

# Faux trees convert CO<sub>2</sub> to O<sub>2</sub>

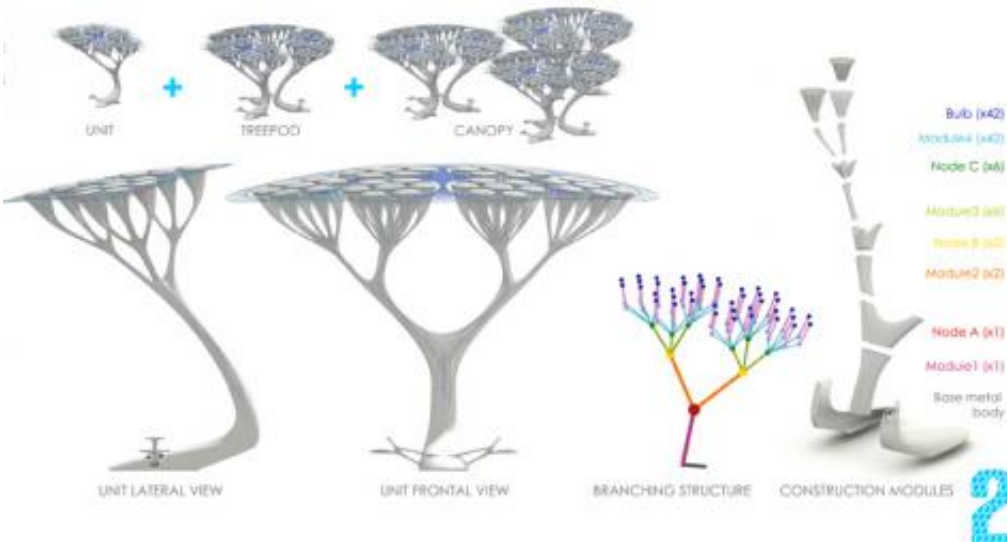
March 10 2011, by Katie Gatto

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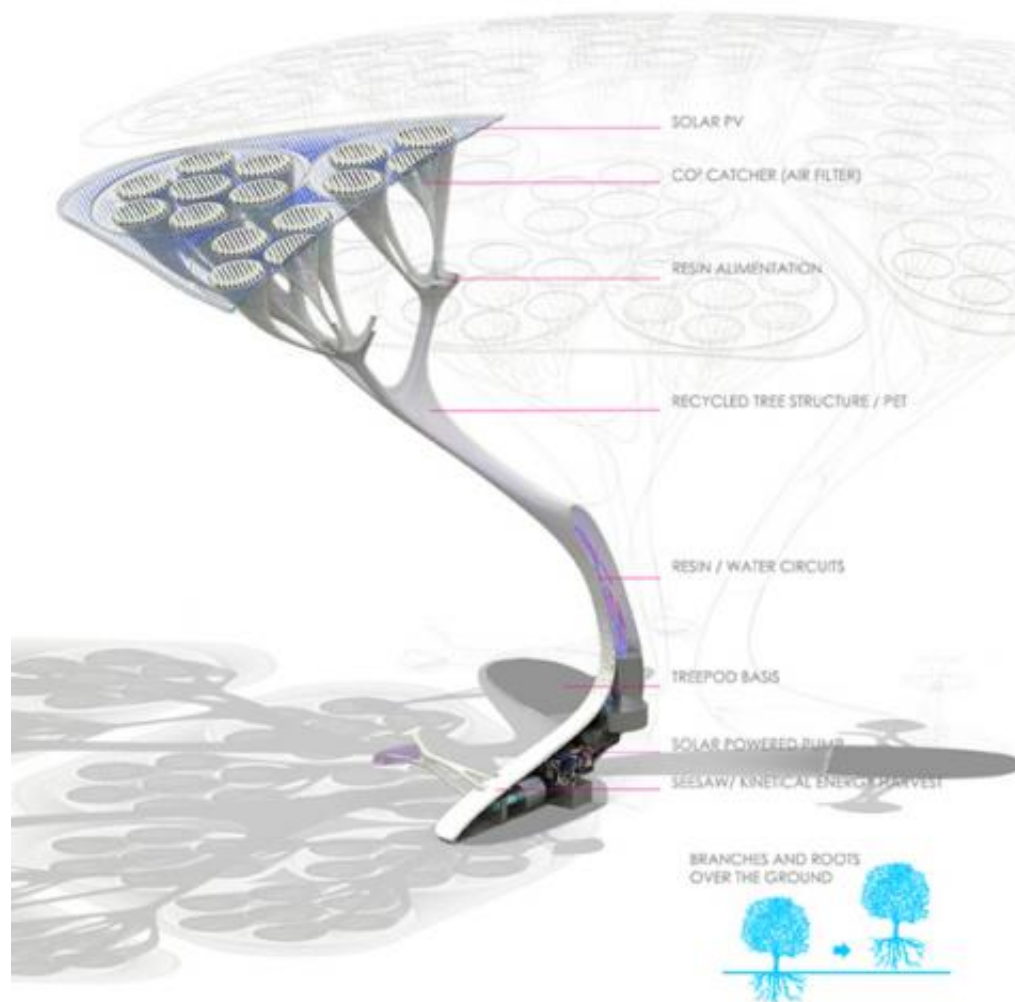


(PhysOrg.com) -- Air is one of the few things that you really cannot do without. At least if you want to continue to live. As the population of the earth gets bigger and bigger and increasing amounts of the globe become industrialized cityscape, the quality of air is a major environmental concern. Poor air quality can lead not only to increased instances of respiratory disease, but to global issues such as acid rain, as CO<sub>2</sub> levels in the atmosphere rise.

Fortunately, nature has given us a way to counteract this effect. That is trees, which convert CO<sub>2</sub> back to breathable oxygen, it is a byproduct of [photosynthesis](#) that helps to keep us alive. Sadly, we have been cutting down all of those trees which means as we produce more CO<sub>2</sub>, we have less to convert the gasses back with.



That is why researchers at the Lenfest Center for Sustainable Energy at Columbia University, led by Dr. Klaus Lackner, have designed a faux tree that is supposed to do the job of a real tree. The machine, that was designed by Dr Lackner, and Mario Caceres and Christian Canonico of Influx\_Studio, is designed to pull CO<sub>2</sub> from the air and emit oxygen instead. The project's result, called the Boston Treepod Initiative is designed to look like the dragon blood tree. The dragon blood tree was chosen because of its wide branches and umbrella style of tops that can support the larger sized [solar panels](#) that power the tree.



After a period of trial and error it was determined that the tress could not be powered by the sun alone. Instead of relying on plugs or batteries the secondary source of power will be the [kinetic energy](#) of humans. The groves of tree pods will be pared with hammocks and see-saws that will help to power the devices.



**More information:** [shiftboston.org/competitions/2011\\_treepods.html](http://shiftboston.org/competitions/2011_treepods.html)

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