

**1.6.1 Embodied Energy of Commercial Windows in the U.S.**

<u>Window Type</u>	<u>Embodied Energy (MMBtu/SF) (1)</u>	<u>CO2 Equivalent Emissions (lbs/SF)</u>
Aluminium	0.973	190.1
PVC-clad Wood	0.447	88.3
Wood	0.435	90.9
Vinyl (PVC)	0.557	111.7
Curtainwall Viewable Glazing	0.233	66.1

Note(s): 1) Embodied Energy: Energy use includes extraction, processing, transportation, construction, and disposal of each material. Assumptions: Low rise building. Values are general estimations for the U.S. 60 year building lifetime. Low-e, double-pane, argon-filled glazing. All assemblies are insulated to IECC 2009 minimums for zones 3 and 6.

Source(s): Athena Institute. Athena EcoCalculator for Assemblies v3.5.2. 2010. Available at [www.athenasmi.org/tools/ecoCalculator/index.html](http://www.athenasmi.org/tools/ecoCalculator/index.html)