



InstaGen 25% Uplift Summary

Overview

Our InstaGen Solar Panels have been awarded innovation status under the ECO4 Scheme, providing a 25% uplift in measure-specific funding. The ECO4 (Energy Company Obligation) scheme aims to assist low-income individuals residing in fuel-poor homes by reducing their heating costs through the installation of energy-efficient insulation, heating, and renewable measures.

This innovation status means that an installer using our product, with its 25% uplift on the measure score, would receive additional funding compared to a traditional solar panel system. On average, our innovative solar system can allow installers to receive an additional £1,500 from the 25% uplift.

Our innovative solar panel system integrates cutting-edge technology to optimise energy output while minimising potential losses due to shading, module mismatch, degradation, and other issues. At the core of our system are high-performance solar panels equipped with Tigo optimisers, which enhance generation efficiency.

The solar panels utilised in our system are designed to capture sunlight and convert it into electricity with maximum efficiency. Each panel is fitted with Tigo optimisers, which serve as intelligent electronic components that ensure optimal performance of the solar array.

Tigo optimisers are engineered to constantly monitor and regulate the output of each individual solar panel, thereby mitigating the impact of shading, module mismatch, and other factors that can impede energy generation. By optimising the output of each panel, Tigo optimisers enable our solar system to operate at peak efficiency under varying environmental conditions and shading.

Breakdown of Components:

1. **Solar Panels:** High-quality photovoltaic panels designed to capture sunlight and convert it into electricity.
2. **Tigo Optimisers:** Intelligent electronic devices that maximise energy output by monitoring and regulating the performance of individual solar panels.
3. **Tigo TAP Monitoring Device:** The Tigo Access Point (TAP) improves the data management of your solar system through seamless communication with Tigo Smart modules and retrofit devices.

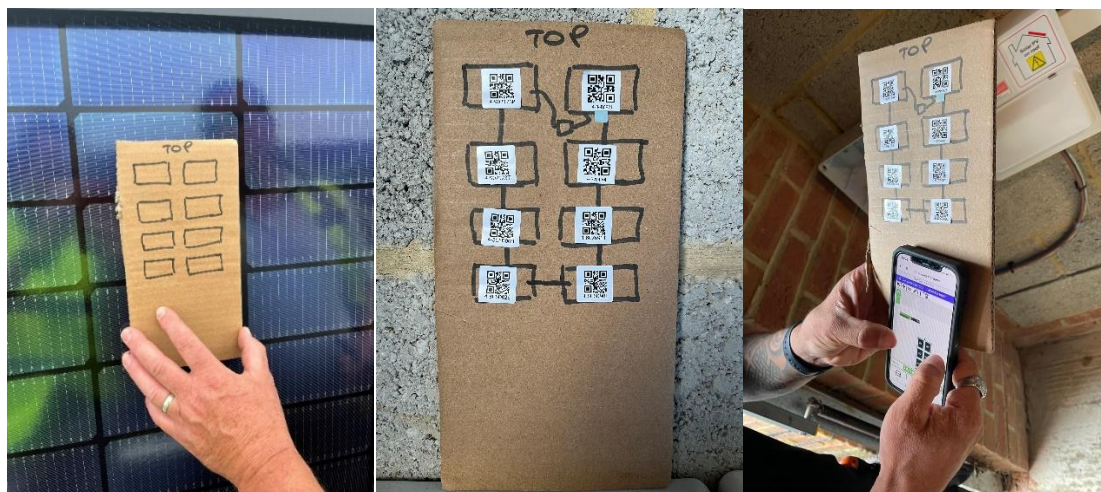
Requirements for Funding Uplift:

1. Product/system warranty reflecting the ECO household address to which the measure is delivered.
2. Documentation reflecting the capacity of solar and the underlying assessment, measured in kWp for the ECO household to which it is delivered.
3. Pre, mid, and post installation photographs of the product installed in the ECO household, including the optimiser with panels.
4. MCS certification for the ECO household connected to the solar PV array.
5. A data plan provided to households without Wi-Fi at no cost to the end-user for a minimum of 10 years. (Get in contact with InstaGroup for further advice if customer has no Wi-Fi).
6. A manufacturer warranty registered for the Solar PV array, covering at least a 12-year period and a 30-year linear power output warranty.
7. Additional CCA/TAP modules included at no cost to the end-user, demonstrated through photographic evidence.
8. A label on all devices clearly describing the free services available to the end-user and how to utilise these services.
9. A guide included within the handover notes for the system, ensuring the householder can connect to and use the monitoring system provided by the CCA.

Installation Steps

1) Tigo optimizer mapping layout

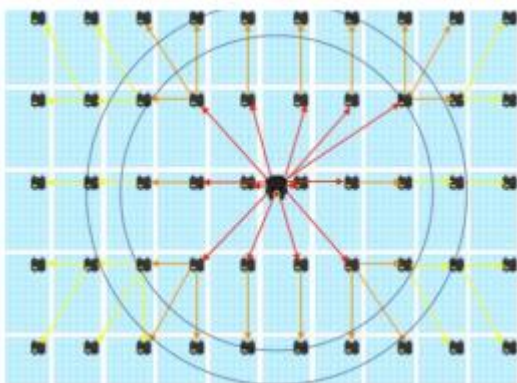
- The barcodes of each optimizer fitted to the back of the panel needs to be recorded in such a way to ensure the ease of mapping.
- Remove the QR/barcode sticker and affix it to a suitable map of the solar array (Ensure this matches the physical layout of modules on the roof).



- Attach the TS4 to the top of the PV module frame using the silver clips with the cable glands facing down. The TS4 and its cables, cable glands, and connectors must not touch the roof surface.



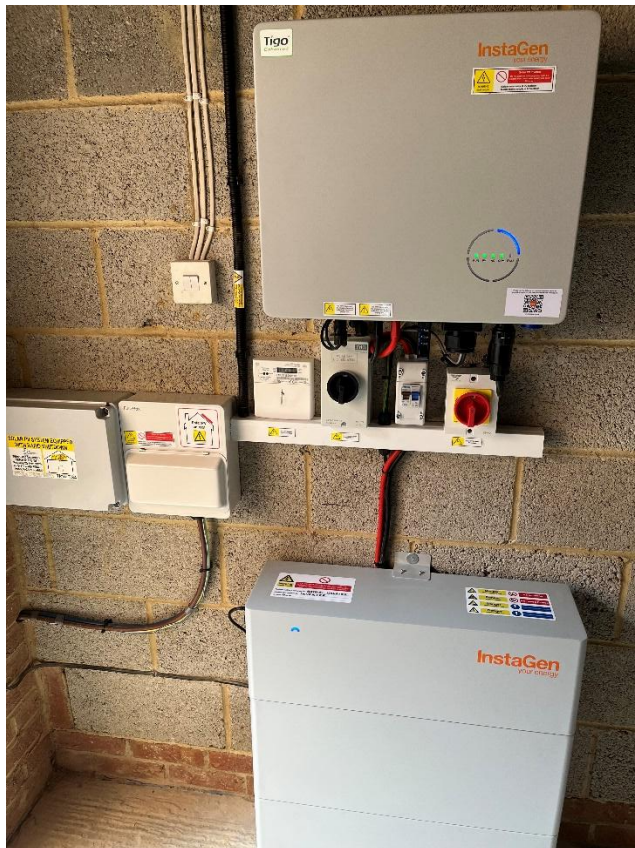
- Connect the shorter TS4 input leads to the PV modules.
- Connect the longer set of TS4 output cables to the neighbouring TS4 to create a string.
- A TAP communicates wirelessly with TS4 devices to gather monitoring data and enable rapid shutdown. The TAP communicates with a CCA via a ferruled 4-wire communication cable such as shielded Cat5e.
- One TAP can communicate with up to 300 TS4s when placement guidelines are followed.
- Install the TAP centrally in an array for best coverage. Tap works best when no more than 10m from nearest optimiser.



- Complete all communications connections before powering on the CCA.

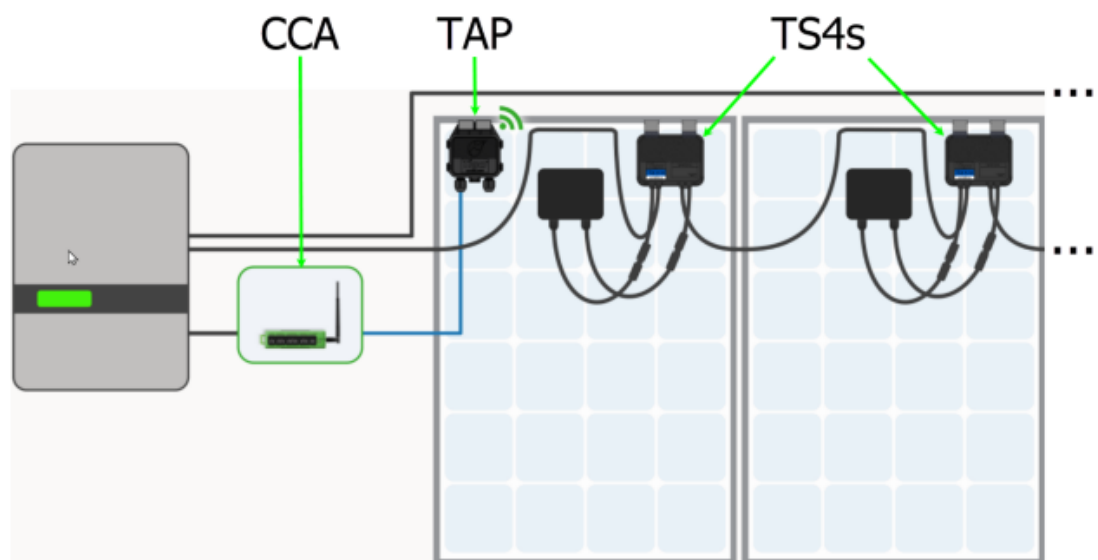
2) Labelling

- The QR code provided which links the customer with the warranty portal and the Tigo app guide for the end user (https://www.instagroup.co.uk/wp-content/uploads/2024/07/tigo-manual-cca-tap-ts4_InstaGroup.pdf & <https://www.instagroup.co.uk/warranty-registration/>)
- QR code to be affixed to the inverter and the Tigo CCA / TAP Enclosure
- Remember to make reference to this in your MCS handover pack the end user receives!



3) Tigo Optimizers & C-Tap monitoring device

- TS4-A-O (monitoring, rapid shutdown, and optimization) MLPE use the Tigo Access Point (TAP) and the Cloud Connect Advanced (CCA) hot spot to communicate with inverters and the cloud.
- TS4s mount directly onto module frames with spring clips where the frame edge
- Perform system configuration and registration with a browser or with the Tigo Energy Intelligence (EI) mobile app available in the App Store or Google Play. Final commissioning requires using the Tigo EI mobile app.
- Residential installers can use the Tigo EI app for the entire process.
- Scan this QR code to download the app.



4) Mid & Post Installation Photos

These photos are in addition to the standard mid / post photos required for ECO4 to prove the measure was installed to innovation.

- Tigo optimisers fitted to panels
- Tigo CCA / TAP installation process including enclosure
- QR Code affixed to inverter and CCA / TAP enclosure

Examples of CCA / TAP installation and enclosure

