

Tree free sugar cane versus Wood pulp/recycled fibers

Sugar cane paper is environmentally superior to virgin AND recycled paper but indistinguishable. In fact it's actually better because it is produced primarily from sugar cane fiber instead of wood fiber. Bagasse Sugar Paper is made from sugar cane waste, (otherwise known as "bagasse"), instead of trees making it 100% biodegradable and recyclable. Even the manufacturing process is sustainable and eco-friendly.

Why Is Sugarcane Used to Make Paper?

By Timothea Xi, eHow Contributor

The reasons for making sugarcane paper are manifold.

With staggering statistics like 900 million trees that are cut down annually to supply U.S. paper mills and 67 million tons of paper used by Americans each year, alternatives to wood-based paper offer a reprieve to the forests. While recycling paper is one way to mitigate the use of trees, another solution uses no trees at all: sugarcane-fiber paper is made from bagasse, or the husk of the cane left over after being processed for sugar.

1. It Doesn't Use Up Trees
 - Sugarcane paper takes an existing waste product, bagasse, and converts it into usable products. In addition to making paper from bagasse, manufacturers can also make compostable tableware, tissues and napkins from the same fiber. The sugarcane paper can be used like regular paper for making napkins, for example. You can also recycle sugarcane paper and include it in the recycling stream along with ordinary paper.
2. Sugarcane Fiber Would Otherwise Contribute to Air Pollution
 - One way to get rid of sugar cane fiber after sugar processing is to burn it. However, this abets air pollution and increases greenhouse gas emissions. Rather than using the bagasse in a way that harms the environment, the fiber can be redirected to be processed into paper. The bagasse is pulped and bleached without using chlorine; finally, the material is woven to create paper.
3. Producing Sugarcane Paper Uses Less Energy
 - The energy required to make sugarcane paper is less than that needed for traditional wood-pulp paper making. Sugarcane husks, as a byproduct and agricultural waste product, are available in abundance and are not harvested for paper from virgin plants, unlike trees intended for paper. Fewer intermediate steps to creating paper makes

sugarcane more streamlined and less fuel-intensive than its wood-based counterpart.

4. Sugarcane Paper Biodegrades Faster than Regular Paper
 - From an archival standpoint, users of paper want their paper goods to withstand the elements and last a long time. From an environmental vantage point, however, something that does not hasten towards decomposition is not as eco-friendly. Sugarcane bagasse biodegrades faster than does regular paper, which can be advantageous or less so, depending on what you require of your paper.

Read more: [Why Is Sugarcane Used to Make Paper? | eHow.com](http://www.why.com/info_10048827_sugarcane-used-make-paper.html#ixzz2RmcUhL6d)
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Most paper is made from wood. Even if you use “recycled” paper, which is a huge improvement, the process starts with cutting down a tree. We now use Bagasse paper for our napkins. For most people, this is a completely new word. Bagasse, pronounced “Buh-Gas”, is essentially what remains after the sugarcane plant is drained of its juice. This left over pulp or fiber has outstanding and very useful qualities: It grows almost like a weed. Fast growing in a thick mono-culture setting, it can be grown yearly with little wear and tear on the earth and soil. It doesn’t need heavy fertilizers, nor does it demand much more than rainwater to grow. As sugarcane grows in the tropics, rain and sun is plentiful. It grows very quickly and costs very little. Most importantly, the fiber or pulp that is often just thrown away has great uses. This fiber can be used to make paper, spoons, forks, plates and boxes, thus minimizing the demand for plastic. Best of all, these products can be made with little energy, no chlorine or other toxic chemicals. Bagasse is truly revolutionary and we are now using it in many of our newest products – like our One Nap. We are always trying to reduce our ecological footprint and Bagasse is a great way to do so.

Selecting products made from recycled fibers reduces the need for virgin wood pulp, which means more trees are left standing. The principal raw material used for manufacturing paper pulp is wood. However, growing demand in the paper industry, at a time of dwindling forest resources, has compelled manufacturers to turn to other sources of raw materials, such as cereal straw, reeds, bamboo or sugar cane bagasse.

Deforestation Drives Search for Alternatives

For centuries paper was a rare and precious commodity handmade mostly from linen and cotton rags. Today, it is a fundamental part of life and its existence is taken for granted. Each year the world produces and consumes more than 300 million tons of paper.

For every ton produced, two to four tons of trees are brought to the mill! This is of critical concern because forests are being destroyed at an unsustainable pace. Deforestation accounts for 20 percent of all greenhouse gas emissions worldwide, exceeding even the global transportation sector.

Our consumption is wasteful. According to [World Watch](#) magazine, the equivalent of almost 270,000 trees is either flushed or dumped in landfills EVERY DAY worldwide. Today, tree made paper accounts for over 90 percent of the world's production. Fortunately, alternatives are available. Around 5 to 10 percent of the global production is produced from agricultural crops. Second only to electricity cogeneration, paper production is the second-largest revenue stream from sugar cane bagasse.

How we use Sugar Cane to make napkins

Sugar cane bagasse is one of the most environmentally friendly, sustainable, renewable resources suitable for high quality paper making. Sugar cane waste, known as bagasse, is like our lawn clippings. It is a recycled fiber made from the residues of an annual agricultural crop byproduct, thus has no impact on our forests. It is fully recyclable, compostable as well as biodegradable.

The paper industry absorbs 10 percent of the world's bagasse production. This material offers several advantages: rapid growth of the sugar cane plant, widespread cultivation, fewer pesticides for growing sugar cane, as well as lower energy and bleaching chemical requirements for bagasse refining than for the manufacture tree based products. Such a process is also a convenient means of usefully clearing this voluminous sugar refinery waste product: indeed, one ton of refined sugar results in two tons of bagasse.

Manufacturing Sustainable Napkins

Sugar cane is grown and used extensively around the world. When the sugar cane is mature, the stalks are harvested and sent to a sugar mill at which time the sugar is extracted from the fiber. The sugar is then used for human consumption and the fibrous residue or pulp remains after the stalks are crushed for extraction of juice. This pulp is then available as a biofuel or as a renewable resource in the manufacture of paper. The high moisture content of bagasse, typically 40 to 50 percent, is detrimental to its use as a fuel. For paper production, however, it is normally stored wet in order to assist in removal of the short pith fibers, which impede the papermaking process, as well as to remove any remaining sugar. Using sugar cane bagasse in products such as napkins, reclaims the large volume of agricultural waste material and prevents additional environmental harm from the polluting greenhouse gases created during bagasse's historical disposal method of burning.

Sugar Cane Bagasse vs. Wood Pulp – Ten Points

As the sugar cane fiber is grown primarily for sugar and the fiber is retrieved (rather than disposed of) sugar cane bagasse pulp products are preferable to wood pulp products.

- As an alternative fiber, products are produced from a non-forest resource.
- Crops are renewed in less than a year for sugar consumption ensuring a nearly endless supply of renewable resources.
- Using agricultural crops rather than wood has the advantage of reducing deforestation, as forests are often burned to allow for the production of agriculture.
- Sugar cane bagasse helps to leave forests intact which preserves the environment for indigenous flora and fauna ecosystems and reduces global warming.

- While tree farms create an ongoing supply of virgin pulp and fiber, it takes more time to reach maturity which consumes tremendous amounts of chemical pesticides and fertilizers and soaks up large quantities of water.
- End product exceeds environmental parameters set forth by [Forest Stewardship Council](#) (FSC), [Sustainable Forestry Initiative](#) (SFI) and other prominent forest management organizations.
- Wood pulp based products can only be recycled a limited number of times due to the degradation of the fibers during the recycling process. This issue is already clearly apparent in the carton and packaging industries.
- Due to the ease with which bagasse can be chemically pulped, bagasse requires less bleaching chemicals than wood pulp to achieve a bright, white end product.
- Bagasse requires fewer greenhouse gases to collect compared to harvesting of wood chips since it is already at the factory.
- Paper exceeds Federal and State government environmental mandates.

Did You Know?

- The wood paper mill industry is the third largest polluter in the world
- The world consumes approximately 300 million tons of paper yearly.
- Each ton of paper produced consumes approximately 17 living trees.
- Each living tree produces enough oxygen into the atmosphere to sustain two human lives.
- Only 5% of the world's virgin forests are still intact.
- U.S tree-made paper producers consume 1 billion trees-or 12,430 sq. miles of forest yearly.
- 4 billion trees are cut down each year to satisfy the world's paper needs.
- Recycled paper is not sustainable. Manufacture and use of paper damages the fibers and there is a practical limit to the number of times a fiber can be recycled before it starts to disintegrate. (Back to the landfill)
- Sugar Cane Paper is 100% biodegradable and renews itself annually.
- Decomposing paper in a landfill releases methane gas, which is a potent greenhouse gas (20 times more potent than carbon dioxide).
- Sugar Cane Paper is 100% biodegradable and compostable, relieving some of the stress on our landfills.
- The world consumes 5 times more paper now than in 1950.
- Did we mention that Sugar Cane Paper is compostable?
- Sugar Cane Paper biodegrades faster than tree-made paper.
- Sugar Cane Paper products are microwaveable, without releasing any toxins.
- While paper makes up 40% of garbage in the United States, less than 10% of all solid garbage gets recycled.

Sugar Cane is Consistent with Tarzana's One Nap

Sugar cane bagasse fibers are well suited for disposable paper products, such as napkins, for the food service industry. Sugar cane bagasse based products are not only tree free, they are also recyclable, 100 percent biodegradable and fully compostable. When composting, the end products biodegrade back into the soil without leaving any harmful residues, and all of this from the residue of an annually renewable resource, sugar cane, which is grown for food.

As a consumer you now have a choice about whether to use tree made or tree less paper. Many restaurants, including fast food chains, have changed their packaging and disposable paper goods into biodegradable paper products which are now being made from sugar cane.

Trees are vital to our existence because they convert carbon-dioxide into oxygen. Trees are our shelter. They are home to our animals. They grace our planet with beauty and help support life of all kinds. Although new trees can be planted to replace those lost, the time that it takes for a tree to reach maturity may not be seen in the lifetime of the person who planted it. Why not instead utilize an agricultural by-product, which our Earth already has plenty of, in making products which are meant to be "disposable?"

Overall, we consider Sugarcane as a GREAT alternative to tree-based papers. Remember that 100% recycled paper still started with a tree. It is our belief that trees belong in nature – not paper.