



Non-Domestic Microgen  
Scheme

**Quality Assurance and Development  
Programme for Solar PV Registered  
Companies & Registered Installers**

Version 1.1 2023



## Document Revisions

| Version | Date                       | Changes to previous version                 |
|---------|----------------------------|---|
| 1.1     | 03 <sup>rd</sup> July 2023 | Increase of Solar PV System Size to 1000kWp |

## Important points for Companies operating under SEAI Programmes

- This document outlines the key elements and processes of the Quality Assurance and Development Programme (QADP) for the Non-Domestic Microgen Scheme which operates under the Microgeneration Support Scheme (MSS). All registered Companies must ensure that they and their operators are fully familiar with the Quality Assurance and Development Programme set in this document.
- The Non-Domestic Microgen Scheme and other SEAI programmes such as Better Energy Homes, Communities and other Programmes are separate grant programmes with different terms and conditions.

## Table of Contents

|     |  |    |
|-----|--|----|
| 1.  | Quality Assurance System.....  | 3  |
| 1.1 | System Overview.....   | 3  |
| 1.2 | Roles and Responsibilities of the Registered Company and Registered Installer..... | 4  |
| 1.3 | Audit Process and Technical Non-Compliances.....                                   | 5  |
| 1.4 | Administrative Non-Compliances.....  | 6  |
| 1.5 | Classification System for Audit Findings of Technical Non-Compliances.....         | 6  |
| 1.6 | Response Time to Rework Requirement Notifications.....                             | 7  |
| 2   | Risk Based Evaluation of Company Performance and Development Programme.....        | 7  |
| 2.1 | Record of Non-Compliances.....   | 7  |
| 2.2 | Deregistration.....  | 7  |
| 2.3 | Summary Deregistration.....  | 8  |
| 2.4 | Deregistration Process.....  | 8  |
| 2.5 | Re-registration.....   | 9  |
| 2.6 | Company Appeals.....   | 9  |
| 3   | Amendments to the Quality Assurance and Disciplinary Procedure.....                | 11 |
| 4   | Classification of Non-Compliances.....   | 11 |
| 5   | Technical Helpdesk.....  | 11 |
| 6   | Appendix 1 –Action for Non-Compliance.....   | 12 |
| 7   | Appendix 2- Checklists.....  | 20 |
| 7.1 | Solar PV On-Site Inspection Questions.....   | 20 |

## INTRODUCTION

By carrying out energy retrofit upgrades in Irish business, agricultural, public and non-profit sectors under the Scheme, you are playing a vital role in helping Ireland to reduce its greenhouse gas emissions. Ireland and the European Union are working towards a set of goals for 2020, 2030 and 2050. The aim is to make the energy usage in the EU largely carbon free by 2050. To achieve this, several goals have been agreed such as the reduction in greenhouse gases of 30% by 2030 and net zero target by 2050.

The main objectives of the Non-Domestic Microgen Scheme are:

- Promote non-domestic self-consumption of solar PV.
- Address the Energy White Paper commitment to empower citizens to become active participants in the energy transition by supporting the 'prosumer' paradigm
- Build data and evidence to inform any future support scheme for microgeneration
- Investigate the technical, regulatory, and behavioural barriers to the adoption of microgeneration
- Where possible, ensure that microgeneration is either the last measure, or the first of many measures a business, agricultural, public and non-profit sectors to improve the energy performance of their building encompassing the "fabric first" approach, where efficiency of the biggest energy uses (space heating and hot water) should be addressed first
- Create a sustainable and enduring solar PV microgeneration industry in Ireland, supporting local enterprise and employment

The quality-of-service delivery by Companies registered on the SEAI's Solar PV Companies/Installer Register is central to its reputation and operation, which supports its purpose of delivering energy retrofits for non-domestic buildings and value for public monies. That quality of service has two key dimensions: competence and compliance; improving the quality and safety of PV installations and ensuring appropriate governance of the scheme.

A primary element of the Quality Assurance and Development Programme is the performance monitoring and evaluation procedure of Companies installations delivered under the Microgeneration Support Scheme Terms and Conditions and the Non-Domestic Microgen Scheme Code of Practice for Installers. Installing Solar PV can pose unique challenges such as DC and AC electrical work, working at heights on roofs, handling and eventually maintaining equipment. SEAI aims to improve the delivery, application process and ensure the quality of installs, without the addition of unnecessary additional administrative burden.

It is planned to review the Non-Domestic Microgen Scheme programme regularly to inform the future direction of PV support and the Quality Assurance System.

## Quality Assurance System

### ○ System Overview

The overall approach by the SEAI to the Quality Assurance of Non-Domestic Microgen Scheme Registered Companies consists of a combination of:

- The Company maintaining a Quality Management System to ensure compliant installations are delivered on a reliable basis
- Application of the SEAI's Non-Domestic Microgen Code of Practice for Installers through audits and inspections.
- Application of the terms and conditions of the scheme by audits and administration checks.
- Promoting best practice and Quality Assurance of Companies registered to the scheme.

For a Company to properly operate under the List of SEAI's Solar PV Registered Companies/Installers, it is essential that they have read, understood, signed up to and strictly adhere to their obligations contained within, these include, but are not necessarily limited to:

- The Non-Domestic Microgen Scheme Company Registration Form
- The Non-Domestic Microgen Scheme Code of Practice
- Non-domestic Microgen Scheme Quality Assurance and Development Procedure (this document)
- All technical documentation as published on the SEAI Website
- All relevant technical documentation and notifications as SEAI may issue from time to time.

**Note:** It is the version published on the SEAI website which is deemed to be currently applicable.

This document sets out the approach to assessing the compliance of installations to the Scheme requirements, the actions required to rework or remedy an installation and resulting quality assurance procedures for registered companies and registered installers. SEAI shall use all means at its disposal to ensure quality is delivered reliably and where relevant, compliance issues are identified and remedied. This includes, but is not restricted to, desktop audits, on-site audits, Company, Installer and homeowner phone audits, complaints investigation etc.

### **Roles and Responsibilities of the Registered Company and Registered Installer**

Any Company wishing to participate or offer services related to Solar PV for the Non-Domestic Microgen Scheme is required to be registered. The Registered Company is the business the applicant has a contract with to complete the installation. The applicant applies online and at this time they have the option to select a Registered Company who will be completing the works. The Company is responsible for ensuring the installation meets the requirements agreed between the parties and ensure that installations meet all the requirements of the Non-Domestic Microgen Scheme Code of Practice.

Companies are registered by SEAI with a commitment to:

- Only use Registered Installers.
- Adherence to the Non-Domestic Microgen Scheme Code of Practice.
- Demonstrated tax compliance and sufficiency of insurance cover.
- Use of a standard contract with the homeowner for all jobs.
- Agree to the Terms and Conditions listed in the Company registration form that all companies are required to sign when registering with the scheme.

*ID Number's for registered companies in the Solar PV QADP procedure are assigned 5-digit numbers, starting at 50001. Note: These are unique to the PV scheme and so are different from the IDs assigned by other SEAI schemes.*

### **Registered Installer**

This is the person who signs the Declaration of Work (DOW). By doing so they certify that the PV installation meets the requirements and quality standards defined in the scheme. Works completed must be commissioned by a registered installer and the Declaration of Works must be signed by that person to ensure that the work meets the required standard.

A registered installer is required to

1. Have completed a recognised solar PV qualification
  - Be a registered Electric Contractor (REC) with Safe Electric
  - Agree to the Terms and Conditions contained in the Installer Registration form that all installers are required to sign when registering with the scheme.

Please see the registration form for more information.

*ID Number's for registered installers in the Solar PV QADP procedure are assigned 5-digit numbers, starting at 60001. Note: These are unique to the PV scheme and so are different from the IDs assigned by other SEAI schemes.*

### **Coordination with other SEAI Schemes (Better Energy Homes, Sustainable Energy Communities etc.)**

Registration with the Non-Domestic Microgen Scheme is specifically required for the installation of solar PV systems. The Non-Domestic Microgen Scheme has specific terms and conditions and requirements.

- The role of the 'Company' in the Non-Domestic Microgen Scheme is similar to the role of the 'Company' in the Domestic Solar PV Scheme. The role of the 'Installer' in the Non-Domestic Microgen Scheme is similar to the role of the 'Installer' in the Domestic Solar PV Scheme. ID numbers assigned in the Non-Domestic Microgen Scheme are different than those assigned in other schemes and Companies/Installers should take care to reference their assigned Solar PV ID numbers with this scheme.
- Similar disciplinary procedures are outlined in this document for the Non-Domestic Microgen Scheme that are similar to the Domestic Solar PV Scheme.
- The Non-Domestic Microgen Scheme has different registration processes, eligibility criteria, roles and responsibilities, terms and conditions etc. than those of other schemes.

### **Audit Process and Technical Non-Compliances**

Desktop audits, site inspections and on-going continuous improvement are the main tools through which the Quality Assurance of the works and competency/compliance of Solar PV Registered Companies is achieved. The aim of the Quality Assurance programme is to ensure grants are validly paid and support the growth and development of the solar PV sector in Ireland in several ways:

- Ensuring high quality installations to support companies/installers who deliver projects which will be safe, efficient and reliable
- Develop the supply chain and ensure installations are best practice
- Developing high quality standards to promote consumer confidence in the sector
- Any technical non-compliances identified must be corrected via the re-works process by the responsible Company
- Such errors are avoided in future through feedback directly to the Company to continuously improve the service and improve their knowledge of standards and best practice; and
- Disciplinary sanctions may be applied as appropriate, in accordance with the terms and conditions for company/installer registration and to this QADP.

It should be noted that the above Quality Assurance processes in no way removes the sole responsibility for the quality and compliance of all elements of the installations with the associated Company/Installer.

The Audit Process involves planning, co-ordinating, conducting of desktop audits and site inspections,

reporting and acting on the findings, as appropriate. The selection of a Solar PV Company for an audit maybe carried out on both a random and a targeted basis. Selection of a Solar PV Company for audit should not be interpreted as there being any prior presumption by SEAI of error / non-compliance on the part of the Solar PV Company concerned. Each active Company can expect to be audited regularly.

### **Administrative Non-Compliances**

The continued efficient administration of the scheme requires Companies to fulfil their obligations in respect of registration and installation documentation. During routine administration and auditing SEAI may become aware of cases where installations, companies or installers are not fully compliant with the scheme.

In instances where these Administrative Non-Compliances are deemed serious, they may result in sanctions being applied under the Scheme Quality Assurance and Development Programme, emphasising the importance of always maintaining professional administration and customer service.

Where insurance or Tax expires, the company or installer shall be automatically deregistered. The company or installer is obliged to update their records in order to be reregistered.

Administrative Non-Compliances are set out in Appendix 1. (SEAI retains the right to add to / amend this appendix as required to maintain the integrity of the scheme).

### **Classification System for Audit Findings of Technical Non-Compliances**

An audit finding of non-compliance may arise from a technical error or non-compliance with the SEAI's Non-domestic Microgen Scheme Code of Practice or the Company/Installer Registration Terms and Conditions.

Each non-compliance is assigned a severity rating and penalty points are assigned to each severity rating for the purpose of evaluating a Company's performance in accordance with SEAI's evaluation method.

The severity ratings of non-compliances are defined as follows:

| <b>Severity Rating</b>           | <b>Severity 1</b>   | <b>Severity 2</b>  | <b>Severity 3</b>  |
|----------------------------------|---|--|--|
| <b>Classification</b>            | Major or Critical Non-Compliance posing a risk of system failure or safety hazard. Will impede payment. | Non-Compliance which may compromise the effectiveness of the installation. Potential to delay payment. | Non-Compliance not expected to impact operation or safety. |
| <b>Re-work Requirement</b>       | Re-works required   | Re-works required  | Re-works required  |
| <b>Penalty Points Applicable</b> | 3 penalty points  | 2 penalty points   | 1 penalty point  |

Non-compliances are contained in . SEAI retains the right to add to/amend these appendices as required to maintain the integrity of the Scheme.

### Response Time to Rework Requirement Notifications

The allowable period for Company reworks to take place is determined by the severity level discovered at the time of audit. All re-works instructions must be responded to within the timeframe indicated (varies depending on severity).

- **Severity 1:** Company is notified within 1 week of audit and they must undertake reworks and submit confirmation of same to SEAI within 28 days of dated notification. Three penalty points are assigned.
- In certain instances, a Severity 1 merits immediate action to ensure the issue is made safe and, in such circumstances, SEAI notifies the Company that immediate remedial action is required. This rework must be completed as a matter of urgency and confirmation of completion of same submitted to SEAI within 48 hours of notification of rework requirement.
- **Severity 2 and 3:** Company is notified within 1 week of audit and he/she must undertake reworks and submit confirmation of same to SEAI within 28 days of dated notification. Two or one penalty points respectively are assigned.

The Company receives a Reworks Notification from SEAI with a deadline of four weeks to complete reworks and return the attached Reworks Form to the stated SEAI address. A reworks notification may be appealed within 2 weeks, in writing only, by using the Reworks Appeal form provided with the Reworks Notification.

**Failure to comply with a direction to undertake re-works in a timely manner will result in deregistration from both Domestic and Non-Domestic Registered Installers & Companies Registers.**

### Risk Based Evaluation of Company Performance and Development Programme.

#### Record of Non-Compliances

The recording of non-compliances in the form of Severity Ratings is one element of the evaluation process described above. Companies shall be formally notified of Non-Compliances and Severity Ratings applied by email as part of the Reworks Notification. It is important to note that:

- A Solar PV Company's inspection results are recorded.
- All Non-Compliances / severity ratings associated with individual properties will be recorded on the Company profile.
- Each company's profile is treated as a single entity and the non-compliances / severity ratings accrued are assigned cumulatively.
- Significant poor performance will require corrective actions by Companies to improve performance as directed by SEAI. Failure by a Company to improve performance following direction by SEAI may lead to deregistration.

#### Deregistration

The table below lists some of the triggers which will result in deregistration:

| Deregistration Period | Triggers   |
|-----------------------|--|
| 2 Months              | <ul style="list-style-type: none"><li>• Failure to attend targeted workshops / training when directed by SEAI.</li></ul> |

|          |  |
|----------|--|
|          | <ul style="list-style-type: none"> <li>• Undertaking work without appropriate insurance cover.</li> <li>• Company undertaking works while deregistered.</li> <li>• Company applying on behalf of the applicant or letting the applicant use their email address (or any nominated personnel or installer).</li> </ul>  |
| 6 Months | <p>Inappropriate or fraudulent behaviour, including but not limited to:</p> <p>(a) attempt to defraud SEAI / state</p> <p>(b) attempt to defraud applicant</p> <p>(c) any attempt to support the applicant in their endeavours to defraud SEAI / state</p> <p>(d) Inappropriate, unsafe or highly non-compliant behaviour such as:</p> <ul style="list-style-type: none"> <li>• Failure to use products that are fit for purpose, or have a detrimental impact on the structure, viability, quality or safety of the property or are not installed to applicable standards.</li> <li>• Subcontracting work to a Company not on the Solar PV list of Registered Companies/Installers.</li> <li>• Using non-registered Installers to sign DOW.</li> <li>• Very High-Risk Category after a single SEAI performance evaluation. See Appendix 1.</li> </ul> |

### Summary Deregistration

Notwithstanding the above, SEAI reserves the right to summarily deregister a Solar PV Company in specific circumstances involving a technical non-compliance with SEAI's Non-Domestic Microgen Scheme Code of Practice or technical failure that risks compromising applicant health and safety; repeated seriously non-compliant works; failure of an audit or inspection; or activities that could bring the programme into serious disrepute. In this case, deregistration will not be deferred for two weeks although the Company will still be entitled to appeal the decision. No grant related works may be conducted until the appeal has been heard.

In order to remain registered Companies must remain active. If they do not carry out a sufficient number of SEAI supported (grant-related or other) jobs, Companies may be removed from the register. The minimum required to be considered active is three jobs per year, with at least one job completed every six months. When a Company is removed from the register for being inactive, they must remain deregistered for a minimum of six months.

### Deregistration Process

When a Company has been identified for deregistration, e.g., for significantly non-compliant works, the Company may appeal this decision according to the deregistration appeal process set out in section on Company Appeals.

When the deregistration is due to failure to complete reworks, the Company is given the opportunity to appeal the reworks and there is no additional deregistration appeal process after the reworks

appeal decision is made or the time allowed for appeal of reworks has passed.

During the deregistration period the following restrictions apply:

- A Company must not commence any Solar PV works not already started prior to de-registration
- A Company must not accept any new works through the Non-domestic Microgen Scheme.
- A Company is strictly forbidden to accept works as a change of Company as and from the effective date of deregistration
- The completion of any Solar PV works already started by a Company prior to this notice, must be completed within 14 days and shall be subject to the Terms and Conditions of the scheme including audit and rework requirements.

### **Re-registration**

**Re-registration on the Solar PV Company list is NOT automatic.** Once a Company's period of deregistration is completed, it is the responsibility of the Company to contact SEAI to request re-registration. The following information should be provided with the Company's re-registration request:

- Evidence that the basis for your deregistration has been rectified and that the Company has incorporated the necessary steps in its` processes to ensure that the cause which resulted in the deregistration, does not occur again.
- Up to date Insurance and Tax Clearance Certificates.

SEAI reserves the right to impose reasonable conditions on the Company before re-registration. Such conditions may include, but are not limited to, the following requirements: to provide proof of competency, to study the terms and conditions of registration, to study SEAI's Non-Domestic Microgen Scheme Code of Practice and QADP document (this document), to complete a training course, to pass a specified examination, or to provide an updated quality assurance statement. This list may be amended by SEAI from time to time. The number of penalty points applied, and the details of the deregistration shall be kept on record.

### **Company Appeals**

#### **Re-works**

If a desktop audit or site inspection returns a finding of Sev 1, Sev 2 or Sev 3 reworks, the Company receives a Re-works Notification from SEAI with a deadline of four weeks to complete reworks and return the attached Reworks Form to the stated SEAI address. The Company may appeal the re-works decision in writing, within 2 weeks, using the Re-works Appeal form, providing all necessary information to support the appeal. The re-works appeal is reviewed by the SEAI Inspections Unit. The decision by the Inspection Unit may be re-appealed but only on the basis that the logic of the decision was incorrect. . The re-appeal is reviewed by the Head of the Inspections Unit, the decision is final.

A Company who fails to complete reworks by the given deadline, and does not appeal the reworks decision, is deregistered until the reworks are completed or for longer periods where applicable.

Once a re-work has been applied and not successfully appealed, penalty points are automatically awarded. Penalty points may not be appealed.

Once an appeal is received, no sanctions are imposed pending consideration of the appeal by SEAI (except in the case of summary deregistration)

Appeals on Re-works should be sent to:

Technical Helpdesk  
Non-Domestic Microgen Scheme  
SEAI  
Beech House  
Beech Hill Office Campus  
Beech hill Road  
Dublin 4 D04V5N2

Email: [solarpv@seaiauditing.ie](mailto:solarpv@seaiauditing.ie)

#### Significant non-compliance

If an inspection returns a finding that works are significantly non-compliant, i.e., a significant portion of the work is not complete, the Company may receive a letter of “Deregistration Pending Appeal”. The Company has two weeks to appeal the deregistration in writing. Appeals for deregistration due to significant non-compliance are heard by the SEAI Appeals Board. The decision of the Appeals Board is final and may not be re-appealed.

#### Summary Deregistration

Summary deregistration such as serious breach of Health and Safety standards). All appeals must be submitted in writing using the forms provided for that purpose. SEAI endeavours to respond with a decision to all appeals as quickly as possible.

De-registered companies may appeal this decision in writing, describing in detail the grounds for the appeal and including the following information:

Company ID  
Company Name  
Key Contact  
Date of Appeal  
Appeal Reference (App ID and/or MPRN)  
Key Contact Signature and Date

[solarpv@seaiauditing.ie](mailto:solarpv@seaiauditing.ie)

Deregistration appeals (and insurance updates) should be sent to:

Administration Helpdesk  
Non-Domestic Microgen Scheme  
SEAI  
PO Box 119  
Cahirciveen  
Co Kerry

Email: [solarpv@seai.ie](mailto:solarpv@seai.ie)

## **Amendments to the Quality Assurance and Disciplinary Procedure**

SEAI has the right to periodically update its procedures and practices. As a result, SEAI reserves the right to review and amend the systems and procedures outlined in this document and may also issue other directions to Solar PV Companies.

Companies shall be made aware of any such proposed amendments by email or by way of an update displayed on the Solar PV Companies section of SEAI's website. SEAI may invite Solar PV registered Companies to submit comments on, or provide a response to, the proposed amendments. For the most up to date version of this document, that is binding on all Solar PV Companies, visit and download from SEAI's website [www.seai.ie](http://www.seai.ie)

## **Classification of Non-Compliances**

The lists are separated into administrative and technical as appropriate. As noted previously these lists may be updated from time to time and are provided here for clarity and information.

## **Technical Helpdesk**

Please use our technical helpdesk for your queries:

**Phone:** (01) 277 6977

**Email:** [solarpv@seiauditing.ie](mailto:solarpv@seiauditing.ie)

## Appendix 1 –Action for Non-Compliance

| Reference | Doc Ref                        | Description  | Immediate Sanction   |
|-----------|--------------------------------|--|--|
| 1         | T&C 9(q)                       | Engaging in inappropriate or fraudulent behaviour  | 6 months   |
| 2         | T&C 9(g)                       | Failure to carry out remedial works as required and within the appointed deadline.   | 6 months   |
| 3         | T&C 29,<br>CoP                 | Failure to use products that, are fit for purpose, or have a detrimental impact on the structure, viability, quality or safety of the property, or not installed to applicable standards   | 6 months   |
| 4         | T&C 46                         | Sub-contracting to a company not on the Solar PV scheme lists of registered Companies and Installers   | 6 months   |
| 5         | T&C 38                         | Failure to attend targeted workshops / training when directed by SEAI  | 2 months   |
| 6         | T&C 5                          | Undertaking works without appropriate Insurance cover  | 2 months   |
| 7         | CoP<br>T&C 15                  | Company undertaking works while deregistered (where applicable this sanction runs subsequent to the earlier term of deregistration)  | 2 months   |
| 8         | T&C 22<br>CoP                  | Undertaking works while unregistered due to failure to provide valid Tax details and/or valid Declaration of Insurance)  | Dereg until received   |
| 9         | CoP                            | Failure to provide optimal solution to homeowner where physically and economically possible  | 2 months   |
| 10        | CoP                            | Companies should always behave professionally and maintain the high standards expected of the scheme from the quality of the physical works carried out to the level of professionalism with which they are completed, as per the Domestic Solar Photovoltaic Code of Practice | 2 months   |
| 11        | T&C 9,<br>12, 13,<br>14<br>CoP | Failure to respond to SEAI email requests within the required timeframe thereby impeding the effective and efficient administration of the Scheme  | Dereg until received   |
| 12        | T&C 9c<br>CoP                  | Failure to provide the correct data and date of works on the declaration of works (DoW) form or in a verification email, thereby impeding the effective and efficient administration of the Scheme   | 2 months   |
| 13        | T&C 9p                         | Unauthorised use of the SEAI logo for marketing or other purposes  | 2 months   |
| 14        | Guide<br>T&C 7                 | Company applying on behalf of the homeowner or letting the homeowner use their email address (or any nominated personnel or installer),  | 2 months   |
| 15        | T&C 9                          | Failure to ensure that Registered Installers meet the technical competency requirements for the Scheme as specified by SEAI, and are competent, qualified and have the necessary training and experience to complete the works according to the Scheme's specifications        | 2 months or until personnel meets requirement; whichever date is later |
| 16        | T&C 28                         | DoW signed by a non-Registered Installer on the SEAI approved Registered Installers list   | 2 months   |

| Reference | Doc Ref                        | Description  | Immediate Sanction   |
|-----------|--------------------------------|--|----------------------|
| 1         | T&C 9(q)                       | Engaging in inappropriate or fraudulent behaviour  | 6 months             |
| 2         | T&C 9(g)                       | Failure to carry out remedial works as required and within the appointed deadline.   | 6 months             |
| 3         | T&C 29,<br>CoP                 | Failure to use products that, are fit for purpose, or have a detrimental impact on the structure, viability, quality or safety of the property, or not installed to applicable standards   | 6 months             |
| 4         | T&C 46                         | Sub-contracting to a company not on the Solar PV scheme lists of registered Companies and Installers   | 6 months             |
| 5         | T&C 38                         | Failure to attend targeted workshops / training when directed by SEAI  | 2 months             |
| 6         | T&C 5                          | Undertaking works without appropriate Insurance cover  | 2 months             |
| 7         | CoP<br>T&C 15                  | Company undertaking works while deregistered (where applicable this sanction runs subsequent to the earlier term of deregistration)  | 2 months             |
| 8         | T&C 22<br>CoP                  | Undertaking works while unregistered due to failure to provide valid Tax details and/or valid Declaration of Insurance)  | Dereg until received |
| 9         | CoP                            | Failure to provide optimal solution to homeowner where physically and economically possible  | 2 months             |
| 10        | CoP                            | Companies should always behave professionally and maintain the high standards expected of the scheme from the quality of the physical works carried out to the level of professionalism with which they are completed, as per the Domestic Solar Photovoltaic Code of Practice | 2 months             |
| 11        | T&C 9,<br>12, 13,<br>14<br>CoP | Failure to respond to SEAI email requests within the required timeframe thereby impeding the effective and efficient administration of the Scheme  | Dereg until received |

|    |                |   |  |
|----|----------------|---|--|
| 12 | T&C 9c<br>CoP  | Failure to provide the correct data and date of works on the declaration of works (DoW) form or in a verification email, thereby impeding the effective and efficient administration of the Scheme  | 2 months   |
| 13 | T&C 9p         | Unauthorised use of the SEAI logo for marketing or other purposes   | 2 months   |
| 14 | Guide<br>T&C 7 | Company applying on behalf of the homeowner or letting the homeowner use their email address (or any nominated personnel or installer),   | 2 months   |
| 15 | T&C 9          | Failure to ensure that Registered Installers meet the technical competency requirements for the Scheme as specified by SEAI, and are competent, qualified and have the necessary training and experience to complete the works according to the Scheme's specifications | 2 months or until personnel meets requirement; whichever date is later |
| 16 | T&C 28         | DoW signed by a non-Registered Installer on the SEAI approved Registered Installers list  | 2 months   |

The list of actions in the table above is not exhaustive, and sanctions may also apply to other instances of non-compliance with the T&C, the SEAI's -Domestic Microgen Scheme Code of Practice and other directions from SEAI.

## Appendix 2- Checklists - Solar PV On-Site Inspection Questions

| Section                             | Solar PV Inspection Item   | Code | Detail  | Severity |     |       |
|-------------------------------------|--|------|---|----------|-----|-------|
|                                     |  |      |   | One      | Two | Three |
| <b>Structure and mounting frame</b> |  |      |   |          |     |       |
| A                                   | Roof structure does not appear to be in sufficient condition to support mounting frame over time | A1   | Roof in poor condition  | ✓        |     |       |
| B                                   | Ground / mounting structure not in stable condition / not secured                                | B1   | Frame not level or square                                     | ✓        |     |       |
|                                     |  | B2   | Unsuitable footing/fixing                                     | ✓        |     |       |
|                                     |  | B3   | Mounting structure or frame damaged                           | ✓        |     |       |
|                                     |  | B4   | Not fixed according to manufacturer's instructions            | ✓        |     |       |
| C                                   | Evidence mounting frame is not securely fixed  | C1   | No/poor ballast/anchor  | ✓        |     |       |
|                                     |  | C2   | Lack of roof fixings visible                                  | ✓        |     |       |
|                                     |  | C3   | Wrong fixings used  | ✓        |     |       |
|                                     |  | C4   | Roof integrity compromised                                    | ✓        |     |       |
| D                                   | Operation of existing vents is compromised   | D1   | Array fitted over vents                                       | ✓        |     |       |
|                                     |  | D2   | Vents used for cable entries                                  | ✓        |     |       |
| E                                   | Leaks or water penetration evident   | E1   | Leak visible at cable entry                                   | ✓        |     |       |
|                                     |  | E2   | Staining on roof/ceiling around penetration                   | ✓        |     |       |
|                                     |  | E3   | Mechanically protected fitting not used                       | ✓        |     |       |
| F                                   | Evidence land not cleared around ground mounting frame   | F1   | Evidence land not cleared around ground mounting frame        |          | ✓   |       |
| G                                   | Mounting configuration is not in accordance with Solar PV COP                                    | G1   | Mounting configuration is not in accordance with Solar PV COP | ✓        |     |       |
| <b>Array</b>                        |  |      |   |          |     |       |

| Section                | Solar PV Inspection Item  | Code | Detail  | Severity |     |       |
|------------------------|---|------|---|----------|-----|-------|
|                        |   |      |   | One      | Two | Three |
| H                      | Location & orientation of array does not reasonably maximise the energy yield of Solar PV system                    | H1   | Optimal orientation not used  | ✓        |     |       |
|                        |   | H2   | Shading not avoided   | ✓        |     |       |
| I                      | Proximity of array to roof perimeter not in accordance with COP   | I1   | Array is not minimum 500mm from roof edge   | ✓        |     |       |
|                        |   | I2   | Array is not 200mm below the ridge tile   | ✓        |     |       |
| J                      | Evidence of no rail overhang for module and clamp where required  | J1   | Evidence of no rail overhang for module and clamp   | ✓        |     |       |
| K                      | Evidence of no end caps on mounting bar   | K1   | Evidence of no end caps on mounting bar   |          | ✓   |       |
| M                      | Number of panels do not match the number declared in DOW  | M1   | Number of panels does not match the number declared in DOW  | ✓        |     |       |
| <b>String Inverter</b> |   |      |   |          |     |       |
| N/A                    | Not applicable  | N/A  | Not applicable  | N/A      |     |       |
| N                      | Poor location - not safe / not maintainable   | N1   | No access to inverter   | ✓        |     |       |
|                        |   | N2   | Data not accessible to user   | ✓        |     |       |
|                        |   | N3   | Not firmly fixed  | ✓        |     |       |
|                        |   | N4   | Inadequate ventilation  | ✓        |     |       |
| O                      | Poor location - not in accordance with manufacturer's instructions  | O1   | Poor location - not in accordance with manufacturer's instructions  | ✓        |     |       |
| P                      | Inappropriate IP rating   | P1   | Inverter not suitable for outdoor use   | ✓        |     |       |
|                        |   | P2   | Inverter located in an area with an unsuitable environmental conditions   | ✓        |     |       |
| Q                      | String Inverter not mounted on fire resistant surface (Class O) which extends minimum 150mm beyond edge of inverter | Q1   | String Inverter not mounted on fire resistant surface (Class O) which extends minimum 150mm beyond edge of inverter | ✓        |     |       |

| Section                | Solar PV Inspection Item  | Code | Detail  | Severity |     |       |
|------------------------|---|------|---|----------|-----|-------|
|                        |   |      |   | One      | Two | Three |
| R                      | Evidence inverter not as described in DOW/NC6, or NC7, or NC8, or NC5 | R1   | Evidence inverter not as described in DOW/NC6, or NC7, or NC8, or NC5                               | ✓        |     |       |
| S                      | Automatic isolation of the circuit (shunt)                            | S1   | Not present   | ✓        |     |       |
|                        |   | S2   | Not working or automatic isolation of the circuit does not reconnect upon reconnection of AC supply | ✓        |     |       |
|                        |   | S3   | Not within 1.5m of entry to the building or 1.5m from ground mounted array                          | ✓        |     |       |
| <b>Micro Inverters</b> |   |      |   |          |     |       |
| N/A                    | Not applicable  | N/A  | Not applicable  | N/A      |     |       |
| T                      | Data not accessible to user   | T1   | Data not accessible to user   |          | ✓   |       |
| U                      | Evidence that inverter not installed to manufacturer's requirements   | U1   | Evidence that inverter not installed to manufacturer's requirements                                 | ✓        |     |       |
| V                      | AC isolator not fitted in accordance with manufacturer's instructions | V1   | AC isolator not fitted in accordance with manufacturer's instructions                               | ✓        |     |       |
| W                      | AC cable and fittings not suitable                                    | W1   | AC cable and fittings not suitable  | ✓        |     |       |
| X                      | Automatic isolation of the circuit (shunt)                            | X1   | Not present   | ✓        |     |       |
|                        |   | X2   | Not working or automatic isolation of the circuit does not reconnect upon reconnection of AC supply | ✓        |     |       |
|                        |   | X3   | Not within 1.5m of entry to the building or 1.5m from ground mounted array                          | ✓        |     |       |
| <b>Diverter</b>        |   |      |   |          |     |       |
| N/A                    | Not applicable  | N/A  | Not applicable  | N/A      |     |       |

| Section  | Solar PV Inspection Item  | Code | Detail  | Severity |     |       |
|--|---|------|---|----------|-----|-------|
|  |   |      |   | One      | Two | Three |
| Y  | Diverter not installed to manufacturer's instructions                                   | Y1   | Diverter not installed to manufacturer's instructions                                   | ✓        |     |       |
| Z  | Diverter not in compliance with EN 61000  | Z1   | Diverter not in compliance with EN 61000  | ✓        |     |       |
| AA   | Diverter not commissioned   | AA1  | Diverter not commissioned   | ✓        |     |       |
| AB   | Evidence of diverter not operating as intended  | AB1  | Evidence of diverter not operating as intended  | ✓        |     |       |
| <b>AC Electrical installation &amp; metering</b> |   |      |   |          |     |       |
| AC   | AC Installation not connected to dedicated circuit in compliance with ET101             | AC1  | AC Installation not connected to dedicated circuit in compliance with ET101             | ✓        |     |       |
| AD   | AC Isolator not within 2 meters of Inverter   | AD1  | AC Isolator not within 2 meters of Inverter   | ✓        |     |       |
| AE   | Evidence of AC Cables not secure / mechanically protected                               | AE1  | Evidence of AC Cables not secure / mechanically protected                               |          | ✓   |       |
| AF   | No check meter present on AC supply visible to Applicant                                | AF1  | No check meter present on AC supply visible to Applicant                                | ✓        |     |       |
| AG   | Evidence that system is not generating correctly  | AG1  | Evidence from the check meter that system is not generating                             | ✓        |     |       |
|  |   | AG2  | No past meter reading available / past meter reading inconsistent                       |          | ✓   |       |
| <b>DC Electrical installation</b>                |   |      |   |          |     |       |
| AH   | Evidence of DC Isolator not present   | AH1  | Evidence of DC Isolator not present   | ✓        |     |       |
| AI   | Evidence of DC Cables not secure  | AI1  | Evidence of DC Cables not secure  |          | ✓   |       |
| AJ   | Evidence of DC Cables not mechanically protected at points of entry from wear and tear. | AJ1  | Evidence of DC Cables not mechanically protected at points of entry from wear and tear. |          | ✓   |       |

| Section                              | Solar PV Inspection Item  | Code | Detail  | Severity |     |       |
|--------------------------------------|---|------|---|----------|-----|-------|
|                                      |   |      |   | One      | Two | Three |
| AK                                   | Evidence of DC Cables not in accordance with COP  | AK1  | Evidence of DC Cables not in accordance with COP  | ✓        |     |       |
| <b>Documentation and labelling</b>   |   |      |   |          |     |       |
| AL                                   | Datasheets for Solar PV Modules, Inverters and BESS not provided  | AL1  | Datasheets for Solar PV Modules, Inverters and BESS not provided  |          | ✓   |       |
| AM                                   | Warranties for Solar PV Modules, Inverters, Mounting System not provided  | AM1  | Warranties for Solar PV Modules, Inverters, Mounting System not provided                                  |          | ✓   |       |
| AN                                   | O&M Manual not provided   | AN1  | O&M Manual not provided   |          | ✓   |       |
| AO                                   | Basic start up, shut down, safety, operation and maintenance instructions not provided                            | AO1  | Basic start up, shut down, safety, operation and maintenance instructions not provided                    | ✓        |     |       |
| AP                                   | Estimation of system performance calculated using common tools not provided                                       | AP1  | Estimation of system performance calculated using common tools not provided                               |          | ✓   |       |
| AQ                                   | All safety and information labels not in place  | AQ1  | All safety and information labels not in place  | ✓        |     |       |
| <b>Battery Energy Storage System</b> |   |      |   |          |     |       |
| AR                                   | Poor location   | AR1  | Not accessible  | ✓        |     |       |
| AS                                   | Poor location   | AS1  | Not protected   | ✓        |     |       |
| AT                                   | Evidence battery is not secured in accordance with manufacturer's instructions                                    | AT1  | Evidence battery is not secured in accordance with manufacturer's instructions                            | ✓        |     |       |
| AU                                   | Battery system earthing not present / not in accordance with OEM recommendations                                  | AU1  | Battery system earthing not present / not in accordance with OEM recommendations                          | ✓        |     |       |
| AV                                   | Battery system not mounted on a fire proof surface extending 150mm beyond the edge of the battery storage system. | AV1  | System not mounted on a fire proof surface extending 150mm beyond the edge of the battery storage system. | ✓        |     |       |

| Section                    | Solar PV Inspection Item                                       | Code | Detail   | Severity |     |       |
|----------------------------|--|------|--|----------|-----|-------|
|                            |  |      |  | One      | Two | Three |
| AW                         | Battery system is not 150mm from combustible material.         | AW1  | Battery system is not 150mm from combustible material.         | ✓        |     |       |
| AX                         | No isolation present on battery circuit in accordance with OEM | AX1  | No isolation present on battery circuit in accordance with OEM | ✓        |     |       |
| <b>Planning Permission</b> |  |      |  |          |     |       |
| AY                         | Applicant advised of planning requirements                     | AY1  | Yes  | N/A      |     |       |
|                            |  | AY2  | No   | N/A      |     |       |