# What Makes BigToys Green?

**B** y far the most frequent question that our customers ask us is, "What makes BigToys green?" This is an important question that we gladly embrace. Many of our customers have questions concerning how to evaluate the environmental impact of their playground projects. This has become increasingly difficult as more playground manufacturers rush to establish their green credentials. This guide is intended to help our customers make the most informed decision possible.



### Why does BigToys make such a big deal out of environmental issues?



At BigToys, we see a direct connection between caring for children and caring for the environment. Building commercial playground equipment that nurtures children is only half the story. Respecting the environment that our children play in and will one day inherit is equally important.

# How does BigToys use recycled material?

BigToys' steel and plastic structural system contains one of the highest percentages of

recycled content available in playground equipment today. For example, our steel uprights contain on average 78% U.S. made recycled material, and we use 100% post-consumer high density polyethylene plastic in our decks, roofs, and enclosures, which helps keep over 1.5 million milk jugs out of landfills each year!



#### Are BigToys recyclable?

Yes. BigToys equipment is completely recyclable, which allows us to make a Cradle-to-Cradle promise; when your BigToy finally reaches the end of its long life, we'll take it back and recycle it.

# Can BigToys help me earn LEED points?

Yes. BigToys is proud to be a member of the US Green Building Council (USGBC), the organization behind LEED. If you are considering seeking LEED certification for your project, BigToys may

indeed be able to help you earn valuable LEED credits with our equipment's high recycled content combined with other factors. Remember, only projects can be certified, not products or companies. While manufacturers can provide information to help you with project certification, no manufacturer can issue LEED credits. Things to keep in mind when considering LEED certification include: recycled content, low emitting materials, the distance materials travel to your site, bicycle storage, and innovative design. There are many other ways to

potentially earn LEED credits. Learn more at <a href="https://www.usgbc.org">www.usgbc.org</a>, or contact your local BigToys sales representative.



## How do you calculate recycled content?

We follow the US Green Building Council's method for calculating recycled content. The weight of each component in a structure is multiplied by its particular recycled content. When these "recycled weights" are added up, we then compare the total recycled weight to the total weight of the finished structure to determine the recycled percentage. Understanding precisely how different manufacturers arrive at recycled content figures will help ensure you're comparing apples to apples. About half of all BigToys sold each year are custom designs resulting from collaboration with our customers. We will happily calculate the recycled content for any structure, custom or standard, at your request.

Here's an example of a typical BigToys structure, the Hamlet (MEC-735):





#### Are BigToys wood conditioners safe?

Yes. BigToys' wood structures are conditioned with copper azole (a water-based wood



preservative comprised of 96% copper and 4% azole) which prevents fungal decay and insect attack. Our conditioning process provides lasting durability, releases no air pollutants or wastewater, and uses recycled materials. Furthermore, our wood conditioner contains no heavy metals, is arsenate-free, won't leach out, won't dissolve, won't stain, and won't pollute.

#### Are BigToys wood structures sustainably harvested?

Trees are a sustainable resource that BigToys has helped manage for nearly four decades. All wood products used in our playground equipment come from Forest Stewardship Councilcertified producers. Learn more about the FSC at <a href="https://www.fscus.org">www.fscus.org</a>.

#### Do BigToys contain PVC?

No. Many people are concerned about the leaching of PVC softeners, known as phthalates, into the surrounding environment. Given the known risks, and also the uncertainty surrounding phthalates and so-called "California Compliant" PVC, BigToys opted to take the simplest possible approach; our playground equipment contains no PVC. We believe the real issue is about more than phthalates. PVC is a material that presents health risks throughout its life cycle, including manufacturing, use, and disposal Plasticized PVC is found on many playground structures and poses its greatest potential hazard to children in this form when burned as a result of vandalism. The burning of PVC coated components on commercial playground equipment can result in a hazardous concentration of toxic PCB's and carcinogenic dioxin residue left behind on your playground<sup>2</sup>.

1: Healthy Building Network 2: Independent testing via Southwest Research Institute

## How does BigToys minimize its carbon footprint?

BigToys is proud to participate in the **Puget Sound Energy Green Power Program**, one of the top



10 Green Power Programs in the country. We converted to wind power in 2008 as part of our ongoing commitment to reducing our environmental impact wherever and whenever possible. We minimize our carbon footprint in many other ways, including the near elimination of manufacturing waste in our factory and our choice of high-recycled content materials. We'll continue to find ways to reduce our footprint as new materials, energy sources, and manufacturing technologies become available.



#### What other environmental criteria should I consider?

**Durability**: The longer your playground lasts, the lower the environmental impact. Based on decisions we've made, such as priming all metal parts prior to powder coating and using solid recycled plastics instead of less durable composite recycled materials, BigToys offers a 50 year warranty on our steel and recycled plastic structures.

**Packaging**: BigToys minimizes unnecessary packaging material, and what we do use is nearly 100% recyclable.

**Manufacturing Practices**: While there are a variety of certifications available to manufacturers, it's also useful to look at energy consumption, materials used, and waste creation and handling. BigToys buys wind power for our factory. We use the highest recycled percentage material available, and all of our wood is certified sustainably harvested. We recycle nearly 100% of our already meager waste, and we require no on site water treatment or processing. We make our catalogs and brochures available online to minimize printing, and what we do print is on FSC certified, locally produced, 100% recycled paper.

**Avoid Harmful Materials**: Consider not only the harmful materials that might be present on your playground, but also the harmful materials used and disposed of during manufacturing. Forward looking manufacturers like BigToys have drastically reduced or completely eliminated harmful materials from our products and practices.



# **Glossary of Terms**

#### **Wood Conditioning**

Wood conditioning is a process of chemically treating wood under pressure. Conditioned wood lasts more than 5 times longer than unconditioned wood. Longer life means using less of our precious natural resources while further protecting your investment.

#### **Sustainability**

Building sustainably means minimizing resource use during construction and throughout the life of a product. It also minimizes potentially negative health effects from materials, manufacturing, maintenance, and eventual disposal or recycling. It means leaving the world a better place for future generations to enjoy.

#### Recycled vs. Recyclable

Recycled means that the material would have been disposed of if it had not been re-purposed. Recycled material can be pre-consumer or post-consumer. Pre-consumer recycled content typically refers to material that is the by-product of a manufacturing process. By recycling nearly all of our scrap material, BigToys creates nearly no manufacturing waste. Post-consumer refers to material that has been used by consumers, such as milk jugs. Recyclable simply means when a product wears out, it can be returned to the manufacturing process and used yet again.

#### **Polyvinyl Chloride (PVC)**

PVC is one of the most widely used plastics in the world. It can be made softer and more flexible with the addition of plasticizers, the most widely-used being phthalates. Much controversy surrounds both PVC and phthalates, which is why BigToys contain no PVC.

#### **USGBC** and **LEED**

The U.S. Green Building Council (USGBC) is a non-profit community of leaders working to make green buildings available to everyone within a generation. Their Leadership in Energy and Environmental Design (LEED) initiative is an internationally recognized certification system that measures how well a building or community performs across a variety of metrics. <a href="https://www.usgbc.org">http://www.usgbc.org</a>

#### **FSC**

The Forest Stewardship Council (FSC) is a stakeholder-owned system for promoting responsible management of the world's forests. http://www.fscus.org

#### **Carbon Footprint**

Carbon footprint is the total set of greenhouse gas emissions (primarily carbon dioxide) associated with manufacturing activities.

