



IDENTIFY:

SOLAR PV INFOSHEET & CHECKLIST

This is an introduction to solar PV for GAA Clubs. See:

<https://www.seai.ie/publications/SEAI-Solar-PV-Guide-For-Business.pdf> for more information and advice.

What is solar PV?

The photovoltaic (PV) effect occurs when light from the sun is converted to electricity. Solar PV panels can be installed on the roof of buildings like GAA clubs to capture the light from the sun and convert it into the electricity that is used to power a building's activities.

Is solar PV a good option for my club?

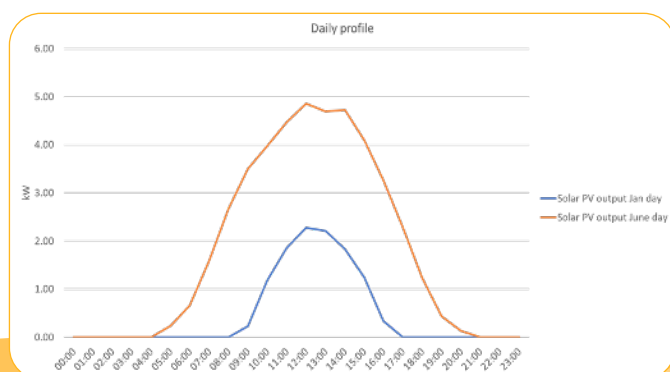
Having solar can be a great option for generating green electricity and saving money on electricity. However, how suitable solar PV is for your club depends on two main factors

1. Your club's current energy usage patterns.
2. The orientation of your roof space.

Why do our energy usage patterns matter?

Solar PV works best where buildings have a steady daytime electricity demand. Solar PV generates electricity during sunlight hours and will generate approximately five times more electricity on a summer day (May/June) than on a winter day (Dec/Jan).

This suits clubs that have activity in their building and grounds during the day rather than clubs where activities are mostly after dark.



Typical solar PV Daily Profile

Our club doesn't have a huge amount of daytime activity but we are still interested in solar PV. Are there options for us?

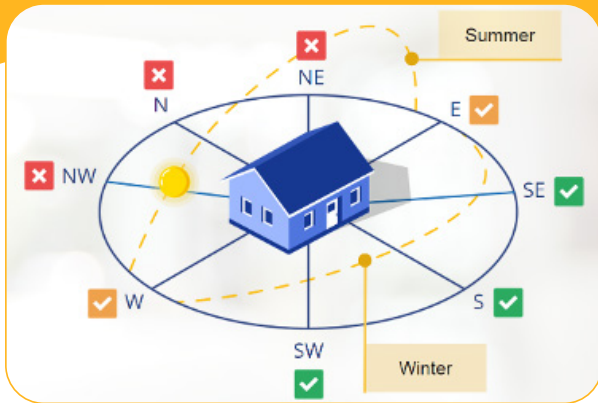
- **Battery storage** allows users to store or divert electricity generated during the day and then utilise it during the evenings when needed. However, this can add considerably to the cost of installation and would need careful analysis in advance.
- **A hot water immersion diverter** can be used to divert electricity to an electric immersion in your water tank to heat hot water. This might suit a club where showers are often in use in the evening.
- Talk to your energy consultant, Sustainable Energy Community mentor (26-counties) or installer about the feasibility and value for your club of these options.

TOP TIPS

To make sure Solar PV is the right investment for your club, establish a good understanding of your current energy use by:

- Collecting and analysing your energy bills
- Taking meter readings in the morning and late afternoon/early evening (e.g., 6pm) to see how much your building is using during the daylight hours.
- Considering the installation of a simple electricity monitor. This is a very simple way to get a real-life profile of your electricity demand.





No planning permission is required for most rooftop solar installations on the island of Ireland.

Why does the orientation of our roof space matter?

The best rooftops for maximising electricity generation are those that are:

- south-facing
- in good condition, *and*
- with minimal shading from trees or adjacent structures.

The optimum tilt angle of solar PV panels in Ireland for year-round solar gain is 35–40 degrees

Our club roof space isn't suitable for solar PV panels. Are there other options?

Ground-mounted solar PV panels can be an option for clubs that have sufficient ground space. The Connacht Centre of Excellence has both roof and ground-mounted solar installations. See: <https://learning.gaa.ie/greenclub/casestudies>

Will we need planning permission for a solar PV installation?

No planning permission is required for most rooftop solar installations on the island of Ireland or for many smaller ground installations. There are some zones where restrictions do apply. Check with your installer, contact your local planning office or, for clubs in the 26-counties, see <https://www.gov.ie/en/publication/00203-solar-planning-exemptions/>

Is there grant funding available for solar PV installations?

There is a grant scheme for club house solar installations in the 26-counties: <https://www.seai.ie/business-and-public-sector/business-grants-and-supports/commercial-solar-pv/>

There is no equivalent scheme in the six counties. However, solar PV panels may be eligible under other community, facility or sports grants.

Can we earn money from exporting surplus electricity from our solar PV panels?

Clubs in the 26-counties can benefit from a Clean Export Guarantee (CEG) tariff or a Clean Export Premium (CEP) tariff. Ask your Sustainable Energy Community (SEC) mentor, contact your energy supplier or visit <https://www.gov.ie/en/publication/b1fbc-micro-generation/> for more details.

There is no Clean Export Guarantee in the six counties at the moment. However, your energy supplier may offer to pay you for exported energy from your renewable generator. Action Renewables can also register your generator for export. Contact your electricity supplier or visit <https://actionrenewables.co.uk/household-energy/energy-services/electricity-export/>

Our club is interested in solar panels. What should we do next?

- Gather as much information as possible – e.g., bills, meter readings, clubhouse activities records – on your club energy use and your clubhouse activity.
- Seek professional advice from an energy consultant, an energy expert in your club or community or your SEC mentor (26-counties) to assess the costs, benefits and suitability of solar PV for your club.
- Identify a specialist contractor. For clubs in the North: MCS-certified installers (<https://mcs-certified.com/find-an-installer/>) should be used if possible, although this is not currently a mandatory requirement. For clubs in the South – a list of SEAI-registered Solar PV companies is available at <https://www.seai.ie/grants/home-energy-grants/solar-electricity-grant/solar-pv-installers-and-c/> Ensure that you have examined their previous work and that all insurance and paperwork is in place.
- Notify the GAA Insurance Department of planned works.
- Inform the ESB or Northern Ireland Energy of any solar PV installation in your club.
- See <https://www.seai.ie/publications/SEAI-Solar-PV-Guide-For-Business.pdf> for more details.



Green Club Solar PV Checklist

This is a non-exhaustive list designed as a guide for clubs in the early stages of considering a solar PV installation

- We have calculated our annual electricity usage across the 12-months of the year.**
Around 75% of the annual energy from a solar PV system is produced from May to September.

We have identified which of the following applies more to our club:

- 1. We have regular, steady daytime electricity usage.**
Solar PV works best where clubs have a steady daytime electricity demand.
- 2. We use most of our electricity in the evenings and at weekends.**
Solar PV may be an option if battery storage or load shifting – e.g., to water heating or electric vehicle charging – is included in the system design.
- Our clubhouse roof is in good condition.**
- The inclination and orientation of our roof is suitable for solar PV.**
Optimal orientation for Solar PV is South, South-west or South-east. Optimal tilt angle of solar PV panels is 35-40 degrees.
- Our roof is not shaded by trees or other buildings/structures.**
- We have checked out the planning requirements for our planned system.**
- We have checked out the electricity grid requirements for our system.**
- We have sought independent advice – e.g., from an energy consultant, Sustainable Energy Community (SEC) mentor or an energy expert in the club or community – as a first step in our planning.**
- Our system will be installed by a competent contractor.**
- We have explored funding options through the SEAI Non-Domestic Microgen Grant (26-counties) or community and facility development grants.**
- We have contacted our energy supplier or talked to our SEC mentor (26-counties) about benefitting from electricity export tariffs.**
- We will inform the ESB or Northern Ireland Energy if we go ahead with installation.**
- We will inform the GAA Insurance Department before we begin any works.**