



# GREEN CHILDCARE: MOVING BEYOND A GREEN ENVIRONMENT TO A GREEN FACILITY

Karen Kudrna, Environmental Studies

(Jean Lavigne and Diane Veale-Jones)



**Abstract:** Green childcare currently does not have a standardized definition, and is often portrayed as an emphasis on the health of children. While health is important, being green is more than being healthy; being green means making sustainable choices that try to minimize negative environmental impact. A facility can choose to use green chemicals, to reduce plastic use, reduce the production of waste and implement a green curriculum. Truly green childcare facilities should not only set an example of stewardship with sustainable choices, without having to raise rates; they should also take advantage of their ability to educate the children in their care.

**Methods:** While there are no existing lists of criteria for green facilities, there are two comprehensive lists for a healthy green environment: Oregon's Eco-Healthy Childcare and the Indiana's 5-Star Environmental Recognition. I evaluated those lists, interviewed an employee from each program, and separated out health issues from sustainable practices. I interviewed 8 facilities, 6 certified Eco-Healthy and 2 in St. Cloud. I compared prices of products to be sure that sending a child to a green facility is not only the choice of an affluent parent. I researched chemicals, plastics, waste in the United States, alternatives to disposable diapers, and green early childhood education.

Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2007	2008	2009	
<b>Durable Goods</b> (Detail in Table 12)	11.3%	12.1%	14.4%	14.3%	16.0%	17.7%	18.0%	18.5%	19.2%	
<b>Nondurable Goods</b>										
Newspapers	8.1%	7.9%	7.3%	6.4%	6.1%	5.1%	4.2%	3.5%	3.2%	
Books and Magazines	2.2%	2.0%	2.2%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	
Magazines**				1.4%	0.9%	1.0%	1.0%	0.6%	0.6%	
Office-Type Papers***	1.7%	2.2%	2.6%	3.1%	3.1%	2.6%	2.4%	2.4%	2.2%	
Directories**				0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	
Standard Mail§				1.8%	2.3%	2.3%	2.3%	2.2%	1.9%	
Other Commercial Printing	1.4%	1.8%	2.1%	2.1%	3.0%	2.6%	2.4%	2.0%	1.4%	
Tissue Paper and Towels	1.2%	1.7%	1.5%	1.4%	1.3%	1.4%	1.4%	1.4%	1.4%	
Paper Plates and Cups	0.3%	0.3%	0.4%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%	
Plastic Plates and Cups†			0.1%	0.3%	0.4%	0.4%	0.3%	0.3%	0.4%	
Trash Bags**				0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	
Disposable Diapers	Neq.	0.3%	1.3%	1.3%	1.3%	1.4%	1.5%	1.5%	1.6%	
Other Nonpackaging Paper	3.1%	3.0%	2.8%	1.8%	1.8%	1.8%	1.7%	1.8%	1.8%	
Clothing and Footwear	1.5%	1.3%	1.4%	1.9%	2.7%	3.1%	3.3%	3.5%	3.7%	
Towels, Sheets and Pillowcases**				0.3%	0.3%	0.4%	0.4%	0.5%	0.5%	
Other Miscellaneous Nondurables	0.1%	0.2%	0.9%	1.6%	1.7%	1.7%	1.6%	1.7%	1.6%	
<b>Total Nondurables</b>	19.7%	20.7%	22.7%	25.0%	26.4%	25.2%	24.2%	23.4%	22.0%	
<b>Containers and Packaging</b> (Detail in Table 19)	31.1%	36.0%	34.7%	31.0%	31.3%	30.2%	30.8%	30.2%	29.5%	
<b>Total Product Wastes†</b>	62.0%	68.8%	71.8%	70.3%	73.7%	73.2%	72.9%	72.1%	70.6%	
<b>Other Wastes</b>	38.0%	31.2%	28.2%	29.7%	26.3%	26.8%	27.1%	27.9%	29.4%	
<b>Total MSW Generated - %</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Municipal Solid Waste in the US, 1960-2000

**Waste:** Water used for washing can be easily cleaned and reused, and energy can be created from renewable sources. Land use for solid waste disposal is not easily reclaimed.

**Plastics:** Some forms of plastic are estimated to take decades to centuries to degrade. Polyvinyl chloride, classified by the EPA as a human carcinogen, is found in many plastics.

**Case Studies:** The two Kinderberry Hill Child Development Centers I interviewed have a recycling program. The children get "excited and conscientious", as director Anne Roy said; parents reported children were pulling items out of the trash and telling their parents to recycle. Tooterville Childcare uses a variety of green cleaning products; the director says prices are comparable to traditional cleaners. New Horizon Academy in St. Cloud has wooden puzzles, shelves, tables, chairs, cars, and trucks. Lil Newton's Nest is switching to cloth diapers.



Cloth Diapers



Wooden Play Kitchen



LakeShore® I Can Recycle! Toolbox

**Household Chemicals:** Many household chemicals are down-the-drain chemicals; they end up in aquatic environments where they negatively affect biota.

**Conclusions:** A green facility should reduce waste produced by considering the use of reusable cloth diapers. It should use alternatives to plastic toys when economically feasible, check regularly for newer and better green chemicals while verifying that the chemical it is currently using has not been discredited. Finally, a green curriculum is necessary for a green facility.

**Education:** Children are able to pick up on new concepts easily, and repetition enforces lessons. Children will remember green lessons outside of the facility, and share them with their friends and family.