



# **Checklist for Solar Photovoltaic Installations**

**Developed by  
Cheshire & Warrington Public Sector  
Carbon Management Partnership**

## Checklist for PV Installations

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Installation of Solar Photovoltaic systems (PV) can generate an income in the form of the Feed In Tariff, which is paid for every kWh generated, plus a separate payment for any exported to the grid. The economic viability depends on both the FITs and the value of the electricity used on site.

The FIT rates and conditions are reviewed regularly, so always check the latest information from DECC - [www.decc.gov.uk/fits](http://www.decc.gov.uk/fits)

	Y/N	Action
<b>Own Sites</b>		
Is the site likely to remain in your ownership for 25 years?		
If not, will the remaining value of the FITs/installation be regained on disposal?		
Is there a mortgage or other loan outstanding on the property and if so have you approval from the lender?		
Will the system be covered under your existing insurance for loss of income due to damage or theft?		
<b>Leased Sites</b>		
Do you have permission from the Owner?		
Does the lease last beyond the period of the Feed-In-Tariff (25 years)?		
If not, do you have agreement to sell the remaining value of the FITs beyond the end of the lease period?		
Or, have you accounted for a reduced return in the business case?		
Have you agreed responsibility for removal of the panels and loss of income in the event of building/roof renovation?		
Who will be responsible for insurance?		
Will the system be covered under your existing insurance for loss of income due to damage or theft?		
<b>Building Durability</b>		
Is the building likely to be demolished within 25 years?		
If so, can you ensure that the PV panels can be installed on a replacement building or at the same site?		
Have you taken into account loss of FIT income during the construction period in the business case?		
Is the roof likely to require replacement or refurbishment during the next 25 years?		
If so, can you ensure that the PV panels will be replaced on the roof?		
Have you taken into account loss of FIT income during the construction period in the business case?		
<b>Location</b>		
Does the installation site face, or could the panels face, SE-SW?		
Is there any over-shading at the site from e.g. buildings, trees, poles, chimneys?		
Is the site likely to become shaded by neighbouring developments or growing trees?		
If roof-mounted, has the roof been checked to ensure that it		

is structurally sound?		
Is the roof accessible for installation and maintenance?		
<b>Feed In Tariff Income</b>		
How much of the electricity generated will be used on site?		
Which FIT band the system will fall into (<4kW, 4-10kW, 10-50kW, 50-150kW, 150-250kW, 250kW-5MW or stand-alone)?		
Will your organisation be subject to the multi-installation tariff?		
Do the properties meet the required energy efficiency standards e.g. EPC level?		
Will the system be commissioned and registered with Ofgem before the next review deadline?		
Do the output calculations conform to the Standard Assessment Procedure (SAP)? Have you checked these against actual output from systems in your area e.g. on <a href="http://www.sunnyportal.com">www.sunnyportal.com</a> ?		
Has the performance loss over 25 years, from both panels and inverters, been taken into account in the business case?		
<b>Grid Connection</b>		
Is the site single phase or 3-phase supply?		
Does the system fall under the threshold for permission from the Distribution Network Operator (3.84kWp per phase)?		
If DNO permission is needed (G59), have you got a formal quote for this based on the technical specification of panels & inverters?		
Has the timescale for this been factored in to the installation programme (this can take months)?		
<b>Planning Permission</b>		
Have you checked whether the installation will need planning permission?		
If yes, have you factored in the costs of the application including scale drawings of the installation?		
Has the timescale for this been factored in to the FIT deadline (or can you apply prior to letting the installation contract)?		
Have you notified Building Control of the installation?		
<b>Quote Assessment</b>		
Is the installer MCS accredited?		
Is the equipment MCS accredited?		
Does the quote include: scaffolding, grid connection costs, warranties, FIT registration, display meter?		
Does the timescale for installation go beyond the current FIT deadline?		
<b>Warranties</b>		
How long are the warranties for the installation, panels, inverters and other component parts?		
Do the panel warranties include minimum performance levels?		

Have you considered extended warranty for inverters (likely to need replacing over the panel lifetime)?		
<b>Pre- &amp; Post-Installation</b>		
Has the system been registered for FITs?		
Can you pre-register the system (>50kW)?		
Has a system been set up to provide regular readings for FITs?		
Has a monitoring system been set up to identify any loss of output e.g. from panel or inverter failure, inadvertent shading or system trip-out? Does this give an automatic warning?		

## Business Case Data

<b>Income Data</b>	
System Size kWp	
System Output kWh/yr – Year 1	
System Output kW/yr – Average	
Exported Output kWh/yr	
Feed In Tariff Rate (Year 1)	
Export Tariff Rate (Year 1)	
Projected FIT inflation rate	
Value of Electricity Replaced p/kWh	
Projected Electricity price inflation rate	
Tax rate payable on the FIT income	
<b>Cost Data</b>	
Capital cost to install	
Planning permission & Building Control approval (including drawings)	
Grid connection	
Insurance	
Extended Warranties and/or Inverter replacement (at least once over the panel lifetime)	
Maintenance	
Loss of income due to building repair etc	

## Contact

For further information on this checklist or the work of the Cheshire & Warrington Public Sector Carbon Management Programme:

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