

Quinta das Cantigas – Eco Getaway

Sustainability report on energy usage

Power & heating 2023

Total consumption Average 27000 kwh per year	Total solar production Average 23.000 kwh per year
Electric power consumption: <ul style="list-style-type: none"> • Average 17.000 kwh per year Gas power consumption: <ul style="list-style-type: none"> • Average 5900 kwh per year (Average consumption 38 gas bottles per year ~ 240 kg gas ~ 12.9 kwh/kg gas = 5900 kwh) Wood power consumption: <ul style="list-style-type: none"> • Average 4000 kwh (Average 1000 kg wood per year ~4 kwh per kg) 	<ul style="list-style-type: none"> • Produced by 80 PV solar panels for electricity • Battery capacity of 20 Kw • Excluding production of warm water for showering (600 liter solar boilers) • Excluding production of warm water for swimming pools by 150 heat pipes
<ul style="list-style-type: none"> • Other consumption purchased by “100% green contracts Gold Energy” 	<ul style="list-style-type: none"> • Auto consumption of self-produced solar power approx. 55%
<p>Analyses 2021 -2023:</p> <ul style="list-style-type: none"> • Installed a battery pack (2022), more efficient heating in 2022/23 (airco’s and central heating) and more water heating solar panels for tab water (2023), objective is to reduce the consumption of propane gas. • We increased overall consumption by 50%, mainly caused by 2021 “covid” year and increased number of winter rentals 	<p>Analyses 2021 -2023 continuation:</p> <ul style="list-style-type: none"> • The increase in winter rentals and related heating caused significant impact in total consumption. The new heating systems assured no increase in wood power usage, but still a lot in gas bottles for warm water. • Battery system supported increase of auto consumption with approx. 20%

