

Environment Friendly Material

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ABSTRACT

Eco-friendly literally means earth-friendly or not harmful to the environment. This term most commonly refers to products that contribute to green living or practices that help conserve resources like water and energy. Eco-friendly products also prevent contributions to air, water and land pollution. Plastic, the boon of the mid 20th century, is proving to be the bane of 21st century. Plastic may be light weight, low cost and water proof, but it is ecological and waste management nightmare. It takes only 2-3 weeks for a banana peel to breakdown in the soil, but at least 100-1000 years for a shopping bag to do so. Plastic not only causes waste management problems but also ecological disasters. It is reported that, every year, plastic bags kill about 100, 000 whales, sea turtles and other marine animals, often by choking them. Plastic bags resemble edible squid and jellyfish. Polyethylene terephthalate (PET) which is used to replace glass for containers because it is strong, cheap, unbreakable and light weight also does not degrade and accumulates in the environment. Plastics and its relative are not friends to the environment, and there use must be reduced drastically, if not banned totally. Instead, the use of environment friendly products should be encouraged in the process of responsible environment management. From plastic bags and bottles to forest-guzzling paper mills, everyday products are wreaking havoc on our environment in more ways than we'd care to count. Fortunately, people are becoming increasingly aware of this. The necessity for sustainable and earth-friendly materials is becoming increasingly evident, and consumer demands for "eco" products are rising as a result. Nowadays, eco-friendly products are being made from a vast array of materials. Some of these materials are all-natural, some are organic, and others are environmentally friendly by means of production. A list of eco-materials is as follows: Bamboo, Jute, Hemp, Reclaimed Materials, Organic Cotton, Recycled Cardboard, Cork, Recycled Plastic, and Recycled Glass.

Keyword: Reclaimed material, organic cotton, recycled cardboard, recycled glass, etc.

1. INTRODUCTION

From plastic bags and bottles to forest-guzzling paper mills, everyday products are wreaking havoc on our environment in more ways than we'd care to count. Fortunately, people are becoming increasingly aware of this. The necessity for sustainable and earth-friendly materials is becoming

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2. ENVIRONMENT FRIENDLY MATERIALS

2.1 BAMBOO

Bamboo has existed as an alternative material for millennia. This amazingly strong and versatile plant is a naturally eco-friendly resource. It requires no pesticides or herbicides, and relies on natural rainfall for irrigation. Cultivating bamboo requires no pesticides, herbicides or irrigation, and instead relies on natural rainfall. Just like the lawn in your backyard, bamboo has a self-replenishing growth cycle, so no need for replanting activities that result in soil erosion or damage to the surrounding environment. Furthermore, bamboo produces up to 35% more oxygen than trees, thus helping to offset carbon-dioxide emissions. It's easy to see why bamboo is a favorite when it comes to sustainable materials. From bathrooms and bedrooms to buildings and boats, the possibilities are endless. Here are some of the best products that bamboo has to offer.

2.1.1 Skateboards: Bamboo Skateboards are an eco-friendly skate company committed to environmental sustainability. Their Striped Locker Long boards, Blank Decks and Pintail Decks are made using bamboo from managed plantations, and sustainably sourced hard-rock maple. So you don't have to compromise on quality to ride with a free conscience.

2.1.2 Bamboo Bottle: Plastic bottles are a major environmental problem. Made from sustainable bamboo and recyclable glass, the bottles are BPA-free, so you can wash and reuse without worry. Although the cap and bottom are made from plastic, it is both BPA free and recyclable, making it significantly more environmentally friendly than conventional plastic bottles.

2.2 RECLAIMED MATERIALS

What are reclaimed materials? Just Wood, paper, plastic, metal, rubber- *anything*, really- that has been reclaimed and re-purposed fits the bill. The reason reclaimed materials are so environmentally friendly is that they reduce our dependence on precious natural resources, and help keep waste out of landfills. Deforestation for paper and wood production, carbon emissions produced by plastic manufacturing and soil pollution from pesticides used to grow conventional cotton; these are but a handful of the problems we contribute to on a daily basis. And that's *before* anything ends up in the trash or landfills. As these incredible everyday items demonstrate, *re-using* the old to *make* something new is the way of the future; a way that's not only environmentally friendly, but creatively inspiring as well.

2.2.1 Green Toys: Green Toys are the perfect choice when purchasing play-things for kids. Made entirely from recycled plastic milk bottles, their extensive range includes vehicles, outdoor toys, indoor gardening kits and even an all-vegan salad set.

2.2.2 Doormats: Another irresistibly quirky reclaimed material offering comes in the form of a doormat. Flip-flop doormats make use of the scraps leftover from rubber sandal manufacturing-yet another great example of people breathing new life into materials that would otherwise be destined for landfills! They're handmade and water-resistant- the perfect place on which to clean your cruelty-free shoes.

2.3 *ORGANIC COTTON*

Conventional cotton is grown and produced with enormous amounts of chemicals; posing a threat to the health of people and the environment at every stage of production. Fortunately, organic cotton is becoming more popular as manufacturers and consumers seek safe, natural options for everyday items such as clothing, bedding, towels and toys. Cotton is generally perceived as being a fairly natural product. Fortunately, many farmers, producers and companies are working to address the problems associated with conventional cotton production. Organic Cotton has become increasingly popular in recent years, as consumers are becoming aware of its advantages, which include:

- No use of chemical pesticides, herbicides or fertilizers
- Manual and organic farming practices that include soil fertility management, hand weeding, and crop rotation- improving the soil, the health of workers, and the local environment
- Formaldehyde and heavy-metal free, so no nasty chemical residues
- A great fabric for those with skin allergies and sensitivities, due to lack of chemical irritation.

2.3.1 Towels: People towels are an eco-friendly alternative to single-use paper towels, aimed at reducing the 3000 tons of paper towel wastes that is produced *every day* in the US alone. All towels are made from 100% certified organic, fair-trade cotton that is absorbent and light-weight, allowing it to dry quickly.

2.3.2. Bedding: If you're lucky enough to be getting a good night's sleep, then you're probably in contact with your bedding for 7-10 hours every single night. That's a pretty significant amount of time, and you might want to seriously consider spending it in organic cotton.

2.4 CORK

Cork is an amazingly unique, eco-friendly, naturally sustainable material that has many uses *outside* the wine bottle. Cork comes from the outer bark of cork oak trees, making it a renewable resource that can be harvested without causing damage to the tree itself. Cork tree forests are carefully monitored by both the forest owners and environmental authorities to protect their health, and the trees themselves contribute to soil fertility and local biodiversity. Once produced, cork and its products are also easily recyclable and bio-degradable. It is naturally buoyant, flexible, water-resistant, flame-retardant, thermally insulating and highly durable.

2.4.1 Sole “Casual” Flip Flops: Cork is a great choice for footwear- it’s naturally water-repellent, resistant to mildew, and hypo-allergenic. SOLE have made the most of these natural benefits in their Casual men’s and Casual women’s flip-flops. These vegan sandals have a cork midsole, and a cork-wrapped foot bed, which will mold to your feet for added comfort and support. The straps are a mixture of hemp and recycled polyester, making them SOLE’s “most sustainable” sandal.

2.4.2 Sprout Cork Watch: This **eco-friendly unisex watch** from Sprout features a cork face and band, giving it a natural look and feel. But it’s not just aesthetics that Sprout is concerned about- it’s also the environment. The case and clip are made from biodegradable corn resin, the lenses from recyclable mineral crystal, and their batteries are mercury free.

2.5 RECYCLED CARDBOARD

Paper production contributes significantly to deforestation, as well as air, water and land pollution. Recycling cardboard is a simple and effective way to reduce the amount that ends up in landfills, and reduce the amount of trees used in paper manufacturing. In addition to reusing and re-purposing cardboard, you can help by *always* recycling what's left over. The best way to recycle cardboard is to re-use or re-purpose it.

2.5.1 Fold and play recycled Speakers: These are another product aimed at reducing the environmental impact of electronic goods. These portable speakers are able to be flat-packed for easy transportation, thanks to a foldable casing that’s made from 100% recycled (and recyclable) cardboard. They require no batteries or external power, and are compatible with any device that has a standard headphone input.

2.5.2 The Dutch Design Chair: The Dutch design chair is an innovative and sustainable piece of furniture that’s made from 85% recycled paper. Each chair, just like the packaging it comes in, is completely recyclable. Their range of designs come flat packed, are easy to assemble, and can also be used as coffee tables, foot rests or even gift boxes!

2.6 JUTE

Jute is one of the world's most natural (and most underappreciated) eco-friendly materials. Long fibers are harvested from the skin and stem of the plant before being spun into threads for practical use; the most common of which are burlap and hessian cloth. A highly durable and inexpensive material, jute also boasts several environmental benefits. It requires few to know pesticides and herbicides to grow, absorbs high levels of carbon dioxide, and is both recyclable and biodegradable. In addition to being highly durable and inexpensive, jute is considered an environmentally friendly material, for several reasons:

- Jute reaches maturation in as little as 4-6 months, making it a highly efficient source of renewable materials
- It grows in tropical areas, relying on natural rainfall rather than extensive irrigation systems
- Jute cultivation enhances soil fertility for future crops
- It absorbs carbon dioxide and releases oxygen at a rate several times higher than trees
- Jute is completely biodegradable and recyclable.

2.6.1 Jute Yoga Mats: These non-slip jute yoga mats from Hugger Mugger are naturally breathable and lightweight, making them easy to transport. In addition to offering soft, cushiony support, these mats are recyclable, renewable and biodegradable. Jute's natural absorption properties make the "Sattva" mat an especially good option for fans of Hot Yoga.

2.6.2 Jute Bags: Jute is a great choice for bags- its sturdy, breathable, and lightweight. These jute drawstring bags are reusable, recyclable and multi-functional. Perfect for storing produce and coffee beans, they also make excellent eco-friendly gift bags for all your eco-friendly gifts.

2.7 RECYCLED PLASTIC

Recycling plastic helps to address this pre-established waste problem. It also requires less energy and fewer natural resources than making plastic from raw materials. Plus, it's incredibly versatile. Recycled plastic is not perfect, however, as it still requires significant amounts of water and energy for production, when compared to other resources. There is also concern that the perception of plastic as being easily recyclable will further add to the problem, as consumers feel comfortable using more, but do not dispose of products in the correct manner. Despite these disadvantages, recycled plastic has great potential as an eco-friendly resource. It helps to address a massive pre-existing waste problem, is extremely versatile, and can be infinitely recycled. Instead of contributing to the contamination of oceans and the expansion of landfills, dispose of your plastics carefully, and allow them to be transformed into fantastic eco-friendly products like these.

2.7.1 Dog Beds: Keep your companion comfy in an eco-friendly Bumper Bed from West Paw. These dog beds are cushioned with a super-soft fiber filling that is made entirely from recycled plastic bottles.

2.7.2 Disposable Paper Cups: It's no surprise that disposable paper cups pose a huge environmental problem, as tens of billions are used each year in the US alone. Made from recycled polypropylene, they're microwave and dishwasher safe, BPA-free, and 100% recyclable.

2.8 RECYCLED GLASS

With so many new and innovative "green" products on the market, it can be easy to overlook the simple things, like glass. Recycling glass is a great way to keep waste out of landfills, conserve natural resources, and reduce the amount of energy that is used in the glass manufacturing process. As well as being environmentally advantageous, recycled glass is an inert material that is both food-safe and impermeable. Recycling glass is a great way to keep waste out of landfills, help conserve natural resources, and reduce the amount of energy that is used in the glass manufacturing process. One of the biggest advantages of glass is that it can be continually and indefinitely recycled, without compromising strength or quality (unlike paper or plastic, which start to degrade). As well as being environmentally advantageous, recycled glass is an inert material that is both food-safe and impermeable.

2.8.1 Paddywax Candles: Paddywax Candles' "Eco" series features a selection of soy-wax candles that are housed in jars made from recycled wine bottles. Available in a range of delicious natural fragrance combinations

2.8.2 Mosaic Tiles: Recycled glass is a fantastic sustainable option for kitchen and bathroom tiling. Vidrepur manufacture their mosaic tiles from 99% recycled material, and they're available in a variety of colours to suit your decor. These tiles are naturally resistant to stains, mold and mildew, are easy to clean, and are suitable for both outdoor and indoor use.

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