



Smart Solar Estimator Guide

by Smartec.ie

This simple guide will help you estimate how many solar panels you may need for your home or business.

Step 1: Check your electricity bill and find your average monthly usage (in kWh).

Example: 350 kWh/month

Step 2: Multiply by 12 to get your yearly electricity use.

Example: $350 \times 12 = 4200$ kWh/year

Step 3: Divide by 950 to estimate your ideal solar system size (kWp).

This assumes Irish solar performance (950 kWh/kWp/year average).

Example: $4200 / 950 = 4.42$ kWp

Step 4: Enter your panel wattage in the Excel tool (usually 400W).

Example: $400W = 0.4$ kW

Step 5: Use the Excel tool to calculate number of panels:

$(\text{System size in kWp} \times 1000) / \text{Panel wattage}$

Example: $(4.42 * 1000) / 400 = 11.05$ panels (round to 11)

Download and open the Excel tool to plug in your numbers and see your result.

This is an estimate - actual needs may vary based on your roof size, shading, orientation and future usage increases.