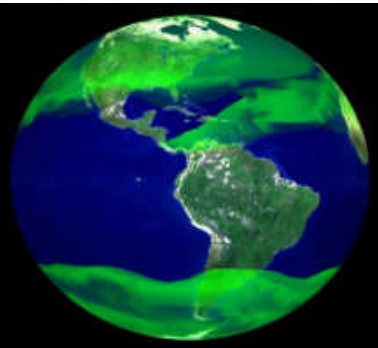


U.S. Environmental Protection Agency
Food Scrap Webinar

March 2010

Beyond Recycling

Composting comes to the 21st century

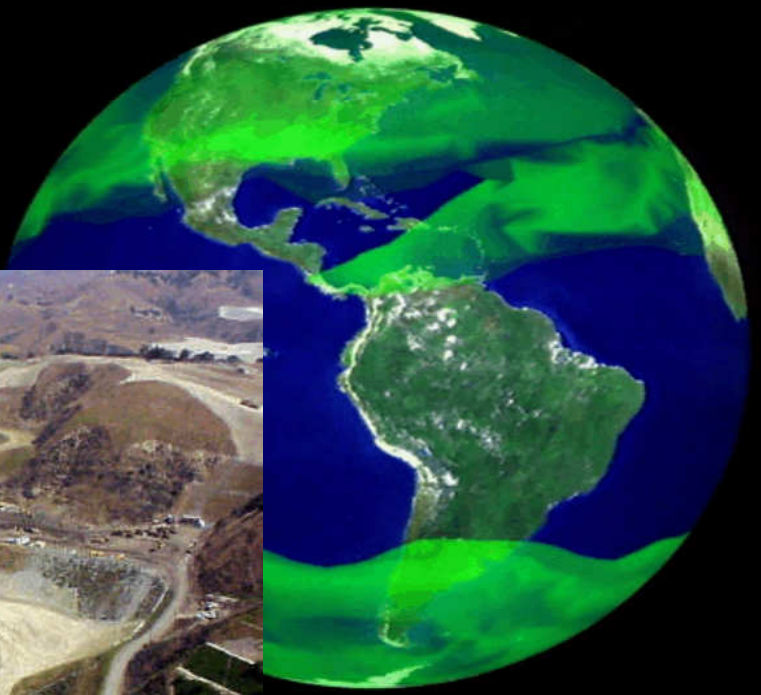
By Peter Anderson, Executive Director
Center for a Competitive Waste Industry

Key points

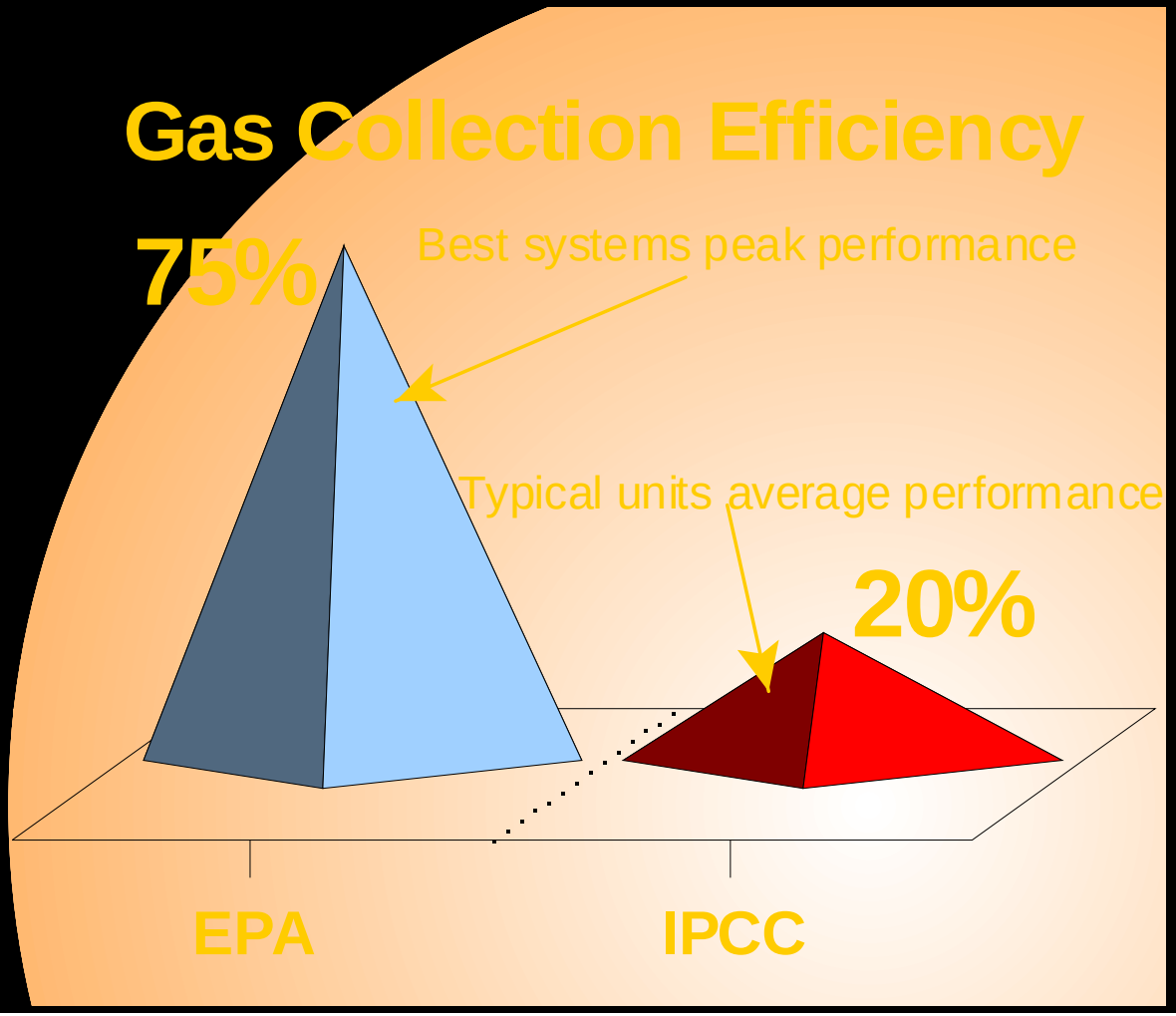
- ✔ The ability of expanded organics programs to significantly reduce greenhouse gas emissions provides a potent new reason for more communities to become involved, along with the earlier motivations to increase diversion and lessen landfills' threats to groundwater
- ✔ When organics programs capitalize on their synergies to reduce the frequency of trash collection, they can both double diversion and produce savings to offset the cost of the new programs
- ✔ Processing food scraps creates potential odor problems that, ultimately, may require more expensive enclosed systems
- ✔ In 2009, 121 communities in North America had moved beyond recycling to composting

Opportunity knocked for recyclers

Opportunity is knocking for composters



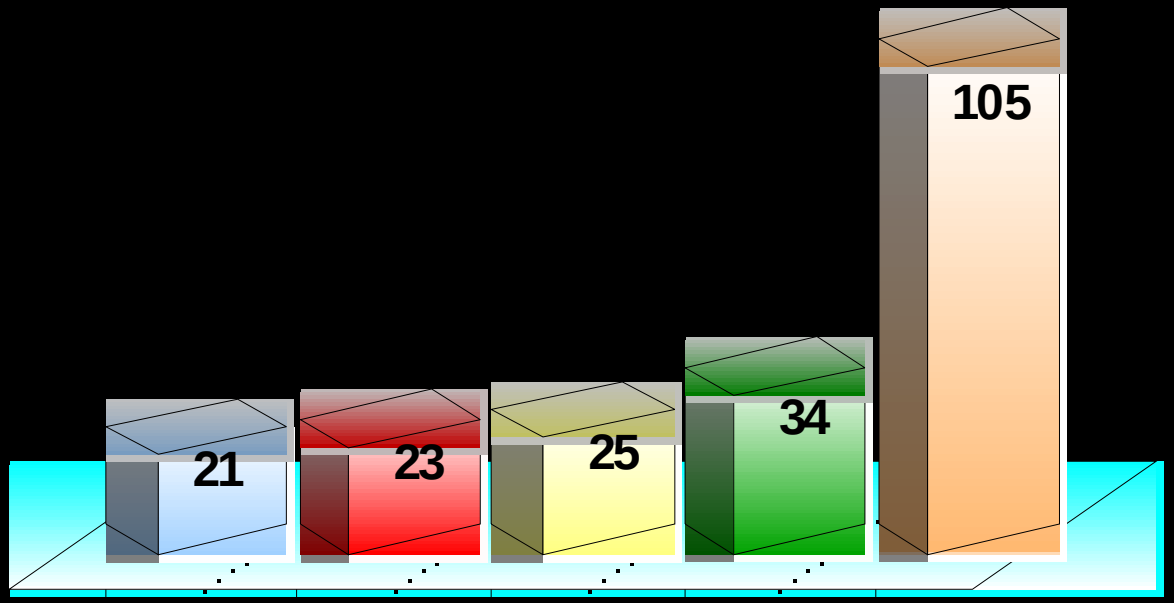
Landfills release more methane than recognized



And the warming impact is much greater

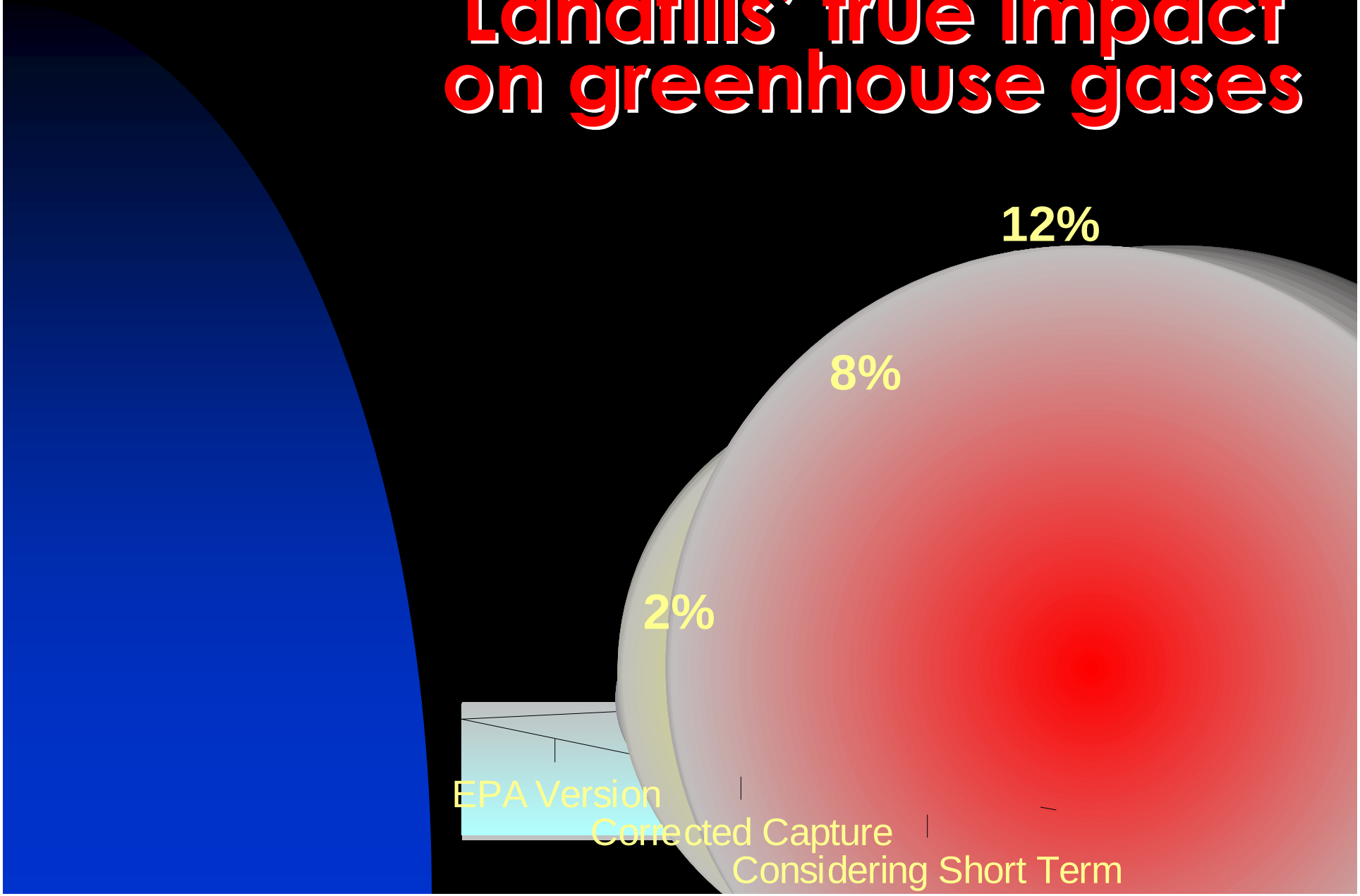
Methane's Hyper Warming Potential

Multiplied Times CO2



4 minute mile in 2 seconds

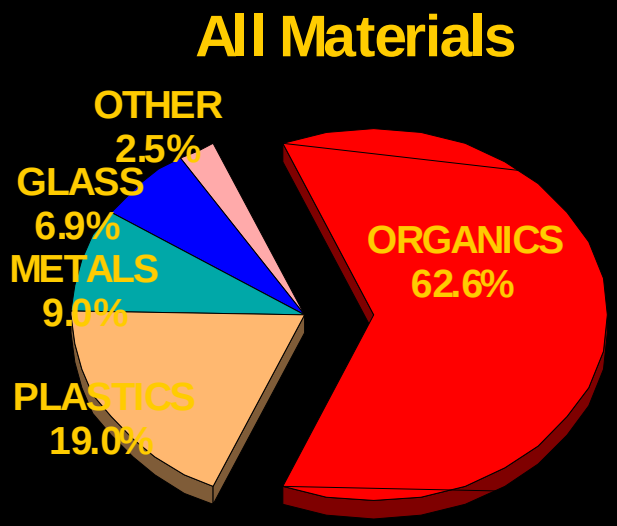
Landfills' true impact on greenhouse gases

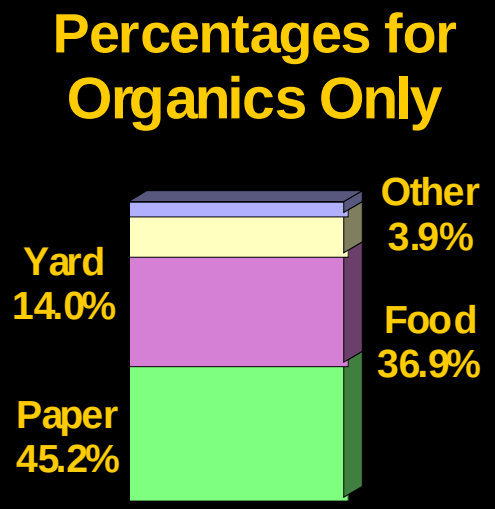


Landfill methane is from rotting organics

Muncipal Solid Waste Composition

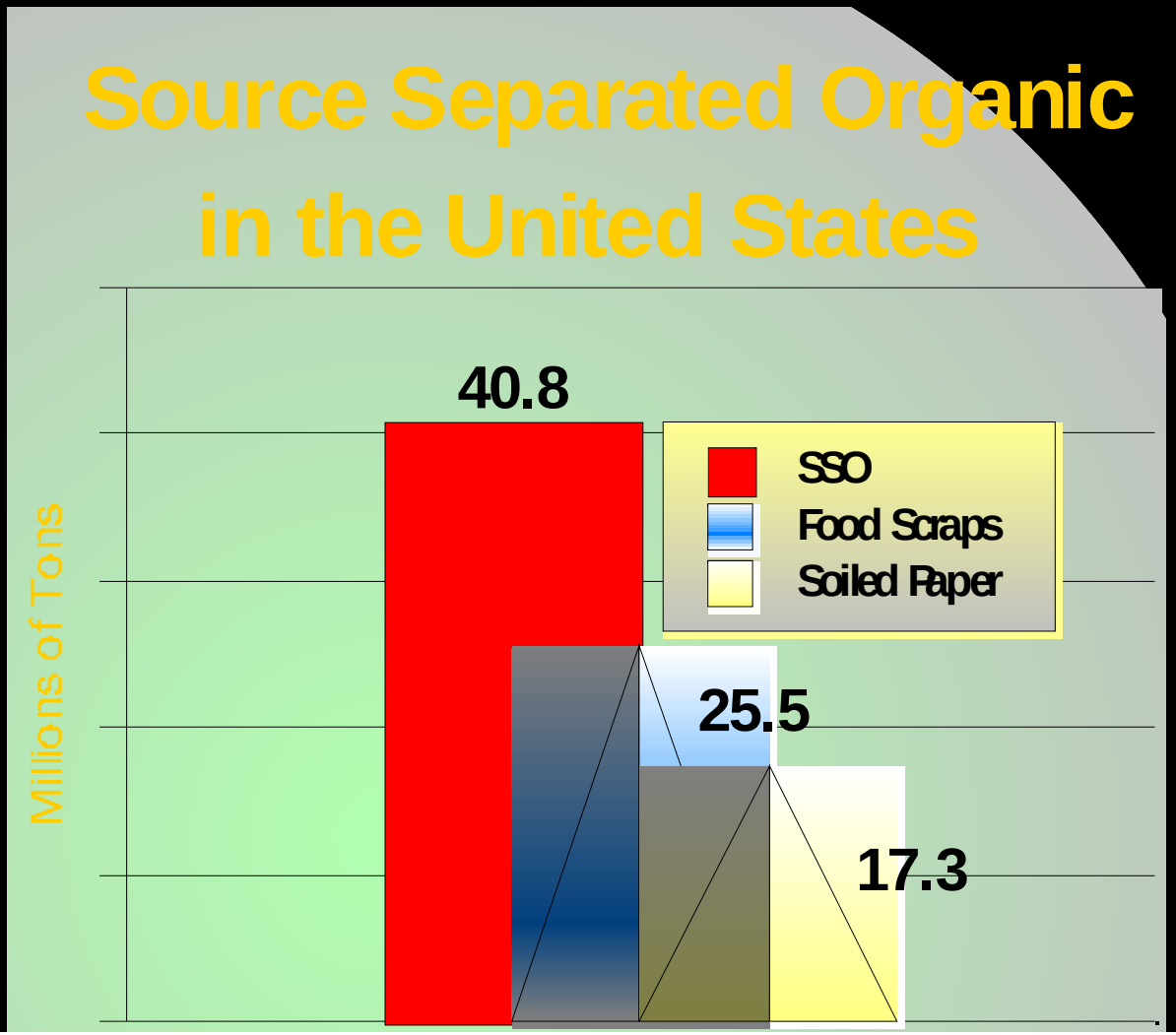
Disposed of in the U.S. After Recycling - 2007





Enormous potential

Source Separated Organic in the United States



Kitchen catcher

Three cart set-out

Split body truck

Collection

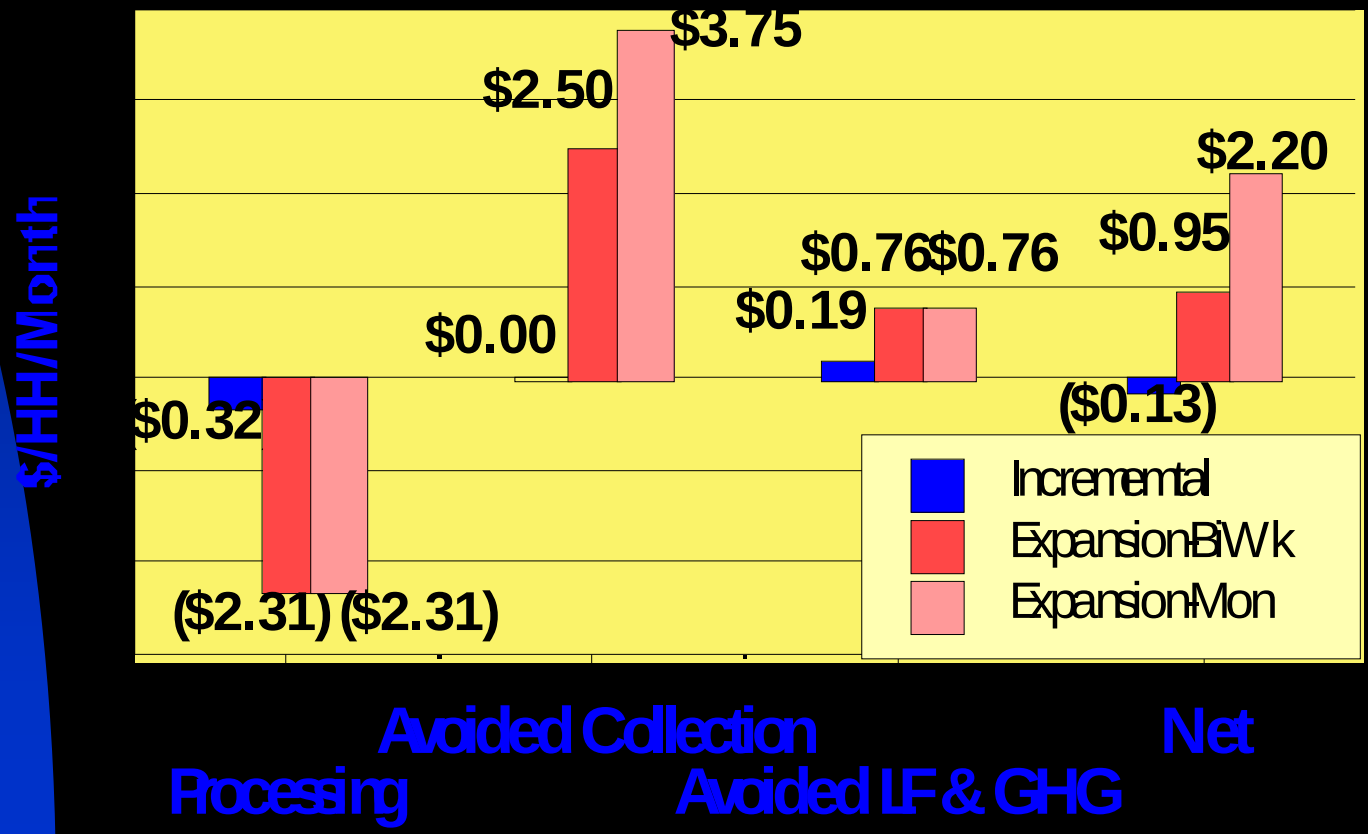
Different Collection Strategies for Separate Collection of Source Separated Organics

	Material Streams			Collection Frequency
I	Wet (Food, soiled paper and other wet contamination)		↔*Dry (Recyclables and rubbish)	Weekly
II	Rubbish	Recyclables	↔ Organics**	Weekly
III	Rubbish			Biweekly
		Recyclables	↔ Organics**	Weekly
IV	Rubbish	↔ Recyclables		Biweekly
			Organics**	Weekly
V	Rubbish	↔ Recyclables	↔ Organics**	Biweekly

Powerful synergies

Net Costs of Diverting Organics from Landfills

(Excluding the costs to collect separated organics)

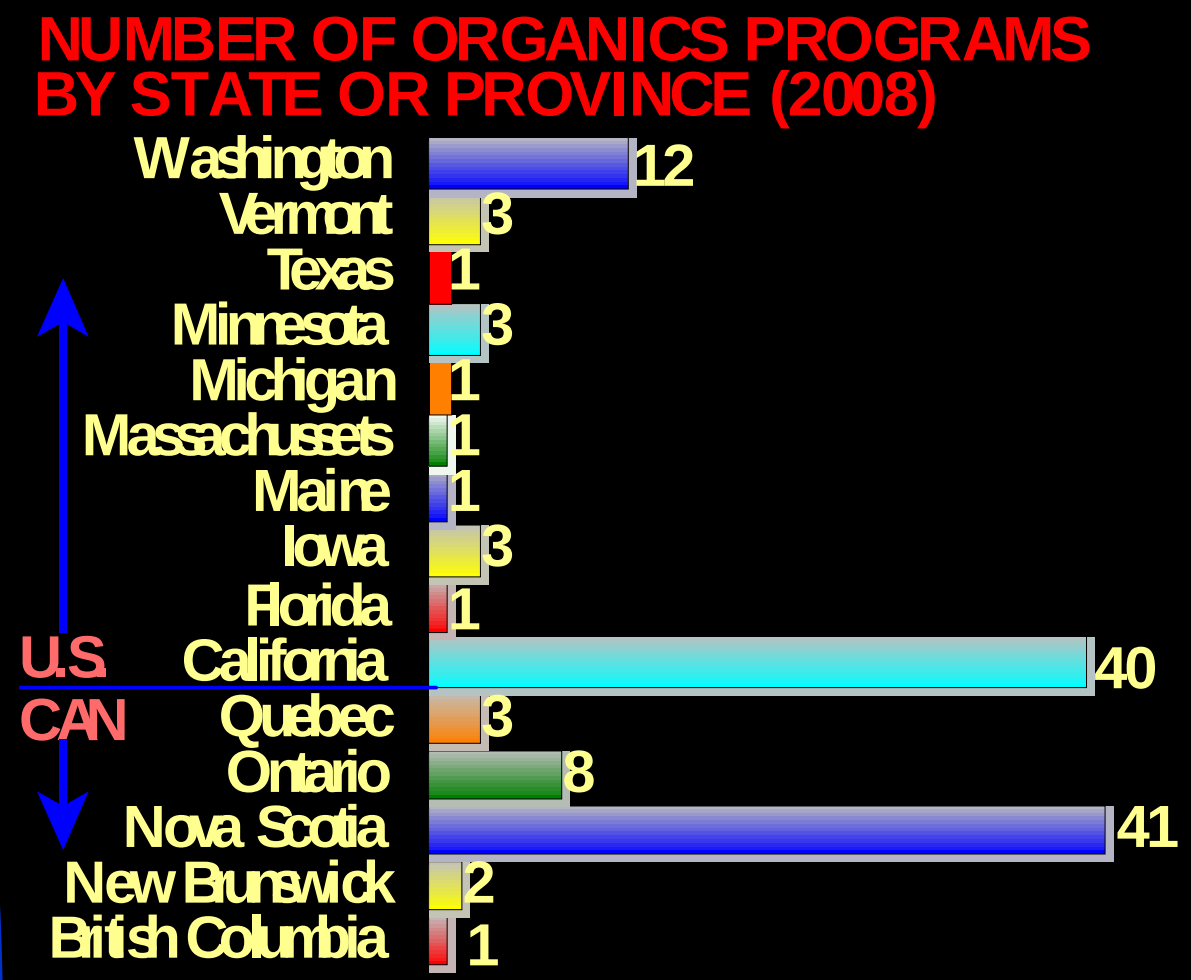


Covered windrows

Processing

MAJOR GROUPS OF ORGANIC PROCESSING SYSTEMS			
	Aerobic		Anaerobic
	Windrows	In-Vessel	Digesters
Types	➢ *Open turned piles* ➢ *Static aerated piles* ➢ *Covered Pod* ➢ *Covered Fabric*	➢ *Shipping container* ➢ *Silo* ➢ *Tunnel* ➢ *Channel* ➢ *Rotating drum*	➢ *Sewage plant digesters* ➢ *Wet digesters* ➢ *Dry digesters digesters*
General Description	Elongated piles of organics, usually yard trimmings and sometimes sludge, laid out on the ground, or on concrete slabs. The piles can be either open or covered, and aerated manually with end loaders by turning or with forced aeration through piping.	Organics, more often including food scraps and soiled paper, are placed in either shipping containers, in rotating drums, or, in an enclosed building, in tunnels or channels where forced aeration or moving paddles are used to bring oxygen to the material.	The part of the organics primarily consisting of food scraps and soiled paper are first placed in an enclosed anaerobic digestor to generate methane for energy, and then the remaining digestate is composted using conventional aerobic processes

Cities separating food and soiled paper




Carpe
diem

To read *Beyond Recycling* report

www.beyondrecycling.org/pdf_files/FinalReport.pdf

To exchange information with colleagues

Join on-line forum at beyondrecycling.org

For more information

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