

Less and Better

Reshaping the EU
seafood system



As an important point to note, this position paper is focused on the EU seafood system, rather than having a global scope. Seas At Risk acknowledges that aquaculture and fisheries play a vital role in food security globally, especially for coastal communities in developing countries. Calls made by Seas At Risk to reduce and improve seafood consumption are not applicable to contexts in which seafood is an important pillar of food security and where malnutrition is present. The calls are tailored to a European context in which food security is strong and will not be put in jeopardy by a reduction in seafood consumption. In fact, European seafood production and consumption can be a driver of food insecurity elsewhere.

Seafood vs aquatic food: The concept of seafood traditionally refers to animal products harvested from the sea (fish, crustaceans, molluscs, etc...) and used for human consumption. Seafood tends to exclude algae, even if sourced from the sea, as well as animal products harvested or cultivated in freshwater. As such, the Food and Agriculture Organisation (FAO) has coined the term aquatic foods to include any food that can be harvested or grown in water and is used for human consumption. As such, this paper will use the concept of seafood rather than aquatic food but does include algae under the seafood umbrella. Algae should be an essential part of seafood consumption in the future and that should be reflected. While freshwater products are not included in the scope of this position paper, most of the content is very much applicable to them



Contents

Key recommendations	4
Key recommendations for production	4
Key recommendations for processing and distribuion	4
Key recommendations for consumption.....	5
Key recommendations on governance	5
Introduction	6
Components of the seafood system	7
Production	8
Fisheries	8
Aquaculture	9
Processing and distribution	11
Consumption	13
Governance, support and regulation	15
Conclusion	16
Bibliography	17

Key recommendations

Key policy recommendations for production:

- The upcoming Ocean Act and other ocean related policies must include the importance of the ocean's carrying capacity as a limiting factor for aquaculture and fisheries production. Implement an ecosystem-based approach to fisheries and aquaculture management.
- Better and fully implement the Common Fisheries Policy (CFP) and ensure the next Multiannual Financial Framework (MFF) uses public money to drive the just transition to low-impact fisheries and contribute to marine ecosystem restoration.
- Ensure fishing opportunities allocation transparency and accessibility. Full disclosure of allocation criteria and public registers for quota allocations mechanisms and outcomes by national authorities are fundamental conditions to improve fairness and accountability in the management of fishing opportunities.
- Revise EU aquaculture guidelines to phase out intensive carnivorous fish aquaculture and promote responsible scaling of low trophic seafood products (molluscs and algae) and alternative proteins (plant-based, fermentation and cell-based).
- Improve marine animal welfare standards by providing mandatory training for fishers and aquaculture producers on humane handling, eliminating harmful practices such as asphyxiation, and prioritising short, local supply chains to minimise stress and suffering during transport.

Key policy recommendations for processing and distribution:

- Invest in sustainable processing and labour practices by supporting energy-efficient technologies, better waste management, and strict labour protections to safeguard workers and reduce environmental impacts.
- Promote shorter and local seafood value chains to improve traceability, reduce transport emissions, generate fairer prices for producers, and enable responsible and low-impact practices.
- Reward sustainable practices across the seafood value chain by introducing clear quality and geographical labels and developing a Participatory Guarantee System (PGS) to recognise fair, transparent, and low-impact fisheries and market actors.
- Revise the Common Market Organisation (CMO) regulation to close the traceability gap regarding frozen and processed seafood products, as well as to exclude products involved in human rights abuses and bycatch of endangered, threatened and protected species.

Key policy recommendations for consumption:

- Promote “less but better” seafood consumption by encouraging Europeans to reduce overall seafood intake while prioritising local, seasonal, and low-impact species caught by small-scale fishers, rather than relying on imported industrial seafood.
- Support the transition to low-trophic and plant-based alternatives by replacing high-impact species (e.g., tuna, salmon, shrimp) in diets with algae, molluscs, fermented, or plant-based proteins that provide similar nutritional benefits with lower environmental impact.
- Reframe EU seafood policies and communication to focus on sustainability, social justice, and ecosystem health, rather than promoting seafood primarily as a cheap or abundant protein source and ensure food security discussions reflect equity and distribution rather than overconsumption or industrial production.
- Introduce environmental and social labelling of all seafood products through a revision of the Common Market Organisation (CMO) that covers not only greenhouse gas emission but all environmental, social and potential health impacts of the seafood supply chain.

Key policy recommendations on governance:

- Harmful subsidies, like fuel tax exemptions for industrial fleets and subsidies for intensive fish farms, should be phased out. The remaining public funds should incentivise low-impact and energy-efficient fisheries and aquaculture.
- Develop long-term, regional ecosystem-based fisheries and aquaculture management plans with clear objectives, monitoring systems, and adaptive measures that integrate ecological, social, and economic considerations.
- Ensure inclusive marine spatial planning by giving small-scale, low-impact fishers and aquaculture producers meaningful participation and real decision-making power, and by fully integrating their local knowledge and socio-economic role into governance processes.
- The long-term aim should be a transition towards a more sustainable and low-impact fisheries and aquaculture sector that is economically viable without constant public support.

Introduction

The scientific consensus is clear: our current food systems are pushing the planet to its limits, overexploiting natural resources, disregarding animal welfare, and undermining both human and environmental health¹⁻³. The urgency to transform these systems has never been greater. We must build food systems that are resilient to shocks and capable of mitigating the interconnected crises of climate breakdown, biodiversity loss, and pollution—ensuring a liveable future for generations to come⁴.

Nowhere is this imperative more pressing than in the seafood sector. The European Union's demand for seafood far exceeds what its own waters can sustainably provide⁵, driving over-exploitation at home and shifting environmental and social burdens to vulnerable regions, particularly in the Global South, where coastal communities depend on marine resources for food security and livelihoods⁶. By importing over 80% of its seafood⁷, the EU externalizes the ecological costs of overfishing, pollution, habitat destruction, and illegal, unreported, and unregulated (IUU) fishing, while exacerbating global inequities in access to marine resources.

The prevailing model of seafood production, defined by globalised value chains, concentrated ownership, and high environmental impact, is unsustainable⁸. It perpetuates climate change, ecosystem degradation, biodiversity loss, social injustice, and human rights violations. The EU must move away from this ecologically and socially harmful approach, which prioritizes unsustainable economic growth, productivity, and profit over long-term sustainability and resilience.

A just and rapid transition is essential. This means shifting toward low-impact, short-value-chain fisheries and aquaculture, while ensuring that

workers and communities dependent on industrial fisheries and intensive aquaculture are supported and not left behind⁹. Such a transition also requires redistributing value more equitably across the food chain, challenging the dominance of a few actors who have historically concentrated profits at the expense of fairness and ecological integrity.

This paper explores the pathways to achieving a diversified, decentralised, and localised seafood system, one that is resilient, equitable, and aligned with ecological limits. By rethinking seafood production, processing, distribution, consumption, and governance, we can secure a sustainable and just future for the EU and beyond.

The European Union's demand for seafood far exceeds what its own waters can sustainably provide, driving over-exploitation at home and shifting environmental and social burdens to vulnerable regions...



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Components of the seafood system

The European seafood system encompasses all activities and actors involved in producing, processing, distributing, and consuming seafood, as well as the social, economic, and environmental outcomes these activities generate. Understanding the system requires a holistic perspective that goes beyond production alone, recognising the interconnections between natural resources, supply chains, governance, and society.

Seafood production and harvesting include both wild capture fisheries and aquaculture, from small-scale coastal operations to industrial-scale enterprises. These activities are shaped by environmental conditions, population management practices, technology, and access to resources. Processing and value addition transform raw seafood into packaged, frozen, or specialty products, while addressing by-products, waste reduction, and food safety standards.

Distribution and logistics ensure that seafood reaches markets efficiently, maintaining quality through transport, storage, and wholesale and retail networks. Consumption patterns, consumer preferences, and sustainability standards, such as certifications and traceability schemes, further influence the flow and demand for seafood products.

Governance and policy frameworks are critical to the system's functioning. Governments, regional authorities, and civil society organisations set rules, regulations, and standards, from fisheries

management and aquaculture licensing to trade policies and support for coastal communities.

The activities across the seafood system generate a wide range of outcomes, including impacts on ecosystem health, biodiversity, livelihoods, and community well-being. These outcomes interact with system activities, creating feedback loops that shape future production, consumption, and management practices.

Recognising the components and interactions within the European seafood system is essential for designing policies that enhance sustainability, robustness, and equity. Addressing challenges across the supply chain, from production to consumption, can safeguard marine ecosystems while supporting the communities that rely on them.

Production

Fisheries

European fisheries have faced multiple, interconnected crises for decades, steadily eroding the sector’s resilience. Shaped by post–World War II priorities of food security and economic growth, the EU’s Common Fisheries Policy (CFP) drove the industrialisation and globalisation of Europe’s seafood system. Technological advances and long value chains turned the EU into one of the world’s most powerful seafood markets, now the third largest globally. Yet consumption far exceeds domestic production, creating a heavy reliance on imports, while significant volumes of wild-caught fish are exported or diverted to fishmeal and oil. This model has increased supply and consumption but entrenched dependence on global markets and generated growing environmental and social costs.

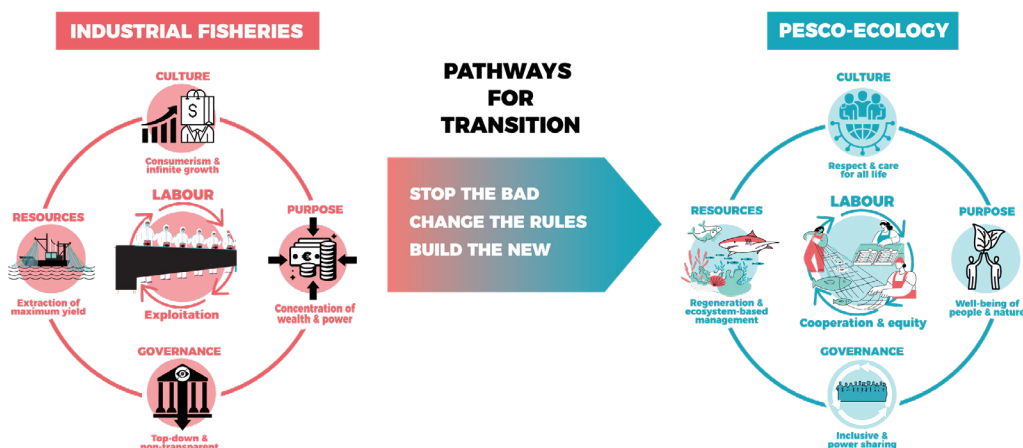
A long-standing policy focus on maximising catch volumes has resulted in severe ecological and socio-economic damage. Half of European fish populations remain outside safe biological limits, and overall fish biomass is still less than half of 1950s levels. High-impact, industrial fishing practices have degraded marine habitats¹⁰, destabilised ecosystems, and reduced the ocean’s capacity to store carbon, exacerbating climate change¹¹. At the same time, coastal communities have been weakened as

small-scale fisheries decline and economic power concentrates in large industrial operators⁸. Although the 2013 CFP committed to restoring fish populations above sustainable levels, weak implementation and the misuse of scientific concepts such as maximum sustainable yield (MSY) have undermined recovery and reduced the resilience of marine ecosystems.

Structural biases within the CFP, compounded by lack of implementation and weak enforcement, further reinforce inequality and unsustainability. Fishing opportunities are disproportionately allocated to large-scale fleets, marginalising small-scale and coastal fishers who represent most of the fleet and employment but receive only a small share of total catch. This concentration has accelerated the economic decline of coastal communities and intensified unfair competition in globalised markets. While small-scale fisheries hold significant potential to support population recovery and local livelihoods, they face declining viability, management gaps, and, in some cases, illegal fishing. Overall, Europe’s fisheries reflect a broader economic model based on industrial growth and overextraction of finite resources.

To break this vicious circle, pesco-ecology, an approach inspired by agroecology, offers a transformative framework for fisheries. It promotes a modern, regulated, and economically viable form of fishing that reconciles exploitation and conservation as mutually reinforcing goals. Built on two core principles,

A JUST TRANSITION TO LOW-IMPACT FISHERIES



harvesting fish prudently with minimal ecosystem impact, and maximising the social, economic, and societal value of each kilo of fish caught, pesco-ecology prioritises robustness, long-term viability, and resilience over short-term efficiency and maximum yields.

This shift requires moving away from industrial extraction and concentration of power toward collective wellbeing and regeneration. Fishing must primarily serve direct human consumption, fair livelihoods, and local, transparent supply chains, with fishing rights treated as a public trust rather than private assets. Low-impact, selective fishing within ecosystem limits should replace high-impact, carbon-intensive practices, restoring biodiversity, protecting habitats and juveniles, and ensuring stable and predictable yields. By combining scientific knowledge, fishers' expertise, and circular economy principles, this approach reduces waste, lowers climate impacts, and reconnects consumers with producers through shorter value chains.

Pesco-ecology also demands deep changes in labour, culture, and governance. It promotes dignified work, social justice, and cooperation across the seafood value chain, recognising women, young people, and marginalised groups, and empowering low-impact fishers as stewards of the marine commons. It challenges consumerism and endless growth, replacing them with care, restraint, and respect for ecological limits. Governance must shift from top-down control to inclusive, participatory co-management, with transparent allocation of fishing opportunities, accountable producer organisations, and strong traceability and community-based assurance systems to ensure fairness, sustainability, and long-term resilience.

In this context, a just transition is essential. Rooted in trade union and climate justice movements, it seeks to protect workers and communities dependent on extractive activities while guiding necessary change in a fair, democratic, and socially responsible way. Seas At Risk has long worked on just transition in fisheries and, together with scientists and fishers, has developed a shared vision for low-impact, fair, and resilient fisheries in Europe⁹.

Aquaculture

Aquaculture is often promoted as a solution to declining wild fish populations and increasing seafood demand, yet it is not environmentally sustainable by default. In Europe, especially in Norway, Iceland, the Faroe Islands and the UK, the rapid growth of industrial aquaculture has been accompanied by serious ecological and socio-economic impacts where production is poorly planned, weakly regulated, or highly intensive. These include habitat destruction, particularly of valuable coastal wetlands, pollution from excess nutrients and chemical inputs, reliance on unsustainable fishmeal and fish oil, and conflicts with wildlife. Poorly managed farms can also threaten wild populations through escapes, disease transmission, and the introduction of invasive species, while altering ecosystem services and undermining local livelihoods.

The EU is currently not a major player in aquaculture production, far behind key players such as China, Indonesia and India¹². In response to the reliance of the EU on imported seafood products, the European Commission has launched multiple campaigns and funding initiatives to bolster aquaculture production in the EU^{13,14}. This surge in institutional support should not lead to a massive industrialisation revolving around the maximisation of production and profit, as was the case with the Common Fisheries Policy between 1950 and 1970. It should instead be an opportunity for responsible scaling of low trophic aquaculture, with a major focus on planetary boundaries and ecosystem restoration.

Environmental pressures vary by species, production intensity, and location. Intensive and semi-intensive finfish farming, particularly of carnivorous species such as salmon, sea bass, or groupers, is associated with high organic and nutrient waste, chemical usage, seabed degradation, and increased risk of disease. It is driving habitat degradation and overfishing through its need for fish meal and oil^{14,15,16}. It is acknowledged that the percentage of fish meal and oil in European feed has strongly decreased¹ over the last decades but that has been replaced by vegetable alternatives such as soy, canola or palm^{17,18}. However, as soy and palm oil used in the EU is imported from intensive harmful chemical intrants and genetically modified monocultures that drive deforestation and pollution,

feeding fish with soy and palm oil have strong environmental, health and socio-economic impacts along the value chain¹⁸⁻²⁰. Furthermore, 20% of the feed is still composed of fish meal and oil and as the aquaculture production has steadily increased, so has the absolute demand for feed^{17,21}. This is not only inefficient but is also linked to social justice. Through fishing agreements, EU and foreign fleets are intensively fishing in waters of Western Africa for small pelagic species (sardines, pilchards, etc...), which are then transformed into fish meal for aquaculture^{21,22}. Local coastal communities are unable to compete with foreign vessels and local fishmeal producers and thus have seen their catches dramatically decrease, driving food insecurity and malnutrition^{23,24}.

Additionally, carnivorous fish aquaculture currently relies on intensive caging practices, with strong inputs of antibiotics and antiparasitic products that leak to the marine ecosystem²⁵. Antibiotics, for example, are a driver of increased antimicrobial resistance, which poses a serious threat to human health and ecosystem structure^{26,27}. The high concentration of fish also leads to high quantities of faecal matter, which disrupt benthic communities under the cages²⁸. Lastly, caged carnivorous fish species are selected for productivity in captivity rather than resilience in the wild. They will tend to have low genetic diversity and reduced fitness²⁹. When farmed fish escape from the cages, they threaten indigenous ecosystems where they are usually absent from and if they are native, they endanger the local population through interbreeding with their genes unsuited for life in the wild^{29,30}. Lastly, it is a problematic practice in terms of fish welfare and waste. High concentration of fish in cages lead to major welfare issues due to overcrowding and parasites, causing high mortality rates and mass mortality events that are accepted and accounted for by aquaculture producers³¹.

Low trophic aquaculture, especially of algae and molluscs, can deliver seafood that is produced with low impact and can even contribute to restoring marine ecosystems. Native species of algae and bivalves provide nurseries and ecosystems in which fish and crustaceans can thrive, yielding benefits

to fisheries^{32,33}. Native bivalves, such as oysters and mussels, are filter feeders that can help reduce eutrophication and restore life to marine ecosystems that have been destroyed by excessive agricultural runoff^{34,35}. Additionally, bivalves create reefs that mitigate the impact of erosion on the coastline, enhancing climate resilience³⁵. While considering its benefits, low trophic aquaculture must still be scaled up **responsibly**, focused **on native species**, restoring **native ecosystems** and **in small-scale exploitations**. This is all encompassed in the Ecosystem Approach to Aquaculture (EAA), which focuses on aquaculture development within the wider ecosystem³⁶. Indeed, bivalves and algae are species that interact with their ecosystem and industrial exploitations would create an imbalance in the ecosystem, especially in areas that originally do not support these species³⁷. Additionally, the increasing competition for marine space and the plastic pollution resulting from these operations would not be compatible with industrial exploitations.

A sustainable aquaculture policy must prioritise ecological integrity, climate resilience, and community wellbeing, shifting towards a regenerative use of marine, coastal, and inland waters that sustains ecosystems, provides decent livelihoods, and delivers quality seafood. This requires strict biosecurity, careful site selection, low-impact and selective production methods, and responsible management of feed, water, and chemicals, while preventing escapes, controlling invasive species, and managing wildlife interactions through non-lethal approaches. Public authorities should support multi-trophic, permaculture-inspired aquaculture that harnesses the full potential of the water column³⁸: seaweed and algae can capture excess nutrients and provide nutritious food, filter-feeding shellfish purify the water while supplying protein, and finfish and crustaceans can be sustainably harvested as higher-value products. Operating within ecological limits, respecting biodiversity, and ensuring transparency, traceability, and accountability across supply chains will be essential to integrate environmental sustainability, social equity, and economic viability, securing both healthy seafood and resilient coastal communities.



Processing and distribution

The EU seafood processing sector plays a critical role in transforming catches and aquaculture products into food for domestic consumption and export, encompassing activities such as cleaning, filleting, freezing, canning, and packaging. While processing adds value and extends shelf life, it also generates significant environmental impacts. These include high energy and water consumption, greenhouse gas emissions from refrigeration and transport, and the production of organic waste and effluents that, if inadequately treated, can pollute local waterways³⁹. Packaging materials, particularly plastics, further contribute to environmental degradation, while long and complex supply chains increase the carbon footprint of seafood products⁴⁰. In addition, the globalisation of processing has often decoupled production from local consumption, reducing transparency and traceability in the supply chain and making it harder to ensure sustainability⁴¹.

Human and social challenges are also significant. The processing sector is often labour-intensive, and workers, especially migrants⁴², can face precarious contracts, low wages, and poor working conditions⁴³. Health and safety risks are common due to repetitive tasks, cold and wet environments, and handling of heavy machinery. Seasonal employment and high

turnover can undermine community stability and limit opportunities for skill development. Moreover, processing facilities are unevenly distributed, with many located far from small-scale fishing communities, reducing the economic benefits retained locally. Addressing these challenges requires investment in cleaner, more energy-efficient technologies, strict labour protections, better waste management, and supply chain transparency that links processing practices to environmental and social sustainability.

Once seafood has been produced, it will usually be sold, either directly by the producer and through existing private arrangements or through general sale at the auction. In the case of the latter, the few larger distributors present at the auction can be incentivised to form cartels and drive lower prices since they hold bargaining power over primary producers. While distributors are an important link of the seafood system, they are still subsidiary to the retailers that will execute the final sale. Retailers are the actors with the most power. They set prices for distributors, which in turn set their own prices to primary producers. Retailers also decide the sourcing standards, inventory and the traceability information that will be available to consumers. While a part of consumers can be

intentional in their purchasing patterns and will go above and beyond to consume products, they believe to be sustainable, most consumers will tend to choose based on the available products in their usual retailer.

The focus on productivity and cost efficiency of our seafood system has sometimes led to long and convoluted value chains and trade flows. This is not only non-sensical in terms of transport emission, but opaque and confusing value chains may also conceal severe human rights abuse, illegal fishing and destructive fishing practices. This is particularly prominent in the case of tuna, as tuna vessels are the most likely to engage in illegal fishing through reflagging, commit fraud and use forced labour⁴⁴. They alone represent 42% of all human rights violation in fisheries⁴⁴. It becomes particularly problematic when a 2023 report by the NGOs Bloom & Blue Marine Foundation uncovered how European retailers were selling cans of tuna fished in tropical waters without due diligence on traceability⁴⁵. While retailers relied on labels such as the Marine Stewardship Council (MSC) for their sourcing policy, a 2023 external review of the MSC found it had completed “highly unsatisfactory progress” in terms of human and labour rights⁴⁶. A second study concluded that “the Marine Stewardship Council logo [...] does not set a legitimate standard of care for keeping forced labour out from the certified tuna supply chain”⁴⁷.

There are still major issues with seafood traceability in Europe, leading consumers or private actors to inadvertently support destructive practices and human rights abuses. It is estimated that 50% of seafood is mislabelled, with Interpol/Europol have identified seafood as having one of the highest rates of fraud among food products⁴⁸. Seafood mislabelling is even persistent at the heart of the EU, in the cafeteria of the Parliament and the Commission, with an estimated 30% of samples taken in Brussels being mislabelled⁴⁹. When considering only tuna, the mislabelling rate rose up to 88%⁴⁹. Additionally, the current labelling requirements for seafood under the Common Market

Organisation (CMO) do not apply to processed foods, such as canned tuna, fish sticks or surimi. For those products, there is no EU-wide legal obligation to provide information to consumers about species, origin and method of catch⁵⁰.

Shorter and local value chains address most of the issues mentioned about regarding fraud, labelling and traceability. They tend to be more beneficial for all actors involved. In the case of producers, direct selling from producers to consumers or other types of end clients lead to fairer prices and higher value extracted after production, which incentivises responsible practices. In term, producers are incentivised to produce higher quality products for their customers, as the products can be traced easily, promoting accountability. A shorter and local value chain also tends to generate less greenhouse gases due to reduced transport and less waste along its value chain. Seafood waste that might be generated by smaller seafood actors can also be used in secondary products, such as agricultural fertilisers, animal feed or bioreactor fuel for fermentation. Waste reduction is particularly aligned with the adopted revision of the Waste Framework directive adopted in September 2025, which sets binding reductions for food waste by 2030⁵¹.

To provide concrete examples, the SAR report “Fisheries for a new era” described innovative business models in Europe that are respectful of livelihoods and the marine environment⁵². Through direct selling, low-impact practices and transparency to consumers, these initiatives improved the livelihoods of fishers with fair prices, while minimising ecosystem impact and providing consumers with high-quality product. They were however faced with many challenges, including regulatory, which threatened their existence and even caused the disappearance of some of them. Newer just and sustainable models cannot exist without appropriate regulation, governance and support, which will all be addressed in a following section of this paper.

Consumption

The EU plays a crucial role in global seafood dynamics. While the EU has a relatively high demand for seafood, with annual per capita consumption of around 24 kg in live weight equivalent, its self-sufficiency is only around 45% and it is far from able to meet its fish requirements from its own seas⁵³. To be able to meet the demand, the EU pays around €180 million to non-EU countries annually for fishing agreements that allow the EU fleet to access their 200-mile zones⁵⁴. The EU also imports high amounts of aquatic animal products (both seafood and freshwater) and was the largest importer in the world in 2022, for a value of USD 33.2 billion¹². With its high seafood consumption, the EU not only exacerbates the degradation of marine environments and IUU fishing, but it also contributes to unequal distribution of seafood. The report published by the World Wide Fund for Nature (WWF) in 2022 referred to this imbalance as “Europe eats the world”⁵⁵.

While millions of people outside the EU depend on seafood food for their livelihoods and as a main source of protein, citizens in some European countries consume in average much more than recommended by their national dietary guidelines⁵⁶. For example, the French consume 32.58 kg per capita per year in live weight equivalent (meaning of marine animals caught). This measure includes inedible fractions such as the head, fins or shells, and does not account for waste. Edible yield from seafood varies widely depending on species and processing, typically ranging around 40–75% of live weight⁵⁷. After conversion to edible weight, actual French intake is estimated at around 20–24 kg per capita per year, while dietary guidelines recommend 200 grams of fish a week, for a yearly recommendation of only 10.4 kg^{53,58}.

This overconsumption is the main basis for the title of this position paper: Less but better seafood.

It is essential to phase out fish caught or produced by industrial fisheries and aquaculture in favour of low-trophic alternatives and fish caught by low-impact fishers, supplement by plant-based foods. Better seafood in terms of environmental impact, animal welfare and social justice.

While fish does contain nutrients that are very beneficial for human health, such as omega 3 fatty acids, vitamins (A, D, B12) selenium or zinc, these nutrients are also contained in low-trophic seafood (algae, molluscs) or can synthesised through fermentation. The three major components of EU seafood consumption are tuna, salmon and shrimp, which all have self-sufficiency rates under 30% (including 1% for salmon!) and therefore rely on imports⁵³. They are foods that have been integrated simply as a protein source in common dishes (poké bowls, sandwiches, salads) and could easily be replaced by low-trophic or plant-based alternatives, especially those enriched in nutrients through fermentation. Alternative proteins have the potential to provide the health benefits provided by fish consumption but with lower environmental impact. The report published in 2025 by Seas At Risk “Blue diets, low-impact solutions – The role of alternative proteins in the (sea)food transition” touches on the importance of fermentation, planted-based proteins and cell-based cultivation⁵⁹. It does also stress the importance of responsible scaling, open-source patents and clean energy sources.

Instead of being a cheap filler protein, fish should be celebrated and valued, as it holds cultural significance to many Europeans. The focus of consumption should be on local and seasonal fish species, caught by local low-impact fishers and contributing to the prosperity of coastal communities. Contrary to our message,

current EU discourse encourages fish consumption, particularly from aquaculture, by presenting seafood as being more sustainable than land-based animal proteins. This narrative tends to only consider greenhouse gas emissions without considering the ecosystem impacts caused by industrial fisheries and carnivorous fish aquaculture, which can disrupt the carbon sinking potential of marine ecosystems⁶⁰. Newer methods for life cycle assessments are now starting to consider marine ecosystem impacts should therefore provide a more balanced picture^{60,61}. Land-based animal proteins should instead be replaced by plant-based foods or low-trophic seafood.

Finally, claims that Europe's seafood sector is primarily about food security are largely misleading, because they obscure the reality of how seafood is produced, traded, and consumed in the EU. Europe is not facing a shortage of fish for nutritional needs; rather, it is embedded in a highly globalised, market-driven system where seafood is treated as a commodity, not a staple food. The EU imports the majority of the seafood it consumes, while a significant share of its own production is exported⁶², undermining any meaningful link between domestic production and local food access. In addition, European pelagic freezer trawlers export 90% of forage and small pelagic fish they catch, such as horse mackerel and sardines, including to African markets including Nigeria and other West African countries⁶³. At the same time, much of the seafood sold in Europe is processed, convenience-oriented, or premium-priced, making it inaccessible to low-income consumers and nutritionally unnecessary compared to other available protein sources. Food insecurity in Europe is primarily a problem of inequality, poverty, and distribution, not supply, and invoking "food security" to justify environmentally damaging fishing practices, industrial aquaculture, or spatial expansion at sea serves economic interests rather than public need. In the context of seafood, food

security rhetoric risks legitimising overexploitation, social injustice, and ecological degradation, while diverting attention away from the real priorities: sustainable resource management, fair livelihoods, and equitable access to healthy food.



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Governance, support and regulation

As mentioned previously, there are existing actors working to transform the seafood system, centring it on welfare, planetary boundaries and fair livelihoods. But this just transition is difficult and can only be enabled by adequate governance, support and regulation.

Relating to production, smaller actors lack proper representation, allocation of opportunities and financial support. Indeed, low-impact fishers have difficulties accessing fishing quotas, while small-scale low-trophic aquaculture producers are competing for increasingly limited marine space. For the former, article 17 of the Common Fisheries Policy recommends quotas to be allocated based on environmental, social and economic criteria, which should favour low-impact fishers. For the latter, their integration into the maritime spatial planning (MSP) process is important and should be considered from the start. Both low-impact fishers and aquaculture producers are also compatible with other elements, such as offshore wind farms and should be valued when it comes to multi-use areas in MSP.

Harmful subsidies are also disproportionately allocated to larger actors, leading to overfishing and the industrialisation of aquaculture. Despite representing 75% of the EU fleet, small-scale fishers only received 20% of allocated European funds in the EMFF2 between 2014 and 2021⁶⁴. A 2023 report by the European Court of Auditors found that the 1 billion€

investments from the EMFF into aquaculture did not include monitoring about the sector's environmental sustainability⁶⁵. As such, subsidies be withdrawn from destructive fishing methods and carnivorous fish aquaculture, which should instead be re-routed to low impact producers and processors.

Inequality and imbalance are even more persistent in processing and distribution. Many initiatives mentioned in the SAR report [Fisheries for a new era](#) lacked support and persisted despite strong challenges. Chief amongst the challenges were difficult communication and regulatory hurdles, since administrations tend to centralise in the name of simplification of efficiency⁶⁶. Regulatory barriers can have real consequences, such as the ceasing of the Empesca't initiative in Catalunya, a direct selling scheme developed by small-scale fishers. It was granted an operating license only on a yearly basis, which prevented stronger personal and financial investment from all parties. This caution proved correct, as the license of Empesca't was not renewed and the initiative was discontinued despite strong local support from both fishers and consumers. This should not happen to innovative models that are in line with Participatory Guarantee Systems, a framework that supports social and environmental justice as well as co-management⁶⁷.

Conclusion

The current seafood system disparages the planet and its people but there is hope. Dedicated producers, processors and distributors are giving their best to drive the just transition to local, fair and low-impact seafood systems that puts environmental and social

wellbeing at its core. They do however face resistance from larger actors and from institutions that prioritise the status-quo. The just transition requires all the support it can get and Seas At Risk along with its members will be at the forefront of this movement.



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Contact

secretariat@seas-at-risk.org

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