

Economics For Change

When change is involved for Carbon Storage, Healthy, Energy Efficient and Safe Structural Buildings, the first question is, "what does this all cost?" The economics has to support the change, and if it is not economically feasible, change will be slowed even if education prevails in time.

No. 1. Deforestation accounts for 17.4% CO₂ emissions - more than all transportation emissions world-wide. If both deforestation and transportation emissions were cut in half in the next 25 years, it would be a big contributor to what climate change concerns are about.

No.2 What are the challenges that will need to be overcome?

A. China is the largest contributor of CO₂, followed by the USA, then Russia, followed by India. The challenge is, will these countries possess enough economic incentive to embrace the climate change accord?

B. The lumber industry world-wide uses green trees for most of their building products. When logged and then sawn, mostly into 2x studs and other lumber products, they leave a high percent of roots, limbs, leaves and needles to

- support the eco-system. The kiln drying process to dry the lumber, consumes large amounts of energy, but is needed to dry wood products to prevent
- dimension changes in construction. The reason that dead trees don't yield as well as
- green trees for current construction methods is because when wood from the dead
- trees doesn't yield well since when drying in the forest for years it has developed
- cracks or checking that can cause the conventional lumber products to not hold together
- causing a loss of yield.

Even though This live tree lumber product does store carbon for years and using green lumber is said to be carbon neutral .Lumber from dead trees, that are going to waste but still are storing carbon if used in solid wood building products can store carbon indefinitely. Unlike the problem using dead wood for conventional construction, using dead wood has a lot of good economic features when used in solid wood buildings.

C. Change to the standard building system and the energy standards in many countries will be a large challenge. Even though there is solid proof that R-factor does not meet certain standards and has a diminishing R-factor, when temperatures fall. No doubt that education takes time and resources, The public is one of the education challenges. Also producers of lumber, suppliers, engineers, architects, planners, builders all need to have the knowledge to bring change for the betterment of humanity.