# Midsummer’s Solar Panels Leave a Carbon Footprint Ten Times Lower

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A new life cycle assessment (LCA) shows that the carbon footprint from solar panels made by Swedish solar energy technology leader Midsummer is almost 90% smaller than from silicon based solar panels made in China. This confirms Midsummer solar panels’ position among the most environmentally friendly energy types all categories due to its advanced technology and local production.

”For a conscious consumer of renewable energy, whether private or commercial, it is instrumental to look at the entire life cycle, i.e. the total climate effect of the product including material choice, manufacturing, transports, operations, etc. And of course to choose an energy source with a minimal carbon footprint. Here Midsummer's thin-film solar panels are completely superior, thanks to our unique technology,” said Sven Lindström, CEO, Midsummer – a provider of turnkey production lines as well as flexible, lightweight, cost-effective copper indium gallium diselenide (CIGS) thin-film solar panels for building-integrated photovoltaics (BIPV) solutions.

A new study shows that Midsummer's solar panels, made in Sweden, generate nearly 90% less CO2 emissions than silicon-based solar panels made in China, and only 1% of the greenhouse gases that European coal power emits.

Compared to silicon-based solar panels made in China Midsummer's solar panels made in Sweden generate nearly 90 per cent less CO2 emissions.

There are multiple reasons for this. Midsummer's flexible CIGS solar panels do not contain any heavy glass or aluminum components. This greatly reduces material consumption. The light-absorbing CIGS layer is also extremely thin. Therefore, the production process is fast and with low energy consumption. At its Swedish factory, Midsummer only uses renewable

energy.

Midsummer's technology allows for the production of the electricity right where it is consumed, which is an important ‘green' aspect. Midsummer's solar roofs are nearly invisible and are installed on tin roofs, shingles, and large factory roofs (they can also completely replace shingles or tin). The electricity is produced directly on top of the building where it is consumed.

For Swedish installations, production is local. Midsummer manufactures its solar panels in its own facilities in Järfälla just outside Stockholm. The company is looking at establishing additional factories across Europe which would mean shorter transports and a higher ratio of renewable energy for production than the silicon panels made in China, often with coal-based electricity. Local production also means local employment and tax revenues etc.

The LCA report (Life Cycle Assessment, LCA, of Midsummer's Lightweight CIGS Solar Panels) was carried out by environment consulting company Miljögiraff AB at Midsummer's request. The study follows ISO14041 standard and has been verified by a third party. The objective was to calculate the combined carbon footprint from 1kWh of electricity generated by Midsummer's thin and discrete solar panels using CIGS solar cells from a life cycle perspective.

Read the original article on Cision.