Some people state that "The energy balance is negative: Manufacturing a PV system consumes more energy than it ever produces in its life time."

The fact is: Photovoltaic (PV) systems, like every other product, do need energy for manufacturing. But PV systems pay back this energy input within 1 to 3 years, depending on cell type and location. During its expected lifetime of 30 years, the PV system produces therefore 10 to 30 times the energy it originally consumed.

Source: Alsema, De Wild, Fthenakis, 21st European Photovoltaic Energy Conference, Dresden, 2006

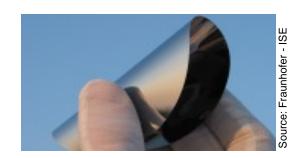
Technology improvements which can be realised within a few years, will result in energy pay back times (in Southern Europe) well below one year for *all* major cell types.

"We found that today's PV systems have an energy pay-back time of maximally 2 years under average Southern Europe insolation"



Erik Alsema, Senior researcher at Utrecht University, The Netherlands

The figure shows the current energy pay back time for PV systems using different cell technologies and installed either in Central Europe or Southern Europe.



Therefore the correct statement is: "The energy balance of solar PV is clearly positive today and will further improve as technology progresses."

