

Ene 07 Flexible demand response

(All buildings)

Aim

This issue recognises installed electrical building systems which have the capability to automatically modify their electricity consumption patterns in response to signals from the electricity supplier. This allows consumption patterns to be aligned with the availability of renewable energy and so reduce carbon emissions from grid supply electricity.

Overview

Assessment type	Credits available	Applicable assessment criteria
Fully fitted	2	All
Shell and core	2	All
Shell only	0	Not applicable
Residential: Fully fitted	2	All
Residential: Partially fitted	2	All
EU taxonomy	-	None

Minimum standards

Rating level	Credits
-	None

Assessment type specific notes

Reference	Assessment type specific note
-	None

Building type specific notes

Reference	Building type specific note
-	None

Issue specific notes

Reference	Building type specific note
3.0	No electrical systems Where no electrical systems in table 41 are present on-site, this issue is filtered out.

Assessment criteria

Flexible demand response – Two credits

Flexible demand response – one credit

- 1 Identify installed systems present on-site and their flexible demand response capability, see M1, table 41
- 2 At least one flexible demand response point has been awarded.

Where at least three installed electrical systems in table 41 are present:

Flexible demand response – two credits

- 3 At least two flexible demand response points have been awarded

Checklists and tables

None

Methodology

M1: Flexible demand response

The number credits available is determined by the number of electrical systems that are present in the building (see Table 41).

The number of points awarded is determined by the flexible demand response capability of each present system (see Table 41).

Table 41 Flexible demand side response points available and points awarded

Systems present	Flexible demand capability	Points
Electric space heating	Operation can be optimised based on signals from the electricity supplier or local renewable sources.	1
Electric space cooling	Operation can be optimised based on signals from the electricity supplier or local renewable sources.	1
Electric domestic hot water	Operation can be optimised based on signals from the electricity supplier or local renewable sources.	1
Electric vehicle charging points	Charging with one-way control based on signals from the electricity supplier or local renewable sources.	1
	Charging with two-way control based on	2

Systems present	Flexible demand capability	Points
	signals from the electricity supplier or local renewable sources.	
Other systems or equipment with flexible demand capability	Present	1
	The battery energy storage system is capable of charging based on signals from the electricity supplier or local renewable sources.	1
	The battery energy storage system is capable of feeding electricity back into the grid.	1

The types of electrical systems present in the building and their flexible demand response capabilities must be entered in the BGO Platform. This will automatically calculate the number of credits available and awarded.

Example calculation

A building has the following electrical systems installed.

- Electric space heating system – 1 point available
- Electric domestic hot water – 1 point available
- Electric vehicle charging point – 2 points available

Three electrical systems means that two credits are available. The only electrical system with flexible demand capability is the vehicle charging point which has one-way control so according to Table 41 1 flexible demand response point is awarded and the first credit can be awarded.

In accordance with criterion 3 a second point is needed for two credits. This means that one of the two available credits is achieved.

Compliance notes

Ref	Terms	Description
CN1	Single building assessments on larger developments or campuses (and extensions to existing buildings)	Where the building being assessed forms part of a larger development (or is an extension to an existing building) containing common areas and other buildings, the scope of the flexible demand side response criteria applies only to new and existing elements within the construction zone of the assessed building.

Evidence

Criteria	Interim design stage	Final post-construction stage
All	<p>Design drawings, relevant section or clauses of the building specification or contract.</p> <p>Where products are specified, manufacturer's product details, confirming the flexible demand capability of specified systems.</p>	<p>Final construction drawings or equivalent or assessor site inspection report and photographic evidence showing installed systems.</p> <p>Manufacturer's technical data confirming the flexible demand capability of the installed systems.</p>

Definitions

None

Additional information

None