

# Renewable Materials Offer Better Alternatives

The goal of using inputs with renewable content is to cut using resources with high environmental content and these substitutes produced by quick-to-grow plants reduce the dependence on forests and other resources that take decades to regenerate



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Love is 'still' in the air. On the weekend following Valentine's Day, fall in love with renewable material just as you commit to renewed vows of love to your friends and family! While renewing your love for people comes in the form of reiterated promises, nature has her own way to us, so we don't deplete resources that cannot be re-grown quickly.

Materials from plants that are typically harvested within a ten-year cycle are termed 'rapidly renewable'. The goal of using materials with rapidly renewable content is to reduce the use of resources with high environmental value. These materials are usually natural and do not contain any hydrocarbons.

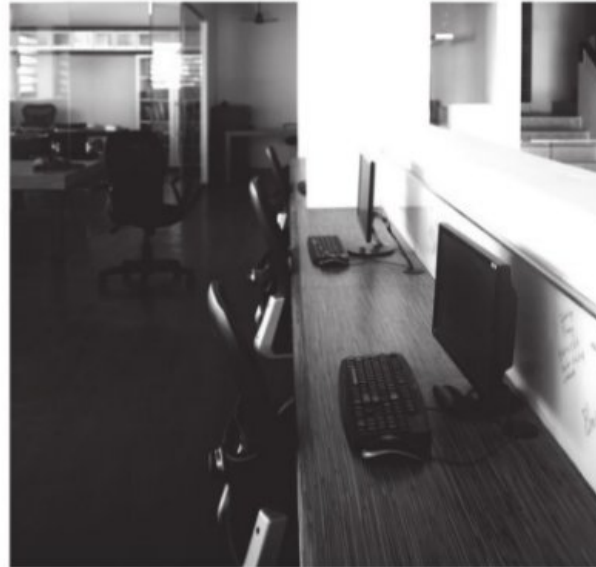
They include agricultural by-products which are fibrous such as bamboo, straw, cork, soy, cotton, sunflowers, hemp, wheat-board, and strawboard. By using materials produced with these quick-to-grow

plant-based products, the harvesting of forests and other resources that take decades to regenerate can be reduced.

Some green building materials are a mix of rapidly renewable inputs with recycled content like newsprint, cotton, soy-based materials and seed husks.

With wood substitutes flooding our markets it is easy for us to stick to those from rapidly renewable sources in order to make a difference. These can be composite agrifiber boards instead of the typical particle boards and MDF that are widely available. Bagasse board is one of my personal favorites!

Modular furniture for large offices, contributes much to the total spend on interior fit-outs in large format offices. The use of plywood or other similar wood substitutes in such large spaces comes as partitions, panels and furniture (desks and filing cabinets) themselves. These can easily be substituted with a bagasse board, which uses



dried bagasse as it comes out as waste from the sugar factories. The boards are made from the fibrous matter that is further processed to remove the water content and compressed into boards in many layers that are glued together with a no-formaldehyde adhesive to maintain the eco-rating of the product.

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We never realise that if our furniture is not eco-friendly, it will release in an enclosed environment carcinogenic formaldehyde from plywood and particle boards.

When materials and products are selected or specified for projects, it is important to consider several environmental factors like waste prevention, recyclability and disposal. Renewable materials don't contrib-

ute to global warming and depletion of natural resources as they are byproducts of other industry. These materials improve indoor-air-quality by cutting out the formaldehyde that standard materials may have.

Rapidly using renewable materials as part of the building's specs offer green rating. The innovative use of these include some accepted animal sources as well — the consideration being that the animal is not harmed or killed to extract the product.

A widely accepted use is that of wool as upholstery, carpet or wall panels.

There are other products too that use recycled whey for paints and wood finishes that are considered rapidly renewable and acceptable to use in a sustainable fashion. Dairy on the walls. Imagine that!

*(The writer is an architect, urban designer, dancer and chief designer at Shilpa architects)*