

tell me **more** about

solar maintenance and system monitoring



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Maintaining your solar PV or solar hot water system is vital to optimal performance and maximum energy production.

If you have already invested in a solar system, regardless of who it was installed by, you can protect your investment by ensuring faults are quickly identified and resolved, maximising your returns. Our systems are designed to last at least 25 years, and have the advantage of using products supplied by leading manufacturers. System monitoring and regular servicing will insure against potential losses in performance and protects your solar investment.

What we do

Southern Solar provides a complete, design, installation and maintenance service to maximise return from your investment. Since 2002 we have worked with domestic, commercial, agricultural and public sector clients to install solar PV and solar hot water systems. Our systems monitoring and maintenance service is available to all installations, including homeowners, asset or facilities managers, farmers, social landlords and utilities.

Systems monitoring and maintenance gives you peace of mind:

- Ensuring optimal performance
- Satisfies warranty, finance and insurance requirements
- Diagnostics and fault monitoring

Solar electricity Operations and maintenance contract

A complete operations, systems monitoring, servicing and maintenance contract on your existing Solar PV installation. Fully scalable, intended for solar electricity installations with PV panels from household sizes below 4kWp up to and beyond 5MW field scale installations.

Depending on your requirements the contract and arrangements can be tailored to your individual situation. This service requires the installation of a monitoring system.



We schedule the following for you in the five year arrangement:

- Annual inspection of all accessible wiring, mounting systems, mechanical installation components, meters, sensors and communications.
- Continuous web-based systems monitoring with serious fault diagnosis within 24 hrs.
- Access for you to the web portal data and alert emails.
- Weekly analysis of data on web portal to identify any unexpected low generation.
- Monthly report of basic trends and production analysis from monitored data.

We can also provide:

- Array cleaning – in dusty or dirty environments such as farms regular cleaning has shown to increase annual solar energy production by 5–10%.
- Site security.
- Site management (eg vegetation cutting to avoid shading).
- Thermal imagery and scans.

Who is this maintenance contract suitable for?

Whether you are a homeowner or a facilities manager for a social landlord with multiple properties to maintain, we have a service solution for you to help manage and monitor your assets.

- Farmers
- Social Landlords
- Homeowners
- Asset Managers
- Utilities
- Schools



Solar electricity

Scheduled service contract

What is it for?

A maintenance contract on your existing solar PV installation offers a routine annual service; this is intended for solar electricity installations with PV panels from below 4kWp up to and beyond 5MW.

In years one to four the following is completed annually:

- Inverter preventative maintenance.
- Inspection of accessible DC electrical wiring including string fuses.
- Inspection of AC electrical wiring including emergency switching.
- Inspection of accessible mounting system and other accessible mechanical installation components.
- Inspection of all meters, sensors and communications.
- Electrical testing of array output.
- Annual detailed report based on the above inspection visit. Detailing performance levels of the installation and components as required.

In year five we also carry out:

- A full re-test and commission of all AC and DC circuits relating to the PV system and the supply of appropriate certification.
- Inspection of mounting system and mechanical installation.

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Contrary to popular belief, PV power plants are not maintenance free; they require a regimen of continual monitoring, periodic inspection, scheduled preventative maintenance, and service calls.”

Electric Power Research Institute (EPRI) Whitepaper Report July 2010



Solar hot water

Scheduled and reactive maintenance contract

What is it for?

A well installed solar hot water system should not require significant maintenance; however it is advisable to have the system serviced regularly to ensure that it continues to work efficiently. If you look after your system it should last over 20 years. There are still systems going strong that were installed in the 1970s!

Whether you are a homeowner, a facilities manager for a pool or a social landlord with multiple properties to maintain, we have a solar thermal service solution for you to ensure the system is performing well throughout its life.



In years one to four the following is completed annually:

- Visual inspection of all aspects of installation including pipework, insulation and pipe connections from an accessible location.
- Check for system pressure, pump, flow rate and components and are in good working order.
- Check antifreeze concentration with refractometer, top up and disposal of waste.
- Check all electrical aspects of installation including controller and fuses.
- Ensure system meets regulatory and safety labeling requirements.
- Check any storage temperature limitation controls and heat dumps related to the solar system are operating correctly.
- Check that any thermostatic mixing valves are operating correctly.

In addition, the year five visit will include:

- Replacement of antifreeze.
- Check expansion vessel gas pressure is suitable.



About Southern Solar

Established in 2002, we are specialists in the installation of solar hot water and solar electrical systems. We have built a strong reputation for delivering a high quality service to commercial, public sector and householders, having successfully completed thousands of solar projects across the UK.

Currently with eight regional teams in Bristol, Canterbury, Hereford, London, Oxford, Sussex, Wales and Winchester our regional teams survey, specify install and maintain solar systems across the south of England and Wales.

Find out more about Southern Solar at
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Official solar partner to:

