



ECON 101: Healthier Materials Edition

Legislation is *NOT* the Answer

True progress on climate change requires government action, a notion perhaps best summarized by environmentalist Rev. Fred Small, “Changing a light bulb is good. Changing a senator is better.” However, for healthier materials policy is *not* the primary solution, as it is with climate change. Instead, when lawmakers regulate chemicals a common result is that manufacturers turn to regrettable substitutions, rather than identifying healthier chemical alternatives. For example, bisphenol A (BPA), a well-known endocrine disrupter implicated in a variety of human ailments, has been replaced by “BPA-free” labeled substitutes such as bisphenol F (BPF) and bisphenol S (BPS). Yet BPF and BPS, chemically similar to BPA, also demonstrate endocrine disruption characteristics and some studies are beginning to show health effects like those found in BPA.¹

Healthier materials advocates recognize this issue and are pushing for more class-based approaches, but legislative progress remains slow and regulation is thus far ill-suited to keep up with the fast-changing science, both on the development of new chemicals for industry use and on the understanding of the health impacts of chemicals on people and ecological systems. What can we do?

Market Forces Make Progress

One mechanism to increase healthier materials options *does* react quickly: capital market forces. As design and construction professionals, we are the clients of building product manufacturers, specifying and procuring their products. Through our projects’ purchasing power we can send manufacturers market signals that incentivize healthier materials, pushing them to make more green chemistry options available.

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6387873/>



Take plywood. IES is aware of two no-added-formaldehyde plywoods in the US. Both Columbia's PureBond and States Industries' SoyStrong use a soy-based adhesive technology to hold the layers together. If, when buying hardwood plywood, most projects in the US purchased only one of these two no-added-formaldehyde options, then all plywood manufacturers would start selling a no-added-formaldehyde plywood option.

Demand Creates Change

The more projects make design decisions based on product chemistry, the faster manufacturers will get the message. The two critical elements are *volume*, where we make manufacturers see the market demand—and *advocacy*, where we communicate with and educate manufacturers so they understand what we want.

Between 2010 and 2019, coal production in the US dropped by 34%². There are lots of factors that contribute to the decline, but the short of it is that we buy less coal and more natural gas for electricity production. If we buy more Red List free building products, there would be less Red List chemical production.

This is Your Call to Action.

Change some light bulbs! Because every new project is either helping to drive the adoption of healthier materials or it is contributing to the Red List chemical status quo.

² <https://www.eia.gov/coal/annual/>