

Environmental Benefits

How to Weed Out the *Greenwashers*



Topics to Consider

- *Weight of insulation*
- *Size: Smaller packages cost less and use less fuel to deliver*
- *Material fatigue*
- *Performance-Per-Inch*
- *Recyclability*
- *Compostability*
- *Biodegradability*
- *Bio-disintegration*
- *Does it require outer boxes? Tape? Void fill? Plastic liners?*
- *Storage Density: Fewer deliveries means less diesel*
- *Ease of disposal, regardless of intentions to recycle or reuse*
- *Speed of packing and ease of use for packer and recipient*
- *Ability to cushion and protect*

Claiming
"Green, made with
recycled content" may
be deceptive if the
environmental costs of using
recycled content outweigh
the environmental
benefits of using it.

-**Federal Trade
Commission**



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As society becomes more aware of its impact on the environment, it is only natural to expect corporations to embrace the values of sustainability and environmental stewardship. Many new products are marketed as simple ways to satisfy the need to be green. How, as concerned businesses, can we be sure products are better for the environment, remain cost-effective, and actually work?

No one likes using EPS cooler boxes (Styrofoam® is a common misnomer for EPS). They are bulky, cost too much to ship, easy to break, a fire hazard, and bad for the environment. Though marketed as recyclable, it is simply too expensive to support a recycling program and the EPS inevitably ends up in the garbage. But how much better is that new green solution?

Denim (and Jute, Bamboo Rayon, Mushrooms, Cornstarch, etc)

Denim insulation is a recycled product made from cotton textile fibers. Cotton is the world's most pesticide and chemical intensive crop so it is admirable to recycle it for additional use. Unfortunately, manufacturers utilizing denim (or jute, etc.) as an insulator tell you to toss their product in the trash after its use, guilt-free, because of cotton's biodegradability. **FTC prosecutes such claims as unqualified and misleading as landfills are meant to prevent degradation!**

Clearly denim is much better than EPS as a raw material. It can work for thermal shipments, but at **four times the weight!** This means more diesel and jet fuel burned for the same parcel. To support the green narrative, biodegradable plastic must not be an oxygen barrier and does little to control convection. You still need a box, tape, and void fill.

Modern landfills are designed as low-oxygen environments so that the waste *cannot* decay. This environment helps to prevent decomposition which produces harmful greenhouse gases like methane and carbon dioxide, as well as leachate, which pollutes ground water and soil. Much of the organic material in an ancient Roman landfill that was twenty centuries old had not fully decomposed. **50% of all landfill made today is paper that will be mummified for future archeologists.**

Polyester Fiber (PET)

Sourced almost entirely from recycled drink bottles, PET fiber insulation is resilient and **fully curb side recyclable**. It can be provided compressed and custom printed in whatever size you need, always taking up less room in delivery trucks and your valuable storage space.

Recycling is the solution to the green challenges facing shippers today. Utilizing post-consumer recycled PET to manufacture insulation and making it easy to recycle into something else prevents waste, degradable or not, from filling our landfills.

Rockwool

Rockwool insulation is a product made from actual rocks and minerals in a process similar to how cotton candy is spun. It is bio-inert.

Just as with denim, rockwool is a better raw material than EPS. But it is also at least four times the weight of EPS! The panels are not flexible, suffer from material fatigue and require the use of a box, tape, and void fill.

Flexible Polyurethane Foam (FPF)

As a petrochemical based product, polyurethane is not much better than EPS as a raw material. However, it is a highly recycled material (90% of carpet underlayment is recycled FPF, nearly a billion pounds per year) and utilizes soy as a feedstock (less than 20%).

Where other EPS alternatives have environment benefits with hidden trade-offs, FPF products such as our **Kangaroo Mailer** provide the green solution our customers need while reducing costs, improving performance, and increasing efficiency in their shipping operations by as much as 200%.

Kangaroo Mailers ship compressed, reducing the storage requirements over alternatives by 68%-87%. It is the smallest and lightest way to ship your temperature-sensitive items; reducing raw material consumption, material handling, space in delivery trucks and airplanes, while preventing breakage and spoilage better than EPS and all its alternatives.

Don't be fooled by the Greenwashers. Recycling is the *only* way to prevent your green alternatives from ending up mummified in the dump. If you can't pour it down your drain, it is not biodegradable!

please reference <http://www.bpiworld.org/page-190439> for more information