



Apricus AP Solar Collector Embedded Carbon Emissions

Calculations Based on AP-30 collector

Material	Weight (kg)	Raw Material Standard Energy Usage Values	Manufacturing Factor*	Energy Usage (kWh/kg)	Total Energy Usage (kWh)	Total CO2 (kg)**
304 Stainless Steel	8.1	0.98 kgC/kg	2	6.44	52.2	52.2
Aluminium	2.6	15 kWh/kg	1.2	18	46.8	46.8
Copper	11.8	1.123 kgC/kg	2	7.78	91.8	91.8
Glass	65	0.257 kgC/kg	1.2	1.01	65.7	65.7
Silicone Rubber	2	1.2 kgC/kg	2	7.89	15.8	15.8
Cardboard Packing	18.5	1.57 kgC/kg	1.2	6.19	114.5	114.5
TOTAL					386.7	386.7

* Factor to consider additional energy used during manufacturing of final product.

** Based on 1kg of CO2 per kWh of energy used.

Approximate values for each model size		
AP-10	128.90	kg of CO2
AP-20	257.81	
AP-22	283.59	
AP-30	386.71	

"Payback" time based on average insolation value of 4kWh/m²/day and solar conversion of 65% = 62 days