

## Advantages

- **Cost-competitive** with synthetic insulation systems.
- **Sustainable**

Our biomaterial is a dense matrix consisting of a mass of branching, chitinous structure to the fungal tubes as they rapidly grow and bind and dried before application.

Our biomaterial can be designed to achieve precise R-values, mechanical properties, and to match the net shape of the surface to be insulated. Unlike petroleum-based plastic insulation, our product does not create plastic pollution and waste streams. It binds carbon and drastically reduces environmental footprint of construction.

8f"D\]]ddY'5a gh]gUj g\_]k Ug'Yl dYf]a Ybh]b[ 'k ]h 'V]ca UHf]Ug'XYj Y'cdYX'hVWbc`c[ mhc'dfcXi W'hYfa U`m]bgj 'Uh]b[ 'V]c`c[ ]W' ZcUa žUbX'hYUa YX'i d'k ]h '8f"N\Uc\i ]'I>cYm'i N\l]b[ žU[ YchVWb]W' Yb[ ]bYYf'8f"N\l]b[ ž\_bck ]b[ 'hY'WU'Yb[ Yg'cZ]bgj 'Uh]b[ ' Vi ]X]b[ gUbX']bZUg'fi Vh' fY'Zca 'hY'Yl fY'a Yg'cZ'hY'5'Ug\_Ub'k ]bhYfg'zgi [ [ YghYX'hYgh]b[ 'hY'ZcUa g'Zcf'hY]f'ghUV]]hmUbX'hYfa U' properties and they developed a prototype for carbon-neutral, and high-value insulation from local forestry by-products and ž b[ U'fcchYhg"K ]h 'U[ fUbh'Zca 'l b]j Yfg]hmcZ5'Ug\_U'5bVW'cfU[ YžhY']XYU'hUh'YX'hc'F\]ncZcfa 'k Ug'Vcfb"

F\]ncZcfa ž@@] 'g]U'GYUk c'Z<c'X]b[ g'7ca dUbmUbX'k Ug'Zcfa YX']b'si 'm&\$%\* 'VmihY'J ]W'Dfcj cghcZF YgYUfW'UbX'; fUXi UH' Gri X]Yg'Uhi 55ž8f"<Y'YbU'K ]gb]Yk g\_žk ]h 'hY'ZUW'hmi]bj Ybhc'fg'8f"D\]]ddY'5a gh]gUj g\_]ž5ggc'WUhY'DfcZYggc'f'cZDi V']W<YU'h' UbX'8f"N\Uc\i ]'I>cYm'i N\l]b[ žDfcZYggc'f'cZ7]j ]'9b[ ]bYYf]b[ "

**Business Model:** Fully develop an engineered system to manufacture ASTM-rated insulation board and other bio-insulation products locally, and license them for manufacture and marketing nationally and internationally.