

Shades of green

We never know the worth of water till the well is dry. ~Thomas Fuller, Gnomologia, 1732

At a time when attentions rightly turn to environmental matters, it is also time to consider that which is so obvious as to be overlooked. To this point, the energy embodied in our existing buildings has largely been excluded when determining the basis for a “green” building. So also have the resultant negative impacts of building anew. But this is beginning to change. Consider the following:

In Palo Alto, for example, the City’s 2006 waste characterization study reveals that almost half of our 78,000 tons of waste is construction and demolition (C&D) materials. Approximately half of that, essentially a quarter of PA’s waste or 19,500 tons, has no potential for recycling or reuse.

Additionally, the energy used in clearing a lot, the transport and recycling of the materials that do not go into landfill, the energy consumed in the manufacture and transport of new materials used in the replacement structures.....all these actions create significant new carbon impacts. And concrete, as one of the most noxious building materials due to its high carbon output during manufacture, adds as much as one ton of carbon dioxide to the atmosphere for every ton produced.

*So bleak is the picture... that the bulldozer and not the atomic bomb may turn out to be the most destructive invention of the 20th century.
~Philip Shabecoff, New York Times Magazine, 4 June 1978*

The wood, glass, concrete, metal, concrete, roofing materials, stucco, sheetrock, plaster, brick, stone....all represent the “embodied energy” in our existing homes and offices. Too much information exists to continue to deem as green only the new buildings.

It takes approximately 65 years for a green, energy-efficient new office building to recover the energy lost in demolishing an existing building,”

*said Moe. "And let's face it: Most new buildings aren't designed to last anywhere near 65 years. [...] It all comes down to this simple fact: We can't build our way out of the global warming crisis. We have to **conserve** our way out. That means we have to make better, wiser use of what we've already built.*

No matter how much green technology is employed in its design and construction, any new building represents a new impact on the environment. The bottom line is that the greenest building is one that already exists.

~Richard Moe, president of the National Trust for Historic Preservation, Berkeley, March 2008

The National Trust is now working with L.E.E.D. to include representative credits for existing buildings in their widely utilized green standards.

While for a variety of reasons it is not realistic that all existing buildings be retained, so much information is now readily available that it does confirm that we have to be better stewards of our planet by going back to the basics as represented by the environmental triangle:

Reduce
Reuse
Recycle

Oh yes, and as for Palo Alto...ultimately, with recommendations from the Historic Resources Board, the Architectural Review Board, the Planning & Transportation Commission and City Staff, the Palo Alto City Council recently passed a Green Building Code that credits points for reuse of existing buildings. Historic homes can be credited with up to 20 points for building retention toward the 70 required total points. The code can be viewed at:

<http://www.cityofpaloalto.org/depts/pln/news/details.asp?NewsID=1007&TargetID=85>

Waste not the smallest thing created, for grains of sand make mountains, and atomies infinity. ~E. Knight