
VIC	5,737 APPROVALS	3.7%	-11.0%
NSW	5,531 APPROVALS	6.9%	-4.5%
QLD	4,191 APPROVALS	5.7%	2.2%
WA	2,111 APPROVALS	7.3%	-23.5%

Landfill levy rates

Period	Putrescible Rate/tonne	Approx. inert rate per tonne*	Inert Rate/m ³
Current to 31 December 2014	\$28	\$8	\$12
1 January 2015 to 30 June 2016	\$55	\$40	\$60
1 July 2016 to 30 June 2017	\$60	\$50	\$75
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1 July 2019 onwards	\$70	\$70	\$105

ENVIRONMENT HEALTH & SAFETY

GMRS 2015

GLOBAL MINIMUM REQUIREMENTS

FEB - 2016



We'll Get You Where You Want To Go.



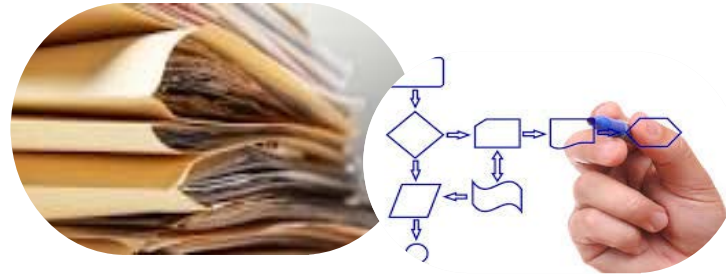
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Tips





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AUTHORITY**

WA...TOO GOOD TO WASTE

MBAWA Smart Waste Sundowner

Waste Strategy achievements to date and Overview of the State Government's Recycled Construction Products Program

Marcus Geisler

Chairman, Waste Authority

10 May 2016



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AUTHORITY

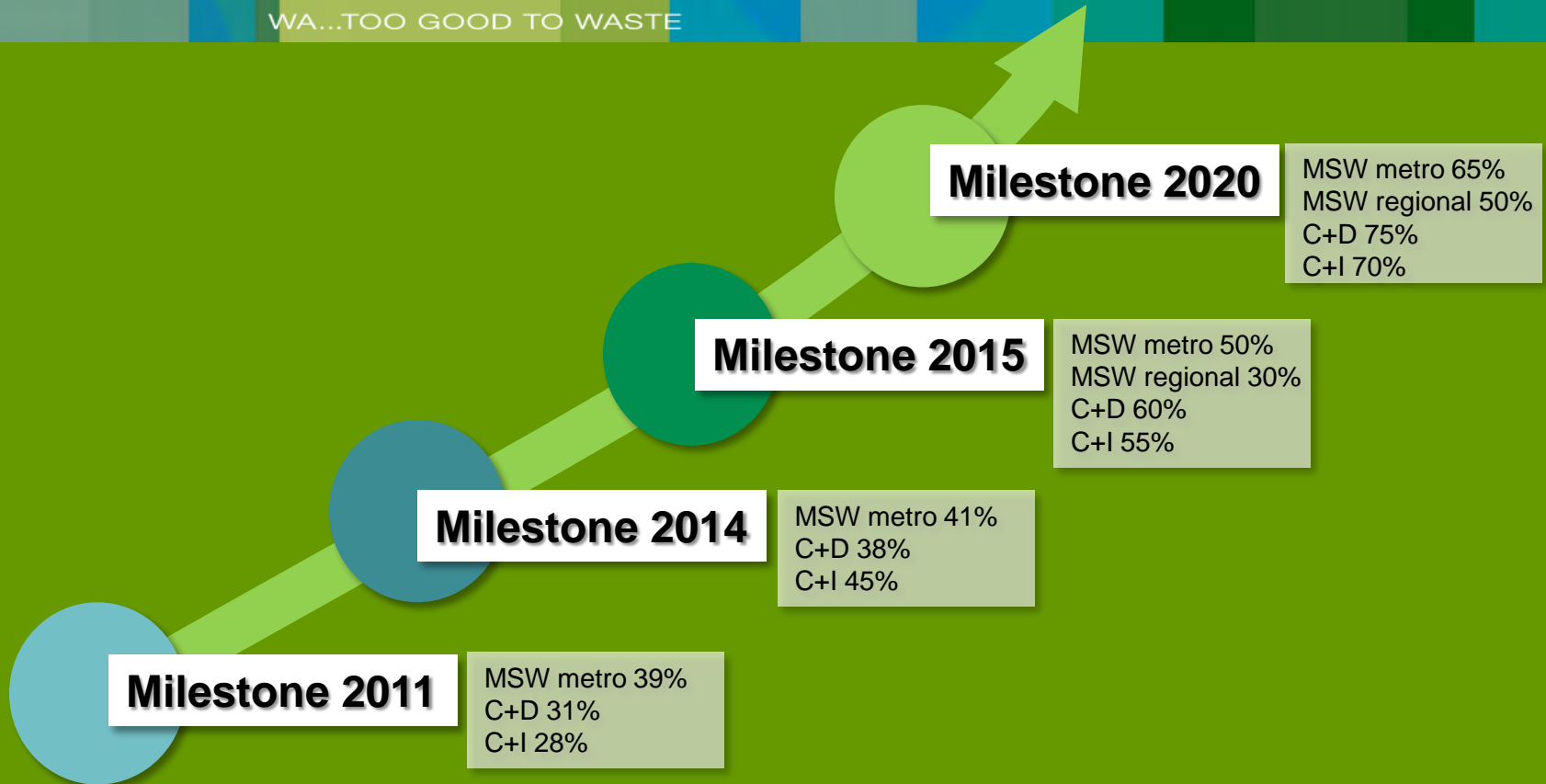
WA...TOO GOOD TO WASTE





WASTE AUTHORITY

WA...TOO GOOD TO WASTE



Milestone 2011

MSW metro 39%
C+D 31%
C+I 28%

Milestone 2014

MSW metro 41%
C+D 38%
C+I 45%

Milestone 2015

MSW metro 50%
MSW regional 30%
C+D 60%
C+I 55%

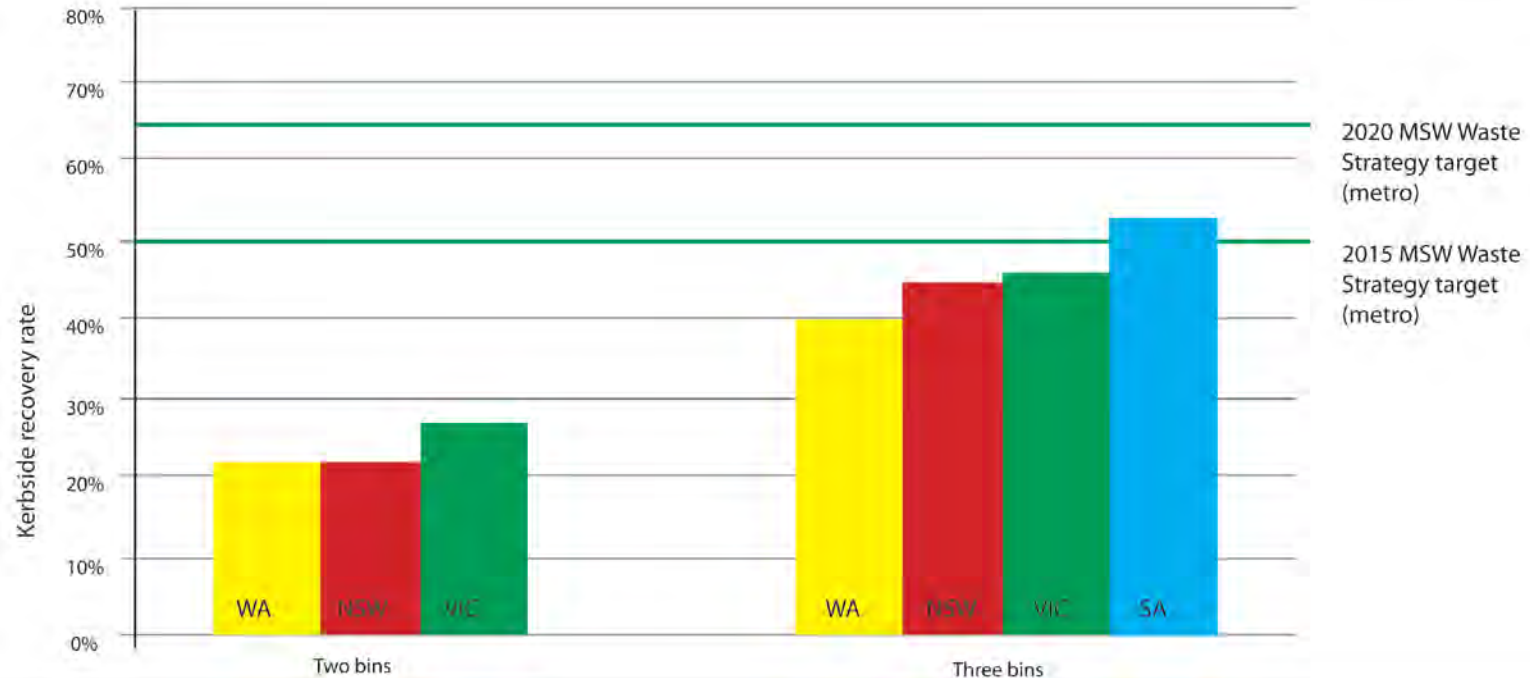
Milestone 2020

MSW metro 65%
MSW regional 50%
C+D 75%
C+I 70%



WASTE AUTHORITY

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**WASTE
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STREAM A

\$8 MILLION

Round 1/2017
Closes 30 June 2017

▶ Submit Application A1

**\$10,000 & 50%
INCENTIVE
BONUS**

LGA POLICY
Closes 30 June 2017

▶ Submit Application A2

STREAM B

\$2 MILLION +

Round 1/2016
As advertised

▶ Submit Application B





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Demolition site for Gateway Project, Belmont



WASTE
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WA...TOO GOOD TO WASTE



Recycled C&D product in use at Gateway Project, Belmont



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Launch of the Asbestos Guidelines for C&D Recycling, Belmont



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MBA launch of the Smart Waste Guide, Alkimos



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For further information on the
Recycled Construction Products Program email

RCPP@der.wa.gov.au

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James Hardie



SMART WASTE SUNDOWNER

THANK YOU

It's about making a Smart Waste choice

KEEP PACE WITH BUILDING INDUSTRY LEADERS BY REDUCING WASTE

TO MAKE YOUR SMART WASTE CHOICE VISIT

www.mbawa.com/smartwaste

Master Builders needs your views on recycling, illegal dumping and other hot topics in waste management. Builders, please take 5 minutes to tell us:

- How waste management costs impact your business?
- What you need from our Smart Waste services?
- How you deal with illegal dumping?

Early response gets you a free or discounted training place.

The Smart Waste program is supported by funding from the Waste Authority through the Waste Avoidance and Resource Recovery Account

