

REDUCE Greenhouse Gas Emissions RECYCLE Construction & Demolition Debris

Global Warming and C&D Recycling

Did you know that construction and demolition debris contributes to global warming?

Every time you send construction and demolition (C&D) debris to a landfill instead of recycling it, you're adding greenhouse gases to the atmosphere and contributing to global warming.

Here's why:

C&D waste for new residential and commercial construction is mostly made up of wood, cardboard, metal and concrete.

When organic materials like wood and cardboard wind up in landfills, over time they break down and produce methane, a greenhouse gas 23 times more potent than carbon dioxide. Reusing or recycling wood and cardboard instead of landfilling them puts a big dent in the amount of methane coming out of landfills.

And when C&D debris like wood, cardboard, metal and concrete are reused or recycled into new products, a lot less energy is needed compared to making new products. New products require raw materials to be extracted from the earth which require burning fossil fuels — one of the main causes of global warming.

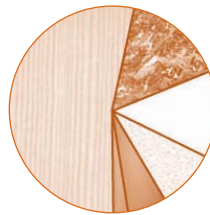
How much of landfill waste is made up of C&D materials?

More than 21% in Alameda County, and as much as 30% statewide.

How much C&D debris is created when a new house is built?

Building a typical California house produces 8.5 pounds of waste per square foot. That's 17,000 pounds of waste for a 2,000 square-foot house.

Construction Waste Generated from Building a 2,000 Square-Foot Home



Wood	42%
Gypsum	13%
Concrete	15%
Cardboard	6%
Metals	3%
Other	21%

How much can you save?

Recycling 95% of the wood, cardboard, concrete and metal debris from the construction of a typical new 2,000 square-foot home in California keeps **6.4 tons of waste out of the landfill**.

The avoided methane emissions and reduced energy consumption from recycling C&D materials from 1 home is the equivalent of taking 1 car off the road for a year, or avoiding 5.7 metric tons of CO₂ emissions.

When it comes to reducing greenhouse gases, isn't energy efficiency a lot more important than C&D recycling?

They're both important, but in the short term C&D recycling makes a much bigger difference. Recycling 6.4 tons of materials

If we want to achieve a rapid reduction in the state's greenhouse gas emissions, it's critical that we increase our C&D recycling rates.

from the construction of a new 2,000 square-foot GreenPoint Rated home (which is an environmentally sound home - visit www.GreenPointRated.org for more information) results in a 75% reduction of greenhouse gas emissions for the first year while the energy efficient features result in a 22% reduction.

Are the greenhouse gas emissions from commercial C&D debris similar to residential construction?

Most commercial buildings are much larger than a typical house, so their C&D debris has an even greater impact on global warming.

For example, construction of a new 7,545-square-foot fire station in Alameda County resulted in more than 114 tons of C&D debris. Fortunately, 87 tons of wood, cardboard, concrete and metal were recycled. That's the equivalent of taking 4 cars off the road for a year, or avoiding 21.6 metric tons of CO₂ emitted into the air.

What can you do?

Reduce the carbon footprint from building by making sure that C&D materials are reused or recycled instead of landfilled. Visit www.StopWaste.Org for resources on recycling C&D material, including the *Builders' Guide to Reuse and Recycling*.

Is C&D debris recycling required in Alameda County?

Virtually every city in Alameda County now requires C&D recycling. Contact your building department for details. Go to www.StopWaste.Org, or call Meri Soll at (510) 891-6500.

