Energy Technology List

Buying New Energy Efficient Equipment

The Energy Technology List (ETL)

March 2020

Introduction

This presentation provides information about the **Energy Technology List (ETL)** for procurement of new energy saving equipment.

The presentation is divided into sections that answer the following questions:

1 **What are the benefits of purchasing energy efficient equipment?**

2 **What is the Energy Technology List?**

3 **Who uses the ETL, how do they use it, and why do they use it?**

4 **Additional information**

1

What are the benefits of purchasing energy efficient equipment ?

What are the benefits of purchasing energy efficient equipment?

Energy efficiency is one of the most cost-effective ways to decrease energy use and greenhouse gas emissions.

- When making purchasing decisions, organisations frequently focus on the purchase price of new equipment when in reality the running costs, such as the cost of energy, can very quickly outweigh the value of the initial purchase price.

- Energy saving equipment can result in:
  - ✔ lower energy bills;
  - ✔ reduced greenhouse gas emissions; and
  - ✔ quicker payback of the cost of purchase, through reduced operational costs.

- Improving energy efficiency is one of a variety of measures that organisations can take to improve their environmental credentials.

2

What is the Energy Technology List?

How can it help me procure equipment?

What kinds of equipment are listed?

How does equipment qualify for the list?

What is the Energy Technology List (ETL)?

The ETL is a government approved list of energy efficient equipment across a wide range of technology categories.

Currently, approximately **14,000 products** across **56 technology areas** are listed on the ETL.

Using the ETL can help organisations navigate product selection and have confidence about energy efficiency claims: Despite the benefits of energy efficiency, organisations may find it difficult to know if the equipment they have selected actually performs better than other options. The ETL rigorously evaluates listed products so that businesses can have confidence in their energy performance.

The ETL can be used to streamline purchasing decisions, ensuring that efficient options are selected to decrease energy bills and increase green credentials.

Please note that on 29 October 2018, the Chancellor announced that the ECA and First Year Tax Credits Scheme (FYTC) will end **from April 2020**.

What technologies are listed on the ETL?

Equipment that is eligible:

1) **Listed on the ETL**
2) **Complies with ETL criteria and the manufacturer has provided a statement of compliance (ETL "unlisted" categories)**
3) **Assessed CHP equipment that has received a certificate of energy efficiency**

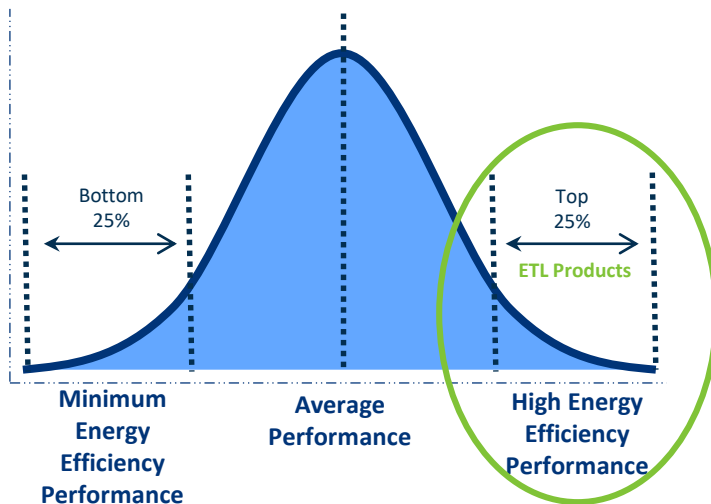| Equipment listed on the ETL	Unlisted ETL categories:	Combined Heat and Power (CHP)
Air-to-air energy recovery Boiler equipment Compressed air equipment Heat pumps Heating, ventilation and air conditioning (HVAC) equipment High speed hand air dryers Motors and drives Portable energy monitoring equipment Radiant and warm air heaters Refrigeration equipment Solar thermal systems Uninterruptible power supplies Waste Heat to electricity conversion equipment	Automatic Monitoring and Targeting Systems Lighting equipment Pipework insulation Air to Air Heat Pumps, Split, Multi-Split and VRF	For more information please visit the CHPQA webpage.

What does it mean to qualify for the ETL?

The energy saving criteria are set to ensure eligible products represent a significant improvement in energy performance over current standard products.

Bottom 25%

Top 25%

ETL Products

Minimum Energy Efficiency Performance

Average Performance

High Energy Efficiency Performance

The ETL seeks to incentivise the use of energy efficient products. In so doing, the ETL aspires to encourage manufacturers to design more products that qualify as highly energy efficient equipment.

In contrast, Minimum Energy Performance Standards, such as building design regulations and EcoDesign, are used to remove the poorest performing equipment from the market.

As the market evolves and equipment energy performance generally improves for a technology, the list requirements will change to make sure that only the highest energy efficient equipment is represented.

How are products on the ETL assessed?

The ETL has established robust energy efficiency criteria for each listed and "unlisted" technology against which products are assessed

- The **ETL independent technical team** review the products against the criteria to demonstrate that the products meet the established requirements

- Different **Performance requirements** are set for each technology

- For most categories manufacturers need to test their equipment performance to **BS EN standards**

- All products must be tested in accordance **with the relevant procedures and test conditions**

- To see specific requirements for the technology categories, please visit The ETL Criteria List

- Where products are assessed as **meeting the criteria**, they are added to the ETL. **If they do not meet the criteria** (which may be due to a lack of supporting information in the application) then the products are not added.

Additional information about unlisted technology categories

- As described in slide 7, some technologies are part of the ETL, but are "unlisted" technology categories. For some technologies it is not practical to list all qualified products. Nonetheless, **unlisted technology categories that are part of the ETL.**
- **Unlisted technology categories include**: automatic monitoring and targeting systems; lighting equipment; pipework insulation, air to air heat pumps, split, multi-split and VRF.

- For unlisted categories a supplier can use **the technology criteria** to determine if a specific product qualifies
- There is a different process altogether for **CHP equipment**

Useful sources of information for unlisted technologies

Factsheet
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/385397/Key_Information_for_Purchasers_factsheet__4_.pdf

Efficient White Lighting checklist
https://www.gov.uk/government/publications/efficient-white-lighting-units-criteria-for-etl-inclusion

Lighting Guidance
https://www.gov.uk/government/publications/lighting-guidance-note-for-the-energy-technology-list-etl

London Underground

Technologies: Across the Tube network in the past two years lighting and VRF systems have been installed at a number of stations, and variable speed drives within cooling systems and escalators. Upgrades at stations such as Victoria, Liverpool Street and Moorgate include many ETL-listed assets.

London Underground's Procurement Process: LU has included project management processes to ensure delivery teams are using the ETL. The energy efficiency requirements in LU's engineering standards for electrical and mechanical equipment have been aligned to the performance criteria of the ETL and LU is encouraging its suppliers to make sure their products are listed.

3

Who uses the ETL, how do they use it, and why do they use it?

A case study

University of Reading

Technologies: the University has used the Energy Technology List across a range of different technologies, from boilers to refrigeration units to high-efficiency hand dryers.

How the university used the ETL: The University of Reading has used the Energy Technology List to select projects and deliver energy efficiency savings across the University. For example, the University recently installed 72 high-efficiency hand dryers, selected directly from products listed on the Energy Technology List.

Financial savings: These products have delivered attractive financial paybacks in terms of the energy saved. It is estimated that the 72 dryers are delivering total energy savings of £8,022 annually – calculated using Salix Finance's hand dryer calculation tool.

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Additional information

Where can I find more information?

For information about the ETL please visit: https://www.gov.uk/guidance/energy-technology-list

Or contact the ETL Help Line on 0300 330 0657 or email ETLQuestions@carbontrust.com

To search for a product on the ETL please visit:
https://etl.beis.gov.uk/engetl/fox/live/ETL_PUBLIC_PRODUCT_SEARCH