

Accelerated Capital Allowances Eligibility Criteria

Category: Electro-Mechanical Systems

Technology: Process Energy Management Systems

Process Energy Management Systems (PEMS) are hardware, firmware or software control systems designed to manage the energy consumption of energy-using equipment, with the sole aim of optimising energy efficiency within the process and meeting specified energy-efficiency standards.

Eligibility criteria

To be included on the ACA Specified List, a PEMS must meet *all* the required conditions set out below.

Note: *Supporting documentation that clearly demonstrates ACA compliance according to the conditions below will be required as part of the ACA checking process. Detailed information on the types of documents accepted can be found in the separate Supporting Documentation guidelines.*

No.	Condition
1	Inputs to the system must include energy use and process/system conditions.
2	The system must provide a user interface that alerts the user when the system is not performing to its specified conditions.
3	The system must control the operation of more than one piece of standalone machinery, and the equipment must be able to operate without the PEMS (i.e. the system is not an integral part of the operating controls of a machine).
4	All controlled variables on the system must have upper and lower control limits and alert the user when these are outside of required bands, along with the energy impact expected.
5	The system shall have at least one key performance indicator that will be a good indicator of the energy efficiency of the operation of the process/equipment, with an ability to set both upper and lower bands of acceptance.
6	The system must allow the user to monitor and archive energy-related data, and have the capacity to generate standard interchange files that will allow other

	computer systems to use the data collected.
7	The device will have the functionality to cause controlled devices to be set to inactive mode after defined periods of inactivity.
8	All equipment and/or components must be CE-marked as required by the specific EU directive(s).
9	Appropriate installation, operating and maintenance manuals, including an appropriate connections diagram, must be available for the end-user as part of the main contract of sale, along with any software supports required to communicate with external devices in order to maximise the achievement of any potential efficiency improvements when installed.

----- *End of ACA eligibility criteria* -----

Please see next section for guidance on:

1. Supporting documentation required

Guidance on product details and supporting documentation

NOTE: The following information is not part of the official criteria document published within the relevant Statutory Instrument. It has been added here for guidance purposes only in order to help you to provide (a) product details and (b) the required supporting documentation.

All information contained in this guidance document is subject to change without notice.

Supporting documentation required

Described below is the list of documents that are accepted as proof of compliance for the specific Process Energy Management Systems condition.

Note: This information will only be requested **AFTER** you submit your product's basic details online.

Important Notes to Product Providers

Please ensure that you read the "Important Notes to Product Providers" section at the end of this document prior to submitting documentation.

No.	Condition	Supporting Documentation Requirement
1	Inputs to the system must include energy use and process/system conditions.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
2	The system must provide a user interface that alerts the user when the system is not performing to its specified conditions.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
3	The system must control the operation of more than one piece of standalone machinery, and the equipment must be able to operate without the PEMS (i.e. the system is not an integral part of the operating controls of a machine).	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
4	All controlled variables on the system must have upper and lower control limits and alert the user when these are outside of required bands, along with the energy impact expected.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
5	The system shall have at least one key performance indicator that will be a good indicator of the energy efficiency of the operation of the process/equipment, with an ability to set both upper and lower bands of acceptance.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.

No.	Condition	Supporting Documentation Requirement
6	The system must allow the user to monitor and archive energy-related data, and have the capacity to generate standard interchange files that will allow other computer systems to use the data collected.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
7	The device will have the functionality to cause controlled devices to be set to inactive mode after defined periods of inactivity.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
8	All equipment and/or components must be CE-marked as required by the specific EU directive(s).	<p>Official and published manufacturer's technical data sheet or brochure that demonstrates CE marking compliance</p> <p>OR</p> <p>A copy of an official signed declaration on headed paper that confirms CE marking compliance.</p> <p><i>Official declarations should explicitly state the product for which CE marking is being confirmed (i.e. do not provide a letter simply stating general compliance with the relevant ACA condition).</i></p> <p><i>Where a document is used to demonstrate conformance for a number of products or range of products, it should clearly specify each individual product covered by that document.</i></p>

No.	Condition	Supporting Documentation Requirement
9	Appropriate installation, operating and maintenance manuals, including an appropriate connections diagram, must be available for the end-user as part of the main contract of sale, along with any software supports required to communicate with external devices in order to maximise the achievement of any potential efficiency improvements when installed.	<p>A copy of an official signed declaration on headed paper that confirms that the appropriate operating and maintenance manuals are provided. Where possible, a link to technical documentation available to download online should be included.</p> <p>Note: A signed declaration is required to comply with this condition in all cases. Submitting copies of user manuals is not sufficient (and not required) for this condition.</p>

Important notes for product providers

General

There should be a clear link between the product submitted and all supporting documentation. This will typically take the form of a *product code* or *product name* that can be cross-referenced between the submitted product and the relevant supporting documentation.

If product codes/names have been changed since publication of the supporting documentation, then you must provide official evidence of this with the supporting documentation supplied.

If there is any deviation from these requirements, the supporting documentation will not be considered adequate for the purposes of demonstrating compliance with the criteria conditions. This will in turn delay the submission and/or result in the product not being considered eligible.

Where the ACA criteria or help documentation makes reference to compliance with appropriate rather than specific standards, the onus is on the product provider to ensure that the supporting documentation supplied references recognised standards that apply to the submitted product, i.e. the product must be covered under the scope of a recognised standard.

If it is subsequently found that any product submitted does not meet the performance or specification criteria, it will cease to be considered eligible for the ACA.

Note: When supplying the supporting documentation through the online process, you must ensure, when demonstrating compliance with the relevant condition, that the correct page number(s) of the document is referenced. When referencing more than one page number, add an explanatory note.

Test report

A test report must include an outline of the complete test, including:

- √ Introduction
- √ Details on test conditions
- √ The specific model details of the product tested
- √ The steps taken in the test
- √ The results
- √ Graphical representations
- √ Conclusion

All documents should be on headed paper and the document should be officially signed off. **All documentation must be in English**, or include adequate translation.

Certification

Where certificates are provided, all tests must be carried out by an organisation that is accredited by a national accreditation body, recognised via the European Cooperation for Accreditation (preferred) or the International Accreditation Forum. **All documentation must be in English**, or include adequate translation.

Scientific equivalence

Some ACA criteria conditions allow for scientifically equivalent tests and/or standards to be used.

If a product has not been designed, manufactured or tested to the specific standard named, then documentation relating to an equivalent internationally recognised standard may be used, where the phrase '*or scientific equivalent*' is included in the ACA condition or help documentation.

In such applications, the onus is on the product submitter to demonstrate satisfactory equivalence of the standards. Submissions which reference such supporting documentation may take longer to process. If the product provider does not provide satisfactory evidence of equivalence, then the product will not be considered eligible for the ACA. **All documentation must be in English**, or include adequate translation.

Note: Where specific standards are cited in a condition or in the ACA help documentation, then documentation demonstrating that the relevant products have been designed, manufactured or tested to these specific standards is preferred. Scientific equivalence is considered the exception rather than the norm.