

Department for Business, Energy & Industrial Strategy, Unboxed

Energy Technology List: discovery phase

Discovery report

September 2019

UNBOXED



Department for
Business, Energy
& Industrial Strategy

Executive summary

We undertook a five-week discovery project to understand what are the main user needs around the ETL. Across the duration of the project, we spoke to 26 people from a cross-section of industries and roles involved in the specification, purchase and use of products for non-domestic use. Some had previously used the ETL and some hadn't. The three key things we learned were that the user experience of the current ETL is quite poor for those who do use it, there is low awareness of the ETL and also there is a lot of complexity around the different people involved in purchasing and decision making when it comes to buying products.

Our recommendations are that initially the user experience of the current website could be improved with some work to the journey and content. We would recommend then undertaking some marketing activity to help raise awareness, as well as building relationships and partnerships with key organisations. Finally we recommend undertaking further research into some key areas to ensure that user needs are met more broadly.



Overview of recommendations

These are explored in more detail in the deck

Alpha

Improved ETL user experience

- Refreshing the design
 - Improve search functionality
 - Enable product comparisons
 - Improve flow of user journey
 - Consider consistency and style of visual design
- Overhaul of content and hierarchy
 - Include content for business cases
 - Create content to appeal to a range of technical levels
 - Create a content hierarchy
- Move to a single platform
 - Create a consistent user journey by moving content to one platform
- An exploration into creating an API of data included in the ETL

Policy improvement

Encourage uptake and refresh delivery

- Building awareness
 - Undertake marketing activities
 - Create news and events
 - Work closely with relevant user groups
 - Establish partnerships and connections with relevant bodies
- Connect to policy
 - Identify existing policies the ETL could support or work in partnership with
 - Use relationships with user groups and bodies to initiate new policies

Further research

Meet new user needs

- Meeting some user needs will be improved by undertaking the first two areas of work, but further user needs and a wider range of user segments may be met through further research into other areas including:
 - Research into commissioners' motivations and drivers
 - Research into facilitating networking between user groups
 - Research into widening the types of products (and services) listed on the ETL

Context



Problem

What is the context of the project and why something needs to be done.

The Energy Technology List (ETL) was created to support the Enhanced Capital Allowance (ECA) scheme for helping businesses to invest in energy-saving products and equipment.

It currently only reaches a relatively small amount of people involved in purchasing of plant and equipment, and to have real impact it was important to understand the wider context in which the ETL sits to consider how it could add value in the future.



Current vs. future purpose



A tool for
companies to
claim back tax on
energy efficient
purchases



A digital platform that
drives and facilitates
energy-efficient decisions
and behaviour across
businesses and the public
sector, including the
construction,
refurbishment and
industrial sector

Current purpose

Future purpose

User segmentation



User research participants

During this discovery, the team spoke to **26 participants**:

6

Specifiers

4

Manufacturers

2

Contractors

2

Energy
managers

2

Tax advisors

3

Building
managers

0

Commissioners

3

Membership
bodies

4

Internal
stakeholders

26

Total participants

Personas and user groups

We spoke to a range of people who currently do and don't use the ETL, and **seven main user groups** involved in the purchase and use of energy efficient equipment have emerged as a result of primary research.

Personas have been created to represent each group, based on user research, helping to communicate their individual situations and needs.

They are representative of people across a number of different roles in a range of different organisations and businesses.

Manufacturers

Specifiers

Contractors

Facilities managers

Product users

Energy managers

Commissioners

Sectors users may come from include:

Services

Construction

Transport

Retail

Industrial

Personas and user groups

Manufacturers

The types of people we spoke to had job roles including area manager or sales representative.

They are responsible for building networks with specifiers, contractors and product users, informing them of product developments, making sales and helping with maintenance and upgrades of their products.

Gary,
Sales Manager



Personas and user groups

Manufacturers

What they say

“Companies who buy our products are more focussed on sustainability than cost. They know our product has a better lifespan and better performance, so it’s worth their while to spend a bit more upfront.” —
Manufacturer

“People purchase based on recommendation, it’s all about building relationships.” — *Manufacturer*

“We preach the BS EN 15232 standard - it defines minimum requirements for controls and building automation. If everyone used this we could solve the carbon crisis.” —
Manufacturer

Opportunities

Showcase their top of the range products

Help building a network with specifiers and contractors

A competitive edge over their competitors

User needs

As a manufacturer, I need to sell my products, so that I can continue to operate my business.

As a manufacturer, I need to be at the front-of-mind for specifiers and contractors, so that they are aware of my products.

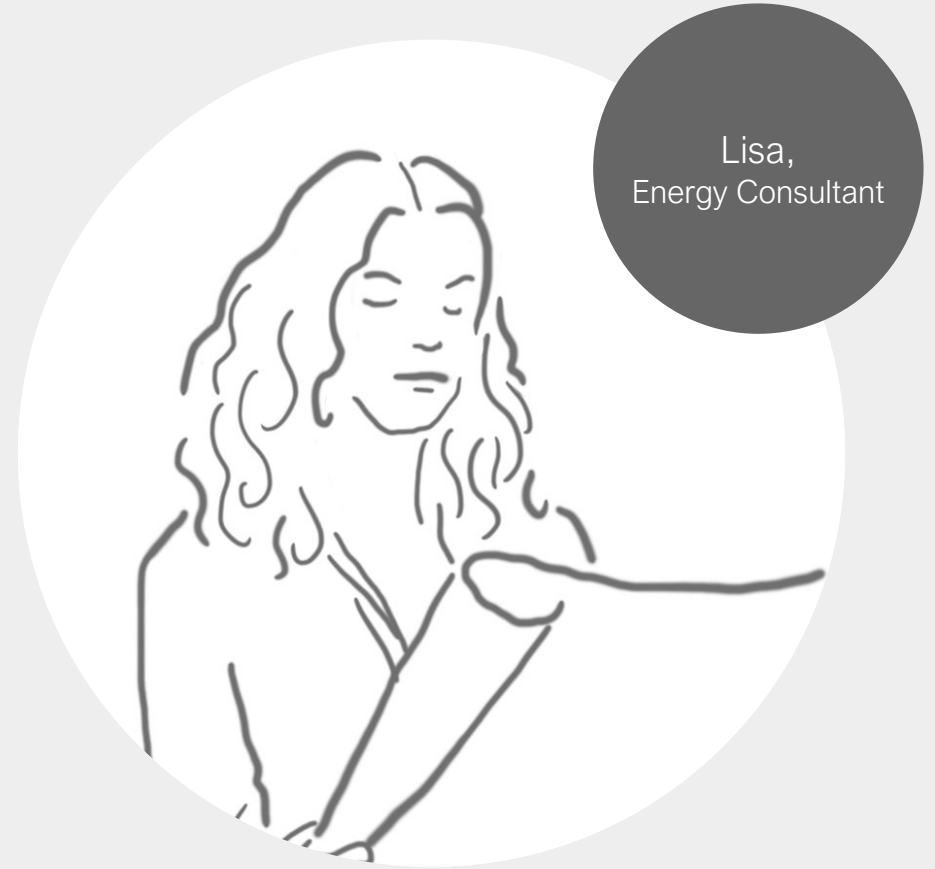
As a manufacturer, I would like an independent verification of my product’s value, so that this can support my customers buying decisions.

Personas and user groups

Specifiers

The people interviewed who specified equipment had job roles including energy consultant, lighting consultant or architect.

These roles are mainly focussed on specifying the most-appropriate equipment and the energy efficiency, rather than cost. They often work with the client to understand their needs to ensure that they get the most-appropriate design for how the space will be used.



Personas and user groups

Specifiers

What they say

“My greatest fear is not noticing newest products coming to market. Younger engineers will ask me what I recommend, but it’s important to keep an open mind. I like reading industry journals and magazines to see what other people are doing.” — *Consultant*

“We research products ourselves and then either recommend the one we think is best or the top three for the client to choose from.” — *Consultant*

“Professional pride is a motivator to use the best kit.” — *Consultant*

Opportunities

Keeping them up-to-date with new developments and products

Access to information that allows them to compare products and identify best for their needs

Provide reliable, independent information on products

User needs

As a specifier, I need to stay up-to-date with the latest energy-efficient technology, so that I can make informed decisions.

As a specifier, I need to be able to compare products on relevant metrics so that I can choose the right products for the project.

As a specifier, I would like to ensure that I’ve specified the right products, so that I know I’ve done a good job.

Personas and user groups

Contractors

Individuals interviewed include those who work for contracting firm, including an engineer.

One of their main goals is to get the job delivered to budget, and to ensure that the project is profitable for their firm. One of the ways they do this by finding more-economic versions of the equipment specified.

Contractors often directly purchase equipment.

Jo,
Engineering
Manager



Personas and user groups

Contractors

What they say

“When we put together a tender, we go out to suppliers and sub-contractors to ask for quotes, we’re really looking for who can offer us the lowest price. We need to find ways to squeeze a profit margin out of our budget.” — *Contractor*

“Manufacturers come in once a year or so to our office and tell us about their newest stuff and how it works. It definitely helps put their products front of mind when I’m looking to buy something. I also get CPD points for attending the session.” — *Contractor*

“If I’ve worked with a supplier before and know that they did a good job, I’m likely to go back to them again in the future.” — *Contractor*

Opportunities

Help to find competitively-priced products

Ways to stay on top of developments and the latest in technology

Ways to build connections with manufacturers

User needs

As a contractor, I need to build in a profit margin on the purchase of energy-efficient products, so that I can continue operate my business.

As a contractor, I need to know what energy-efficient products are good value for my projects, so that I can make informed decisions.

As a contractor, I want to know good manufacturers, so that I can get good products at a good price.

Personas and user groups

Facilities managers

In-house facilities managers have been engaged, including those who worked in an agency to provider facilities management.

Their main focus is ensuring that equipment is easy to maintain, and that it functions in accordance to the criteria of people using the building. For some, energy efficiency was an obvious part of that, for others, it wasn't a concern.

Facilities managers often directly purchase equipment.



Personas and user groups

Facilities managers

What they say

“Energy efficiency is just second nature to us. It’s just part and parcel of what we do.”
— *Facilities manager*

“The BMS means we can control and set timings for lighting and heating to come on and off when rooms are in use.”
— *Facilities manager*

“I did a training course provided by a manufacturer that extended the warranty period by 5 years.”
— *Facilities manager*

Opportunities

Help make energy efficient decisions business friendly decisions by providing information relevant to a business case

Expand the ETL to include Building Management Systems (BMS)

Connect facilities managers to manufacturers for training and technical support

User needs

As a facilities manager, I need to understand the life cycle and payback period of the equipment installed, so that I can understand the financial benefit.

As a facilities manager, I need to measure the performance of plan equipment, so that I can monitor energy and financial performance.

As a facilities manager, I want to I’ll be able to get training and support for any product I purchase so that I know I can maintain it easily.

Personas and user groups

Product users

Product users include tenants of an office or staff of the business. This is where we think the performance gap comes in — current behaviour is not currently driven by trying to be energy-efficient, but likely by costs and productivity.

Product users are not generally involved in the purchase of equipment however, so any influence of their behaviour needs to be through tools other than the ETL and policies.

Norma,
Office Manager



Personas and user groups

Product users

What they say

“The buck stops at completion. It’s handed over and that’s that. We need some training to ensure proper application.” —
Consultant

“Office running costs are my top priority.”
— *Office manager*

Opportunities

Encourage understanding of how to use equipment

To bring energy efficiency up their agenda

User needs

As a product user, I need to be encouraged to understand how to use equipment in the best way, so that I am operating it in the correct way.

As a product user, I need a reason to think beyond my business costs, so that I can take energy efficiency into consideration.

Personas and user groups

Energy managers

Energy managers engaged include those of large, public institutions.

Their focus is on changing policy within their organisation to be more energy aware. Some of their work is taken up persuading commissioners of the benefits of considering energy efficiency when defining briefs for projects.

They may not be directly involved in the purchasing of equipment.

Rob,
Energy manager



Personas and user groups

Energy managers

What they say

“We have to persuade the project sponsor of the benefit to them, and their budget, to get them interested in making energy efficient decisions.”
Internal energy team

Opportunities

Help to build the business case for energy efficient decisions

User needs

As an energy manager, I need to find information to support my business case for energy efficient decisions so that I can help influence commissioners.

Personas and user groups

Commissioners

(unvalidated)

Commissioners are the ones who hold the purse strings. They include people with a quite diverse range of job titles including Director of Finance and Director of Estates, and people on decision making boards.

They are unlikely to be directly involved in the purchasing of equipment, but are the ones who set the brief and ultimately decide what priorities they have the project. They may be better influenced by tools other than the ETL.

Sarah,
Director of Finance



Personas and user groups

Commissioners (unvalidated)

What they say

“We have to persuade the project sponsor of the benefit to them, and their budget, to get them interested in making energy efficient decisions.”
Internal energy team

“The real power comes in when pressure [to make energy efficient decisions] comes down from the building owners.” *Consultant*

Opportunities

Show tangible benefits of energy efficient decision making

Help bring more energy efficient decisions into the brief

User needs

As a commissioner, I need to understand the non-technical benefits of energy efficiency, so that I can better understand the impact of my decisions.

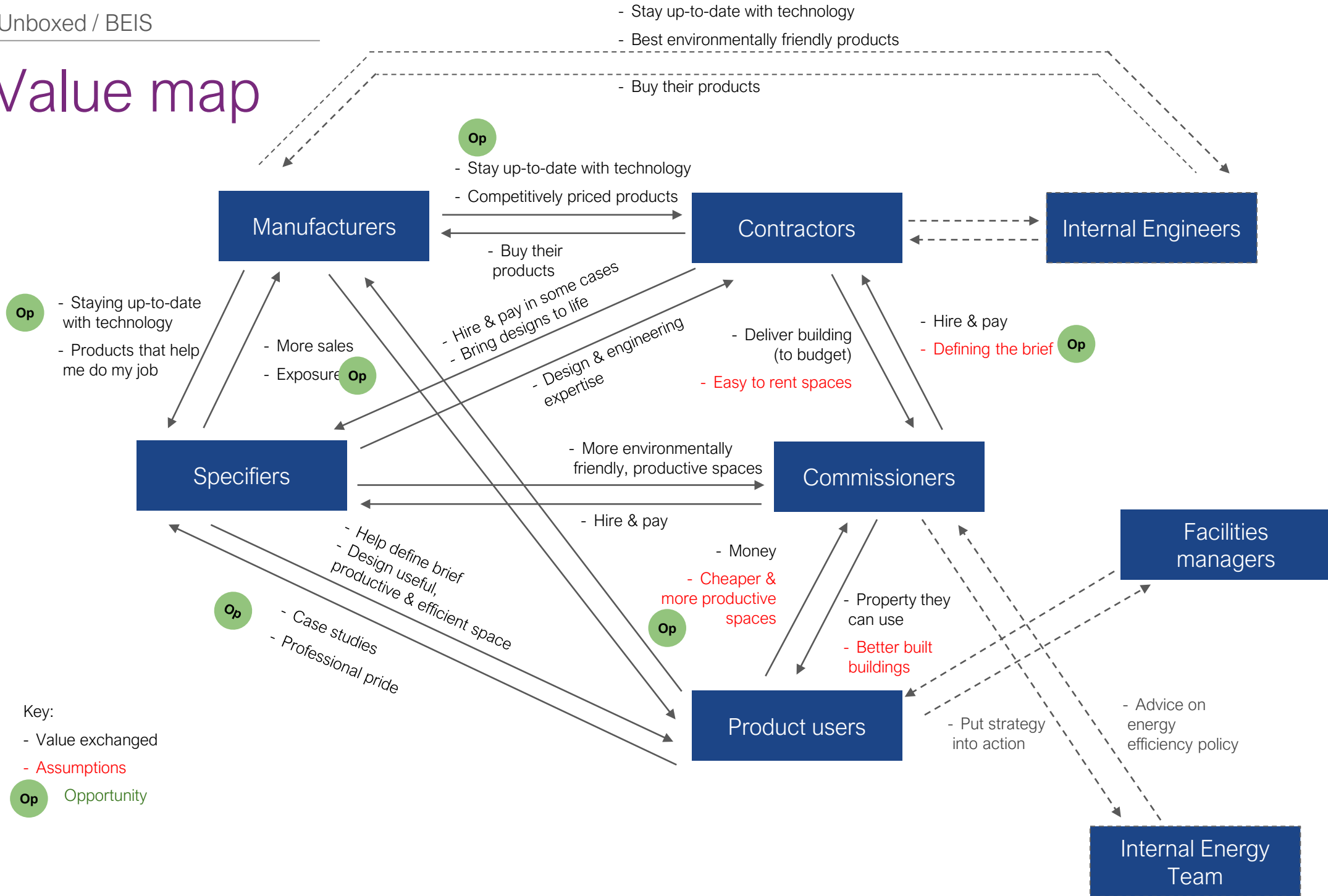
As a commissioner, I need compelling reasons to bring energy efficiency into the brief, so that I drive energy efficient decision making.

Value and influence mapping

In order to better understand the complexity of the relationships, a number of maps have been created on the following slides, including:

Map type	Description
Value map	This shows the relationships between each of the parties, and traces what value is exchanged between them. Relationships need to have some balance in the value exchanged for it to be a positive connection.
Influence map	Some user segments have greater ability to influence whether energy efficiency will be taken into consideration during the purchasing of equipment. We mapped this to show where the most impact can be had if the right user segments are targeted.
Selling map	Which user segments are involved in selling of equipment
Purchasers	It has been identified that purchasers are actually made up of a number of different user segments, each with different motivations and drivers
Users of the equipment	Showing who is most likely to be direct users of equipment purchased

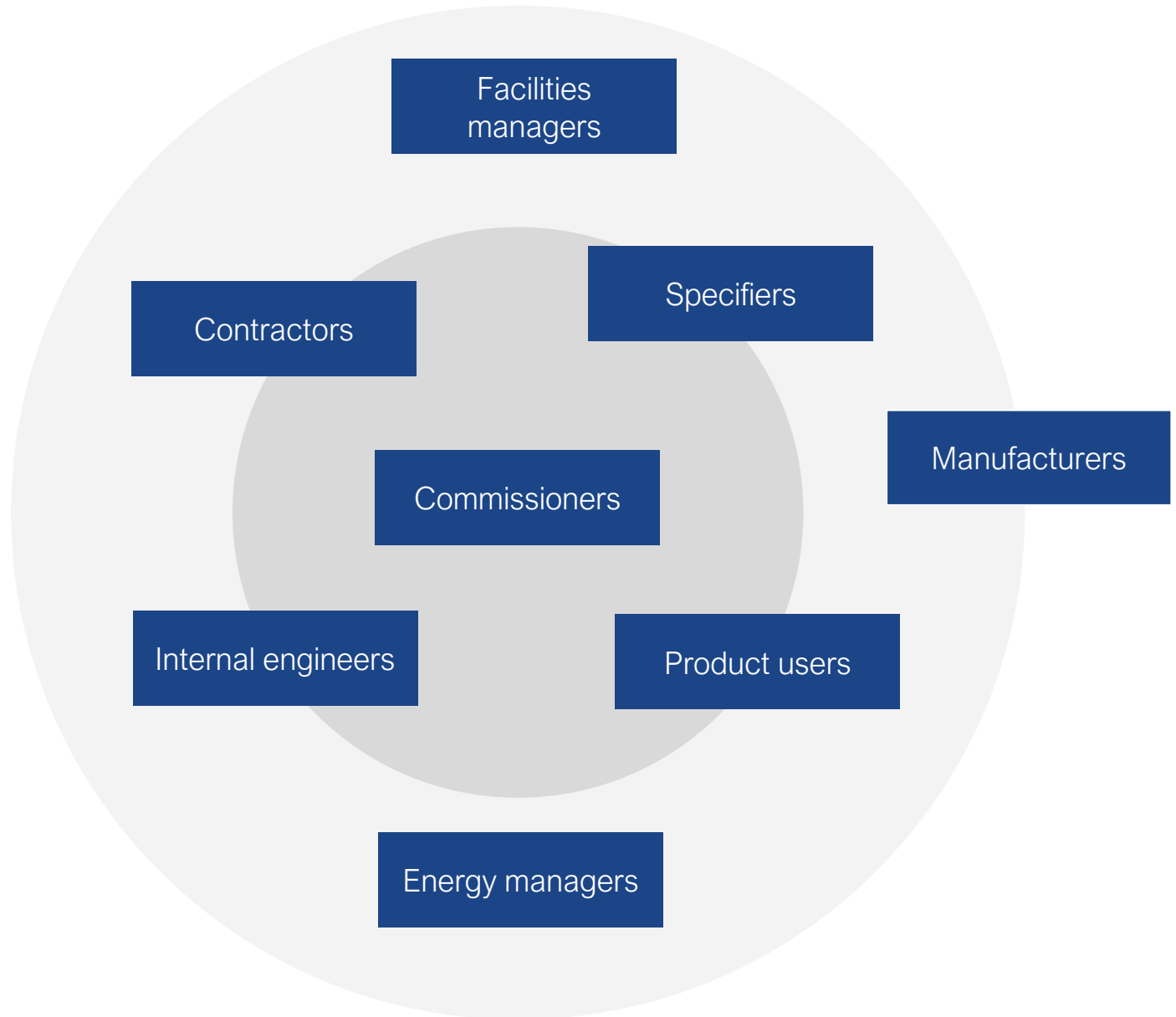
Value map



Ability to influence energy-efficient decisions

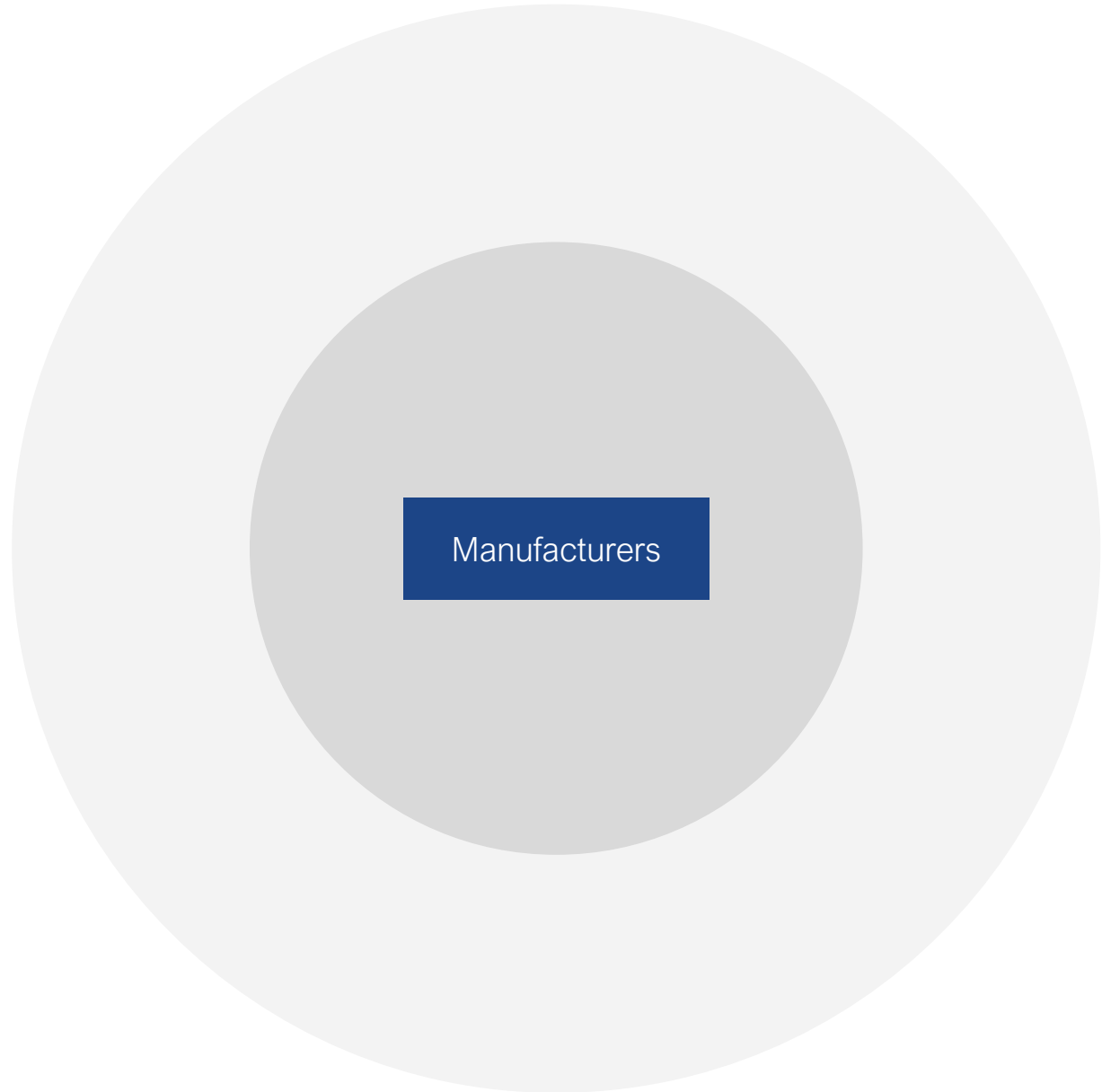
Commissioners sit directly at the centre of the influence of energy-efficient decisions, given their position of power within the decision-making process.

Specifiers, contractors and **product users** still have certain influences on purchasing decisions because of how the system works. Specifiers for example make the first decision but contractors are often the ones who make the actual purchase.



Selling equipment

Manufacturers are the only user group involved in selling equipment.

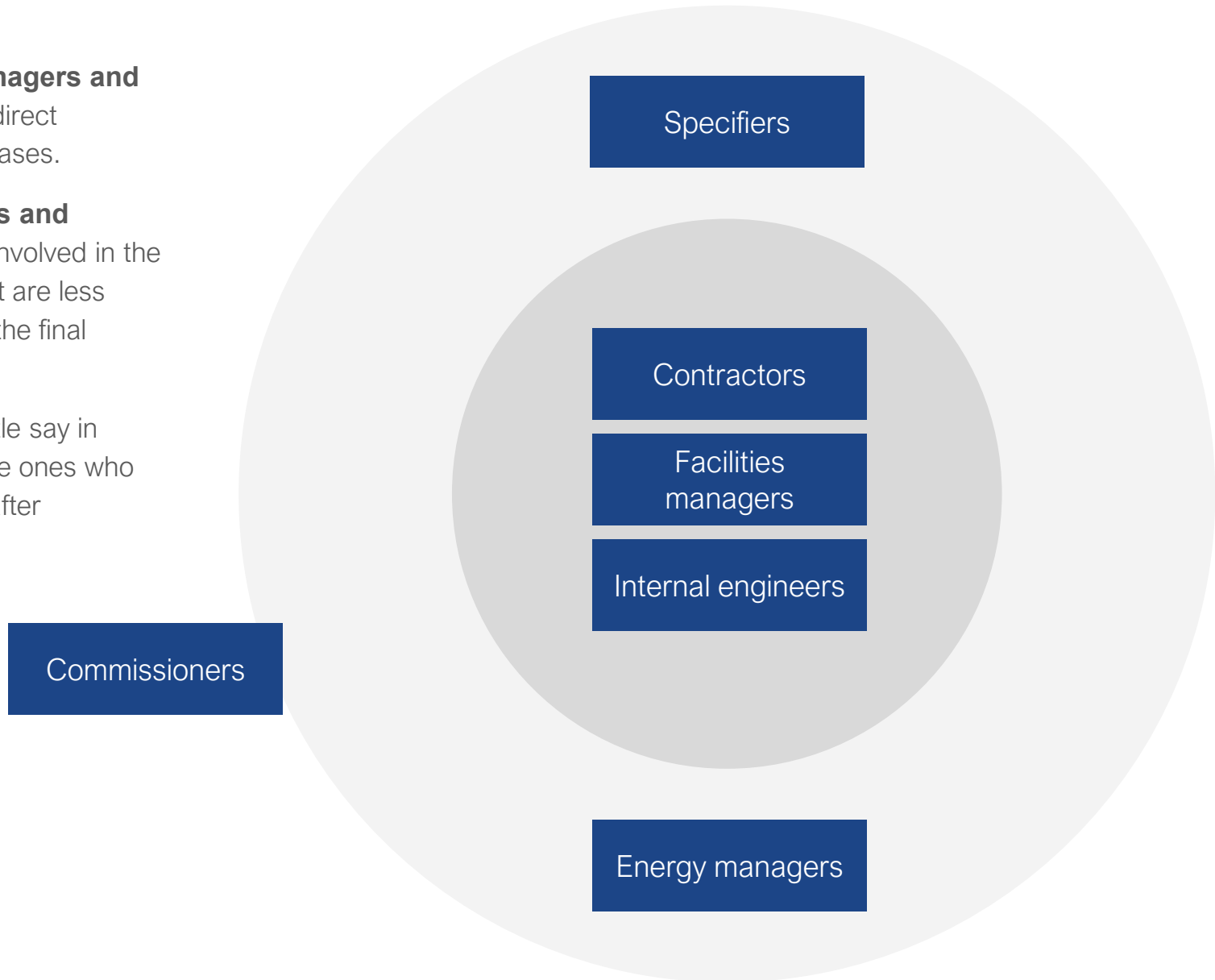


Direct involvement in purchasing

Contractors, facilities managers and internal engineers all had direct involvement in making purchases.

Commissioners, specifiers and energy managers may be involved in the decision making process, but are less likely to be the ones making the final purchase themselves.

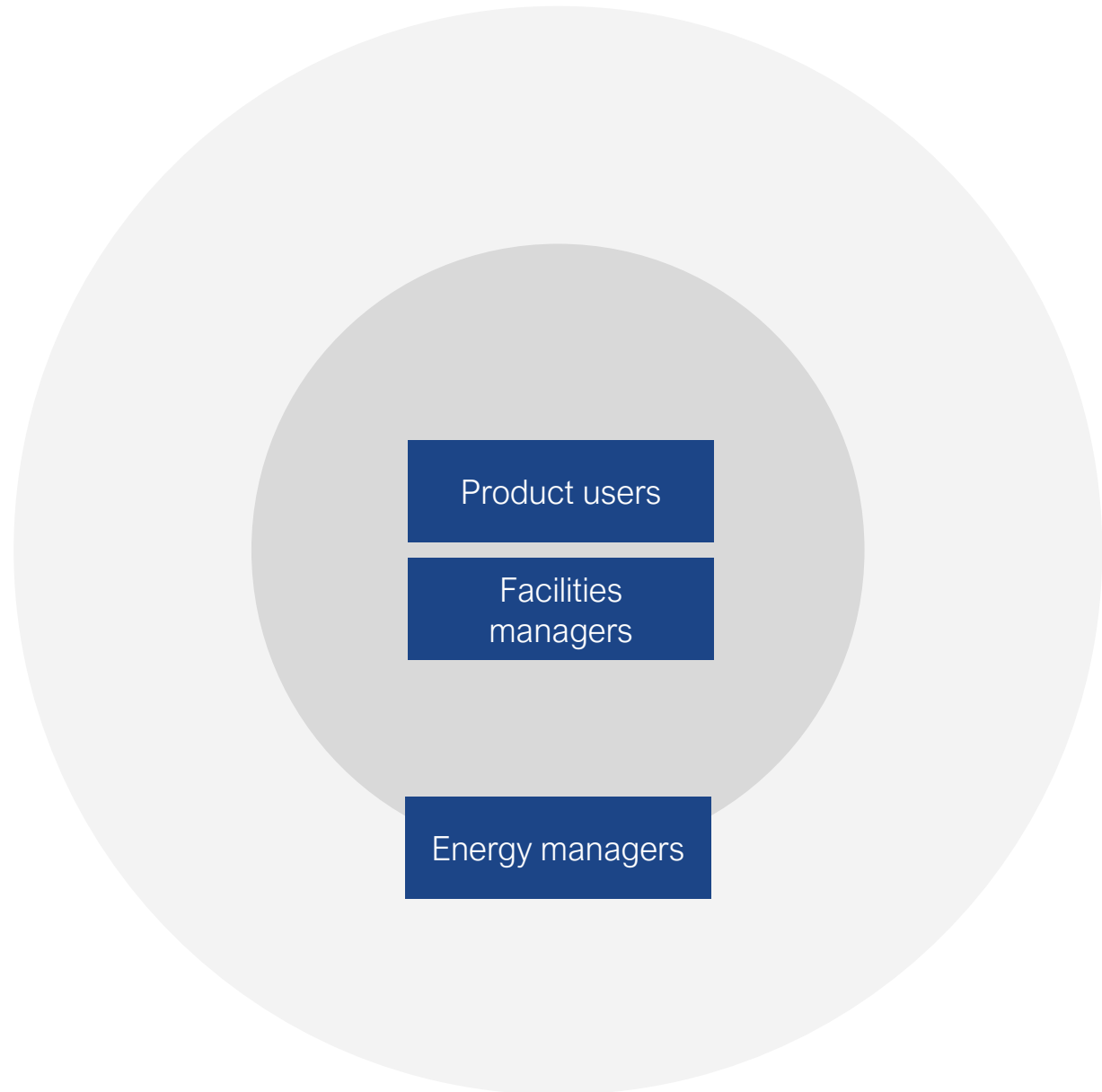
Product users may have little say in what's purchased, but are the ones who will be using the equipment after installation.



Using the equipment

Facilities managers, product users and to a certain extent energy managers all are most likely to be the ones using the equipment.

After handover, **contractors and specifiers** are less likely to be involved.



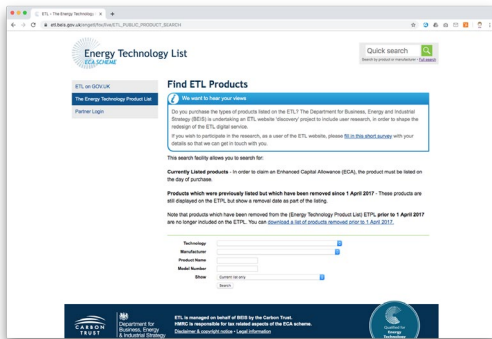
Reviewing the current ETL public website



Technical findings

Components overview

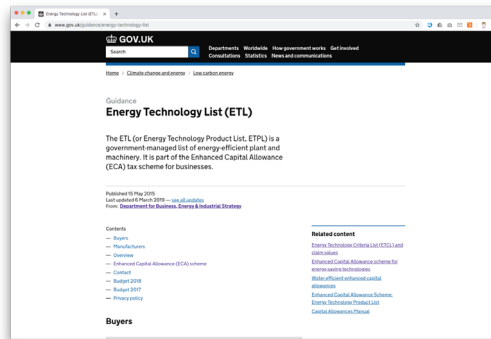
The ETL landscape is currently made up of **four main components**:



ETL public website

The ETL public website, allowing for users to search the list of published products:

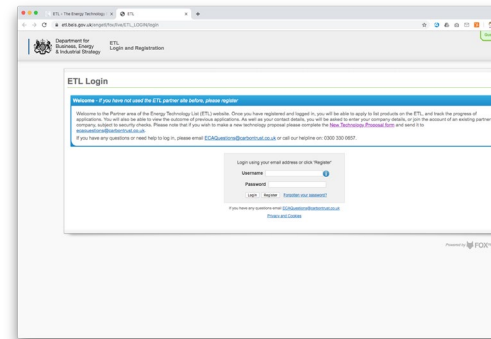
https://etl.beis.gov.uk/enget/fox/live/ETL_PUBLIC_PRODUCT_SEARCH



ETL GOV.UK guidance

The ETL guidance sitting on GOV.UK:

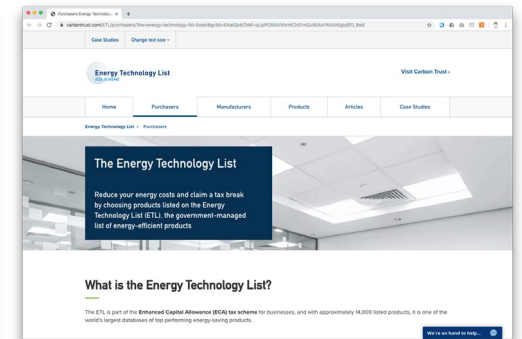
<https://www.gov.uk/guidance/energy-technology-list>



ETL partner/admin portal

The back-end portal allowing admin and manufacturers to submit new products for publishing on the ETL public website:

https://etl.beis.gov.uk/enget/fox/live/ETL_LOGIN/login



ETL Carbon Trust microsite

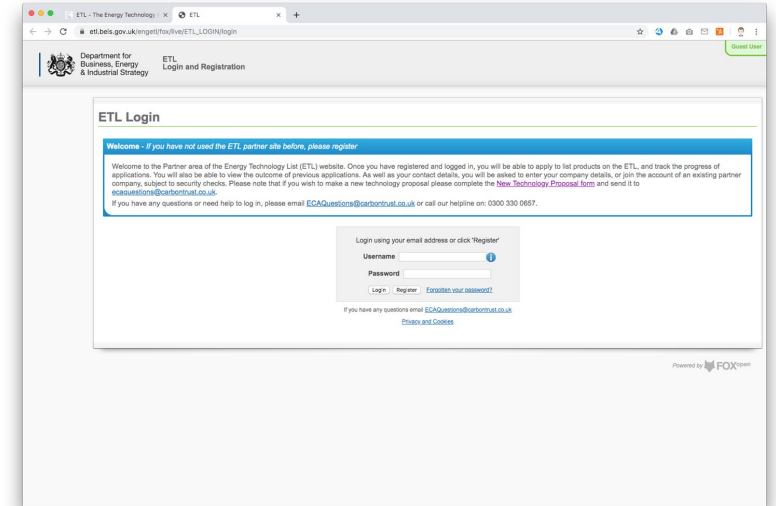
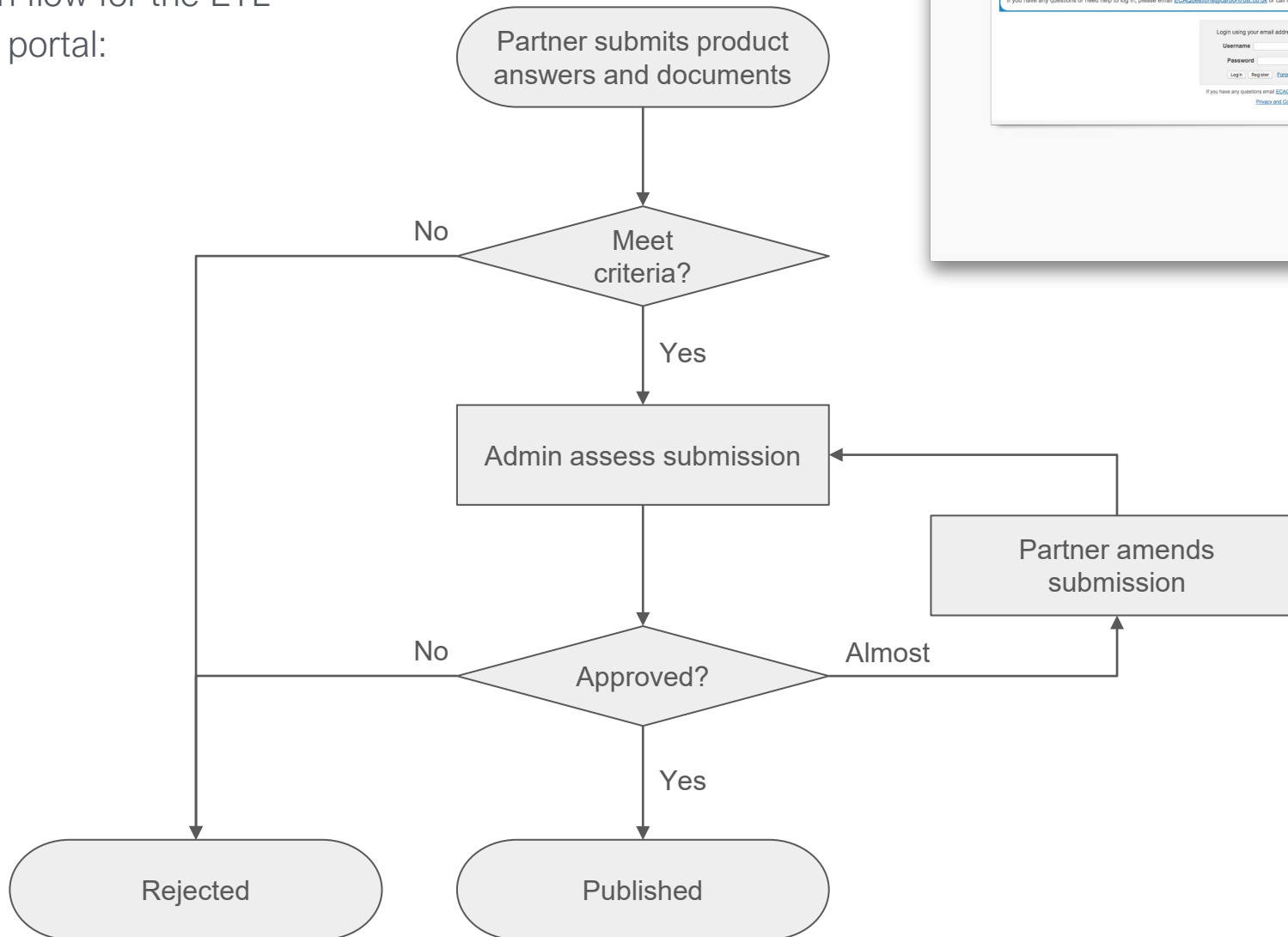
A separate new microsite by Carbon Trust:

<https://www.carbontrust.com/etl/>

Technical findings

Publication flow

The publication flow for the ETL partner/admin portal:

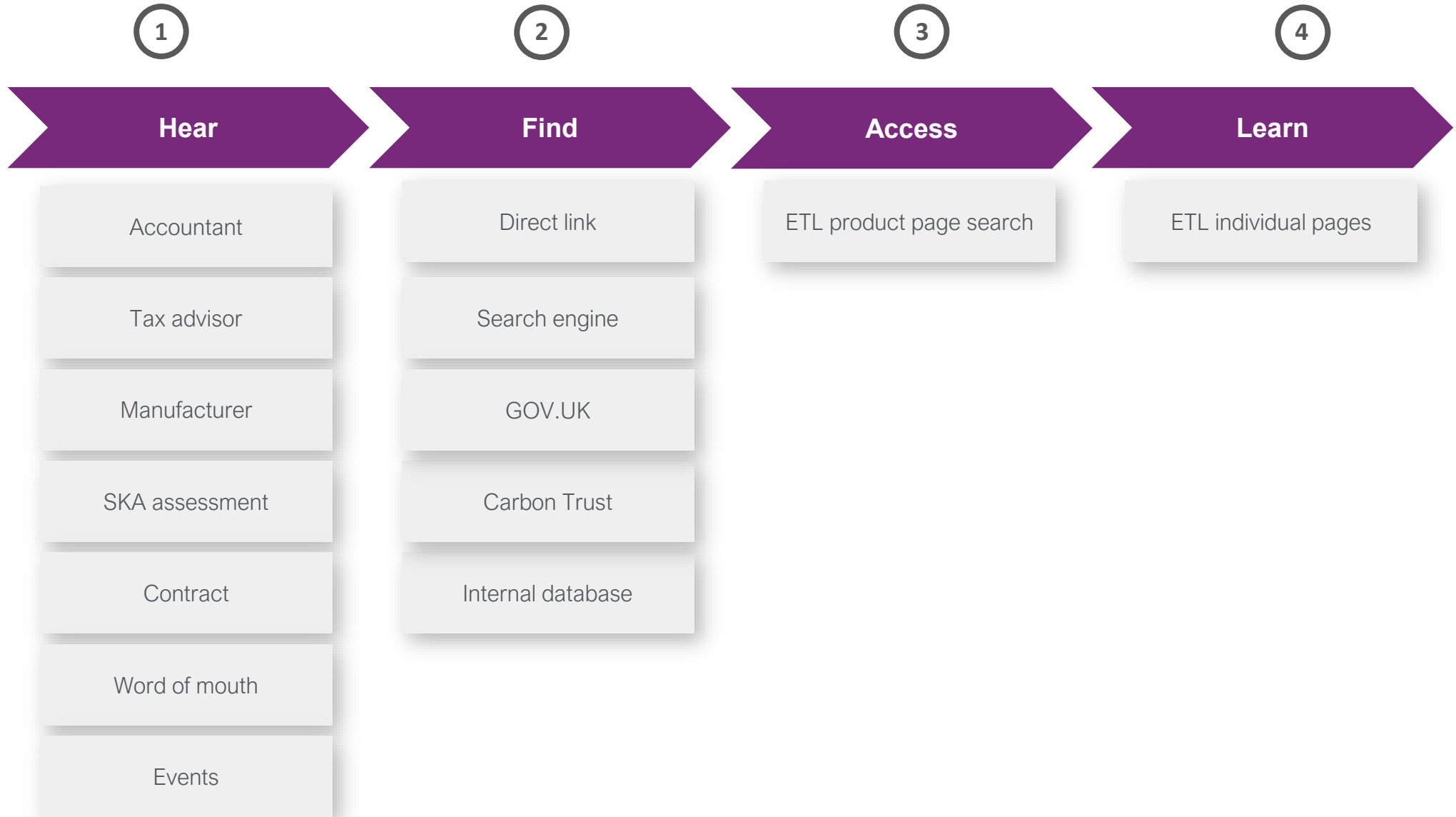


Review of current ETL user experience



Current journey

How users currently find out about and use the ETL



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GOV.UK ETL guidance

The content on this page could be reviewed and restructured to be more clear.

When ETL is searched for on GOV.UK, this page is 4th — improvements could be made to make it easier to find.

The screenshot shows the GOV.UK website interface for the Energy Technology List (ETL) guidance page. At the top, there is a navigation bar with the GOV.UK logo, a search bar, and links for Departments, Worldwide, How government works, Get involved, Consultations, Statistics, and News and communications. Below the navigation bar, the breadcrumb trail reads: Home > Climate change and energy > Low carbon energy. The main heading is "Guidance Energy Technology List (ETL)". The introductory text states: "The ETL (or Energy Technology Product List, ETPL) is a government-managed list of energy-efficient plant and machinery. It is part of the Enhanced Capital Allowance (ECA) tax scheme for businesses." Below this, it provides publication and update information: "Published 15 May 2015", "Last updated 6 March 2019 — see all updates", and "From: Department for Business, Energy & Industrial Strategy". A "Contents" section lists: Buyers, Manufacturers, Overview, Enhanced Capital Allowance (ECA) scheme, Contact, Budget 2018, Budget 2017, and Privacy policy. A "Related content" section lists: Water efficient enhanced capital allowances, Enhanced Capital Allowance Scheme: Energy Technology Product List, Energy Technology Criteria List (ETCL) and claim values, Energy Technology List (ETL): information for purchasers, and Energy Technology Criteria List (ETCL): information by categories. The page ends with a "Buyers" section header.

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GOV.UK

The collage includes several overlapping screenshots from the GOV.UK website:

- Energy Technology List (ETL) Overview:** A page titled 'Energy Technology List (ETL)' with a sub-header 'The ETL, or Energy Technology Product List (ETPL) is a government managed list of energy efficient plant and machinery. It is part of the Enhanced Capital Allowance (ECA) tax scheme for businesses.'
- Buyers:** A section titled 'Buyers: Find and compare energy-saving and energy-efficient products on the ETL.' It includes text: 'If you're a business that pays income or corporation tax, you'll be able to claim 100% first-year capital allowances on a product if it's on the ETL at the time of purchase. If it's been taken off the list, or is added at a later date, you will not.'
- Manufacturers:** A section titled 'Manufacturers: Manufacturers and suppliers register and needs to add your product to the ETL.'
- ETL Factsheet: Key information for purchasers:** A document titled 'ETL Factsheet: Key information for purchasers' with a sub-header 'This factsheet addresses the most common queries that people have regarding the Energy Technology List (ETL) and the Enhanced Capital Allowance (ECA) Scheme, when purchasing machinery and equipment.'
- ETL buye information for purchasers (ETL):** A document titled 'Energy Technology List (ETL): information for purchasers' with a sub-header 'Factsheet for purchasers of energy-saving products who want to learn more about how best to use the ETL, search for listed products, or understand what is needed for a claim for an Enhanced Capital Allowance.'
- Key information for Purchasers: ETL factsheet:** A PDF document titled 'Key information for Purchasers: ETL factsheet'.
- ETL:** A central logo for the Energy Technology List.

ETL guidance

ETL buye

Energy Technology List (ETL): information for purchasers

Factsheet: Info. for purchasers

Info. for purchasers

There's a number of different pages on different websites that a user can link to from the gov.uk. Ideally a clearer path for users to take to get to the information they need would help.

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GOV.UK

The collage consists of multiple screenshots of the GOV.UK website. Key elements include:

- Search Results:** Pages showing search results for 'Energy Technology List (ETL)' with filters for 'Buyers' and 'Manufacturers'.
- Product Lists:** 'Find ETL Products' pages with search filters and lists of eligible products.
- Guidance Notes:** Documents such as 'Lighting guidance note' and 'Combined Heat and Power Quality Assurance Programme'.
- Factheets:** 'ETL Factsheet: Key information for Purchasers' and 'Key information for Purchasers: ETL factsheet'.
- Product Type Pages:** Pages detailing 'ETL product types: lighting'.

 Overlaid text labels identify specific content areas:

- ETL:** A central label identifying the overall topic.
- ETL Factsheet: Key information for Purchasers:** Points to a specific factsheet document.
- ETL buye:** Points to a 'Buyers' section on a product page.
- ETL guidance:** Points to a 'Guidance' section.
- Info. for purchasers:** Points to a 'Buyers' section.
- Tech. info. leaflet:** Points to a 'Documents' section.
- ETL product types: lighting:** Points to a 'Product types' page.
- Guidance notes:** Points to a 'Guidance' section.
- CHP quality assurance programme:** Points to a 'Documents' section.
- Product type: lighting:** Points to a 'Product types' page.

The deeper you look for information, the journey becomes quite complex - switching between websites and levels of complexity of content. Choosing one platform for all the content and simplifying the user journey would be beneficial.

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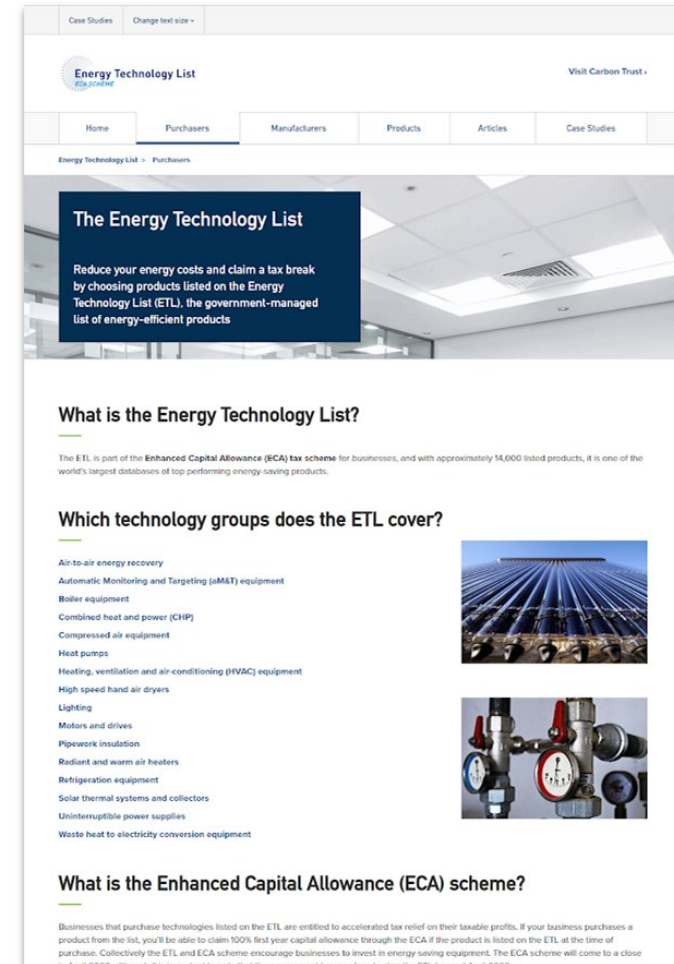
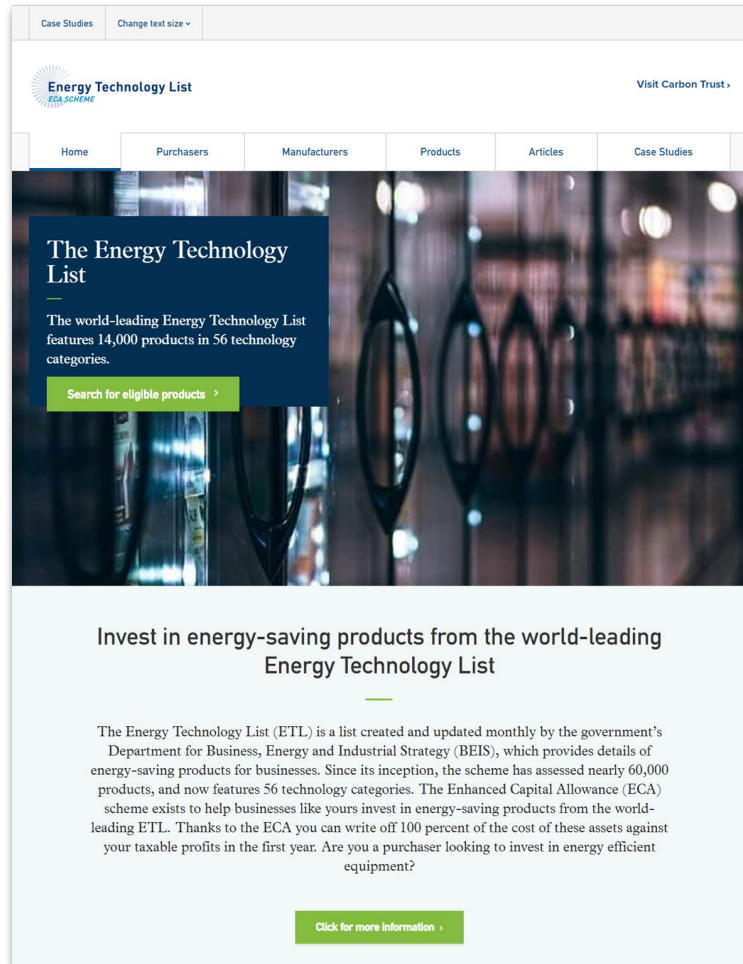
LEARN

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Carbon Trust microsite

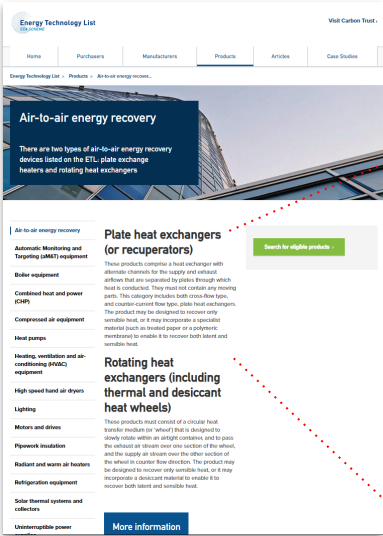
The carbon trust microsite has clear content and structure, and the images add to the experience.

The layout makes it easier to digest the complex information involved.





Carbon Trust microsite



Air-to-air energy recovery

Plate heat exchangers (or recuperators)

These products comprise a heat exchanger with alternate channels for the supply and exhaust airflows that are separated by plates through which heat is conducted. They must not contain any moving parts. This category includes both cross-flow type, and counter-current flow type, plate heat exchangers. The product may be designed to recover only sensible heat, or it may incorporate a specialist material (such as treated paper or a polymeric membrane) to enable it to recover both latent and sensible heat.

The content is well written to improve understanding.

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ETL public website: search

The search page on the ETL public website could be improved with further information and some content to describe what the ETL is and how it works.

The screenshot shows the Energy Technology List (ETL) public website search page. At the top left is the ETL logo with the text "Energy Technology List" and "ECA SCHEME". To the right is a "Quick search" box with a magnifying glass icon and the text "Search by product or manufacturer • Full search". Below the logo are three navigation links: "ETL on GOV.UK", "The Energy Technology Product List" (highlighted in blue), and "Partner Login". The main heading is "Find ETL Products". Below this is a blue banner with an information icon and the text "We want to hear your views". A text box below the banner explains that BEIS is undertaking an ETL website 'discovery' project and asks users to fill in a short survey. Below this is a section titled "This search facility allows you to search for:" followed by two paragraphs: "Currently Listed products" and "Products which were previously listed but which have been removed since 1 April 2017". A note at the bottom of this section states that products removed prior to 1 April 2017 are no longer included. Below the text is a search form with dropdown menus for "Technology" and "Manufacturer", text input fields for "Product Name" and "Model Number", and a "Show" dropdown menu set to "Current list only". A "Search" button is at the bottom of the form. The footer contains the Carbon Trust logo, the Department for Business, Energy & Industrial Strategy logo, and text stating "ETL is managed on behalf of BEIS by the Carbon Trust. HMRC is responsible for tax related aspects of the ECA scheme. Disclaimer & copyright notice • Legal information". On the right side of the footer is a circular logo for "Qualified for Energy Technology List".



ETL public website: search

The search function is key to using the ETL website, the number of products and manufacturers would be easier to navigate with a different UX pattern than a drop down menu as there are too many options to scroll through.

Users also suggested they would like to be able to search by unit or product number or by product specifics.

- ✓ Air to Air Energy Recovery
- Automatic Monitoring and Targeting Equipment
- Automatic Monitoring and Targeting Sub-metering Systems
- Portable Energy Monitoring Equipment
- Boiler Equipment
- Biomass Boilers
- Burners With Controls
- Condensing Economisers
- Flue Gas Economisers
- Gas-fired Condensing Water Heaters
- Heat Recovery from Condensate and Boiler Blowdown
- Heating Management Controllers for Wet Heating Systems
- Hot Water Boilers
- Localised Rapid Steam Generators
- Retrofit Burner Control Systems
- Steam Boilers
- Combined Heat and Power
- Compact Heat Exchangers
- Compressed Air Equipment
- Desiccant Air Dryers with Energy Saving Controls
- Flow Controllers
- Master Controllers
- Refrigerated Air Dryers with Energy Saving Controls
- Heat Pumps
- Air Source: Gas Engine Driven Split & Multi-split (incl VRF)
- Air to Air Heat Pumps Split, Multi-split and VRF
- Air to Domestic Hot Water Heat Pumps
- Air to Water Heat Pumps
- Heat Pump Dehumidifiers
- Heat Pump Driven Air Curtains
- Packaged Air to Air Heat Pumps (rooftop)
- Water or Brine to Water Heat Pumps
- Water to Air Heat Pumps, Split, Multi-Split and VRF
- Heating, Ventilation and Heating (HVAC) Equipment
- Active Chilled Beams
- Building Environment Zone Controls
- Close Control Air Conditioning
- Evaporative Air Coolers
- High Speed Hand Air Dryers

74 technology choices

- ✓ 2020 Solar Limited
- A.O. Smith Water Heaters
- A1-CBISS
- ABB Ltd
- ABILITY PROJECTS LIMITED
- ACV UK Ltd
- Advanced Combustion Engineering Ltd
- Advanced Ergonomic Technologies Ltd
- AEG Power Solutions GmbH
- Aermec UK Ltd
- AEROFOL ENERGY LIMITED
- AES Limited
- AGLO ENERGY LIMITED
- AHT Cooling Systems GmbH
- Airdale International Air Con
- Airmaster Applied Solutions
- AIRSYS (UK) LIMITED
- Alldales
- ALMIG UK Ltd
- Alpeninox UK Ltd
- Alpha Therm Ltd
- Alternative Heat Ltd
- AmbiRad (a Division of Nortek Global HVAC)
- Andrews Water Heaters and Boilers
- APC by Schneider Electric
- APEN GROUP S.p.A.
- ARCON Solvame A/S
- Arctic Circle
- Arneg Portuguesa
- Arneg Spa
- ASHGROVE ENERGY LIMITED
- ATAQ Heating UK Ltd
- Atlas Copco Compressors
- Autoflame Engineering
- Autonomis Ltd
- AVKIBEG (UK) Ltd
- BAR Industrial Automation Ltd
- Babcock Wanson UK Ltd

326 manufacturers



ETL public website: product page

Throughout many of the interviews, many people told us comparing products is essential for them. This could be a useful feature for product pages.

The content also could be reviewed and restructured to ensure it's suitable for a range of technical and non-technical users.

Ensuring all links are live for a smoother user experience.



- [ETL on GOV.UK](#)
- [The Energy Technology Product List](#)**
- [Partner Login](#)

Product details

[Back to product search](#)

Product

- Technology** Boiler Equipment
- Subtechnology** Biomass Boilers
- Product name**
- Model number**
- Date added**
- Date removed**

Manufacturer

- Name**
- Address**
- Website**
- Telephone**
- Fax**

Features

Name	Value
Product capacity	Biomass Hot Water Boiler <=100kW
Design Fuel Type	Log
Maximum Continuous Rated (MCR) Output (<=100kW) (kW)	25
Minimum Rating (kW)	5
Net efficiency at 100% MCR (<=100kW) (%)	92

Options and recommendations

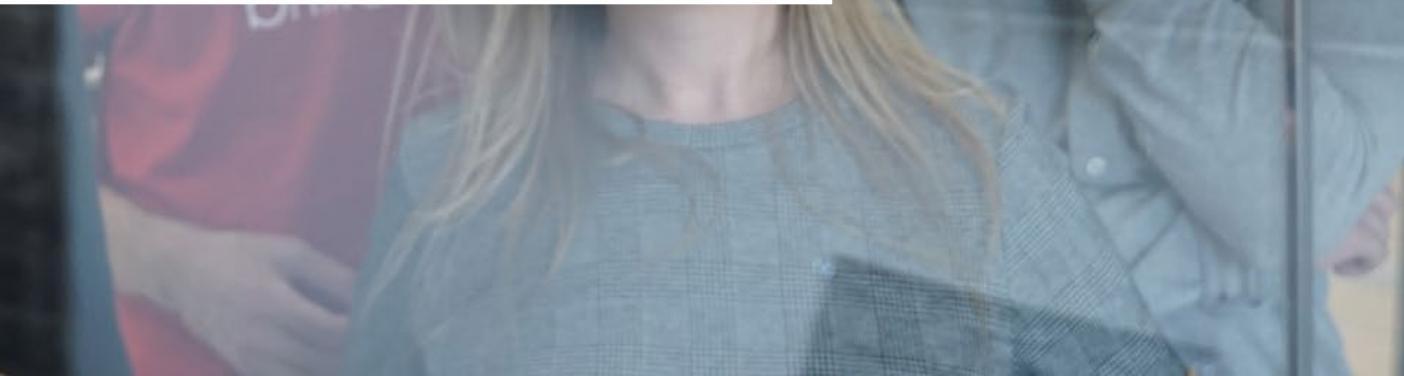
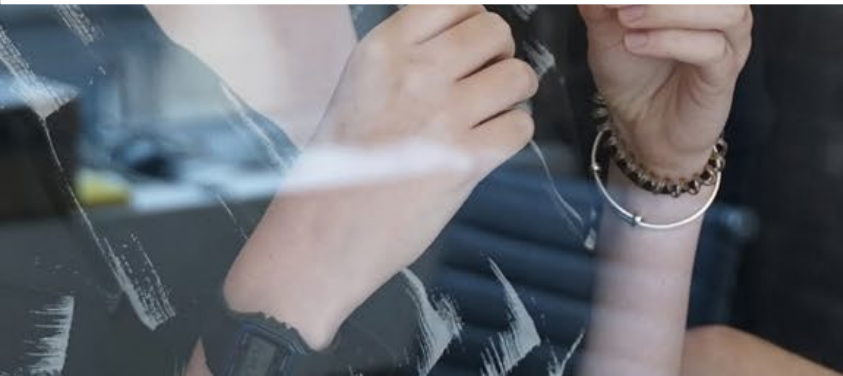
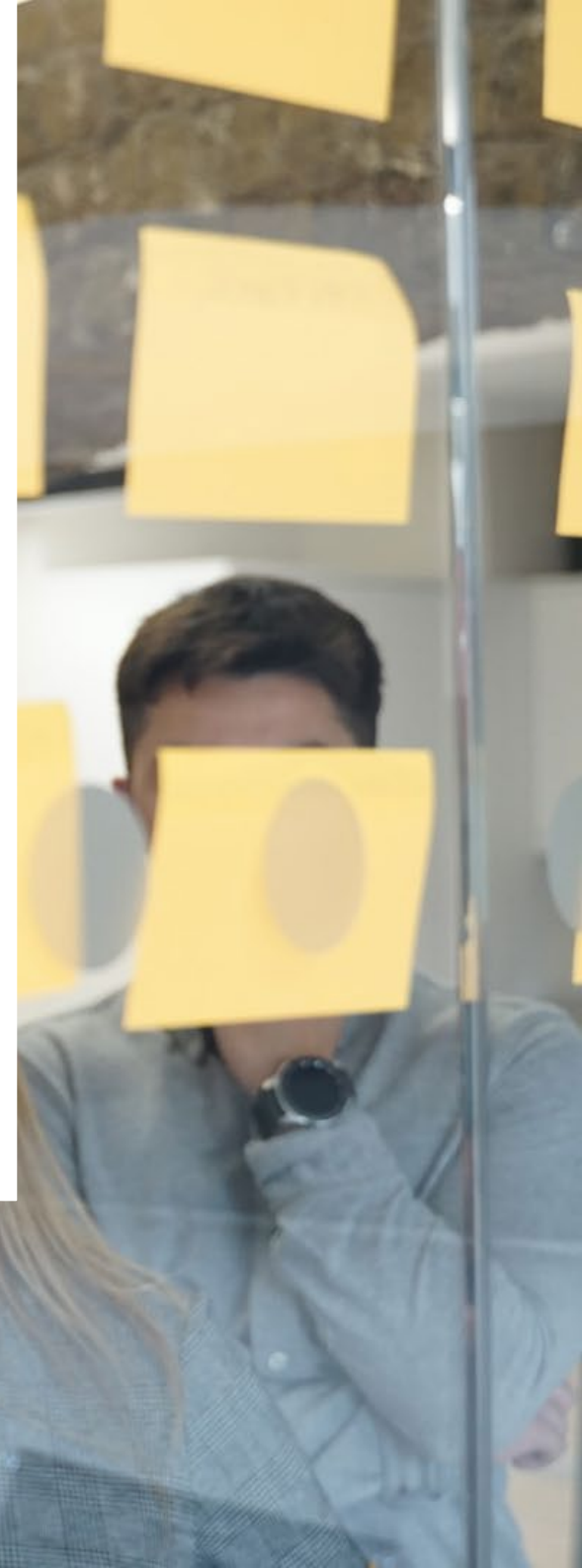


Recommendations

Options

Based on the outputs of primary and secondary user research from across this discovery phase, including the listed pros and cons, our recommendation is to **redesign the Energy Technology List** to meet future user needs.

Further detail on recommendations for how to continue are covered in the following slides.



Option #3: Re-design the ETL

Recommendations



Key areas identified in this discovery

The outcomes of this discovery phase have highlighted three areas core areas:

Discovery research outcome

The current ETL has poor user experience

Low awareness of the ETL

Many different people are involved in purchasing decisions with different motivations

Recommendations

Area #1: A poor user experience of the current ETL

The experience of the ETL public website from current users' point of view is lacking. Primary user research with existing users highlighted areas including:

- **A lack of clarity on the purpose of the list for users** — including defined purpose, what to do when using it and how to use it
- **Limited key information on individual products** — including detailed descriptions, commercial information and individual product links
- **Product listings aren't up-to-date** — this includes the latest items or technology within the marketplace
- **Information and language mismatch** — there's a mismatch between industry language and information and that of ETL language and information

“On the Tesco website, it's really clear what you're supposed to do - buy stuff. It's not clear on the ETL website what to do, we feel a bit embarrassed pointing clients towards it.” — *Manufacturer*

“It doesn't actually tell you how much an item costs. Often what was paid for units varies as it depends on the relationship the supplier has with the contractor. I have to estimate what I think was spent.” — *Tax advisor*

“Every time I looked for a product on the ETL it wasn't there - the list needs to be kept up-to-date.” — *Consultant*

“The website is not very attractive, and even I found it a bit overwhelming.” — *Specifier*

“There is a mismatch between part number on a product and part number of the ETL.” — *Tax consultant*

Recommendations

Area #2: Low awareness

Whilst some people interviewed had heard of the ETL, many weren't aware of it. Many of those who knew of it hadn't used it. Example reasons include:

- **There's a lack of policy to encourage usage** — many people spoke about how behaviour needs to be changed in order to improve the performance gap
- **Information is not tailored to user needs** — those in technical roles already done their own product comparisons, and for those with less technical understanding, the information is too technical
- **No clear integration with other standards or policies** — we heard people speak about the standard their company works or refers to with passion, but ETL is currently not aligned with any of these
- **The ECA is ending** - This means there will be even less reason for people to use the ETL in its current format from April 2020

“Clients could make a difference, after all, they're paying, but they often don't have the knowledge or understanding.” — *Manufacturer*

“The most successful buildings are the ones where the client knows what they want.” — *Manufacturer*

“It doesn't send a great message that we're taking away the only tax incentive.”
— *Tax advisor*

“Facilities Management understand the problem of poor indoor air quality and its link to people's productivity” —
Manufacturer

“We preach the BS EN 15232 standard — it defines minimum requirements for controls and building automation. If everyone used this we could solve the carbon crisis.” — *Manufacturer*

Recommendations

Area #3: Many different stakeholders involved in decision making

During the kick-off workshop, “manufacturers” and “purchasers” were discussed. Through primary research, it quickly became clear through user interviews that the role of purchaser isn’t so clear-cut, with multiple roles involved in the decision making process:

- **Specifiers** will choose equipment based on energy-efficiency credentials
- **Contractors** will often then find cheaper alternatives to help boost their profit margins
- **Energy managers** write policy about the type of equipment that should be bought
- **Commissioners** hold the purse strings and give direction as to how they expect their money to be spent
- **Facilities managers** are most likely to replace equipment with the most recent model from the same brand

“We sell to consultants - they don’t always really understand the details and tend to copy paste stuff a lot. We train people on energy efficiency, but if they don’t speak to each other it doesn’t work.”

— *Manufacturer*

“We need awareness raising amongst people commissioning buildings.” — *Tax advisor*

“The real power comes in when pressure [to make energy efficient decisions] comes down from the building owners.” — *Consultant*

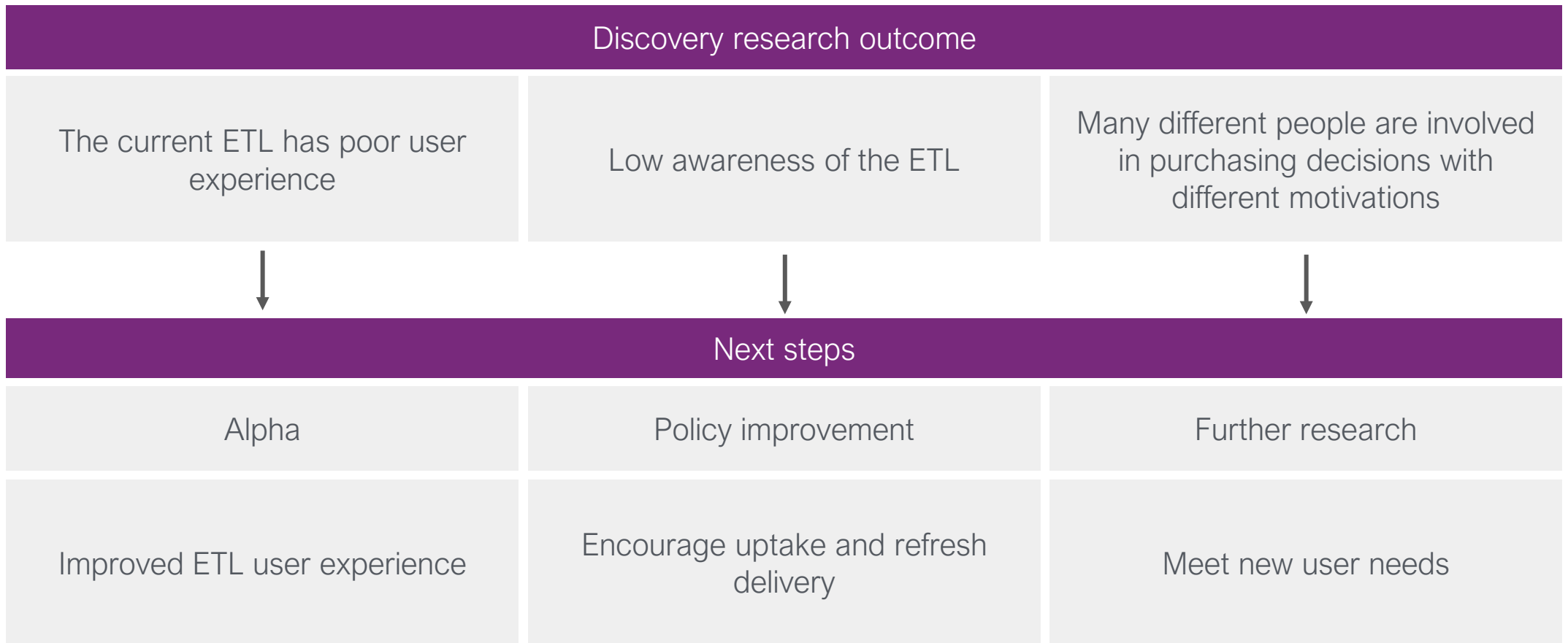
“I tend to choose the most energy efficient equipment. I think on every project I’ve worked on the contractor has replaced what I specified with cheaper stuff.”

— *Consultant*

“We have to persuade the project sponsor of the benefit to them, and their budget, to get them interested in making energy efficient decisions.” — *Internal energy team*

What's next?

The three core areas that could be explored further include:



Alpha

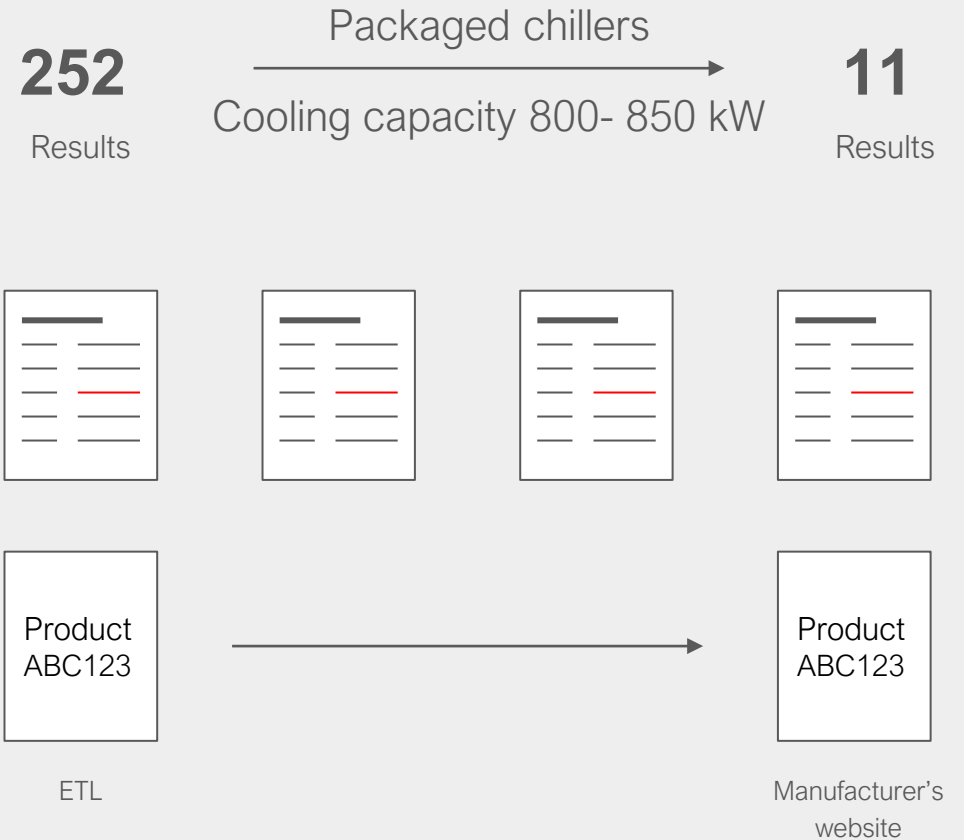
Improved ETL user experience



Improved ETL user experience

User experience (UX) / User interface (UI) design recommendations

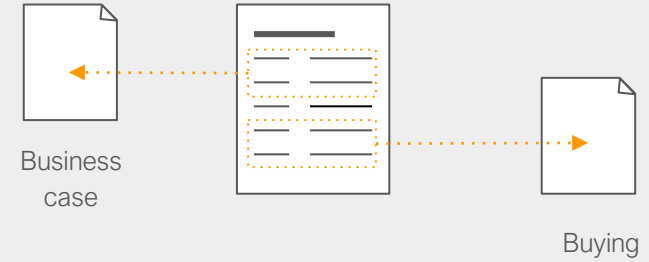
- Reduce the number of products returned by the search, by allowing the user to enter product specific criteria (i.e. a product number or a cooling capacity range for chillers)
- Improve ability to make decisions by allowing a side-by-side product comparison
- Provide a seamless journey by providing links through to product on the manufacturer's site
- Consider consistency and style of visual design for the ETL and what will provide the most value in terms of creating a great user experience



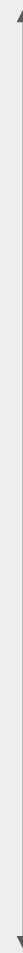
Improved ETL user experience

Content and hierarchy

- Taking into account the needs and technical abilities of the different user groups will help inform both the content and its hierarchy
- Including information helpful to those preparing business cases for energy efficient equipment would be beneficial, as well as identifying what information is needed to help more technical people compare and contrast products
- More technical information should be positioned further down the hierarchy for people to find if they need it



Plain English



What is it?
Why do I need it?
How do I use it?

Lifecycle costs
Energy efficiency comparison
Installation guide

Technical specification

Technical language

Improved ETL user experience

A single platform

- The ETL is currently across three unique platforms and URLs ([ETL public website](#), [Carbon Trust microsite](#), [GOV.UK ETL guidance](#))
- This results in a fragmented user experience and online journey
- Recommendations for the future platform include a single platform, under a single URL for a seamless, consistent and user-friendly experience



Policy improvement

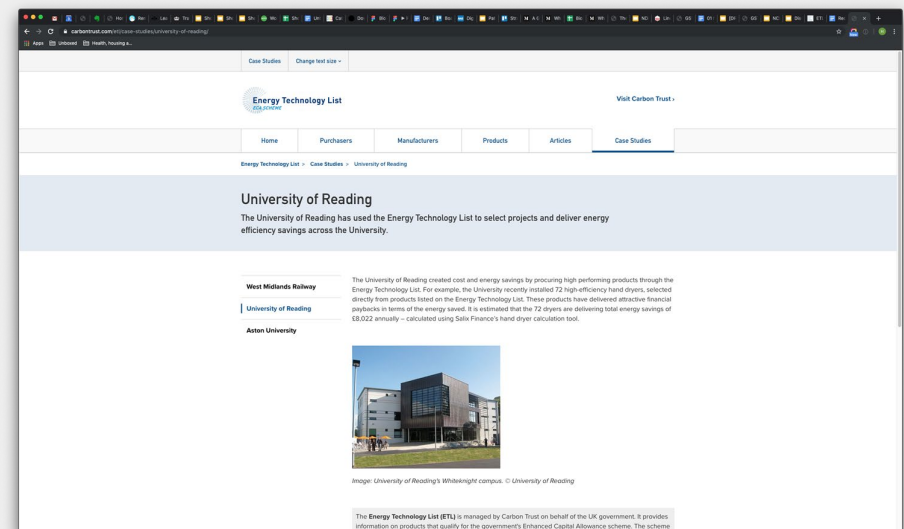
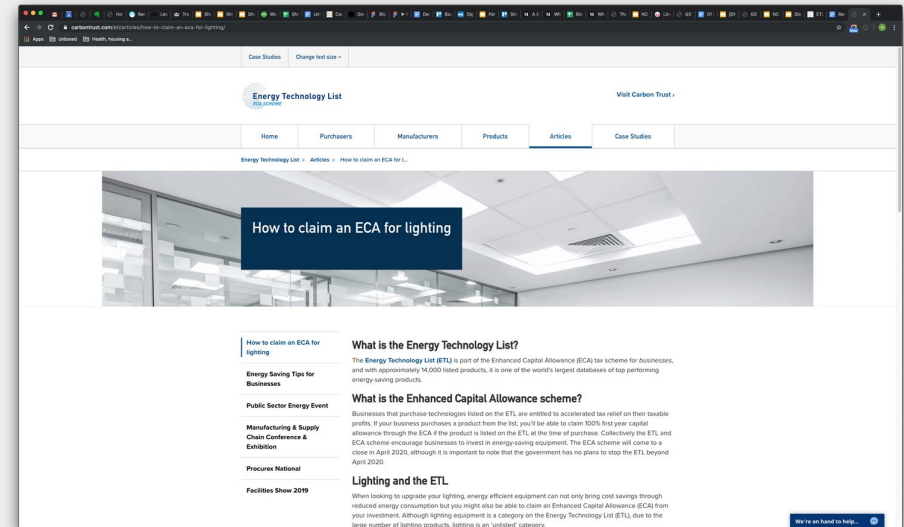
Encourage uptake



Supporting uptake and policy

Building awareness

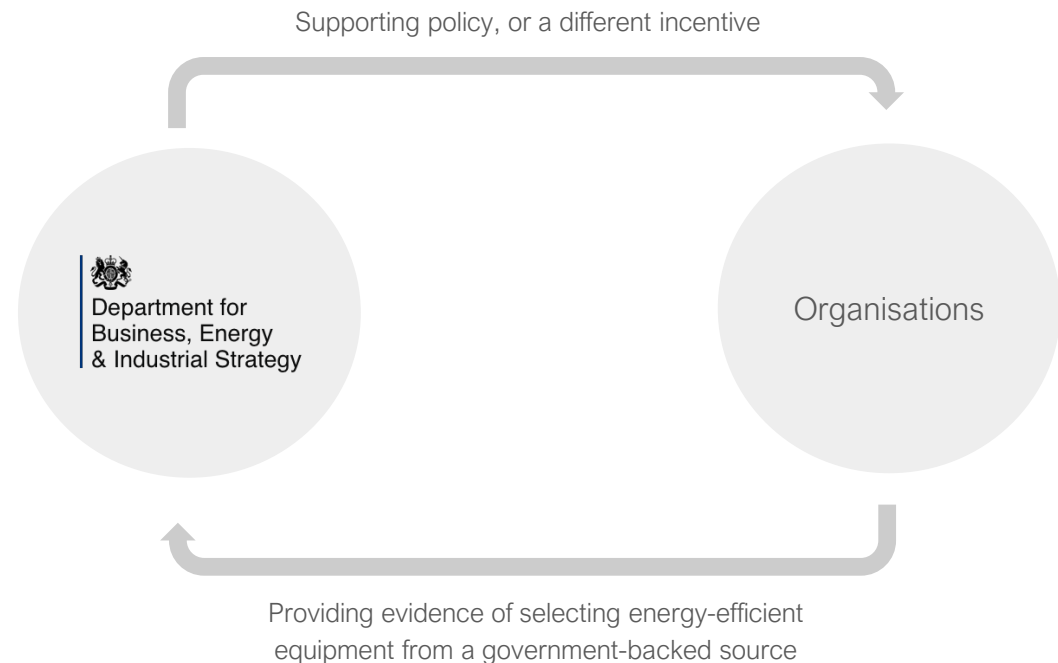
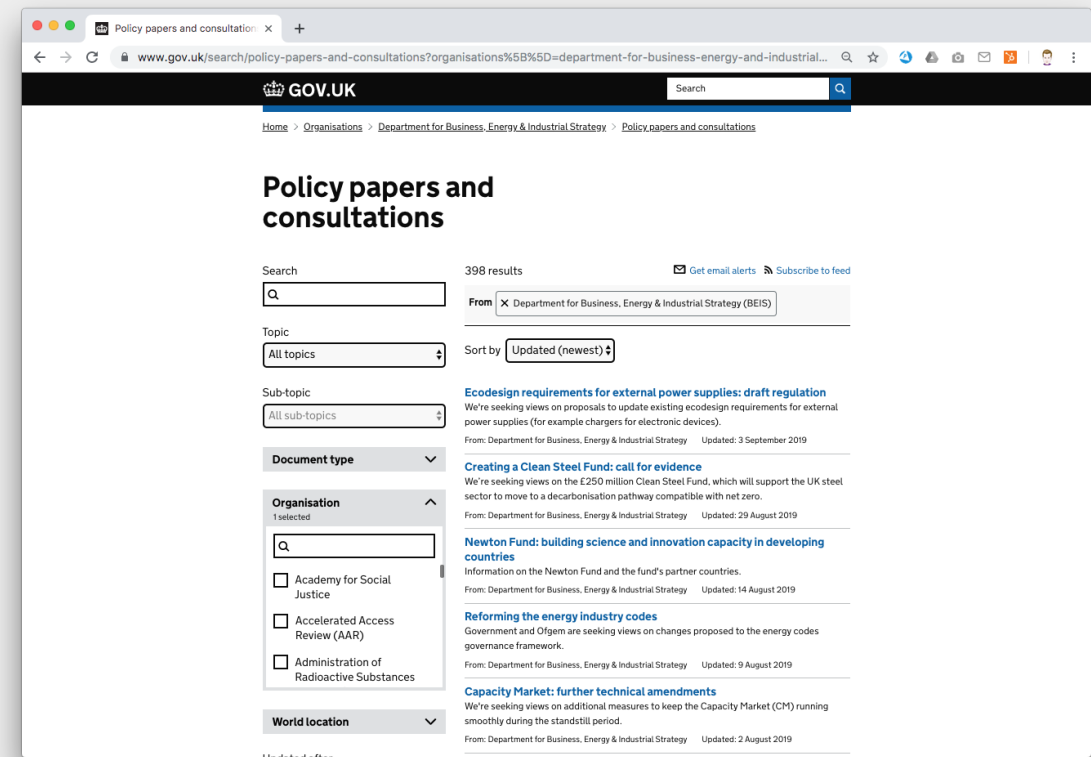
- Once the baseline of an improved user experience for the ETL has been established, some marketing activity may be required to raise awareness amongst key user groups
- There has already been some success using tools such as newsletters and attending events, these could be rolled out to meet the interests of different user groups to help build awareness
- By maintaining close contact with appropriate user groups it's possible to be aware of their user needs and predict what may be coming up. As experts in their own fields, users can be a valuable source of information and word of mouth
- There are many bodies that might have interest in the ETL. Build relationships with them to reach their membership. Some examples include:
 - [Better Buildings Partnership \(BPP\)](#)
 - [Energy Managers Association](#)
 - [Major Energy Users' Council \(MEUC\)](#)
 - [BREEAM](#)
 - [Association for Public Service Excellence \(APSE\)](#)
 - [Sustainable Energy Association](#)



Supporting uptake and policy Connecting to policy

To ensure formal uptake of the ETL from organisations, supporting policy is a key opportunity, including:

- **Identifying existing policy** — there is potential for the ETL to add value to other policy areas encouraging energy efficient purchasing and decision making. Identifying these and working with teams to ensure the ETL is designed to work in conjunction with other policy areas will increase its range and ability to have impact
- **Use relationships to initiate new policy** — by establishing relationships with membership bodies and user groups, BEIS would be in a unique position to really understand the needs of those groups, and understand what policies would in the future have greatest impact



Further research

Meet new user needs



Further research

Commissioners

- As they are not likely to be technical or directly involved with the purchase of equipment, for the ETL website redesign alpha and beta, further discovery with commissioners may not be needed. In the future if wider user needs are to be considered, we feel it would be valuable to speak to some commissioners to understand their motivators and drivers
- Commissioners have been identified as being key to influencing the energy efficiency of decisions due to being a key role in the financial decisions and forming briefs for work
- The team were unable to reach anyone in a commissioner role as part of this project - it was incredibly hard to identify anyone who does this, so in future research this would need to be a consideration

Property developer

Director of Estates



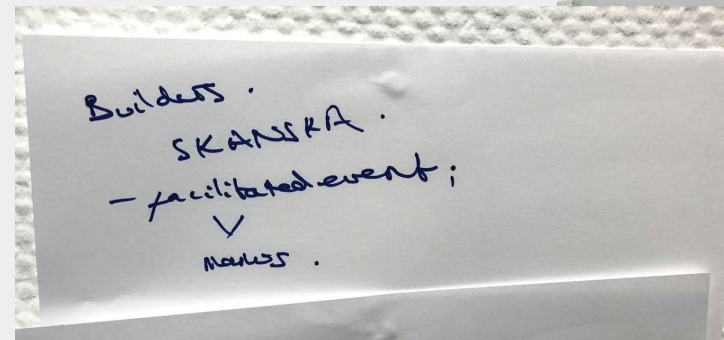
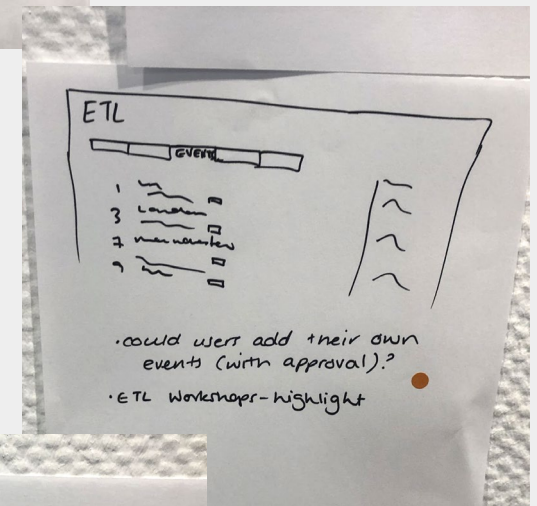
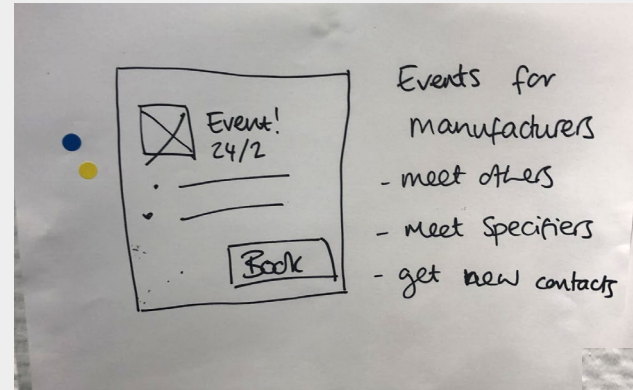
Director of Finance

Property investor

Further research

Facilitate networking

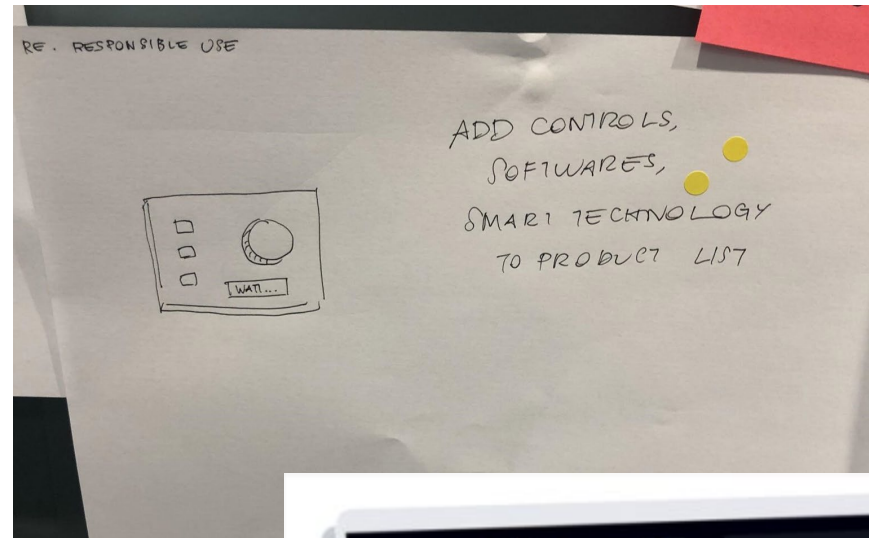
- Manufacturers are keen to get their brand and products in front of specifiers and contractors
- Specifiers and contractors are keen to stay up to date with latest technologies and what's available on the market so they can choose the most appropriate equipment for their projects
- There's an opportunity to help expand networks and knowledge through events, news and case studies or brand homepages
- This could also be expanded to include facilities management who would like access to manufacturer's technical support and training



Further research

Extend range of products

- Many people in the research mentioned the need to include software, BMS and smart meters in the list
- Extending the types of products covered may make information more relevant and useful, especially to less technical people who are more likely to be engaging with these types of products
- Some interviewees also suggested the list could be broader than just products to include approved suppliers, installers and specifiers
- This could also work with policy to help encourage new behaviours around energy usage and purchasing decisions



Overview

Alpha

Improved ETL user experience

- Refreshing the design
 - Improve search functionality
 - Enable product comparisons
 - Improve flow of user journey
 - Consider consistency and style of visual design
- Overhaul of content and hierarchy
 - Include content for business cases
 - Create content to appeal to a range of technical levels
 - Create a content hierarchy
- Move to a single platform
 - Create a consistent user journey by moving content to one platform
- An exploration into creating an API of data included in the ETL

Policy improvement

Encourage uptake and refresh delivery

- Building awareness
 - Undertake marketing activities
 - Create news and events
 - Work closely with relevant user groups
 - Establish partnerships and connections with relevant bodies
- Connect to policy
 - Identify existing policies the ETL could support or work in partnership with
 - Use relationships with user groups and bodies to initiate new policies

Further research

Meet new user needs

- Meeting some user needs will be improved by undertaking the first two areas of work, but further user needs and a wider range of user segments may be met through further research into other areas including:
 - Research into commissioners' motivations and drivers
 - Research into facilitating networking between user groups
 - Research into widening the types of products (and services) listed on the ETL

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