



# Getting Waste Sorted





Today's presentation is from the sharp end – not the pointy headed!

- Waste and Builders
- Our Project
- Culture Change
- What industry can do
- What regulators can do
- Discussion



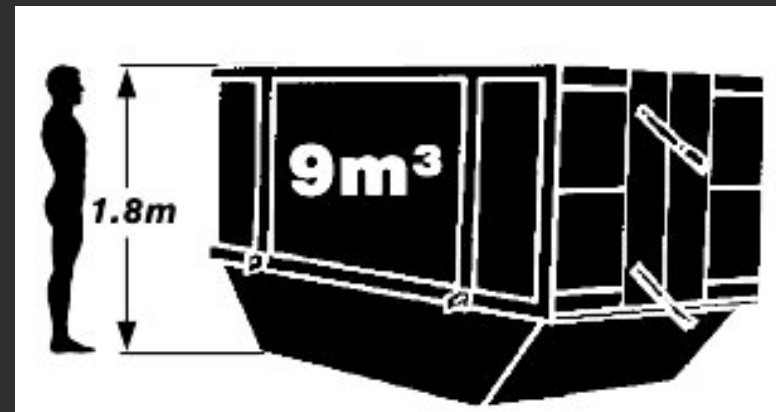


Source: [http://www.govyou.co.uk/wp-content/uploads/Guy\\_Fawkes\\_bonfire\\_2007.jpg](http://www.govyou.co.uk/wp-content/uploads/Guy_Fawkes_bonfire_2007.jpg)



## Waste is an issue...

- Construction and demolition waste represents up to...
- **50%** of all waste generated in NZ (MfE)
- The average residential construction project generates
  - 3 – 5 tonnes of waste
  - 25-40 m<sup>3</sup> of waste
  - 3 or 4 9m<sup>3</sup> bins of waste
- Whatever way you look at it – it's too much



Source: images <http://discountbins.co.nz/>

# Financial Costs of Waste Disposal

- What is waste costing you now?
- How much does a skip cost you?
- How much does disposal cost you?
- How much profit is thrown away?

## Why bother ?

- ✓ Increase your profits
  - ✓ Reduced disposal costs - typical residential construction project spends \$300 - \$1000 on waste disposal
  - ✓ Reduced costs of purchase - expensive resources and building material being wasted



**Remember: Most construction waste is made up of **new** materials – that have been bought and paid for.**

## Why bother ? (continued)

- Improve your business
  - *Better onsite Health and Safety*
  - *Improve your reputation*
  - *Leadership - considerate and professional builders*
  - *Stay ahead of regulations*
  - *Homestar*
- **Environmental** - landfill space issues, pollution and needless waste of current available resources



# Waste and Builders – The Challenge

- Culture of builders
  - Time and effort = money
- Speed of delivery
- Site constraints – size, location etc
- Lack of sticks
  - Waste costs too low?
  - Lack of adoption of best practice (e.g. Homestar)
- Lack of carrots
  - No easy ‘system’ – have to think!
  - Where are the Cash bonuses!



# Our project

- Working with Builders
- They find it HARD – well... they find it *harder than business as usual*
  - Deadlines and Dollars
- Training
  - Education, knowledge, Incentives, buy in
- Knowledge does NOT equal action
- Using a co-design process to find workable solutions
- It's about changing a culture – and being more professional











**OUR SITES REFLECT THE WAY WE WORK**





**TIDY SITES ARE SAFER, MORE  
EFFICIENT AND COMMAND RESPECT**

# Concentrating on The Big Three

**Treated**



**Wood**

**Gypsum**



**Plasterboard**

**Plastic**



**All Wrap  
(black & clear)**









# What can Industry do? Suggestions for Builders

- Devise and put in place a simple waste management plan for every site
- Think of waste as a resources – e.g. reuse off-cuts of timber
- Induct people on site (like H&S) and make subbies responsible for their own waste
- Refine your schedule of quantities – stop over-ordering
- Get buy in at the design stage – modular construction
- Teaching good waste management at apprenticeship level





# What can Industry do? Suggestions for wider industry

- Waste Management Companies
  - Getting waste industry buy in
  - Look into smaller sortable systems that are easy for builders (e.g. Plasterboard and flexible bins)
- Merchants
  - Merchants take more responsibility for recycling – and as a portal for information regarding waste practices



# What can local and national government do?

## Some suggestions

- Make community re-use an option
  - Develop a network of materials to be re-used and connect people
- Consider consent process – should every house require a simple waste management plan?
- Better information about best practice
- Relax rules on storage of waste on berms and bin placement



Image source: [http://dsps.wi.gov/Images/Rules\\_and\\_Regulations.jpg](http://dsps.wi.gov/Images/Rules_and_Regulations.jpg)

[https://rahulcblog.files.wordpress.com/2013/09/img\\_2737.jpg](https://rahulcblog.files.wordpress.com/2013/09/img_2737.jpg)

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# Construction Waste – Case Study

- Average 3 bedroom = 3-5 tonnes of construction waste = new materials going to landfill
- Some builders have started reducing this – focussing on diverting waste to recycling and reuse
- In case studies (Auckland, Christchurch) seems that with a bit of effort 80% of construction waste can be recycled = 1 tonne to landfill
- Exemplar case study
  - Hastings Best Home (<200kg to landfill)





# Hastings 'Best Home'

- Less than 200kg waste to landfill...

www.besthome.org.nz

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# Discussion?

