



MCS SMART EXPORT GUARANTEE API



Guidance for Application



# 1. INTRODUCTION

The Smart Export Guarantee (SEG) is the governments replacement for the FiT.

Once implemented the SEG should ensure that small-scale generators are remunerated for the electricity they export to the grid. SEG will be in force from the 1st January 2020.

The Government has confirmed MCS (or equivalent) as the route through which households can access the SEG.

Installations up to and including 50kw in size will need to use MCS certified equipment, fitted by an MCS registered installer.

Currently the way that energy companies could determine if a potential customer qualifies for the SEG is very unintuitive; relying on customers to send a copy of their MCS certificate which then needs to be manually checked against the MCS Installation Database (MID).

To assist energy companies with offering SEG tariffs to their customers, MCS has developed a free to use Application Programming Interface (API). This API links to the MCS Installation Database and allows companies to automate the process.

# 2. OPERATION

The API could be integrated into a current typical online application process for a potential customer, removing the requirement for a separate SEG application process or manual verification. The customer would simply provide their MCS Certificate number in addition to their full address (which they would normally be required to submit as part of an online application process. The API would allow for the automatic verification of a potential customer attempting to qualify for SEG, removing the need to manually check each applicant and thus reducing administration costs for energy companies.

Before a company can access the API, MCS needs to create each organisation a UAT profile, for testing the API, and a Live profile, for integrating the API. If your organisation is interested in this service, please email the MCS Helpdesk at [mcs helpdesk@mcs certified.com](mailto:mcs helpdesk@mcs certified.com).

The instructions on how to integrate the API into a company's IT systems, as well as technical information on what responses can be expected to be returned by the API can be found below.

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## GetInstallation/{#}

Where # is the requested Certificate Number, this REST API returns JSON containing the following data:

Property Name	Data Type	Max size/format
CertificateNumber	String	255
CreatedDate	String	yyyy-MM-dd HH:mm:ss
CommissioningDate	String	yyyy-MM-dd
Technology	Integer	
Technology_Description	String	255
AddressLine1	String	255
AddressLine2	String	255
AddressLine3	String	255
County	Integer	
County_Description	String	255
Postcode	String	10
MPAN	String	255
TotalCapacity	Decimal	16:2
EstimatedAnnualGeneration	Decimal	16:2
Status	Integer	
Status_Description	String	50
GenerationMeterSerialNumber	String	100
GenerationMeterReading	String	50
DeclaredNetCapacity	Decimal	10:2
InstallationType	Integer	
InstallationType_Description	String	255
DNONotificationCompliance	Integer	
DNONotificationCompliance_Description	String	255

## Authentication

Anyone wishing to utilise the API must be authorised by MCS.

Upon successful request, a registration email with login details will be sent to a nominated email address. Once registration is complete, a call to the API can be made by passing two authentication headers as follows:

### URL

The UAT API is available at the URL: <https://uat-mcsmid-installation-api.solsticecloud.com/>.

An example API call with full URL:

<https://uat-mcsmid-installation-api.solsticecloud.com/GetInstallation/MCS-00009128-P>

The Live API URL will be: <https://api.microgenerationcertification.org/>. This will be made available post-UAT.

### User

The authorised email address of the person calling the API.

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## Authorisation

The unique token for the person calling the API. This can be found by logging in to the MID using the details displayed in the registration email detailed above.

## Lookup Values

Technology Type

ID	Value
0	Unspecified
1	Air Source Heat Pump
2	Biomass
3	Ground Source Heat Pump
4	Ground/Water source Heat Pump
6	Hot Water Heat Pump
7	Hydro
8	Micro CHP
9	Solar Keymark
10	Solar PV
13	Wind Turbine
14	Exhaust Air Heat Pump
15	Water Source Heat Pump
16	Gas Absorbtion Heat Pump
17	Solar Assisted Heat Pump
18	Solar Thermal

Remember the SEG is only for Solar Photovoltaic installations. Any other technology types that are returned by the API by a submitted certificate number should not qualify for SEG.

County

ID	Value
0	Unspecified
1	n/a
2	Buckinghamshire

3	Cambridgeshire
4	Cheshire
5	Cleveland
6	Cornwall
7	Cumbria
8	Derbyshire
9	Devon
10	Dorset
11	Durham
12	East Sussex
13	Essex
14	Gloucestershire
15	Greater London
16	Greater Manchester
17	Hampshire
18	Hertfordshire
19	Kent
20	Lancashire
21	Leicestershire
22	Lincolnshire
23	London
24	Merseyside
25	Norfolk
26	North Yorkshire
27	Northamptonshire
28	Northumberland
29	Nottinghamshire
30	Oxfordshire
31	Shropshire
32	Somerset
33	South Yorkshire
34	Staffordshire
35	Suffolk

36	Surrey
37	Tyne and Wear
38	Warwickshire
39	West Berkshire
40	West Midlands
41	West Sussex
42	West Yorkshire
43	Wiltshire
44	Worcestershire
45	Flintshire
46	Glamorgan
47	Merionethshire
48	Monmouthshire
49	Montgomeryshire
50	Pembrokeshire
51	Radnorshire
52	Anglesey
53	Breconshire
54	Caernarvonshire
55	Cardiganshire
56	Carmarthenshire
57	Denbighshire
58	Aberdeen City
59	Aberdeenshire
60	Angus
61	Argyll and Bute
62	City of Edinburgh
63	Clackmannanshire
64	Dumfries and Galloway
65	Dundee City
66	East Ayrshire
67	East Dunbartonshire
68	East Lothian

69	East Renfrewshire
70	Eilean Siar
71	Falkirk
72	Fife
73	Glasgow City
74	Highland
75	Inverclyde
76	Midlothian
77	Moray
78	North Ayrshire
79	North Lanarkshire
80	Orkney Islands
81	Perth and Kinross
82	Renfrewshire
83	Scottish Borders
84	Shetland Islands
85	South Ayrshire
86	South Lanarkshire
87	Stirling
88	West Dunbartonshire
89	West Lothian
90	Antrim
91	Armagh
92	Down
93	Fermanagh
94	Derry and Londonderry
95	Tyrone

Status

ID	Value
1	In Progress
2	Created
3	Withdrawn

4	Removed
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The status of a certificate is very important when deciding if a submitted certificate should qualify for the SEG. The only value that should be accepted is "Created". A "Created" value represents a Live certificate and a system that is fully certified under MCS. If a certificate is "In Progress" it has not been completed and the system may not have been commissioned yet. "Withdrawn" and "Removed" certificates should never be accepted for SEG tariffs. These are certificates which either were created by accident or have since had their certification removed.

#### Installation Type

ID	Value
0	Unspecified
1	Domestic
2	Non-Domestic

#### Connection to Electricity

ID	Value
0	Unspecified
1	To be notified post connection and commissioning
2	Consent to connect obtained prior to connection and commissioning
3	Not Applicable

#### Responses

Response	Description
200 - OK	API executed successfully; result returned.
400 - Bad Request	API executed by supplied parameter yielded no results.
401 - Unauthorised	Attempt to call API without correct Username and Authorisation Key.
404 - Not Found	No such call exists.

When testing the API in UAT, please use the below certificate numbers for your test. A mixture of live and withdrawn certificates have been included, as well as technologies other than Solar PV. This is to allow the User to test a variety of scenarios, such as a customer trying to apply for SEG with either a Withdrawn certificate or a non-Solar PV system. These certificates are just for testing purposes and do not represent real installations.

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Certificate	Description
MCS-01109073-U	Live, Solar PV
MCS-01109052-T	Live, Solar PV
MCS-01108964-F	Live, Solar PV
MCS-01109048-C	Live, Solar PV
MCS-01109028-R	Live, Solar PV
MCS-01108865-Z	Withdrawn, Solar PV
MCS-01108828-C	Withdrawn, Solar PV
MCS-01108844-G	Withdrawn, Solar PV
MCS-01108986-P	Withdrawn, Solar PV
MCS-01108987-H	Withdrawn, Solar PV
MCS-01109082-H	Live, Air Source Heat Pump
MCS-01109083-C	Live, Air Source Heat Pump
MCS-01109062-V	Live, Air Source Heat Pump
MCS-01109079-R	Live, Biomass
MCS-01109029-W	Live, Biomass
MCS-01109031-V	Withdrawn, Ground/Water Source Heat Pump
MCS-01109033-O	Withdrawn, Exhaust Air Heat Pump
MCS-01109038-B	Withdrawn, Micro CHP
MCS-01109039-K	Withdrawn, Solar Thermal
MCS-01108830-J	Withdrawn, Biomass

### 3. SUMMARY

MCS has developed an API to be used by energy companies, free of charge, to assist energy companies to fulfil their SEG-related obligations. This API would be linked to the MID, a database with over a million registered installations. The purpose of the API is to reduce the need for manual checks and allow for automation, thus reducing administration costs.

MCS has collaborated with energy companies, BIES and Ofgem to produce an effective tool to support all those who will be involved with the rollout of tariffs under SEG. This will not only help energy providers, but also supports an objective that MCS has to improve quality standards in renewable technology installations.

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Finally, the benefits to the consumer is a potentially seamless and easy process for them to apply for SEG related tariffs. The only additional step they may need to perform is providing their MCS certificate number. If any customers do not have access to a copy of their certificate, they can easily request a copy from MCS.

## 4. CONTACT

If you are interested in using this API for your SEG applications or have any questions, please contact the MCS Helpdesk. MCS will need to create a UAT test profile and a Live test profile for each organisation.

Email: [mshelpdesk@mcs-certified.com](mailto:mshelpdesk@mcs-certified.com)

Phone: 0333 103 8130

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