



December 5, 2022

Michael Regan, Administrator
US Environmental Protection Agency
Office of the Administrator, Mail Code 1101A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OA-2022-0859

Dear Administrator Regan, EPA Staff, and Members of the Environmental Finance Advisory Board,

The undersigned organizations represent small businesses in the U.S. commercial fishing industry. Our members include the captains, crew, owner-operators, netmakers, bait stringers, seafood dealers, processing and delivery staff, engine mechanics, fuel and marine suppliers, trade associations, and more, who collectively make America's wild seafood one of the most nutritious and sustainable proteins on the planet.

The signers of this letter came together under the auspices of the Fishery Friendly Climate Action campaign,¹ a grassroots initiative that empowers fishermen to advocate for robust climate solutions that work *for* U.S. fisheries and not at their expense. Since early 2022, the Fishery Friendly Climate Action campaign has facilitated the bottom-up creation of a series of public comment letters and statements through which fishery associations and businesses from coast to coast have collectively called on policy makers to preferentially support climate solutions that:

- Reduce, sequester, or avoid greenhouse gas (GHG) emissions;
- Avoid collateral impacts on the physical, chemical, and ecological properties and processes of ocean, coastal, estuarine, and watershed environments;
- Avoid interference with the harvest and provision of wild seafood;
- Wherever possible, contribute conservation co-benefits that enhance the resilience of ocean, coastal, estuarine, and watershed ecosystems;
- Help the fishing industry address its own carbon footprint by supporting transition to low-carbon fishing vessels; and
- Contribute to putting the U.S. on track to reduce its share of GHG emissions to a level that will hold warming well below 2°C while pursuing efforts to limit warming to 1.5°C.

¹ More information can be found at www.fisheryfriendlyclimateaction.org

As stated in the fifth clause of this definition, reducing the contribution of the U.S. seafood industry to climate change is a paramount priority for our organizations. Most fishing vessels are powered by diesel, a fossil fuel whose emissions contribute to climate change, impaired air quality, and ocean acidification. Diesel is already becoming significantly more expensive as a result of global events, and this trend is likely to continue as the world moves away from petroleum-based fuels. Thus, exploring ways to reduce vessel diesel usage through energy conservation methods, efficient equipment, and alternative fuels offers potential win-wins for the fleet and for global efforts to combat climate change.

To support practical, cost-effective, and voluntary emissions reductions within the fishing industry itself, we have submitted recent letters to the Biden administration and key Inflation Reduction Act implementing agencies recommending the enhancement of existing federal programs (e.g., Diesel Emissions Reduction Act) as well as the establishment of new and diverse dedicated funding streams to support bottom-up planning and innovation. At present, availability of financing for capital upgrades in fisheries tends to be scarce. Funding streams for energy efficiency and conservation, alternative fuels technology development, and engine upgrades can fill a niche gap and increase industry resilience not only by reducing vessel emissions but also by achieving cost savings, safety improvements, and fleet modernization.

The newly established Section 134(a) of the Clean Air Act makes \$27 billion available to the EPA to provide competitive grants to eligible recipients for the provision of financial and technical assistance to projects that reduce or avoid GHG emissions and other forms of air pollution – especially in qualified projects that would otherwise lack access to financing. Fishing vessel emissions reductions projects represent an ideal use of these funds, and by submitting this letter, we signal our interest in working with the EPA to design effective and equitable financing programs for this purpose under the Greenhouse Gas Reduction Fund.

The inclusion within the projects funded by the Greenhouse Gas Reduction Fund of regenerative capital program(s) with specialized market expertise for the fishing and seafood industries could be a critical component of a long-term approach to supporting the energy transition in coastal communities, ensuring that coastal fishing communities are not left out as the U.S. economy shifts towards electrification and other non-fossil-based clean and renewable fuels. At a time when small fishing businesses are already struggling under the cumulative challenges of climate change, offshore renewable energy development, rising fuel prices, and multiple other uncertainties, it is imperative to ensure that the energy transition has the effect of boosting, rather than further eroding, the resilience of coastal fishing communities. The Greenhouse Gas Reduction Fund represents a pivotal opportunity to accomplish this goal.

Because of variations in fishing activity patterns, vessel size and configuration, and local cultural, economic and regulatory conditions, there is no “one size fits all” emissions reduction solution that will work for the entire U.S. fishing fleet. Some technologies may require infrastructure investments on the waterfront (e.g., electric charging stations) or development of new supply chains and distribution networks (e.g., inventory and delivery of biofuels, ammonia, or hydrogen) in order to be feasible. In some cases, energy efficiency may be more effective and affordable than upgrading engines or switching to alternative fuels. Harbor design and electrification challenges in remote communities may enable or constrain certain approaches. Solutions must be designed and led by those who best understand the unique needs of this sector:

fishing vessel owners and operators themselves. The Greenhouse Gas Reduction Fund must support leadership by fishing communities in developing programs and funding streams that fill gaps and support local innovation.

Section 1. Low-income and/or Disadvantaged Communities

1. What should EPA consider when defining “low income” and “disadvantaged” communities for purpose of this program?

Executive Order 139852 states that underserved communities include “populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.” Commercial fishing businesses may be considered disadvantaged from a financial perspective due to the difficulty in obtaining traditional sources of financing for their businesses. For instance, it is well known within the fishing community that traditional lenders such as banks are often unwilling to provide financing for vessel acquisitions and upgrades and have a flimsy understanding of the unique landscape of opportunities and risks characterizing commercial fisheries. Even obtaining a home mortgage can be difficult for fishermen due to their unpredictable income (i.e., their earnings are based on what they catch, which can rise and fall each year due to natural variability and markets, rather than an annual salary or predictable hourly wage).

Additionally, coastal fishing communities face a number of socio-economic stressors that contribute to their increasing vulnerability and marginalization. Some are isolated, rural coastal communities have limited economic opportunities other than fishing, and average family income levels in these communities are often far below national average. Gentrification of coastal communities is a long-standing stressor that has been exacerbated as a result of the Covid pandemic and an urban exodus driven by professionals’ new ability to work from home. Consolidation of fishing opportunities into fewer hands due to corporatization of the industry in many locations has led to intense vulnerability for the smaller businesses that remain. These characteristics should qualify small fishing businesses for consideration under the EPA’s definition of disadvantaged communities when it comes to implementation of the Greenhouse Gas Reduction Fund.

2. What kinds of technical and/or financial assistance should the Greenhouse Gas Reduction Fund grants facilitate to prepare and ensure that low-income and disadvantaged communities can participate in and benefit from the program?

Most of the U.S. fishing fleet consists of small businesses where the owner is typically also the operator of a vessel. Fishermen work long hours (sometimes days or weeks) away from port, and it is not easy for them to access the time, skills, funding, or external technical support that are a prerequisite for identifying and deploying practical, cost-effective emissions reductions opportunities that can improve efficiency of their vessels. There is likely a significant amount of low-hanging fruit emissions reductions potential that could be capitalized on immediately (with

² *Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. 86 Fed. Reg 7009 (Jan. 25, 2021).

substantial cost savings to fishermen) if unlocked through provision of adequate technical assistance and access to financing.

Many of the early commenters who have submitted responses to EPA's request have noted that real and significant community input is vital to ensuring that the Greenhouse Gas Reduction Fund accomplishes the goal of reaching underserved populations. Some have said that this will require direct compensation of members of low-income and disadvantaged communities to ensure their ability to participate in and help shape such programs, as well as free assistance (funded by the program) to members of these communities in obtaining grants and loans and managing awarded funds. Others have suggested that technical assistance is needed to organize partners, secure financing, educate and train community members, assist small businesses, advise local governments, and measure outcomes. Several commenters have requested that the EPA provide funding that will allow on-the-ground organizations representing and/or providing essential services to disadvantaged communities to engage experienced technical services providers.

We concur with these points and note that all hold true for the fishing community. It is vital that those supplying technical assistance have an intimate familiarity with the working waterfront and the unique and demanding needs of fishing vessels. Building fishing vessel emissions reduction programs that are feasible, flexible, and effective requires leadership by the fishing industry. Funds should be used to support this leadership through stipends and administrative support to fishing industry leaders to help shape programs and through technical assistance and training to fishermen-led organizations to manage and/or connect fishing businesses with new funding opportunities shaped by these leaders.

Section 2. Program Design

2. What should EPA consider in the design of the program to ensure GHGRF funds facilitate additionality?

Two consultants with roots in the fishing industry (Shining Sea Fisheries Consulting LLC and Homarus Strategies LLC) are currently compiling a characterization of existing state and federal programs available to support emissions reduction innovations on fishing vessels. This assessment will support a gap analysis that will help answer the following questions:

1. What kinds of emissions reduction innovations are most appropriate and of greatest interest to U.S. fishermen, and how do they vary by fleet and geographical location?
2. What barriers currently prevent broader deployment of these strategies, and what tools are needed to remove or overcome these barriers?
3. What gaps exist in state and federal policy supports for fishing fleet emissions reduction innovations, and how could new and expanded programs help fill these gaps and support innovation at scale?

The results of this gap analysis will illuminate areas where financial support currently does not exist, but where new financial support mechanisms could make a significant contribution to reducing GHG emissions within the commercial fishing fleet. These *additional* investments, currently unsupported by federal and state funding streams or policies, would represent ideal priorities for Section 134(a) of the Clean Air Act. Results are expected in mid-2023 and we will

gladly share these results with the EPA to inform way that Greenhouse Gas Reduction Fund funding may be directed to fill existing gaps.

10. What federal, state and/or local programs should EPA consider when designing the Greenhouse Gas Reduction Fund?

To our knowledge, the only existing programs that offer support related to GHG emissions reduction on fishing vessels are the EPA's Diesel Emissions Reduction Act (DERA) program, the USDA's Rural Energy for America (REAP) program, and a few state programs. These existing programs leave significant gaps in coverage for emission reduction projects in the fishing industry, and the Greenhouse Gas Reduction Fund can help fill these gaps.

The DERA grants program consists of a national program, a Tribal program, and a state program. Expenses related to upgrading marine diesel engines represent an eligible expense within the national program, the Tribal program, and at least seven state programs (Rhode Island, Massachusetts, New Hampshire, Maine, Connecticut, Florida, and Louisiana). DERA funding has been used in many of these places to help vessel owners upgrade to Tier-3 and Tier-4 electronic engines that have lower particulate matter and nitrous oxide emissions than the engines they replace. However, anecdotal evidence from multiple fishermen suggests that some of the state programs are difficult to take advantage of due to paperwork requirements and approval processes, and that the newer engines available through these programs are often not as reliable as the ones they replace. Eligibility requirements tend to be narrow, constraining vessel owners to adoption of specific technologies (e.g., Tier-3 and -4 diesel engines) rather than unleashing innovation and context-appropriate solutions.

The REAP program provides grants and guaranteed loans to install renewable energy systems and/or undertake energy efficiency improvements to agricultural producers and small businesses in rural areas or cities of less than 50,000 population. Some rural communities in Alaska have utilized the REAP program to provide installation of energy-efficient refrigerated seawater system and hold insulation and zoning, energy-efficient generators, and energy-efficient lighting. Further research by Shining Sea Fisheries Consulting LLC and Homarus Strategies LLC will ascertain the full extent of current and potential usage of the REAP program by commercial fishing businesses.

At the state level, California's Carl Moyer Memorial Air Quality Standards Attainment Program provides funds to marine vessel owners to retrofit, repower, or replace engines to gain extra emissions reductions. Alaska's Commercial Fishing Revolving Loan Fund provides funds to Alaska residents for engine fuel efficiency upgrades.

The preceding paragraphs detail existing programs, but there are at least two other *new* programs under the Inflation Reduction Act that could conceivably be leveraged to support emissions reductions on fishing vessels. Like the Greenhouse Gas Reduction Fund, these provisions are not *explicitly* directed at enabling fishermen to reduce the emissions associated with operation of their vessels, but could theoretically be leveraged to support these uses – ideally, in combination with funding supplied through the Greenhouse Gas Reduction Fund.

The first potential opportunity derives from the Inflation Reduction Act's Grants to Reduce Air Pollution at Ports [Section 60102], which establishes a new section of the Clean Air Act to fund the development of port climate action plans and to perform planning and acquisition of zero emissions port equipment and technology. The signers of this letter and their colleagues in the fishing industry intend to submit a letter in conjunction with the EPA's request for comments on this new program, due January 18, 2023. In that letter, we will detail how planning and shoreside investments in fishing ports can complement vessel-level investments that we recommend supporting through the Greenhouse Gas Reduction Fund.

The second potential opportunity derives from the Inflation Reduction Act's \$2.6 billion to NOAA for Investing in Coastal Communities and Climate Resilience [Section 40001], which "shall be used to fund conservation, restoration, and protection of coastal and marine habitats, resources, Pacific salmon and other marine fisheries, to enable coastal communities to prepare for extreme storms and other changing climate conditions, and for projects that support natural resources that sustain coastal and marine resource dependent communities, and marine fishery and marine mammal stock assessments." There has been no formal public comment opportunity associated with this funding, and it is not yet clear whether such an opportunity will occur. However, in November 2022, over 190 individuals and organizations submitted a letter to Secretary of Commerce Gina Raimondo asking her to leverage this funding to help small- and medium-scale, independent fishing and seafood businesses build, promote, and develop their climate-resilient businesses and the sustainability of their fisheries, through measures that would include, among other listed funding priorities, "\$100 million to support and/or finance clean energy opportunities for the nation's small-boat fishing fleet, including vessel retrofits and electric conversions, pilot projects demonstrating new technologies, and outreach and education."

Section 3. Eligible Projects

1. What types of projects should EPA prioritize under sections 134(a)(1-3)? How would such projects maximize GHG emission and air pollution reductions? How would such projects enable investments in projects that would otherwise lack access to capital or financing?

In the choice of projects to fund under the Greenhouse Gas Reduction Fund, the EPA should prioritize projects that achieve a balance of all four of the following objectives:

- Projects with the most significant GHG emissions reductions potential;
- Projects that would not be likely to occur without this funding, e.g., due to a lack of other available loan/grant programs or the inability for applicants to access them;
- Projects that provide social co-benefits, e.g, cost savings to disadvantaged communities, local jobs creation, energy resilience;
- Projects that avoid/reduce impacts to biodiversity, nature-based carbon sequestration potential, and land/ocean use, e.g., through reduction of waste, promotion of reuse/recycling, locating projects in the built environment or over impervious surfaces, etc.

Early commenters who have submitted responses to EPA's request have suggested prioritizing community-led initiatives that fund: electrification, weatherization, and energy efficiency

projects, particularly when applied to existing buildings rather than new construction; green infrastructure such as urban gardens and forestry; projects on existing buildings that can be retrofit and/or support onsite renewables and storage; deconstruction and reuse of building materials; and heat reduction practices such as green and cool roofs.

We too support these project categories, as they tend to be “fishery friendly” and in keeping with the four priorities outlined above. In addition, as stated throughout this letter, we support the inclusion of funding to support GHG emissions reductions projects on fishing vessels, as it aligns with all four priorities listed above.

Some of the renewable technologies that will support the energy transition in fisheries and seafood are currently in development or are at early stages of commercialization, with higher costs that require further action to lower economic barriers to access them for willing businesses. On-the-ground entrepreneurial leadership in vessel decarbonization is already occurring at ports around the U.S., from Sitka, AK, where the Alaska Longline Fishermen’s Association recently launched its Boat Energy Transition Accelerator (a pilot project that will convert a salmon troller to a hybrid diesel/electric motor), to Friendship, ME, where retired lobsterman Richard Nelson recently co-published the report “EV on H₂O? The feasibility of electrifying Maine’s lobster fleet by 2050.” However, to promote widespread adoption of these technologies, policies and incentives will need to be developed that can support scalable deployment of the solutions that work.

Other solutions represent low-hanging fruit with immediate potential to reduce GHG emissions and save operators money, but are under-deployed due to lack of operator knowledge or access to capital. Programs established under the Greenhouse Gas Reduction Fund should support *both* categories of projects – both those that are shovel-ready but underutilized, and those that require risk-tolerant capital in order to reach full commercialization.

2. What forms of financial assistance are necessary to fill financing gaps, enable investment, and accelerate deployment of projects?

Currently the fishing industry does not enjoy access to dedicated programs enabling investment in renewable technologies or low-emissions infrastructure. Because of the unique features and demands of our industry, Green Banks housed at the state level may not develop the staffing capacity and understanding necessary to offer fiscal support for fishing industry projects. For these reasons, we believe that the smaller-sized nonprofit Green Bank/CDFI model offers a great deal of promise for supporting

3. Beyond financial assistance for project financing, what other supports are necessary to accelerate deployment of such projects?

Fisheries operate in a complex regulatory framework. State and federal requirements for fishery management, permitting, operations, waste discharge, emissions, catch reporting, taxation, liability/admiralty, and other factors all weigh on fishery stakeholders’ decisions to invest in renewable technologies. In addition to supporting programs that provide capital, EPA should ensure that such programs are able to provide legal and regulatory confidence for their recipients in their ability to maintain high levels of compliance. This could entail providing fiscal support

for in-house or outsourced legal or consulting services at Green Banks/CDFIs to support clients in this regard.

Additionally, we recommend creating a coordinated “one-stop shopping” portal for potential applicants to access the expanding plethora of often-overlapping programs contained in the Inflation Reduction Act, the Bipartisan Infrastructure Law, and more. It’s very hard for the average fishing boat owner to find his or her way through the maze without technical help and support. This “access portal” process has helped in many other areas to connect potential users with programs, such as the Obamacare technical advisors whose job (paid by the program) it is to match customers with programs and help with the paperwork – and also to advertise the availability of such programs.

Eligible recipients

3. What types of entities (as eligible recipients and/or indirect recipients) could be created to enable Greenhouse Gas Reduction Fund grants to support investment in and deployment of GHG and air pollution reducing projects in communities where capacity to finance and deploy such projects does not currently exist?

As stated above, in addition to state-run Green Banks, smaller specialized nonprofit Green Banks/CDFIs would be best enabled to serve our industry by deploying specialized funding streams, maximizing investment opportunities, and establishing/maintaining expertise in the fishing industry and its unique needs and geographies. Alternatively, regional or national capital facilities focusing solely on fisheries and seafood could support optimized investment in emissions reduction projects for our industry.

5. What kinds of technical and/or financial assistance could Greenhouse Gas Reduction Fund grants facilitate to maximize the investment in and deployment of GHG and air pollution reducing projects by existing and/or new eligible recipients and/or indirect recipients?

As stated above, we believe that technical and financial assistance for the US fishing industry to contribute to our nation’s goal of broad scale emissions reductions should be delivered via funding streams for energy efficiency and conservation, alternative fuels technology development, and renewable fuel propulsion upgrades that can fill a niche gap and increase industry resilience not only by reducing vessel emissions but also by achieving cost savings, safety improvements, and fleet modernization.

Understanding these emerging technologies and their applications in our unique industry requires specialized knowledge. End users are generally small margin, small-to-medium-sized businesses, many with 1-5 employees, located in remote and rural areas of the coastal US. It is critical that adequate support for education and socialization of programs that will deliver capital for renewable energy projects in US fisheries be a central part of any such program.

Thank you for the opportunity to comment.

Sincerely,

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