

EIR 202200293896: documents for release

1. FIS Meeting with Ms Gougeon - Briefing 16 Nov 21

[Redacted]

Current projects

FIS are currently progressing projects aiming to add value to businesses and communities, including:

Sustainable gear - The Smartrawl project puts Scotland at the forefront of the innovative response to eliminating discards, developing a system which will allow skippers to retain commercially valuable catch.

Digital technology - FIS are piloting 'whole supply chain' digitalisation to improve traceability and verification, support management decisions, and strengthen the Scottish seafood brand.

Reducing emissions - FIS want to support the Scottish industry in reducing vessel emissions in ways that are practical, leaving no sector behind. They are planning an event to understand knowledge gaps relevant to Scottish vessels, and what alternative technologies are realistic in a Scottish context.

Future fisheries - FIS supports the next generation of industry leaders through travel and study bursaries. They partner with Scotland's space innovators to understand how satellite technology can support sustainable seafood. They also host the Scottish Fishing Conference to bring people together in genuine collaboration, and to learn from other sectors and nations.

2. MEETING WITH WWF. BRIEFING NOTE FOR CABINET SECRETARY FOR RURAL AFFAIRS AND ISLANDS

[Redacted]

FISHERIES MANAGEMENT STRATEGY

Top lines

Scotland's Future Fisheries Management Strategy was published on 17 December 2020. The publication of the Strategy followed the national Discussion Paper on the Future of Sea Fisheries Management which was published on 4 March 2019. The discussion phase ended on 12 July 2019 following a series of successful stakeholder events. The feedback received as part of the discussion phase has formed an integral part of the development of the Strategy.

We have committed to publishing a detailed delivery plan and a monitoring and evaluation framework in early 2022 although this has been delayed because of internal resourcing issues. These documents will help us (and stakeholders) understand how things fit together, when we will deliver the policies and the outcomes we said we will deliver, and how we will hold ourselves to account.

- Scotland's Fisheries Management Strategy sets out our approach to managing sea fisheries in Scotland in partnership with our stakeholders through 'co-management' and in a way that balances environmental, social and economic interests.
- The strategy forms one of the cornerstones of our Blue Economy approach and sets out a vision for Scotland to be a world class fishing nation delivering responsible and sustainable fisheries management which provides access to a high protein, low carbon food.
- Sustainability, support for biodiversity and consideration of the wider ecosystem is at the heart of how we manage Scotland's fisheries and protect our marine environment.
- This is reflected in the 12 point action plan contained within the strategy which includes actions including the introduction of a new catching policy, adopting the principles of ecosystem-based management and enhancing vessel tracking and monitoring which will help gather scientific data and improve management in our waters.
- The signing of the Bute House Agreement in August last year (2021), which details the terms of the SNP / Green cooperation agreement in Scotland, has meant that the spotlight is now, more than ever, on the twin crises of climate change and biodiversity loss, which require urgent action in order to deliver change on a significant and long-lasting scale.
- We will therefore deliver the commitments outlined in our FFM Strategy to take account of the additional actions contained within the Bute House Agreement specifically relating to fishing.

It is clear that we need to accelerate our action to mitigate the fishing sector's impact on climate change and to put in place the right protections for our marine space:

- We will work with our partners and our scientists to secure a robust evidence base and develop a firm plan to set out direct actions to address climate change, including actions to reduce emissions, and actions to improve fuel efficiency.
- We will introduce the right protections for inshore waters and we have already indicated further research to protect vulnerable spawning and juvenile fishing grounds.
- We will consult on applying a cap to fishing activity in inshore waters that will limit activity to current levels and set a ceiling from which activities that disrupt the seabed can be reduced in light of evidence as it becomes available.
- There are already a range of measures in place to protect fish stocks and the marine environment, including a network of Marine Protected Areas, controls of fishing gear and catch limits. We will accelerate our plans to introduce fisheries management measures into the current MPA network.
- Additionally, we will build on our MPAs by designating new Highly Protected Marine Areas (HPMAs). We will work closely with the fishing industry to understand the impacts of HPMAs and to ensure a just transition.

We will develop and deliver these measures in partnership and already have a strong history of co-management which we will use to guide this work with the overarching aim to focus on collaboration and cooperation, not conflict and controversy:

- Wherever possible we will work in partnership with our stakeholders, utilising our established co-management group FMAC and our Regional Inshore Fisheries Groups (RIFGs) and through formal and informal consultation particularly around technical issues as required.
- We will strengthen the role of the Regional Inshore Fisheries Groups (RIFGs) so that they are recognised as the main delivery vehicle for local management, and have the right resources in place to deliver improvements and tackle local issues such as gear conflict and fishing effort.
- We acknowledge the need to strengthen some of the management structures we have in place, particularly in relation to quota, and will use lessons from the trialling of Quota Management Groups to inform future improvements to our quota management functions.

We will continue to meet - and where possible, exceed - our international obligations relating to fisheries and the marine environment, a great many of which are shared with the EU:

- Departure from the EU has changed the international context in which we operate, but we are determined to continue to play a full and key role in supporting and delivering international fisheries management.
- Scotland is already well regarded by other nations and our opinions, knowledge and expertise will continue to be important in the future.
- We will continue to be a constructive and helpful partner in a UK context, ensuring that Scottish interests are fully reflected, promoted and protected.
- We will take an integrated approach to stock management, explicitly linking stock advice, quotas, and management measures such as technical and spatial rules, through our Future Catching Policy.

Our 12 point action plan

1. We will **promote fishing as an attractive and safe career of choice**, with a focus on improving safety standards, fair work, supporting new entrants into the sector, and equal treatment regardless of national origin or gender. We will not tolerate illegal treatment of any worker in any part of fishing industry.
2. We will **secure the resilience of the fishing industry**, working with stakeholders to strengthen links to local and global markets, supporting diversification and exploring new fishing opportunities.
3. We will **increase the benefit from fishing to local areas** through our policies around allocation of additional quota, ensuring quota is in the hands of active fishers, and increasing the volume of fish landed into Scotland including through the introduction of a Scottish economic link licence condition in in 2023.
4. We will **support delivery of a strong relationship between the fishing industry and local communities**, with strengthened links to local supply chains, support for consumers to buy local / Scottish and recognising the importance of inward migration for remote and coastal communities.

5. We will **address issues around the shared marine space** linking with wider developments through the Blue Economy Action Plan, considering how fishing interests can work alongside others marine users including offshore renewables.

6. We will **strengthen our co-management processes and support transparent and responsive management** to a local level wherever possible, in particular by strengthening the RIFG network. As part of this, we will always consider local community impact as part of our decision making process.

7. We will **deliver a robust licensing regime** to manage domestic and foreign vessels fishing in Scottish waters and will improve quota management arrangements for the non-sector fleet which are not administered by a Fish Producer Organisation or a Quota Management Group.

8. We will **strengthen our quota management processes** supported by the right management groups and delivery mechanisms, and through expanding the use of TACs where appropriate

9. We will **improve accountability and confidence in our seafood products** and fishing operations, supported by a robust compliance regime, making full use of existing tools and new available technology, including REM and vessel tracking solutions, to deliver compliance and improve our knowledge base, ensuring that our decisions are grounded in the best available scientific advice and that we fish within sustainable limits.

10. We will **deliver a robust Catching Policy**, in partnership with our stakeholders, which links stock management with responsive and proportionate technical and spatial measures, which delivers a reduction in waste and which encourages compliance through appropriate enforcement actions, including the application of penalties where appropriate.

11. We will work with our stakeholders to **deliver an ecosystem-based approach to management**, including considering additional protections for spawning and juvenile congregation areas and restricting fishing activity or prohibiting fishing for species which are integral components of the marine food web, such as sandeels.

12. We will take **action to understand and mitigate the impacts of climate change on our seas**, including supporting delivery of the Scottish Government's net zero targets including by reducing vessel emissions and encouraging shorter supply chains. In addition we will support and encourage sustainable waste management in our fleets, growing our circular economy and reducing marine litter.

Contact: [Redacted]

3. Email exchange: Additional questions for fleet surveys

[Redacted]

From: [Redacted]

Sent: 10 May 2021 15:08

To: [Redacted]

Cc: [Redacted]

Subject: Additional questions for fleet surveys

Importance: High

Hi [Redacted]

Apologies for missing your deadline of Friday.

We are looking to do some work on fuel consumption/emissions and are interested in adding some questions into "Section 3b: Fuel consumption and other activities" of the Fleet survey:

A. In 2020, did you make any technological or operational changes to lower fuel consumption?

Yes (Go to Question B)	No (Go to Question C)
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B. Which changes?

Change	On average, how many litres LESS fuel did the vessel use per day at sea as a result of this change?

C. In 2021, do you plan on making any technological or operational changes to lower fuel consumption?

Yes (Go to Question D)	No (Go to Question E)
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D. Which changes?

Change	On average, how many litres LESS fuel will the vessel use per day at sea as a result of this change?

E. Why are you not making technological or operational changes this year to lower fuel consumption?

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There could be guidance to your interviewers to the effect of:

Examples of technological or operational changes that would lower your fuel consumption could include, but are not limited to:

- Diverting fishing effort to fishing grounds closer to the mainland;
- Increasing the efficiency of the power plant through the use of more efficient engines;
- Revising the design of hull and propellers to reduce resistance and increase efficiency;
- Reducing vessel speed to improve fuel efficiency without costly additional equipment;

- Installing an electronic fuel meter to help monitor fuel consumption and establish an optimum steaming speed;
- Removing excess weight to lighten up the boat and significantly reduce fuel consumption;
- Regularly maintaining the vessel hull and engine to reduce drag and enhance engine performance;
- Shifting to low fuel (passive) fishing techniques through gear choice; and
- Employing green technology onboard vessels.

Happy to have a discussion to clarify any of this if this email is not clear and/or to discuss what we want to evaluate with these questions to make sure they are the right ones.

Equally, I am happy to receive comments from others in this email to further refine.

[Redacted] – I was looking to speak to you asap about coefficient work you wanted to do this FY so if you could please give me a call when you have time.

Thanks

[Redacted]

4. Email: Fisheries Net Zero Workshops – notes reflections

From: **[Redacted]**

Sent: 07 April 2022 09:27

To: **[Redacted]**

Subject: Fisheries & Net Zero Workshops - notes & reflections

Hi all,

Two workshops recently on fisheries and net zero / climate change which may be of interest to you, so some very brief notes/reflections below.

Others who attended, please feel free to add yours (or correct mine!).

Feel free to cascade, and happy to try and answer questions.

All the best, **[Redacted]**

1) Pathways to Net Zero in Fisheries – 24 March 2022 – online, Dialogue Matters (for Cefas)

- This was one of the best online workshops I have attended in a very long time, very professionally facilitated.
- Attendance was from a range of government, academic, and industry representatives

2) Vessels of the Future – 6 April 2022 – in person, Mindfully Wired Communications (for Fisheries Innovation Scotland)

- A more traditional, in person workshops, with some presentations followed by break out discussions.
- This workshop had a much greater industry focus/representation than the one above – a clear reflection of the different driver of projects: above is very

much driven by reporting into Defra, this one was much more focused on reporting to FIS.

- There were some interesting presentations from businesses and engineers who are actively working on low emissions technology in maritime
 - **[Redacted]** are working with offshore wind sector to decarbonise their vessels, also presented some recommendations (incl. clear timeline from policy makers, doing more in depth life cycle analysis, and establishing common reporting metrics)
 - **[Redacted]** are building some low emissions vessels incl. large pelagic trawler (most of these new projects have higher cost to the “customer”, i.e., low carbon vessel is more expensive to make; but also receive government grants in Norway)
 - **[Redacted]** make a catalytic hydrogen system which is retrofitted; reduces fuel by 10-20%. Shows promise for an immediate reduction in emissions (and fuel consumption!), currently eligible for funding under Defra’s Fisheries and Seafood Scheme (FaSS), but not under Scottish funding schemes
 - **[Redacted]** making low emissions vessels (hybrid) mainly for aquaculture, but have built 1 and are building another fishing vessel (one is day boat, one is a 5-day boat); also have a retrofit solution which can work as fuel saving method
 - **[Redacted]** leads a centre in engineering where they are developing clean power trains for range of transport (road and maritime). They will be fitting a hydrogen-battery hybrid power train to a small vessel **[Redacted]**, and have designed the new power train for the **[Redacted]** (new power train is improvement on old, and less space, if I understood correctly) – will be installed in 2023-2024
 - **[Redacted]** gave an overview of their regulations changes recently (MGN664 – a route to certification of new technologies) and exemption process
 - **[Redacted]** gave an overview of some recent funding schemes; this organisation helps fishers (particularly small, inshore) to apply for funding schemes
 - **[Redacted]** introduced some other methods to do precision fishing (surface vehicle fish finder, net technologies, changes to trawl doors, sharing by-catch info in real time)
- Some overarching themes from the day (**[Redacted]** personal thoughts):
 - Uncertainty of the pathway/timeline is currently inhibiting action: “we need government to tell us what you want us to do” (although I think in reality that’s not what they want)
 - There is a strong desire for some pilots/demonstrators, but a significant worry that the early adopters could be left worse off
 - The current system of licenses/quota/fleet segmentation is at times thought to be a barrier to change
 - There is increasing recognition that different gears/fleets have distinct questions/concerns, so may require a more targeted approach (and a strong steer from retail to not compare to each other – at the end of the day still a lower carbon animal protein source)

- Increasing fuel prices are a major and immediate concern – this could drive some immediate action, although financial pressures could also impact viability of businesses
- Funding schemes: concerns around the overhead of the paperwork, issues raised around the criteria being too exclusive (insufficient emissions savings making something fall outside the criteria, limits to what could be funded)
- the **[Redacted]** system was very positively received by the room, it gives immediate benefits and is already eligible for funding under FaSS – may be desirable to make it suitable for MFS funding (or even add to our vessels?)
- questions around infrastructure development: this is a little bit chicken and egg, i.e., electrification of ports and bunkering of fuels first, or vessels drive the change. Experience from Norway suggests it's the “customer” (i.e. vessels) who will need to drive the infrastructure. Unfortunately no one from ports/harbours in attendance [maybe a good time to pick up with other colleagues in SG, or with Future Fuels Group]

[Redacted]

Marine Scotland Science

5. 'MFS application - 1408 - Policy Comments'

Marine Fund Scotland (MFS) Policy Comments

Reference No: MFS 1408

Applicant: [Redacted]

Project Description	REDUCE CARBON FOOTPRINT – Reduce fuel consumption via antifouling hull
Question	Comments
Targets/Benefits that will be achieved by the projects e.g. fuel reduction, increase in volume of fish etc.	<p>The applicant wishes to save on their fuel consumption and therefore reduce emissions. The applicant worked out that a reduction in drag by applying the antifouling - self-polishing coatings which gives a smoother hull and prevents antifouling build up – will result in a fuel saving of between 18-20%. .</p> <p>With a saving of being 18-20% of fuel used per trip this will go a long way in the owners working towards the net/zero emission target set.</p>

	There will also be a financial benefit for the vessel and crew through a decrease in overheads.
Policy Relevance of project. Please comment:	<p>Reductions in emissions and support for the drive to net zero.</p> <p>From a policy perspective seems like a sensible approach to reducing fuel consumption and we would want to encourage these type of attitudes. I am not aware if this method does indeed improve fuel efficiency of the fishing vessel but sounds very plausible.</p>
Is the project linked to fair Work First approach?	Yes
Is the project deliverable in a one year time period?	yes
Policy recommendation: Award/Reject (please comment why)	Award with the condition (if possible) that the applicant agrees to be contacted by Marine Scotland during or after the project proposed here is completed, so we can follow up on the effectiveness of this method.

Name: [Redacted]

Date: 20/01/2022

6. Economic Futures Summer Placement Programme 2022

Economic Futures Work Placement 2022

Project Title	Have these new technologies affected the future of marine climate change? Economic value for money assessment of select Marine Fund climate change projects
Organisation	Marine Scotland
Work Pattern	Full time
Duration	6-8 weeks
Location	Online, Edinburgh, and/or Glasgow.
Project Lead:	[Redacted]

<p>Project outline:</p>	<p><u>Marine Fund Scotland launched in March 2021</u> with the aim to support the sustainable growth of the marine economy in coastal communities, in sectors such as fishing, aquaculture and seafood processing. This scheme replaced the European Maritime and Fisheries Fund (EMFF) which had previously been in place as part of UK membership within the EU.</p> <p>Since March 2021, there have been a number of successful bids with the objective to improve climate change or biodiversity outcomes in an effort to support Scotland's Climate Change and Net Zero commitments.</p> <p>The aim of this project is to analyse these successful bids that had the purpose of reducing emissions from the fishing fleet (e.g. by upgrading to lower emission engines). This will include assessing the costs and benefits of these bids, providing a value for money assessment of these types of projects, and drawing on other research done on the benefits of these types of projects elsewhere in the UK, or outwith the UK.</p> <p><u>Marine Fund Scotland</u> is due to open for applications again in 2022-23, and will be continuously monitored and improved upon. This means that any insights gained from this project will help inform the design of the scheme (e.g. by changing the criteria for funding engine replacements).</p> <p>As part of the Marine Analytical Unit in Marine Scotland, you will work closely with economists, statisticians, social researchers, and data analysts. The project will also require regular contact with Marine Funding policy colleagues and Marine Science colleagues, many of whom have many years of experience in this area. This will provide valuable lessons in how economic analysis contributes to the design and implementation of government policy.</p>
<p>Expected Outcomes:</p>	<ul style="list-style-type: none"> • An interim report setting out initial findings. • A final report which assesses value for money of funding marine projects with the aim of reducing emissions (e.g. engine replacements). • Presentation of results to a wider Marine Scotland audience, gaining exposure to communicating economics to non-economists.
<p>Skills Required:</p>	<ul style="list-style-type: none"> • Data analysis / econometrics • Economic evaluation • Microeconomic theory • Communication and report writing skills
<p>Start Date:</p>	

End Date:	
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7. MFS application – 1193 - Policy Comments

**Marine Fund Scotland (MFS)
Policy Comments**

**Reference No: 1193
Applicant: [Redacted]**

Project Description	[Redacted] is seeking MFF grant funding in order to be able to replace the engines on board his fishing vessel [Redacted] The project would involve the 7.97m catamaran having her 2 mechanical IVECO 6-cylinder tier-2 engines removed, and replaced with 2 new FPT electric 4-cylinder tier-5 engines NB have asked the question regarding 50% emission reduction
Question	Comments
Targets/Benefits that will be achieved by the projects e.g. fuel reduction, increase in volume of fish etc.	Net Zero Emissions – new engines are proposed to be electric and would cut emissions by 50%.
Policy Relevance of project. Please comment:	Climate
Is the project linked to fair Work First approach?	No
Is the project deliverable in a one year time period?	Yes
Policy recommendation: Award/Reject (please comment why)	Approve – if we can prove the new engines are electric and really would cut emissions.

Name: [Redacted]

Date: 21/09/2021

8. Future Marine Funding - Submission - Marine Fund Scotland 2022-23 proposal - April 2022

From: Funding and Investment Unit
Funding and Strategy Division
Marine Scotland Directorate

29 April 2022

Cabinet Secretary for Rural Affairs and Islands

MARINE FUND SCOTLAND 2022-23

Purpose

To provide you with an update on the development of the second year of the Marine Fund Scotland, and to seek your approval on the fund's proposed scope, assessment criteria, and arrangements for re-launch.

Priority

Urgent. It would be helpful to be able to confirm and launch the details of the Marine Fund Scotland's second year as soon as possible in order to minimise the gap in funding provision following the closure of the first year of the fund on 31 March 2022.

We are proposing a launch of the second year of the fund in mid-May (opportunities to publicise the launch are covered later in this submission) to maximise the window that applicants have to apply for funding in this financial year, and ensure this year's fund monies can be fully committed by 31 March 2023.

Scope and eligibility

In addition to the revised assessment criteria, we are also proposing a number of key changes/additions to the MFS scope and criteria to determine eligibility for funding. These are listed in the table at Annex C, along with a brief analysis of how they compare with the scope/eligibility criteria of the MFS in 21-22, the EMFAF, and the FaSS. The full list of proposed eligibility criteria for the MFS 22-23 is at Annex D.

We are aware that there may be push-back from some stakeholders on some elements of these revised criteria, for example on engine replacements. We will work with communications colleagues to develop clear messaging which sets out the rationale for these changes and emphasises the opportunities for the marine sectors to take steps towards delivering against the Blue Economy Vision with MFS support.

Engine replacements/modifications

Recent stakeholder engagement by Marine Scotland Directorate found that there is broad recognition within the marine sectors that we are currently in an exploring/testing phase when it comes to marine sector climate change mitigations. Industry is showing a lot of uncertainty regarding what options are the right ones to progress, and although there is a strong desire for some pilots/demonstrators, this is accompanied by a significant worry that the early adopters could be left worse off.

In the MFS 21-22, we allowed applications for funding support towards the cost of replacing diesel engines with a more efficient diesel engine – providing the replacement resulted in a 50% reduction in carbon emissions. A key learning point from the MFS 21-22 was that applicants struggled to provide evidence for a 50% reduction in emissions, and also that this reduction would be sustained over the long term. Despite many enquiries being made about funding available for engine replacements, only a small number of applications were submitted to the MFS for this in 21-22.

We therefore propose, as set out in Annex C, that the MFS 22-23 will not provide funding for direct engine replacements. This is also influenced by the fact that engine replacement should be factored in by a vessel owner as an expected cost of doing business.

Instead, we propose that we include within the scope of MFS 22-23 funding to support the testing of novel engine technologies as part a study or trial – to test feasibility and impact, and with the aim of receiving insights/data that can be used to guide decisions in future years of the MFS on funding for engine replacements/modifications to support climate change mitigation.

Annex A

Proposed assessment criteria for the Marine Fund Scotland 2022-23

The Marine Fund Scotland 2022-23 aims to support projects that contribute to:

- an innovative and economically sustainable marine economy.
- reducing carbon emissions (delivering “net zero”) and protecting the marine, coastal and interlinked freshwater environments.
- delivering benefits for Scotland’s communities, particularly coastal, remote and island communities.

Funding may only be given in relation to Scotland, the Scottish Zone or Scottish fishing boats.

Applications that are deemed eligible to proceed to assessment for funding under the Marine Fund Scotland 22-23 will be assessed for how well they meet the Marine Fund Scotland outcomes which support Scotland’s Blue Economy Vision. Each outcome is made up of a set of criteria (more detail is provided below).

Projects that demonstrate wider benefits beyond, or at least in addition to, benefits for an individual organisation, business or person (for example, benefits for communities) will be prioritised for funding under the Marine Fund Scotland 2022-23.

The Marine Fund Scotland 2022-23 outcomes

Innovation and economic benefit

Outcome: Established and emerging marine sectors are innovative, entrepreneurial, productive and internationally competitive.

Criteria: To meet this outcome, your project should:
explore, develop or deliver/implement innovative or entrepreneurial approaches/techniques.

deliver measurable economic benefits for relevant local communities and for Scotland – in particular communities that are reliant on, or benefit from, healthy marine, coastal and interlinked freshwater environments, and/or in areas where people are experiencing poverty or disadvantage across different aspects of their lives (for example according to the Scottish Index of Multiple Deprivation).

where relevant, support the development of a skilled and well supported workforce through providing attractive opportunities for employment and/or training or re-training, particularly in coastal, remote and island communities.

“Economic benefits” means improvements in one or more economic measures (to the local communities and/or the wider economy of Scotland). These measures could include (but are not limited to):

gross value added

labour market conditions (unemployment, skill shortages, etc.)

education

supply chain intelligence and resilience

price stability

Sustainable, high quality seafood

Outcome: Scotland is a global leader in healthy, quality, sustainably harvested and farmed Blue Foods, for our own population and beyond.

Criteria: To meet this outcome, your project should:

demonstrate innovation in the growing and/or harvesting of marine animals and plants (“Blue Foods”) and/or improve animal health and welfare in order to:

improve sustainability, quality and/or nutrition of Blue Foods.

deliver a reduced or positive impact on biodiversity.

invest in the Scottish supply chain, promoting local vertical integration and clusters which work to develop the local supply chain and bring benefits for local communities.

harness or create opportunities for Scotland’s marine produce to be widely available to and accessed by the people of Scotland.

where relevant, promote Scottish seafood abroad and help develop its international reputation and diversification into emerging and developing markets.

Achieving net zero

Outcome: Scotland’s Blue Economy is resilient to climate change, contributing to climate mitigation and adaptation, with marine sectors decarbonised, resource efficient and supporting Scotland’s Net Zero commitments.

Criteria: To meet this outcome, your project should:

support a transition to low/zero carbon practices, including in supply chains – reducing reliance on fossil fuels, reducing carbon emissions (greenhouse gas emissions), reducing food miles, establishing low carbon routes to market, etc.

where relevant, reduce, recycle or reuse waste products.

“Climate change mitigation” means reducing human-induced climate change by reducing greenhouse gas emissions and increasing the uptake and storage of them.

“Climate change adaptation” means living with, and increasing the resilience to the impacts of climate change, addressing climate risks and opportunities.

Successful communities

Outcome: Thriving, resilient, regenerated, healthy communities have more equal access to the benefits that ocean resources provide.

Criteria: To meet this outcome, your project should:

deliver measurable social benefits for communities in Scotland – in particular communities that are reliant on, or benefit from, healthy marine, coastal and interlinked freshwater environments, and/or in areas where people are experiencing poverty or disadvantage across different aspects of their lives (for example using the Scottish Index of Multiple Deprivation). We recognise that social benefit may be best measured using qualitative measures.

where relevant, support community-led local development.

where relevant, support safe and equal access for all to Scotland’s coastal and marine spaces, promoting the physical and mental health wellbeing benefits that this provides. This could include through increased awareness and understanding of our marine, coastal and interlinked freshwater environments.

“Social benefits” means improvements in one or more possible social measures (to the local communities or the people and/or wider economy of Scotland). These measures could include (but are not limited to):

- community cohesion
- education, income and job security
- health and wellbeing
- crime and fear of crime

- access to green and blue space
- community resilience

Delivering quality projects

Outcome: Projects funded by the Marine Fund Scotland 2022-23 represent value for money, are delivered successfully, show clearly how they have met their outcomes, and are evaluated to learn how projects can improve in the future.

Criteria: To meet this outcome, your project must:

be able to demonstrate that it is good value for money.

be deliverable within the planned budget, i.e. you must set out the projected time frames, key milestones, risks and mitigations for your project, including considering global supply chain fragility and appropriate contingencies, etc.

be clear how delivery against the Marine Fund Scotland outcomes will be achieved and demonstrated.

“Value for money” means the process under which organisations’ procurement, projects and processes are evaluated and assessed to provide confidence about suitability, effectiveness, prudence, quality, and value.

Annex C

Proposed changes / additions to the Marine Fund Scotland eligibility criteria and scope for 2022-23 and comparison with the MFS in 2021-22, the EMFAF and the FaSS

Topic	Position for the Marine Fund Scotland (MFS) in 2021-22	Proposed position for the MFS in 2022-23	Position of the European Maritime Fisheries and Aquaculture Fund (EMFAF)	Position of the Fisheries and Seafood Scheme (FaSS)
Vessel engine replacements	In respect of new engine replacement for vessels, or the overhaul of engines, projects were not eligible for grant funding unless they resulted in a verifiable 50% reduction in emissions.	We propose that the MFS 22-23 will not provide funding for direct engine replacements. Instead, we propose that we invite applications for funding to support the testing of novel engine technologies as part a study or trial – to test feasibility and impact, and with the aim of receiving insights/data that can be used to guide decisions in future years of the MFS on funding for engine replacements/modifications to support climate change mitigation.	The following are eligible under EMFAF: <ul style="list-style-type: none"> innovation in CO₂-efficient technology for the propulsion of fishing vessels (e.g. trials on lower-carbon fuels such as liquefied natural gas, liquefied biogas or hybrid-electrical propulsion; preparatory 	Funding support is currently unavailable under the FaSS for engine replacements, including auxiliary engines, engine refits, overhauls and substantial renovations. <p>Funding support is available under the FaSS for the following fishing-related activities including energy improvements:</p> <ul style="list-style-type: none"> studies to assess the contribution of alternative propulsion systems and hull designs to the energy efficiency of fishing vessels. investments to improve the propulsion system of the

			<p>research on hydrogen fuelling)</p> <ul style="list-style-type: none"> • replacing or modernising engines of fishing vessels to reduce their CO₂ emissions (under specific conditions to avoid an increase of power, and thus of fishing capacity) <p>Funding support for replacement or modernisation of engines is reserved for small and medium-sized fishing vessels (i.e. less than 24 metres long).</p> <p>Also, investments in replacing or</p>	<p>vessel, costs related to the purchase and, if necessary, the installation of the following items:</p> <ul style="list-style-type: none"> ○ catalysers ○ energy efficient generators such as those using hydrogen or natural gas ○ bow thrusters ○ conversion of engines to run on biofuels ○ econometers, fuel management systems and monitoring systems <ul style="list-style-type: none"> • investments that are aimed at the reduction of electricity or thermal energy consumption. • investments that help businesses diversify into products that mitigate climate change or
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			<p>modernising a vessel's engine are subject to specific eligibility rules to prevent them from generating overcapacity or overfishing, e.g. the new or modernised engine must not have more power than the engine being replaced.</p> <p>Individual investments on fishing vessels are capped financially. Together they cannot exceed 15% of the EMFAF budget allocated to each EU country – to avoid crowding out resources from actions with more added value.</p>	<p>reduce emissions</p> <p>Defra colleagues plan to establish a working group (to which SG is invited) to examine the evidence base for engine replacements and will reconsider their position for the FaSS in the financial year 2023-24.</p>
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			<p>In EMFAF, overall, the rate of funding for a project depends on the added value of the investment. Projects with a high collective added value (e.g. innovation, collective beneficiaries, public access to the results) can receive up to 100%, while certain individual fleet subsidies cannot exceed 40%.</p>	
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[Redacted]

9. MFS Application - 1108 - Policy Comments

Marine Fund Scotland (MFS) Policy Comments

Reference No: 1108
Applicant: [Redacted]

Project Description	<ul style="list-style-type: none"> • changing the propeller to one with a different pitch • Improving the electronics on the boat • Improvements to the system of hauling and shooting gear • installing a salt water pump with storage tanks • Installing new lifting equipment
Question	Comments
Targets/Benefits that will be achieved by the projects e.g. fuel reduction, increase in volume of fish etc.	<p>The new propeller would increase fuel efficiency and the new hauling and shooting gear could also add to this by limiting time with the engine under strain. Reductions in emissions, support the drive to net zero. New electronic systems could feasibly reduce time spent looking for good ground and therefore also add to this goal.</p> <p>However the weight of adding tanks on board with new salt-water pump and also new lifting equipment would probably offset these benefits. The extra weight would also cause some concerns in safety – vessel should seek MCA guidance and additional roll testing.</p>
Policy Relevance of project. Please comment:	<p>Modernisation Net Zero Safety</p>
Is the project linked to fair Work First approach?	No
Is the project deliverable in a one year time period?	Yes
Policy recommendation: Award/Reject (please comment why)	<p>Accept on the basis that the operation are clearly trying to modernise with a view to cutting time at sea and increasing the quality of product with a view to lowering their carbon footprint.</p> <p>The reality of whether the changes will result in less fuel being burned, especially with my point above regarding extra weight is beyond my ken.</p> <p>Would like some assurances, if we did fund, that we followed up on the safety/stability point as well.</p>

Name: [Redacted]

Date: 29/10/2021

10. Internal email exchanges with meeting notes from “Kick-off Meeting for Assessing greenhouse gas emissions from Scotland's fishing fleet”

From: [Redacted]

Sent: 27 October 2021 15:37

To: [Redacted]

Subject: Kick-off Meeting for Assessing greenhouse gas emissions from Scotland's fishing fleet”

Cc: [Redacted]

Subject: RE: Kickoff Meeting IQ26-2021 - Assessing greenhouse gas emissions from Scotland's fishing fleet

Dear all,

Thank you for the meeting today. Below are some actions and comments that I noted. Please let me know if I have missed or mis-represented anything.

Actions

[Redacted]

– Establish availability of VMS/u10m data, and whether a mapping exercise with this is a priority for the project (by 12th Nov)

[Redacted]

– Set up regular progress call. *Invites sent.*

Next progress call – Decide on suitable week for pre-xmas steering group meeting

Summary

Context

- Need to develop a robust evidence baseline per segment,
- The segment perspective is needed because a one-size-fits-all approach to policy is not expected
- Want this baseline to inform stakeholders too
- Only emissions on the vessels are in scope, not onshore emissions
- The methodology needs to be transparent so that future work can build on it
- Current information may not be up-to-date

Methodology

- Existing coefficients do not take into account the technology evolution of the sector, as it was some time ago that these were established
- There is similar work to this project going on within the EU, but focused on public data
- Skippers struggle to answer how much fuel they have used – for a range of reasons. When questioned they will tend to focus on the last month even if asked about the last 12 months.
- Panel will look to draw in volunteers that are able to provide sufficient level of detailed information – this may include skippers, but also agencies and others will be approach who might have more data
- Small-scale vessels will be most difficult to include into this process

- The idea of focusing on key ports based on emissions was suggested, and the research team said port authorities will be approached.
- It was raised that ScotGov want a high-level/indicative view of each sector. There was agreement from the research team on this but that some detailed information on vessels is needed to provide calibration. To build up a bigger picture the research team need to establish some more detailed information first. Aiming for a panel that covers 2% of fleet, but other data will be drawn on which covers a larger proportion
- Pelagic vessels may be less cooperative, and in general, communications will need to be well thought through
- There was discussion of other metrics that will be used to understand the data, such as age, length, power or VCU. The research team said this can be done with data available.
- This research might show that, for studying emissions, some segments can be grouped because the current segment definitions are based on wider economic considerations
- ScotGov covid guidance says that outside face-to-face interviews are ok but any workshop should be done online
 - [Redacted] confirmed this was consistent with the planned approach
- There was discussion of the workshop, but there was not great confidence that there will be strong buy-in to this from the sector
- There was some discussion about approaches taken in the EU as alternatives to surveying of fuel consumption data. France and the Basque country mentioned.
- Refrigerants discussed. The research team said that estimating refrigerant type and leakage rates (both needed in order to calculate emissions) will be too difficult to obtain. However, it was agreed that providing at least some discussion in the report of refrigerants as an emission source will be helpful. It will also be considered whether future surveys could at least establish whether boats use refrigeration on their vessel or not.
- Mapping of emissions hot-spots is possible if Marine Scotland can provide the data – there was some discussion of whether this would add to the national emission inventory which uses AIS

Project management

- No planned staff moves, and Seafish can draw on other staff members in the case of absences. Less clear who would fill in for [Redacted]

Outputs

- Coefficients developed in this project should be available to use in future
- [Redacted] mentioned a potential pan-UK discussion on datasets that the project outputs might be able to feed into

Kind regards,
[Redacted]

From: [Redacted]

Sent: 21 October 2021 14:14

To: [Redacted]

Subject: Kickoff Meeting IQ26-2021 - Assessing greenhouse gas emissions from Scotland's fishing fleet

Dear all,

The kickoff meeting for the CXC project, Assessing greenhouse gas emissions from Scotland's fishing fleet, is next Wednesday 27th Oct 12:00-14:00.

Below is a suggested agenda. Please get back to me by COP Monday if you have any amendments/additions.

Proposed Agenda

1. Introductions (5 mins)
2. (ScotGov) Project aims/context (10 mins)
3. (Seafish) Any questions to ScotGov on aims/context (5 mins)
4. Methodology (60 mins)
 - a. Use of previous fuel consumption data
 - i. (Seafish) What statistical approach will be taken to this?
 - b. Vessel panel
 - i. (Seafish) How will this be determined? What criteria? How many vessels?
 - c. Combining data
 - d. Emissions analysis
 - i. Refrigerants
 - ii. Additional hot-spot analysis?
 - e. Data required from ScotGov
 - f. (Seafish) Any foreseeable risks early on?
 - i. How will staff absences be dealt with?
 - ii. Any plans for staff to move on?
5. Outputs (10 mins)
 - a. Report
 - i. (ScotGov) needs of this report?
 - b. Supporting data
 - i. (ScotGov) needs of this data?
6. Project schedule (10 mins)
 - a. Role of CXC
 - b. Steering group meetings
 - c. Coordination with other surveys
 - d. Hard March deadline
7. AOB

Kind regards,
[Redacted]

11. Internal email: CXC Baselineing Fleet Emissions - Project Update

From: [Redacted]

Sent: 18/03/2022 12:26

To: [Redacted]

Subject: CXC Baselineing Fleet Emissions - Project Update

Hi All,

A quick update on the final draft of this project:

- We have received the executive summary which I have updated here: CXC Assessing Scottish Fishing Fleet Fuel Consumption - Draft Report for steering group comment - 18 Feb 2021 details - Objective ECM (scotland.gov.uk)
- As [Redacted] needed a same day turnaround for any initial comments I have given only my comments so far, but feel free to review it now and prepare any comments to feedback with the final draft.
- The final draft of the report should come in by COP 22nd March.
- The final date for our comments to CXC/Seafish would be by 30th of March currently.

I appreciate our steering group has leave and shorter working patterns currently, is a final review by the 30th achievable? If not could you let me know ASAP so I can feed this back to [Redacted] and ask for an extension.

Many thanks for your help so far on this,
[Redacted]

[Redacted]

Sea Fisheries and Marine Climate Change

Marine Scotland

[Redacted]

12. Internal email: CXC Fishing Fleet Emissions - Final Draft review - Comments by midday Wednesday 30th March

From: [Redacted]

Sent: 24/03/2022 16:37

To: [Redacted]

Subject: CXC Fishing Fleet Emissions - Final Draft review - Comments by midday Wednesday 30th March

Hi All,

The final version of the CXC report is ready for our review, **we are looking for comments by midday on Wednesday 30th March**. However, I am aware a few of you are coming off leave on Monday and so if this **deadline will be an issue please let me know on Monday please**.

The final draft report is here: CXC Assessing Scottish Fishing Fleet Fuel Consumption - Draft v2 - 24/03/2022 details - Objective ECM (scotland.gov.uk)

Version 1 has the tracked changes [Redacted] made, but version 2 is what [Redacted] would like us to comment on. So if you would like to see what the text was before [Redacted] changed it please review the version history.

Finally, I just wanted to say I really appreciate all your help so far on the steering group, it has been very helpful. In the final stretch and hopefully (I say not having reviewed this version yet) there are no showstoppers!

Many thanks,
[Redacted]