

Solar PV Requirements - Approvals Process



TAMS 3 Solar PV Scheme



Standalone Investment Measure for Solar PV (like LESS)

- €90,000 Ceiling
- Single grant rate of 60%
- 62kW limit for all farming sectors
- Battery installations of up to 50% of the solar PV capacity
 - example, for a 20kW solar PV system, the battery capacity can be up to 10kWh – in spec S198

Overview

- Installation works can only commence after approval letter issues
- Deposit paid is valid after date of application & not before
- 12 months to complete installation work
- Safety cages under rooflights required, Rooflights must not be removed in animal housing
- Agitation/extraction points to be removed
- ESB Networks form (NC6/NC7) required only at payment claim stage
 - Department Registered Installer makes application for ESB Networks form
- Claim Payment Stage:-
 - Invoice marked paid, NC6, Certs 22 & 23
 - Name on invoice same as name on application





- Electricity generated is for on-farm use only (though export/spillover to grid is allowed)
- Tams panels on roof of dwelling house <u>is not</u> permitted
- Since 24 September 2022, the electricity consumption of the dwelling house can also be included on the energy survey for sizing the Solar PV installation
- Off grid installations are acceptable
- A Ground mounted panel array shall be located within 500m of farmyard
- Applicants can install larger systems:
 - Additional panels (& batteries) at their own cost and not grant aided from another source e.g. SEAI
 - Tams Solar PV system must be a separate standalone system from an SEAI funded system

Tams – Terms & Conditions



Can electricity be exported to the grid from a Tams grant aided solar PV installation? Yes.

EU Commission Rule:

For electricity generation from solar panels on agricultural holdings:

- Annual generation of electricity shall not exceed annual electricity consumption (of farmyard and dwelling house)
- The export of electricity (spill-over) to the grid and payment for same is permitted insofar as the condition above is respected

One purpose of the Solar PV Energy survey is to ensure that this requirement is complied with.

Energy Survey - Extract



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Details of 1) Annual Electricity Consumption, and 2) Solar PV Installation			
Annual Electricity Consumption - of farm including			
dwelling house - obtained from the previous 12 months electricity bills - kWh		34,943	
PV Panel Rating (kWp)	430 watt or 0.43kWp	Area of Single Panel (m²)	2
Total Area of PV Panel Array (m²)		156	
Solar PV Panel Array Output (kWp)		33.54	
Annual Electricity Generation Output from Tams 3			
Solar PV Installation (kWh)		33,540	
Total Battery Storage Capacity (kWh), if applicable		15	

Energy Survey



- Annual consumption = 34,943kWh
- Solar PV System proposed = 33.54kW

Annual generation from 33.54kW:

1kW solar panels generates up to 1000 kWh per annum

 $33.54 \times 1000 = 33,540$ kWh

33,540 kWh < 34,943 kWh

OK [generation must always be less than

consumption]





- Farmer Eligibility general requirements
- Application for solar PV system (kW); batteries (kWh) optional all based on Energy Survey
- For upload with application (otherwise application is invalid)
 - 1. Energy Survey carried out by DAFM registered Installer
 - 2. Two drawings

<u>Drawing 1 - Farmyard Layout Plan</u>

- scale of 1:500
- location of panel array marked with an 'X' on relevant roof
- Or Google map ortho photo
- GPS coordinates or eircode

<u>Drawing 2 – Roof Plan</u>

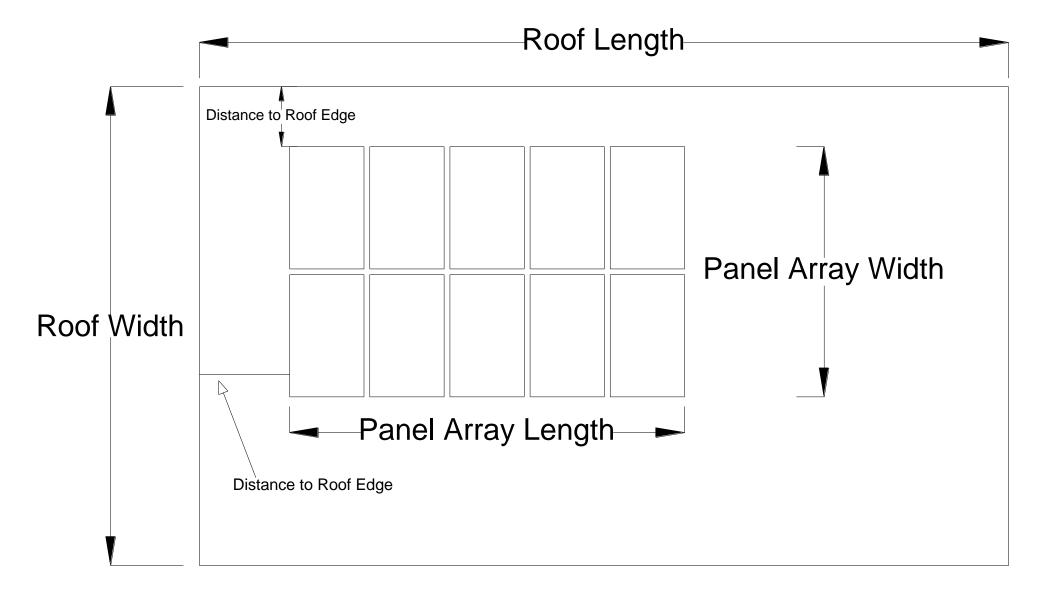
scale 1:100 or 1:200 or illustration

outlining location of solar panel array on roof:

- dimensions of the roof & solar panel array
- distance of panel array from edges of roof
- •location of inverter, meter, batteries, etc.

Illustration Details





Planning Permission – is it required?



- In October 2022, the Dept. of Housing, Local Government & Heritage announced less restrictive planning requirements for solar PV energy systems
- Ground mounted up to 75m² is exempt; over 75m² requires planning permission
- <u>All</u> Roof mounted Solar PV on agricultural sheds is exempt (irrespective of size)
 - Except where farm is in one of 43 Solar Safeguarding Zone (SSZ) up to $300m^2$ panel array is exempt (equivalent to $\sim 60kW$)
 - Solar PV system above 300m² in a SSZ requires planning permission

Planning Permission Exemptions



47 Solar Safeguarding Zones located across the country

- Airports, helipads, hospitals with helipads, etc.
- 3 km radius
- 2% of area of country

For more details, see Statutory Instruments:

- S.I. No. 492 of 2022 Solar Safeguarding Zones maps
- S.I. No. 493 of 2022 Exemption Detail

Roof Mounting Restrictions



Roof with spaced sheeting

- outlet ventilation minimum gap of 100mm between underside of panel mounting frame and roof sheeting (top of corrugation)
- maximum 3 x 3 panel formation, with a minimum
 150mm gap on all outer sides of this formation

Rooflights

- panel array shall not be mounted on or over rooflights
- 1. Safety cages under rooflights required
- 2. Agitation/ Extraction points have to be removed



Scenarios

- Dwelling house & outfarm 5 miles apart can house be included?
 No.
 - 5 miles of cabling required not feasible

- 2. Standalone dwelling house & agricultural purpose building.
 - Yes, if located on the holding (ideally redlined out)
 - No, if remote from the holding (e.g. situated in a location with ribbon development)

please send queries to tams@agriculture.gov.ie



The End