

Q&As from the AFF Launch Webinar (09:30-11:00 04/08/2022)

V1.1

- Q1: Is it possible to apply for funding to support both feasibility and FEED aspects of a single project? I.e. FEED study for PtL conversion using point source CO₂, but undertake a simultaneous study on the feasibility of incorporating DAC into the project?
- A1: Yes, it is possible to apply for both, given the different technologies proposed and the different status. We would encourage you to submit 2 separate applications, one for the FEED stage for the point source CO₂ and a separate application for a Feasibility study using DAC.
- Q2: When you say 'fossil hydrogen' does this mean blue hydrogen?
- A2: As set out in the Guidance document for the feedstock eligibility rules, we state that hydrogen production or hydrogen purchases that are derived from fossil natural gas or coal or crude oil cannot exceed 5% by LHV energy content of the total fuel output of the project. Therefore "fossil hydrogen" encapsulates "blue hydrogen" (natural gas reforming with CCS) alongside other hydrogen production pathways using fossil fuels.
- Q3: Can funding be directed toward new permanent staff hiring?
- A3: Labour costs are eligible but they need to be associated with eligible activities, such as the design and evaluation of equipment contained in the project. So funding cannot be claimed for recruitment activities. However, if new staff are recruited to work on eligible elements of the project, the new ongoing labour costs can be claimed.
- Q4: Given funding will be in arrears, how many AFF payments are expected each year?
- A4: It depends on the individual projects and their milestones. During the finalisation of the grant agreement we will agree the project milestone plan and the invoicing schedule based on that. Typically what we've seen in the past is that milestones can be achieved every three to six months. So it could be quarterly or half yearly invoicing.
- Q5: Can the grant support ongoing activities like FEED, if the FEED started before the start of funding period?

A5: The grant cannot support any costs that have already been spent before the grant letters are signed, so it's only going to support new work. However, just because the FEED stage has started before the start of the funding period doesn't mean that the grant is unable to support any FEED activities – it could support those eligible parts of FEED that are yet to be spent. It needs to be very clear what has already been committed or already paid upfront in your application.

Q6: We have executed our FEED contract and made an initial payment. As FEED has officially commenced, does this make it ineligible for Funding support?

A6: Payments after the grant offer letter has been signed should be OK. So the initial payment that has already been made could not be claimed, but eligible parts of FEED that are yet to be spent should be OK.

Q7: Would site related activity (geo survey, contamination surveys etc) be covered under eligible activities?

A7: Having taken this away for further consideration, the answer is yes, site related activities are in scope of the AFF as eligible activities.

Q8: Is the current list under the 100% or the 50% category?

A8: To clarify the question, the percentages refer to the maximum grant intensity, with up to 100% allowed for Feasibility, Pre-FEED and FEED stages, and up to 50% for Detailed Design and Procurement of Main Equipment stages. The list of ineligible and eligible costs given on the presentation slides apply to both categories.

Q9: Is there a requirement for a consortium, i.e. for an SME to be involved and multiple groups to apply?

A9: No, you can apply as single organisation or as a consortium/group. There is no specific requirement for an SME to be involved.

Q10: Is Co-processing eligible for funding? I.e. for the development of a pre-treatment facility for a new feedstock to go into SAF? There are many benefits of co-processing, mainly the ability to minimise total costs including blending to <50% to meet ASTM spec.

A10: The applicant will need to evidence that the technology pathway is not already fully commercialized, and that the proposed project once operational is going to be at TRL 6 to 8 (demo to first commercial scale). It's not impossible for

coprocessing to fit in that bracket, but it will come down to what feedstock and what new pre-treatment process is being proposed. Note that if intermediate material will be upgraded in an existing refinery, you cannot claim for any costs of constructing that existing refinery. DfT will expect the project costs to be focused on the pre-treatment facility or other innovative aspects of the pathway.

Q11: Can a single company apply for multiple projects at the same time, for example one for the main funding pot and another for the CO2 sub-pot?

A11: Yes, but please make these separate applications. So you'll have one application for say, a biofuels project, and then you might have one application for a CO2 source project. If your company is going to be applying as part of multiple applications, please also provide evidence that your company has the personnel and other resources to be able to manage the workload of multiple projects if they were all awarded at same time.

Q12: How we will be able to do the GHG calculations if the Phase 2 BEIS shortlisting for carbon capture is not announced yet, shall we consider carbon capture or not?

A12: If there is uncertainty of that nature and given the very large impact that the CCS credit will have on your GHG emissions, we would encourage you in this situation to assume both. Set out a GHG calculation where you say the carbon capture is achieved in time for your first year of full operations, but also provide a separate workbook with a worst-case scenario where CCS is not achieved in time for your first full year of operations. That way you'll be able to evidence what the impact of that risk to the project is and help the assessors realize whether there's going to be issues with meeting the threshold in that first year or not. We encourage you to provide more evidence rather than less.

Q13: How do you propose to handle confidential information shared in the application? Will E4Tech/Ricardo sign an NDA?

A13: There are two elements to the confidentiality issue. First of all, for the application phase, any information you submit will be shared just with the small project team within Ricardo and E4Tech. We have put in place access restrictions to make sure that no-one else from wider Ricardo and E4tech can access this confidential information. Ricardo and E4tech have confidentiality clauses in their contracts with DfT so confidential information cannot be shared outside the tight project team. We have very strict procedures for all the staff that are involved in the assessment phase and also for the external Expert Panel members who will validate the assessments. There will be confidentiality clauses in the agreements that are signed with any external

Expert Panel members, and for the government staff involved on the Expert Panel, this will be covered by their normal employment contract.

Secondly, once a grant has been awarded, you'll be requested to share ongoing information on projects as part of the monitoring phase. We've revised the grant agreement that was put in place for GFGS and the version that's now available on the competition webpage includes additional assurances to both parties that the information that's being shared will remain confidential. We've made it clear what information needs to be shared and we've developed various mechanisms to share confidential information in order to minimise or to eliminate the risk that the information will end up in the wrong hands.

Q14: How do you define pilot vs demo vs commercial?

A14: This is based on Technology Readiness Levels (TRL). Appendix B of the guidance document sets out the TRL definitions that are being used in the assessments. However, there is not a rigid scale with X 1000 tonnes a year = TRL 7, given that this will vary depending on the pathway and the feedstock. A pilot (TRL 5) would typically be the first time the technology has left the lab, the smallest project that's operating for small numbers of hours, without integration of systems. Fully commercial (TRL 9), you're looking at multiple/dozens of similar profitable plants being rolled out globally. First-Of-A-Kind commercial (TRL 8), you're looking at the first one or two or three plants globally that are of the minimum economic scale to be commercially viable. Demonstration plants (TRL 6-7) will be in-between pilot and FOAK, so increasing scale & yields, increasing operating hours and reliability, increasing the amount of process integration, utilities/heat integration etc. These are typical metrics that we would be looking at when we assess where your technology is on the TRL scale. Obviously the more technical evidence you can provide about your plants, your performance on these metrics, and the minimum economic scale for your technology, the more accurate the evaluation will be.

If you have any doubts about where your current TRL, please do reach out to the AFF mailbox.

Q15: We are using the same equipment and process as another SAF developer. Will this affect our ability to secure funding as its likely the other developer will also apply for your funding?

A15: Firstly, if two projects are being developed on similar timeframes using the same technology (e.g. one project is expected be operational a year before the other), we are not going to take the decision the first project is the FOAK commercial plant and then the second project is no longer a FOAK commercial plant. As said earlier, the "FOAK commercial plant" will typically

be the first one to three projects globally. So we're not going to be ruling the second project that's slightly later ineligible on that basis.

The other aspect of this question is resourcing. If you've got a common technology developer that's going to be involved in multiple projects, make sure that you can evidence in your application that this technology developer has the manpower and other resources (including equipment manufacturing facilities if relevant) to be able to supply all the relevant projects and work on them all, if they were all successful.

Finally, the AFF has a fixed maximum budget for each Funding Year, and funds will be competitively allocated. Therefore, the more applicants that submit bids, the more statistically likely it is that you might be unsuccessful or only offered a part award. The mitigation to this is to ensure you submit a high-quality application. As stated in the guidance document, there will also be consideration of the overall technology portfolio when making awards, to avoid domination or over-reliance on a single technology pathway within the awarded funds.

Q16: As License fees are paid ahead of development of the process design package in FEED, are they included within allowable costs?

A16: Certainly in the GFGS competition we allowed these costs. If the license fees are linked to the procurement of the main equipment for the project, so conversion, fuel upgrading etc. then they are definitely eligible. However, licence fees that have already been paid prior to grant offer letter signing cannot be claimed.

Q17: How to divide the funding for a long-term activity like FEED which takes 16 or 18 months, shall we divide the funding according to the submission window, or in the first window we submit for the total requirements for the FEED?

A17: Both approaches are permissible. You could apply for all three years of funding in this first application window, because you don't need to wait for the second application window to apply for funding in the later years. Or you could choose to apply for a smaller amount now and apply for some further amount in the second application window (if there are remaining AFF funds for this second window to be opened). For either approach, you need to make it very clear how you are splitting your costs across the different Funding Years and therefore what you'd be claiming each year.

Q:18 Will you allow crop based bio-feedstocks to be used in projects where they are able to demonstrate a GHG saving that meets the criteria and/or they form only a minor portion of the overall feedstock needed or are used as a transitional feedstock for a limited time period?

A18: No. All the consignments have to meet the feedstock eligibility criteria, so the AFF will not be supporting crop-based biofuels. We've come across this problem in prior competitions where the guidelines were not explicit upfront. For the AFF, we are clear upfront that we're only looking for eligible feedstocks.

Q19: Can funding be directed toward feedstock pre-processing FEED work? I.e. UCO cleaning and prep before upgrading to SAF?

A19: In general, yes, funding can be directed towards design work for pre-processing plants, conversion plants or fuel upgrading plants. However, it still needs to be a technology pathway that is going to meet the TRL eligibility criteria (currently TRL5+, and proposed plant will achieve TRL 6-8). We would have concerns if it's just UCO cleaning before being upgraded to SAF as that's already commercialized technology, so it seems unlikely this would meet the TRL criteria. The second concern is that UCO is not an eligible feedstock because it's a segregated oil/fat.

Q20: Can the confirmation of receipt of application be speeded up please? e.g. if we submit close to the deadline, we will not get confirmation until after - hence if there is a problem the deadline will have passed by the time we are aware.

A20: Having taken this away for further consideration, our answer is that we will acknowledge receipt of the application the same day if the documents are received before 16:00 BST, otherwise we will acknowledge receipt the following morning.

Q21: Are large oil companies eligible to apply for this funding?

A21: The key requirement for whether a company can apply for this funding or not is whether they're UK registered company or charity, and the project is based in the UK. It's not even necessary that their operations are predominantly based within the UK. So there should be no reason why a large oil companies shouldn't be able to apply for that funding.

Q22: In the Scoring criteria, how would it be possible to maximise the 100% multiplier on the match funding?

A22: Technically it's impossible to maximize the 100% multiplier on the match funding because that would involve asking for no funding from DfT. However, a project that has very large amounts of match funding and is asking for a very small grant from DfT will have a bigger multiplier than a project that is asking for a very large amount of money from DfT and has a very small amount of private funding secured that they can evidence.

Q23: What do you consider as a commercial facility? is there a minimum volume/yr output?

A23: As stated previously, the definition of TRL8 (FOAK commercial plant) is based on the feedstock and technology pathway, and information about the minimum economically viable scale for commercial operations. There isn't a minimum volume per year output that we will be assessing across all the bids. It is up to the applicant to state and evidence that based on their technology and other similar technology developers, they believe their project is going to be a FOAK commercial plant or a demonstration plant etc.

Q24: Are there targets for the volume of fuel to be produced?

A24: No.

Q25: Can you go lab to demo or do you have to evidence a pilot?

A25: We have clarified this recently in the guidance document, and this is the change that was made in version 1.1, namely we're looking for at least some evidence of an existing pilot plant. This pilot might not have been running for many hours, and there might be very limited information from this pilot plant, but as minimum requirement we are at least looking for you to have this pilot in place for your technology to prove it is at least TRL 5 to be eligible for AFF support. So you cannot go directly from the lab to a demonstration plant for this competition.

Q26: Can funding support legal work - ie, SAF offtake contract drafting etc?

A26: Yes, we've certainly covered that in the past and that clearly falls under addressing legal issues.

Q27: We have been granted a patent for our integrated technology. Will this be seen as a benefit to our application?

A27: Yes, definitely. As mentioned earlier, the more evidence or detail that is given on your project and technology the better and that will help during the application phase. We would encourage examples to be included within the application itself.

Q28: What is the 'sweet spot' for the grant award. Is this in the range of 2m, 10m 30m?

A28: There's no real sweet spot here and the project should consider the DfT funding which they need themselves and should apply on that basis. We encourage them not to think tactically about potentially what amount of funding should be the right amount of funding to apply for in light of other potential bidders.

In the announcement of the sub-pot for CO2 use, the £22m is not a constraint on the amount of money that can be distributed to CO2 use projects, it's just a prioritization pot. So if for example there were £40m worth of grant requests for very high quality CO2 use applications that DfT wanted to fund, that could certainly be possible. So the sub-pot would be used up and then there would be another £18m of the main pot directed towards those other CO2 projects. So the sub-pot of £22m is prioritized towards CO2 projects, but equally less than £22m could be directed to CO2 projects if there are insufficient number of CO2 projects that are sufficiently high quality. In that latter case, any unused part of the £22m gets recycled back into the main pot.

Q29: Do I need to have Planning Permission in place in order to apply for FEED support?

A29: In previous competitions we asked for applicants to have planning permission already granted, but this is not needed for the AFF.

Q30: We are replicating another developers process in full, therefore we not need to build pilot or demo plant and go commercial scale instead. Will I be able to apply for funding?

A30: Yes, but you will still have to evidence what those pilot and demonstration plants have been able to achieve, providing technical annexes with their operations and performance, etc. If you're licensing the technology, do provide all the technical evidence that comes with that. Your current TRL will presumably be based on the demonstration plant that's already operating. You will still need evidence that you're going to be in the eligible TRL range for the proposed plant, e.g. TRL 8 if you're looking at a FOAK commercial project.

Q31: Will a pilot plant which is based in UK be eligible if the commercial scale which will come after will be outside UK? Does the pilot plant have to be in the UK?

A31: There are a couple of things to unpick here.

The AFF will not be funding pilot plant activities. AFF eligibility is, as stated earlier, only for TRL 6 to 8 projects, so pilot plants are not eligible for funding.

However, the question could be interpreted as: Do I have to show that I have a pilot plant that's existing today in the UK to evidence that my technology is meeting the TRL 5 criteria, so that I can get my project for TRL 6-8 into the fund? In answer, your pilot plant can be anywhere in the world as long as you're providing evidence from that pilot plant and your proposed plant is using the same technology as that pilot plant. But it is not a requirement that your existing pilot plant is based in the UK.

Finally, the proposed plant for which you're applying for AFF funding has to be based in the UK. Future commercial rollout plans can be abroad, but the grant funding support you're applying for has to be a UK project.

Q33: What is the greenhouse gas savings linked to the grant award?

A33: We do not have a GHG savings % target. There's just an absolute GHG emissions threshold/ceiling of 31 gCO₂e/MJLHV for the main fuel output which applies to biofuels, RFNBOs and nuclear pathways – or a sliding trajectory over time for recycled carbon fuels. So there's no percentage saving target, and this is mainly because we could have jet fuel but also diesel as eligible main fuels, but with slightly different GHG emissions for their respective fossil counterfactuals. So to keep things simple, we have just absolute GHG emissions as the eligibility criteria.

Q34: Question 2.3.3 asks for us to "Outline the monitoring and evaluation activities you will implement to ascertain that the project is on track and has achieved its intended objectives" - is this focused on the final performance of the plant or is it also looking for project development/ construction schedule management measurement and cost control?

A34: Yes, the latter - it also includes the wider objectives of the project, not just the plant's final performance.