UK STEEL – SUBMISSION TO IETF CONSULTATION

Date: 21 July 2023
To: IETF@beis.gov.uk

About UK Steel

UK Steel, a division of Make UK, is the trade association for the UK steel industry. It represents all the country's steelmakers and a large number of downstream steel processors.

Submission to the consultation on the future of the Industrial Energy Transformation Fund

1. Is the IETF achieving its aims of supporting first movers?

The IETF has been able to support businesses in investing in energy efficiency and emission reduction technologies, making these measures investable. We do not believe it is important whether the project constitutes first-movers, second-movers, or close followers. The main aim must be to support the deployment of energy efficiency, reduction in greenhouse gas emissions, and demonstration of industrial decarbonisation technologies.

However, while the IETF has been very helpful, several of our members have reported negative experiences in applying for IETF funding:

- Some reported waiting over six months to hear back on claims made, often not hearing anything for weeks, before receiving emails requesting data on the claim, followed by silence for another six weeks. Similarly, site visits to discuss claims and project reviews were cancelled last minute, followed by a lack of communication for another six weeks.

- Applicants must manage internal and external stakeholders when applying for IETF funding to ensure their project can still be delivered. A member also reported that one of their projects almost did not go ahead due to the delay from the IETF team. Their internal company stakeholders and coordination prevented them from delaying the project further, and the delay from the IETF team almost stopped the project from going ahead.
- The main barrier to investing in energy efficiency and deep decarbonisation is that payback periods are longer than company-defined thresholds. The IETF provides support up to 35-55%, however, the funding levels are much higher in other countries. For example, in France, government funding is up to and over 90% of project costs. The UK Government should therefore consider increasing the level of funding to help businesses get over the defined thresholds for payback and reduce their energy use. Many members reported this as a key barrier and reported that projects failed as the IETF support levels were insufficient to meet these payback thresholds.
- One of the most frequently cited feedback was how administratively heavy the IETF application process is and how much internal resources companies have to dedicate just to submit an application. This aligns with the IETF Phase 1: first-stage process evaluation report, which notes, "*applicants reported to us that they had invested considerable resource in submitting applications – the IETF Team's Post-Application Survey suggested 85 hours on average, and our interviews revealed around two to four weeks of full-time work, although a larger range was reported'. Though most firms agreed that the work to provide the amount of information required to complete the application was proportionate to the amount of the IETF, the evaluation also notes that 'some non-applicant firm expressed a view that the level of detail and effort required for the application process was high, and that the effort:reward ratio was not favourable, or in the words of one consultee 'not worth the hassle'*".
- The resources required to apply have meant that some of our members will no longer apply for further IETF funding, while others state that they will never apply for funding for feasibility studies and pre-engineering studies, as it is not worth it.

- This has especially been the case where time and resources were spent on applying, where Government subsequently offered significantly lower funding than applied for.

We would support the EIUG's recommendation that "the Government guidance on grant funding might want to reflect the resources businesses need to allocate to submit an application instead of focusing only on the information Government requires for its assessment and assurances needs". Therefore, we strongly recommend that the application process is simplified, require fewer submissions and less data, and that the application process is rebalanced towards businesses needing fewer internal resources to apply.

2. What are the main barriers to investing in deep decarbonisation or energy efficiency technologies?
The initial IETF consultation from 2019 rightly identified the main barriers to investing in energy efficiency and deep decarbonisation:

- The main barrier is and remains "Payback periods are longer than company-defined thresholds". This still holds true, and as outlined above, Government should consider increasing the available funding levels above 45%.
- Internal competition for corporate finance, including from parts of the firm outside the UK
- High capital costs of projects
- High international competition resulting in low profit margins
- Costs and risks of many technologies are too high
- Some deep decarbonisation technologies impose additional operational costs

3. What role does the IETF play in addressing investment barriers, and does this differ to other public and private financing options?
The IETF assist in reducing payback periods to be within the company-defined thresholds, which helps attract investment within the company group. It also addresses the high capital costs and reduces the risk of investing.

4. Do you agree with the range of SIC codes proposed to determine IETF eligibility? If no, what additional categories of activity (using SIC code descriptors if possible) should be included or excluded and why?
Yes. We do not believe that these should be expanded. If anything, the SIC codes to determine IETF eligibility should be limited to focus only on energy intensive industries. This would increase the value for money and help EIIs reduce their energy use and carbon emissions. The current scheme is too broad, and its budget is too low to provide significant help towards the energy efficiency and decarbonisation journeys EIIs face.

To support other non-EII manufacturers, a separate fund can be created, which focuses on SMEs and provides dedicated support for these. Separate new funding would be needed for this.

5. Do you agree with the decision to limit IETF support to existing sites and processes? Are there any opportunities being missed and, if so, how could the energy and emissions impacts of these projects be evaluated?
Yes.

6. Do you agree with the decision to limit IETF support to investments or studies that are relevant to onsite infrastructures only? Are there any opportunities being missed and, if so, what types of off-site investment should be permitted?
Yes.

7. Do IETF rules currently encourage collaboration and the creation of beneficial consortia arrangements? If no, how can we improve this?
Businesses will collaborate with other organisations when necessary to apply to the IETF and deliver the project. However, too many organisations involved increase delivery complexity because of the differences in interest to the detriment of the project itself. Our members report that the scheme does not encourage collaboration, as there is too much red tape and bureaucracy for bilateral agreements with DESNZ, let alone with third parties.

8. Do you agree with the current minimum grant thresholds set by the IETF? If no, what amount should they be amended to? Please explain your rationale including details on what types of project and site would benefit from the change.
Yes. There is no need to reduce this any further.

9. What financing routes would you typically consider when developing a project? Do you have access to all the routes you need, and how do you determine whether grant funding is required to unlock investment in a project?
Capex availability is in particular an issue for steel industry, which is capex intensive. Often the whole capex budget is used on HSE and essential replacement schemes, leaving little or no room for energy efficiency and deep decarbonisation investment. The main route to address this is through grants.

10. At feasibility study stage, would industrial sites benefit from an expansion in scope so that the IETF funding can also support an options analysis of technologies?
Due to the onerous application process, most will not apply for funding for feasibility and pre-engineering studies, as it is not worth it. The key focus should instead be lowering the admin barrier to applying.

11. Are there any other changes to the scope of activities eligible for study strand support that might improve outcomes?
The IETF is already oversubscribed. There is no need to increase the scope of activities eligible.

12. Are there any other changes to the range of eligible technologies or scope of deployment strand support that might improve outcomes?
The IETF is already oversubscribed. There is no need to increase the scope of activities eligible.

13. Do you have any comments on the application process and delivery through to post award for the IETF? Please explain any practical considerations the government should consider when designing IETF Phase 3 or other future schemes.
As stated above:

- Some reported waiting over six months to hear back on claims made, often not hearing anything for weeks, before receiving emails requesting data on the claim, followed by silence for another six weeks. Similarly, site visits to discuss claims and project reviews were cancelled last minute, followed by a lack of communication for another six weeks.

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recommend that the application process is simplified, require fewer submissions and less data, and that the application process is rebalanced towards businesses needing fewer internal resources to apply.

14. Do you have a clear understanding of the range of government support that is available to you and how to access it? Please expand on your answer, describing how you currently identify funding opportunities and any ways in which the accessibility of this support could be improved.
Due to the energy intensity of our members, they have an excellent understanding and overview of the funding available from the UK Government and governments in other countries where they also operate.

15. Do you have any feedback on how the application questions and criteria used to assess IETF studies and deployment projects could be improved?
See above.

16. If you applied previously, please share your views on whether the application questions provided you with adequate opportunity to describe the purpose and scope of your study or project. Are there additional questions that should be asked, particularly in regard to evidencing that the proposal meets the IETF eligibility criteria?
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17. If you applied to the deployment strand, did you find the economic assessment questions and project benefits calculator easy to understand and complete? Did you encounter any issues and what improvements could be made? In your view, does the IETF assessment process discourage applications for projects or studies that may have otherwise gone ahead without IETF support?
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18. How could the assessment of "additionality" be improved, particularly in terms of identifying where investment exceeds existing commitments, such as Climate Change Agreement requirements?
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19. In your view, is it appropriate to assess all applicants against the same criteria or should there be a different approach for certain businesses or projects?
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20. Would the current level of technical detail required for M&V in the IETF application deter you from applying?
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21. How can the IETF encourage further the sharing of knowledge of energy efficiency and deep decarbonisation measures between organisations?
While this is a barrier for SMEs, it is not for larger organisations. It is, therefore, better if advice services separate from the IETF are created to close this gap in the market.

22. What do you see as the IETFs long term role in supporting industry to save energy and reduce emissions? Please consider how the IETF should interact with other decarbonisation and energy efficiency policies to avoid duplication and maximise value for money.
Industrial energy efficiency funding can help companies fund more capital-intensive investments in energy efficiency, particularly where payback periods are longer and therefore the business case is lacking. It will help reduce overall operating costs for industry, unlock further capital investment for the UK, drive productivity improvements, reduce energy consumption and carbon emissions, and facilitate innovation and R&D in this area. The increased productivity and competitiveness would in turn facilitate further investment in decarbonisation since the cost-competitiveness of each market is crucial to attracting investment within the multinational companies.

The potential for energy and carbon efficiency is also evident from WorldSteel data collection, which shows the range of current carbon emissions from scrap-based and ore-based production. The top 15% of ore-based producers emit over 20% less CO2 than the remaining 85% of producers, and the top 15% of scrap-based producers emit almost half the carbon than the remaining 85% of producers on a global scale. There is excellent potential to enhance existing EAFs through heat recovery, scrap pre-heating, foamy slag practices, oxy-fuel burners or lancing, improved process control, and flue gas monitoring and control, to name a few.

Similarly, further efficiencies can be achieved in casting and secondary processes through, for example, continuous casting, efficient ladle pre-heating, near-net-shape casting, endless strip production, direct rolling, hot charging, improved insulation, walking beam furnace, and heat recovery from cooling water. If CCUS is applied to blast furnaces, there are also great opportunities for efficiencies in all parts of the ore-based production via, for instance, heat recovery coke ovens, improved ignition oven efficiency with multi-slit burners or curtain flame ignition systems, top pressure recovery turbine, improved BF gas recovery, and improved ladle pre-heating.

Lowering cumulative emissions is essential to mitigating climate change. Improvement to existing equipment and furnaces will reduce overall collective carbon emission from the steel sector while improving overall efficiency and productivity, putting the sector in a better position to invest in decarbonisation technologies. This also becomes clear when considering that next-generation furnaces will likely not be available in time for the steel industry's ambition to largely decarbonise by 2035, which emphasise the importance of improving the existing technologies through support for energy and carbon efficiency. There must certainly be a focus on no-regret investment to ensure the improvements are worth supporting while considering the span of time of decarbonisation benefits. This can be delivered through the IETF.

However, the IETF has been challenging to access for the steel sector. Due to the very tight margins of the industry and the poor trading environment for the steel sector in the past few years, companies have struggled with even meeting the current 55-65% CAPEX funding requirements. It would be worth readjusting these requirements, considering the affordability challenges the industry has experienced.

23. Do you support the principle of technological neutrality in the IETF? Should any particular technologies or sectors be excluded or prioritised in future support should it become available?
Yes.

24. What type of support will industry need out to 2035 to enable energy efficiency and decarbonisation projects to be replicated and deployed at scale? Would any of the following provide an effective intervention: support for capital costs, operational costs, access to finance or information, clarity on grid capacity and connections or the availability of hydrogen, or capacity building?
UK Steel's Net Zero Steel report outlines the key barrier to decarbonising the steel industry in the UK. Relevant to this consultation are two recommendations in particular:

1) Energy efficiency funding (see our answer to question 22).
2) CAPEX funding of deployment of new Net Zero production equipment. The two integrated steel producers in the UK are responsible for 95% of the industry's emissions and will likely require significant CAPEX investment of £1-2bn per site to commission new furnaces. Steel customers are unwilling to pay premium, so there is no business case for investing unless the Government provides the necessary support. Other governments worldwide are providing substantial co-funding to decarbonise steel plants:

Country	Funding
US	$85bn available for green steel production and upstream decarbonised energy
France	€1.7bn investment for ArcelorMittal to replace three blast furnaces with EAF/DRI €5.6bn for industrial decarbonisation as part of the "France 2030" Investment Plan
Canada	C$400m in the Arcelor Mittal DRI plant C$420m in the Algoma Steel EAF plant
Germany	€1bn grant for Salzgitter for hydrogen-based steelmaking €5bn for the decarbonisation of Germany's industrial sector €55m initial funding or ArcelorMittal hydrogen-based steel production Industrial Carbon Contract for Difference to provide funding model for industrial decarbonisation
Spain	Signed MoU with ArcelorMittal for hydrogen-based steel plant
Sweden	Joint venture between state-owned energy company Vattenfall, state-owned mining company LKAB, Swedish energy regulator, and steelmaker SSAB in hydrogen-based steelmaking
Belgium	Investment in €1.1bn ArcelorMittal DRI plant
Slovakia	€300m to US Steel Kosice (USSK) for its plan to decarbonise by switching to an electric arc furnace from EU Recovery and Resiliency Fund

To meet the Government's ambitions to decarbonise industry and mitigate climate change, the UK Government must match funding levels provided in other countries to help decarbonise the steel sector.

25. Which of the following would provide an effective funding mechanism for energy efficiency and decarbonisation projects out to 2035, and could any become more attractive or necessary: grants, loans, guarantees, and equity? Do you feel that the existing balance between these different types of government support is appropriate?
Grant funding: The financial support option generally depends on the maturity of a technology and the market failure the policy is trying to address, but just like the deployment of renewables under the CfD, direct subsidies are likely the most effective. The main barrier to energy efficiency is not loans, guarantees, and equity but the lack of grant funding.

26. Besides energy and emissions savings, what wider benefits could funds like the IETF deliver? How would you assess and evaluate these benefits?
Wider benefits that the IETF could deliver are safeguarding the competitiveness and decreasing the risk of carbon leakage for energy intensive industries. The analysis and framework to assess these benefits are set out in the Department of Business and Trade's review of the EII exemption schemes and HMT's Net Zero Review.

For further information, contact:
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