UK Government

Industrial Energy Transformation Fund (IETF) Benefits Report

Department for Energy Security and Net Zero (2026)

Contents

1 Industrial Energy Transformation Fund overview

The Industrial Energy Transformation Fund (IETF) is designed to help businesses with high energy use to cut their energy bills and carbon emissions through investing in energy efficiency and low carbon technologies.

IETF is a targeted intervention that aims to promote industrial growth and future proof industry through its support of transformational technologies, encouraging inward investment through match funding. The IETF is a technology-neutral demonstrator that supports the commercial roll out and permanent installation of energy efficiency and decarbonisation technologies at industrial sites that are first movers within eligible sectors. By providing support for energy efficiency projects, the Fund helps sites to overcome capital barriers to investing in technologies that can immediately reduce their energy bills. Through support for decarbonisation studies and deployment projects, the Fund is helping to kick-start the industrial transformation required to meet net zero, especially by supporting early movers with complex, novel decarbonisation technologies. The Fund is targeting projects that can have a transformative effect on industrial energy use and emissions. Novelty, replicability, technical feasibility and deliverability are criteria used in order to select the highest quality projects, acknowledging that some projects will not proceed to completion.

The IETF launched in 2020. It made up to £500m of funding available for industrial sites. The fund has now closed to new applicants and has successfully supported over 150 projects. Funding for some projects will complete in early 2028. Some projects may run beyond this date due to dependencies such as hydrogen supply. The £500m is the estimated amount available in the scheme but will be less than this, as the planned second competition window for Phase 3 did not take place.

This report covers how the funding is spent, information about applicants, case studies of completed projects, expected emissions and energy savings, other expected benefits, and the evaluation programme.

All three phases of the IETF are covered. It should be noted that Scotland has its own scheme, SIETF, which was initiated with Scotland’s share under the Barnett Formula. SIETF is outside the scope of this report. The SIETF share is included within the up to £500m of funding made available.

The purpose of this report is to provide transparency on Government spending and accountability for the programme, as well as provide evidence for future policy-making.

All figures in this report are as of October 2025.

2 Funding

This section covers how funding is split between different types of IETF projects.

The IETF provides grants towards energy efficient and low carbon technologies, with a requirement of private funding for the rest of the project cost. The minimum percentage of match-funding required by companies depended on the type of project, the size of the company, the size of project partners and whether the industrial site was in an area that could claim additional economic assistance[1] or was in Northern Ireland. The percentage of match-funding required by different types of project were broadly aligned with EU subsidy levels. Lower match-funding percentages were required for smaller companies, decarbonisation projects and feasibility studies. The variable match-funding requirements were intended to help provide greater support to projects that might be more challenging to finance otherwise, as decarbonisation projects tend to have longer payback periods (or potentially no payback period) than energy efficiency projects and because of the challenge smaller companies have to raise finance to support capital projects.

Funding is allocated through a competitive process aimed at supporting the highest quality and most transformational bids.

All projects that passed eligibility checks were assessed by panels of technical assessors with moderation and more senior programme panels then reviewing the decisions. Ultimately, recommendations were made to ministers on which projects to fund.

Where proposed projects did not meet the required thresholds, DESNZ provided feedback to clarify the potential deficiencies and concerns with the application, such that, if appropriate, projects could consider reapplying.

All the figures below include projects that are live or closed as of October 2025. Any projects that were unsuccessful at application or have been withdrawn are excluded.

The total grant funding offered to projects across phases 1, 2 and 3 is £201.5m. This is 40% of the total funding of 500m budgeted. Reasons for this include withdrawals from the programme and some projects in Phase 3 pending official sign-off. Withdrawals will be investigated in the impact evaluation, see Section 7.

The amount of private funding leveraged across all three phases is £430.7m. This represents a 2.14 leverage ratio.

Split into phases, the grant funding offered for Phase 1 projects is £42.3m, Phase 2 £109.1m and Phase 3 £50.1m.

[1] The Assisted Areas Order 2014

The IETF supports two categories of project: energy efficiency and decarbonisation. The total grant offer is £110.4m for energy efficiency and £91.1m for decarbonisation projects.

The projects can be feasibility or engineering studies, or deployment projects. Most of the funding is offered to deployment projects with £176.9m for deployment projects, £14.6m for engineering studies and £10.1m for feasibility studies.

The funding is allocated across different regions in England, Wales and Northern Ireland. Scotland has the Scottish IETF which is not covered here. The grants are allocated as per Table 1.

Table 1: IETF funding across regions in England, Wales and Northern Ireland for live and completed projects.

Work region	Grant funding [£m]
North West	60.1
Wales	35.1
Yorkshire and The Humber	24.9
East of England	17.7
Northern Ireland	16.7
West Midlands	16.4
North East	8.5
East Midlands	6.2
South East	5.8
Greater London	5.7
South West	4.4
Total	201.5

Splitting the funding by technology gives the breakdown in Table 2.

Table 2: IETF funding by technology type. DD stands for Decarbonisation and EE stands for Energy Efficiency. Live and completed projects are included.

Technology	Grant funding [£m]
EE: Equipment upgrade	33.6
DD: Fuel switch (electrification)	26.7
DD: Fuel switch (hydrogen)	26.1
EE: Heat or energy recovery	25.2
EE: Process optimisation	22.0
EE: Fuel switch (electrification)	20.8
EE: Resource efficiency	16.6
DD: CCUS	13.7
Other	7.9
EE: Heating and cooling equipment	6.8
DD: Fuel switch (other e.g. biomass, biogas)	2.0
Total	201.5

Technology categories were assigned by the applicants themselves. There is some ambiguity in allocating projects to the categories in Table 2. For example, heat pumps may be in EE: Fuel Switch (electrification) or DD: Fuel Switch (electrification). If heat pumps were used to replace boilers as a fuel switch from gas to electricity, this would be eligible for the Decarbonisation category. If heat pumps were used to recover waste heat from a gas fired furnace, this would be eligible for the Energy Efficiency category.

For further information, IETF competition winners have been published on the IETF website and visualised in an interactive map on Tableau.

Information on the Scottish IETF can be found on the SIETF website.

3 Delivery information

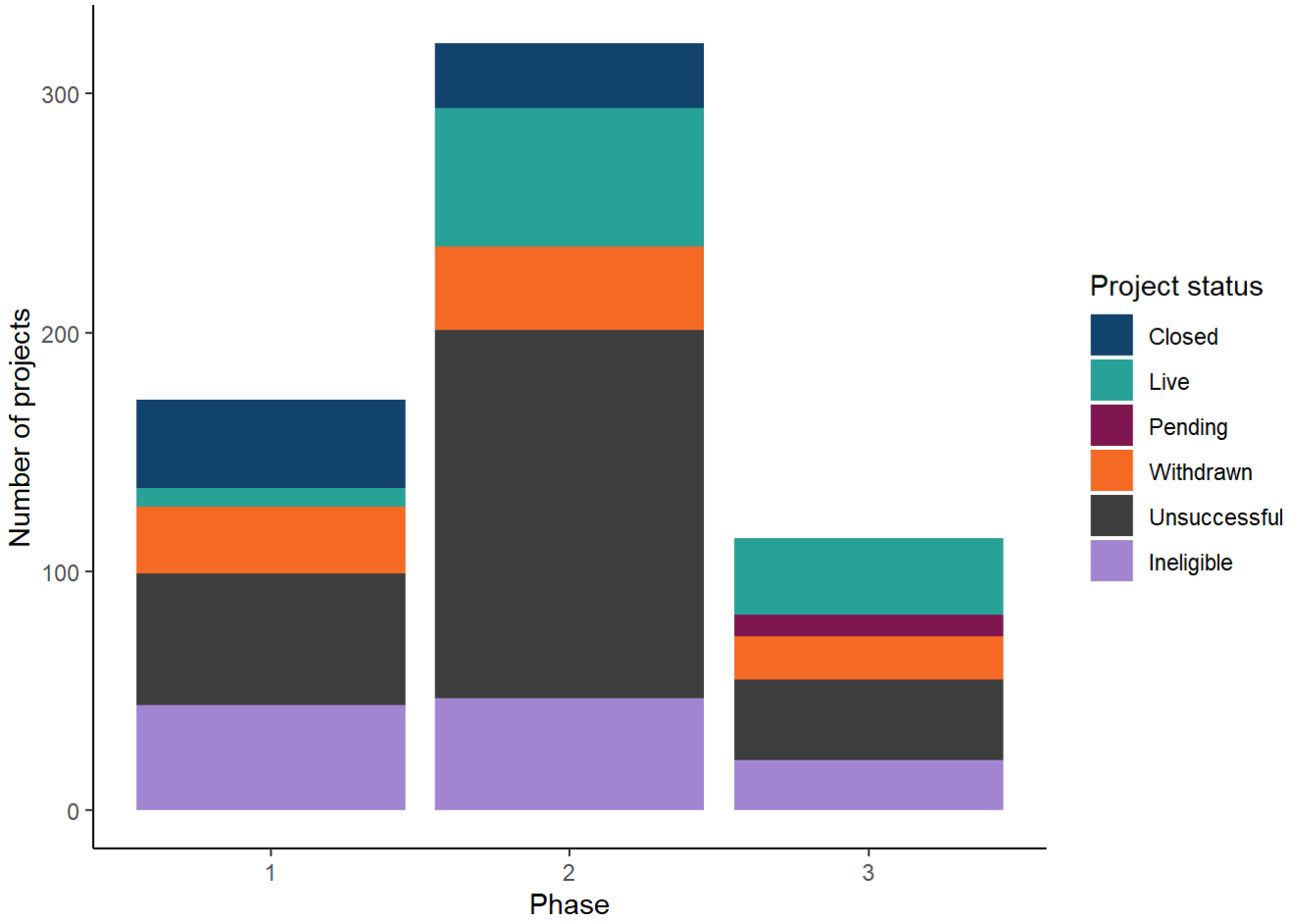
This section provides information on applications to the IETF. The data is as of October 2025, as for the rest of this report.

Table 3 and Figure 1 show the number of projects in each application phase, divided into live, closed, unsuccessful and ineligible projects. A project is marked ineligible if it did not fall into the scope of the IETF criteria. A project is marked unsuccessful if it would have been eligible for funding but did not pass the assessment (i.e. a grant was not awarded) or due diligence checks. A project is live when it is being undertaken and it is marked closed when it has been completed and, where applicable, installation of equipment has been finished. This means that there are in total 162 projects in receipt of a total of £201.5m funding. Some projects in Phase 3 are pending the official sign-off of the grant agreement, so those projects have been marked as pending.

Table 2: Number of projects by status and phase

Project status	Phase 1	Phase 2	Phase 3
Closed	37	27	NA
Live	8	58	32
Withdrawn	28	35	18
Unsuccessful	55	154	34
Ineligible	44	47	21
Pending	NA	NA	9
Total	172	321	114

Figure 1. Project status of all IETF projects



In total there are 81 withdrawn projects across the three phases. Most of the projects withdrew before the grant was formally offered to them. 35 projects have been withdrawn by the company after the grant was formally offered to them. The most common reasons include **increased costs, strategy or ownership change, technical feasibility, and inability to deliver in the required timeframe.**

4 Expected core benefits

The aims of the IETF are

- Supporting industry in building a pipeline of future projects by supporting feasibility and FEED studies,
- Improving the energy efficiency of industrial processes by bringing payback of projects within an investable range for company decision-makers
- Incentivising early movers by making the low-carbon investment financially more attractive than the carbon-intensive option

The benefits of the IETF have been defined in order to measure, contribute to and achieve the overall aims of the scheme. The benefits that are fundamental to delivering IETF objectives are known as core benefits. They are:

- Reduced carbon intensity associated with industrial processes (tCO2e)
- Reduced energy intensity of industrial processes (MWh)
- Reduced energy costs for energy efficiency deployment participants (£)

These are measured in deployment project participants. Qualitative benefits, including those of studies, are investigated in the evaluation programme, see Section 7.

During the application stage, companies were requested to provide estimates of the core benefits from deployment projects. These are calculated from the predicted energy consumption for each fuel after the project completion, compared to a counterfactual estimate. The benefits are scaled down by a technical risk factor and a shutdown risk factor to take into account the likelihood that not all the benefits will be realised. A further downscaling is applied to take into account that some of the benefits might have been realised also in the absence of IETF funding (additionality). Finally, a rebound factor adjusts the benefits downwards for the expected increase in production due to savings made in the energy consumption. All of these factors apart from the shutdown risk have been assessed on a project-by-project basis by the assessors of the applications. A common shutdown risk is applied to all projects.

Once the deployment project has been completed, six-monthly benefits monitoring periods begin. There is too little monitoring data to date for generalising to the whole IETF programme. **Therefore, the data quoted in this section is based on companies' submissions to the IETF in the application stage. Hence the figures are highly uncertain and subject to change when the projects have been completed.**

4.1 Expected Reduction in Emissions

IETF funding is intended to reduce carbon emissions from industrial processes. Thus, the reduction in emissions is a core benefit which is quantified at the application stage and monitoring stage. Because there is not enough monitoring data to date, the below figures are companies' estimates from applications to the IETF. Only live and closed projects are included in these figures. Unsuccessful projects and any projects withdrawn by October 2025 are excluded.

The reduction in emissions is a benefit applicable to both energy efficiency and decarbonisation deployment projects so both types of project are included here.

The emission reduction estimates have been adjusted for assumed additionality and assessed risk (as described in the introduction to Section 4), and any change reported in production from baseline production. The estimates were submitted as part of the application to the IETF.

The estimates provided are for the lifetime of the equipment as estimated by companies in the application. In reality, the equipment can be shorter- or longer-lived.

Table 4 shows the estimated emissions savings from IETF deployment projects.

Table 4: Estimated lifetime emissions savings from IETF projects

Phase	Energy Efficiency or Decarbonisation	Estimated lifetime reduction in emissions [MtCO2e]	Estimated emissions savings per public GBP invested [tCO2e/£]
1	Energy Efficiency	2.1	0.034
2	Decarbonisation	0.8	0.012
2	Energy Efficiency	1.0	0.023
3	Decarbonisation	0.3	0.014
3	Energy Efficiency	0.5	0.018
All	All	4.6	0.021

The emissions savings can be calculated by industry as per Table 5. Here, SIC codes submitted by project companies are used and split into divisions where 10 or more projects are in each division. Where there are less than 10 projects in a SIC division, they are marked as other.

Table 5: Estimated lifetime emissions savings in SIC divisions

SIC Division	Description	Estimated lifetime reduction in emissions [MtCO2e]
Other	Other	1.9
23	Manufacture of other non-metallic mineral products	1.6
10	Manufacture of food products	0.7
11	Manufacture of beverages	0.4
All	All	4.6

4.2 Expected Reduction in Fuel Consumption

Energy efficiency deployment projects are intended to reduce fuel consumption. On the other hand, decarbonisation projects do not necessarily reduce fuel consumption, so we do not consider the fuel savings from decarbonisation projects as a success factor of the IETF. This is because decarbonisation projects, such as Carbon Capture, are primarily intended to reduce carbon emissions and achieving that may lead to an increase in fuel consumption.

In the absence of outturn (monitoring) data, the benefit estimates from applications have been adjusted for assumed additionality, assessed risk, and any change reported in production from baseline production. These are based on information submitted at the stage of application to the IETF.

Table 6 shows the savings as those over the course of the estimated lifetime of the installed equipment. In reality, the equipment can be shorter- or longer-lived.

Table 6: Estimated lifetime reduction in fuel consumption. Phase 2 Decarbonisation projects have led to an increase in fuel consumption.

Phase	Energy Efficiency or Decarbonisation	Estimated lifetime reduction in fuel consumption [GWh]	Estimated fuel savings per public GBP invested [kWh/£]
1	Energy Efficiency	9,067	147
2	Decarbonisation	-991	-15
2	Energy Efficiency	4,636	108
3	Decarbonisation	242	12
3	Energy Efficiency	2,180	87
All	All	15,134	70

The reduction in fuel consumption can be calculated by industry. In Table 7, SIC codes submitted by project companies are used and split into divisions where 10 or more projects are in each division. Where there are less than 10 projects in a SIC division, they are marked as other.

Table 7: Estimated lifetime fuel savings in SIC divisions

SIC Division	Description	Estimated lifetime reduction in fuel consumption [GWh]
23	Manufacture of other non-metallic mineral products	6,130
Other	Other	4,743
10	Manufacture of food products	2,682
11	Manufacture of beverages	1,580
All	All	15,134

4.3 Expected Reduction in Cost of Fuel Consumption

The third and final core benefit of reduced energy costs is applicable to energy efficiency deployment projects only, since decarbonisation projects are defined by the reduction in emissions and therefore do not always reduce energy costs.

The most realistic benefit estimates have been adjusted for assumed additionality, assessed risk, and any change reported in production from baseline production.

The energy cost savings are presented in Table 8 as those over the whole estimated lifetime of the installed equipment. In reality, this period can be longer or shorter and, therefore, the figures are uncertain. Retail fuel prices have been assumed as per the Green Book and they are consistent within each phase.

Table 8: Estimated lifetime reduction in the cost of fuel consumption. Phase 2 Decarbonisation projects have led to an increase in the cost of fuel consumption.

Phase	Energy Efficiency or Decarbonisation	Estimated lifetime reduction in cost of fuel consumption [£m]	Estimated fuel cost savings per public GBP invested [£/£]
1	Energy Efficiency	494	8
2	Decarbonisation	-250	-4
2	Energy Efficiency	131	3
3	Decarbonisation	25	1
3	Energy Efficiency	50	2
All	All	451	2

The fuel cost savings can be calculated by industry. In Table 9, SIC codes submitted by project companies are used and split into divisions where 10 or more projects are in each division. Where there are less than 10 projects in a SIC division, they are marked as other.

Table 9: Estimated lifetime reduction in the cost of fuel consumption in SIC divisions

SIC Division	Description	Lifetime reduction in fuel consumption [GWh]
23	Manufacture of other non-metallic mineral products	211
Other	Other	129
10	Manufacture of food products	88
11	Manufacture of beverages	23
All	All	451

5 Expected non-core benefits

The IETF is expected to lead to the following benefits beyond the core benefits in the previous section:

- Increasing the pipeline of future projects following studies
- Encouraging ‘first movers’, specifically decarbonisation projects
- Knowledge spillovers from projects to the wider sector and supply chain
- Reducing the risk-adjusted cost of new decarbonisation technologies
- Job creation in beneficiaries and supply chain

The extent to which these benefits have been, or will be realised, will be assessed in the impact evaluation programme. However, a brief description of DESNZ’s current understanding is included below.

The IETF assessment process was well-suited to increase the pipeline of future projects by specifically scoring for replicability and scalability. Anecdotally, some projects make a good argument for replicability in similar processes across their own sites and cross-sector, with strong internal and external dissemination plans. Some projects note the sectoral and cross-sectoral benefits of de-risking processes involving hydrogen and high temperature processes.

The IETF assessment process was also well-suited to encourage first movers because deployment projects were scored specifically for project novelty, and the assessment of studies created space for applicants to investigate more conceptual, first-of-a-kind ideas without the need for a deployment plan. Nonetheless, projects still had to be technically robust. Ultimately, this created the environment to develop the commercial readiness of novel and technically sound decarbonisation plans.

Some evidence of knowledge spillovers was found in the published process evaluation. Similarly, evidence was found for IETF reducing financial barriers. We refer the reader to the separate publication on the process evaluation.

6 Case studies of completed projects

This section covers an example project from each of engineering studies, feasibility studies, energy efficiency deployment and decarbonisation deployment. These are presented to give a flavour of completed projects, and a number of significant projects are still in delivery.

6.1 Feasibility study

IETF94642 Pioneer Foods (UK) Ltd: Realising energy and carbon savings from ESOS (Energy Savings Opportunity Scheme) opportunities

- Energy efficiency feasibility study
- Grant offered: £38,970
- Total project cost: £77,970
- Phase 1.1, summer 2020

Challenge: Pioneer Foods is one of the leading cereal product manufacturers in the UK. Concerned with their energy use, Pioneer Foods installed a system of advanced meters and communication networks throughout their site in Peterborough to investigate process efficiency.

Solution: Pioneer Foods' feasibility study focussed on deployment of smart meters, heat recovery from ovens and dryers, high efficiency motors, and battery chargers. Overall, they found that these innovations could save upwards of 3 GWh in energy consumption and 873,000 tonnes of CO2e, or 32% of the site emissions. Crucially, these solutions could be easily scaled to other sites around the UK.

Impact: IETF support has helped Pioneer Foods to identify innovative solutions for reducing energy consumption, operational costs, and carbon emissions throughout their business.

6.2 Engineering study

IETF15003 Digital Reality UK: Data centre cooling system consolidation

- Energy efficiency engineering study
- Grant offered: £32,766
- Total project costs - £131,064
- Phase 1.2, spring 2021

Challenge: Digital Realty are the largest provider of data centre space and services in London. The high energy consumption of their data centres motivated Digital Realty to explore options

for energy efficiency. They commissioned an engineering study into energy efficiency at one of their London data centres, Interxion Carrier Hotel.

Solution: This study laid the groundwork for consolidating cooling equipment into a centralised chilled water system. Partnering with consultants Northshore and PPA, they produced architectural and civil engineering reports for upgrading the cooling system. This will reduce energy consumption, operational costs, and noise levels.

Impact: IETF support has helped to unlock an essential planning stage in Digital Realty's strategy to achieve carbon neutrality by 2030. These innovations will accelerate their journey towards a more sustainable and competitive future.

> *"The IETF Programme was hugely beneficial to this project, and provided the momentum needed to move these concepts forward into a feasible design." (Erin Rowe, Sustainability Program Manager at Northshore)*

Figure 3. Rooftop cooling system at Digital Realty's data centre in London. ©Digital Realty

6.3 Energy efficiency deployment project

IETF03508 FP McCann Ltd: Deployment of proven energy efficient technologies in asphaltic concrete manufacturing process

- Energy efficiency deployment project
- Grant offered £2,642,253
- Total project costs £7,549,295
- Phase 1.2, spring 2021

Challenge: FP McCann is the UK's largest manufacturer and supplier of precast concrete solutions. The company also supplies aggregates, ready-mix concrete, mortar and surfacing products. Seeking to improve energy efficiency across their operations, they identified potential

improvements to the asphalt manufacturing process at Craigall Quarry, Northern Ireland, which has operated for more than 40 years.

Solution: Their wide-ranging improvements included streamlining aggregate production, controlling the moisture content of stored aggregate, replacing diesel-powered equipment with efficient material handling processes, recovery and reuse of waste heat, and increased use of recycled asphalt.

Impact: FP McCann's changes have dramatically reduced the consumption of fuel, electricity and raw materials, resulting in considerably lower emissions and operational costs. With IETF support, they have taken great strides towards their target of reducing CO2 emissions by 50% over the next five years.

> *"This [the project] has allowed us to further improve our green credentials, allowing us to offer a range of modern, environmentally sustainable surfacing products which we could not previously offer to our customers." (Eamonn Kelly, Quarry Manager at FP McCann Ltd (Craigall Quarry))*

Figure 4. Overall view of FP McCann's asphalt plant, Craigall quarry in Kilrea. ©FP McCann

6.4 Decarbonisation deployment project

IETF21032, Natural World Products Ltd: fuel switching for trommels

- Decarbonisation deployment project
- Grant offered £299,409
- Total project costs £544,380
- Phase 2.1, autumn 2021

Challenge: Natural World Products is an organics company managing hundreds of thousands of tonnes of organics every year. They produce high quality peat-free composts and soil conditioners.

Natural World Products were seeking to reduce carbon emissions by replacing diesel-powered plant and equipment with equivalents that were fully powered by electricity. Specifically, they were seeking to replace the diesel engines that drive their trommels, which are rotating, cylindrical mechanical screening machines.

Solution: IETF support enabled Natural World Products to replace these items of diesel-powered plant and equipment with more sustainable cutting edge electrically powered equipment.

Impact: This project has significantly reduced Natural World Products' carbon emissions.

> *"The funding obtained towards this project under the IETF Deep Decarbonisation competition strand has allowed the company to make significant further greenhouse gas emissions savings at one of its key processing facilities by enabling it to replace a number of key items of diesel-powered plant and equipment with more modern and cutting edge equivalents that are fully powered by electricity, generated by the company's on-site wind turbine and solar PV system further adding to the carbon capture benefits of the overall project." (A company spokesperson for Natural World Products)*

7 Evaluation

The IETF monitoring and evaluation team at DESNZ are undertaking a programme of work to evaluate the IETF process and its impact.

A separate publication was released on the results of the final process evaluation which covers IETF Phases 1 and 2. In brief, the process evaluation was based on a beneficiary survey, interviews with various stakeholder groups, and a review of delivery data and other administrative data.

An interim impact evaluation is underway with publication planned for 2026. The aim is to assess the long-term and non-core benefits as well as the core benefits. A final evaluation is planned upon all projects having completed benefits monitoring.

8 Contact details

Enquiries can be sent to IETF@energysecurity.gov.uk.

This publication is available from: www.gov.uk/government/publications/industrial-energy-transformation-fund-ietf-benefits

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