# Rethinking Fisheries

## A vision for fair, low-impact fisheries in Europe

SEAS AT RISK

LOW IMPACT FISHERS OF EUROPE

## About the vision

This vision for fair and low-impact fisheries in Europe was discussed and adopted with a bottom-up approach, incorporating the views of a diverse group of experts and stakeholders from the fisheries community, environmental NGOs, science and institutions. It aims to stimulate a debate on the transition towards fisheries that contribute to the decent livelihood of coastal communities and to flourishing marine ecosystems.

## Authorship

The vision was elaborated and written by the Rethinking Fisheries group composed of:

### Co-chairs:

Marta Cavallé, Executive Secretary, Low Impact Fishers of Europe, Spain

Tobias Troll, Marine Policy Director, Seas At Risk, Belgium

### Members:

Brian O'Riordan, Policy Advisor, Low Impact Fishers of Europe, Belgium
Bruno Nicostrate, Senior Policy Officer, Seas At Risk, Belgium
Caroline Bennet , Founder, Sole of Discretion, UK
Cecilia del Castillo Moro, Policy Officer, Ecologistas en Acción, Spain
Cristina Brice-Pita, Researcher, CESAM/University of Aveiro, Portugal
David Lange, Fisher and Director, Foreningen for Skånsomt Kystfiskeri, Denmark
Didier Gascuel, Professor of Marine Ecology, Agrocampus West, France
Ingrid Kelling, Associate Professor, Lyell Centre, Heriot-Watt University, Scotland, UK
Jan Versteden, Director, Pintafish, Belgium
Jeremy Percy, Chair, New Under Ten Fishermen's Association, UK
Paula Barbeito, Independent fisheries consultant, Spain
Sebastian Villasante, Professor, University of Santiago de Compostela, Spain
Thibault Josse, Coordinator, Pleine Mer, France
Thomas Højrup, Professor of Ethnology, University of Copenhagen, Denmark
Valeska Diemel, Fisheries Policy Officer, BUND, Germany

Copyeditor: Siobhán McGonigle
Cover photo: @Christine Gstöttner

Correct citation of this document: Low Impact Fishers Europe & Seas At Risk. Rethinking Fisheries - A vision for fair, low-impact fisheries in Europe. Brussels: Rethinking fisheries group; 2025

## Acknowledgements

We gratefully acknowledge the valuable input and insights provided by the contributors who helped shape this text: Alexandre Cottier Pérez, Benoît Guérin, Gina Lovett, Gonçalo Carvalho, Inés López, Janne Posti, Monica Verbeek, Nicolas Blanc, Pipsen Monrad Hansen, Rémi Cossetti.

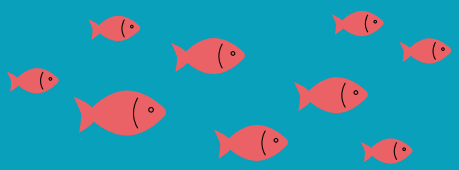


SEAS AT RISK

LOW IMPACT FISHERS OF EUROPE

# Contents





© AKD ltdmar

# 1. Introduction: We need to rethink fisheries

European fisheries are facing a prolonged and worsening crisis, characterised by weakening ecological resilience, declining viability and attractiveness of the sector, and deepening socio-economic inequality. As fish populations become depleted or collapse, wealth, fishing capacity, and fishing rights are increasingly concentrated in the hands of a few large-scale industrial operators. Small-scale and coastal fisheries[a] are being ever more marginalised and deprived of resources, putting generational renewal at risk. [1]

Marine biodiversity is under threat on multiple fronts, through overfishing,[2] destructive practices, climate change, pollution, coastal urbanisation, and the expanding footprint of the blue economy. These pressures place EU sea basins under immense ecological stress,[3] exacerbating a vicious cycle of environmental degradation and socio-economic decline. Current policy frameworks often put economic goals against environmental protections, resulting in ineffective compromises that fail to safeguard either fisheries or the marine ecosystems they depend on.

One thing is certain: there can be no fishing without fish. As the world undergoes rapid ecological and societal change, fisheries must also evolve. The future lies in low-carbon, low-impact fishing systems that conserve biodiversity, restore ecosystem functions, uphold social justice, and ensure that marine space and resources are shared fairly with other users in the expanding blue economy.

This document offers a holistic vision for fair, low-impact fisheries in Europe. It calls for a deep transformation that requires drastically reducing environmental impacts, decarbonising the sector, building adaptability to global change, and restoring the economic viability, cultural relevance, and attractiveness of fisheries.

Our vision underscores the vital stewardship role of fishers and coastal fishing communities. It supports a transition toward low-impact fishing gears and practices that safeguard marine ecosystems. It promotes income diversification, shorter and fairer value chains, and community-supported seafood systems as pathways to greater robustness and equity. It also addresses Europe's overconsumption of aquatic products, calling for a fundamental reorientation of marine resources as a shared public good that must be managed sustainably and equitably to support both present and future generations.

Rather than offering a silver bullet, our vision provides a guiding framework to shape, inform, and continuously improve actions over time, inspiring progressive change in the years to come.

a Defined according to Article 2.14, Regulation (EU) 2021/ 1139: Small-scale coastal fishing means fishing activities carried out by: (a), marine and inland fishing vessels of an overall length of less than 12 metres and not using towed gear as defined in point (1) of Article 2 of Council Regulation (EC) No 1967/2006 (28); or (b), fishers on foot, including shellfish gatherers.

# 2. Background: EU fisheries – A brief history of industrialisation

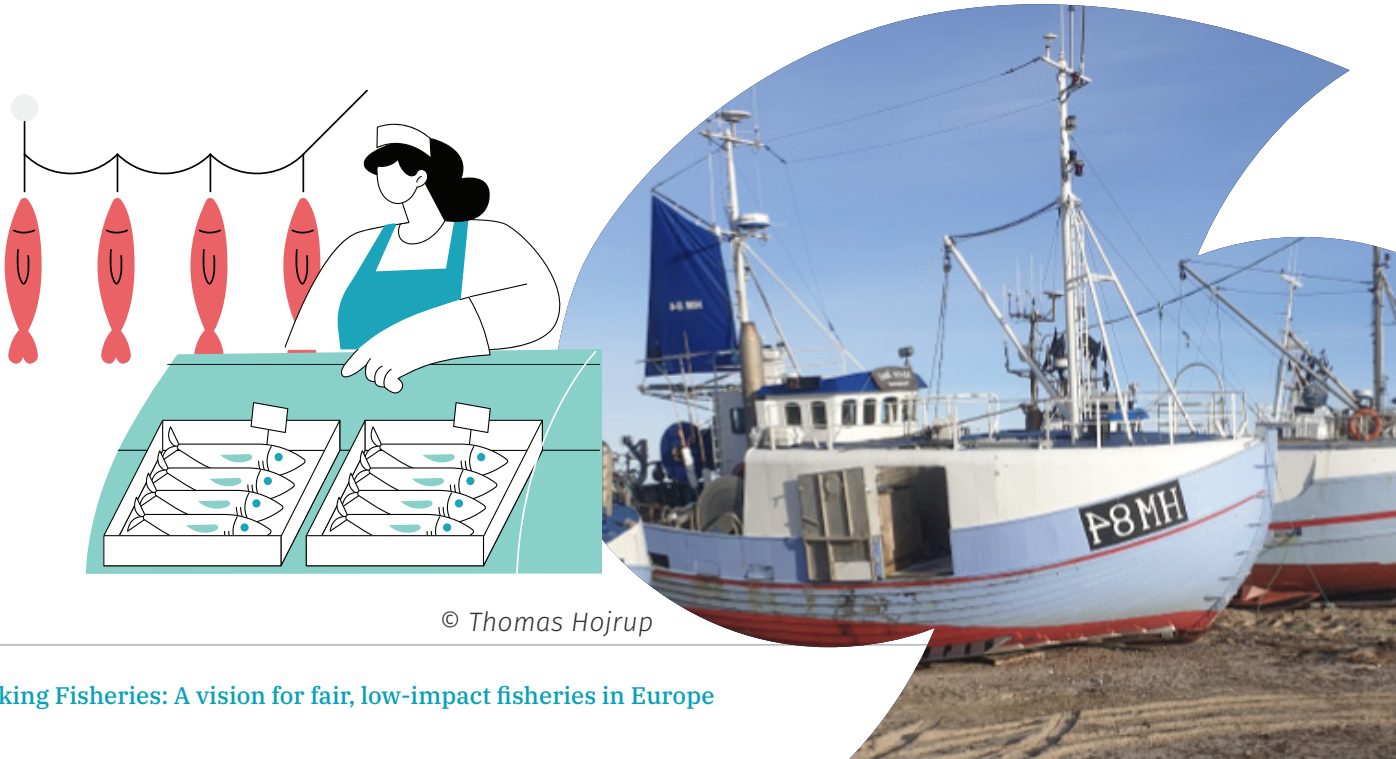
The Common Fisheries Policy (CFP), which governs the seafood sector in the European Union (EU), was driven by the post-World War II priorities of food security and economic growth, as set out in the Treaty of Rome.

The industrialisation of the food system – shaped by top-down policies that were reinforced by powerful lobbying and successful campaigns to boost meat and seafood consumption – gave rise to technological advancements in production methods and long value chains, particularly in the fishing and aquaculture sectors, with the aim of supplying international commodity markets.

As a result, Europe developed one of the most powerful seafood production and marketing systems in the world.

- Europe is the world's third-largest market for fishery and aquaculture products, after the United States and China. In 2022, the EU produced 4.72 million tonnes of seafood (76% wild-caught and 24% farmed), equivalent to about 45% of its total consumption (10.48 million tonnes, of which 71% wild-caught and 29% farmed), imported 85% of its consumption (8.86 million tonnes, of which 76% wild-caught and 24% farmed), and exported the equivalent of around 21% of its consumption (2.24 million tonnes, of which 92% wild-caught and 8% farmed).[4]
- In 2022, the EU's apparent seafood consumption (i.e. the sum of catches, aquaculture production and imports, minus exports) was 23.7 kg per capita, 3 kg higher than the global average of around 20.7 kg. This is a significant increase from 9.1 kg in 1961,[5] and is more than double the recommended amount.[6]
- At the same time, up to 20% of seafood wild-caught in the EU is used to produce fishmeal and oil.[7] In some regions, the percentage is much higher, such as in the Baltic Sea, where 90% of the herring catch is reduced to fishmeal and oil.[8]

These figures highlight Europe's dependence on seafood imports. Yet, growing evidence shows that the current globalised and industrialised food system is unsustainable; it drives environmental degradation, human rights abuses, climate change,[9] over-exploitation and pollution.[10]




© Thomas Hojrup

Despite some progress, fisheries policies and practices have largely focused on maximising volume. This has led to the growth of a large-scale fishing industry and has trapped many players in a vicious circle. Much of the industry relies on unselective, wasteful, and seabed-damaging activities, driven by economic goals rather than long-term environmental and socio-economic sustainability. The consequences have been severe for both the marine environment and coastal communities:

- **European fish populations suffer from chronic overfishing,**[11] with half of fish stocks currently outside safe biological limits.[12] In European waters, only 28% of assessed stocks are sustainably fished and in good biological condition (41% in the North-East Atlantic and Baltic Seas, and 9% in the Mediterranean and Black Seas[11]). Overall, European fish population biomass, i.e. the total combined weight of all fish in European waters, is still less than 50% of what it was in the 1950s.[13]
- **The EU fisheries sector is facing socio-economic decline,** marked by the loss of local, small-scale fishers – vital to coastal communities – alongside increasing concentration of economic power in large-scale, industrial operations.[14] Over the five-year period from 2018 to 2022, the value of total fish landings from small-scale and coastal fisheries dropped by 6% across all EU sea basins, with dramatic declines in the Mediterranean Sea (-30%), the Black Sea (-50%), the Baltic Sea (-36%) and the North Sea (-34%).[15]
- **Marine food webs and ecosystems are being destabilised** by overfishing and habitat damage, creating imbalances between predators and prey. These changes make ecosystems more vulnerable to invasive species and trigger cascading effects that are difficult to predict or control.
- **High-impact and carbon-intensive fishing is accelerating climate change** not only through direct greenhouse gas emissions, but also by damaging marine habitats and ecosystems that otherwise store carbon. This reduces the ocean's carbon storage capacity, undermining its ability to mitigate the impacts of climate change.[16]

The current CFP, adopted in 2013, made "restoring and maintaining populations [...] above levels which can produce the maximum sustainable yield" a key objective. However, poor implementation and enforcement of the current fisheries management approach mean this recovery of fish populations has not materialised. Scientific limits intended to guide sustainable fishing have often been misinterpreted or misused, both in long-term EU fishing plans and in giving scientific advice.[17]

Maximum sustainable yield (MSY) is frequently used as a target, when it should serve as a limit alongside the precautionary and ecosystem-based approaches clearly stated in the regulation. In practice, the MSY approach severely impacts fish populations, particularly when juveniles, i.e. young fish that have not reached sexual maturity, are not protected. In some cases, this has led to a reduction of around 70% in the biomass of the exploited population compared to a situation without fishing.[18] The MSY approach also fails to consider how different fish species interact within an ecosystem. Current models often assume that natural fish mortality rates are fixed and unchanging, based on outdated data. This has led scientists to consistently overestimate biomass and set fishing limits that are too high to maintain fish, let alone ensure healthy food webs and ecosystems.[19]

The result has been serious disruption to fish population structures, cascading effects across the whole ecosystem, and reduced resilience of populations in the face of growing challenges such as disease, ocean warming, eutrophication, and other climate change impacts.[20] MSY should be considered an absolute red line, not an objective to strive for, and even less, a suggestion that can be ignored. In the Baltic Sea, fishing limits set above MSY have contributed to significant declines in the three main species: cod, herring and sprat.[21]

These shortcomings in how MSY is used are compounded by deeper structural issues in how the CFP is implemented. Biases have systematically favoured larger-scale fisheries for decades, allowing them to thrive and dominate, while small-scale and coastal fisheries have been marginalised and overlooked despite representing 76% of Europe's active fishing fleet and 53% of employment at sea.[15]

The current structure of Producer Organisations (POs) and the allocation of fishing opportunities disproportionately benefit large-scale fisheries, concentrating quotas at the expense of small-scale and coastal fishers.[22] Despite their responsible practices, small-scale and coastal fishers are currently restricted to only 7% of the EU's total catch by volume, though their share accounts for 19% of value.[15] This concentration of fishing quotas, along with the privatisation of fishing rights in some countries, has driven the delocalisation of food processing, which has contributed to the economic decline – and in some cases, the disappearance – of coastal communities.

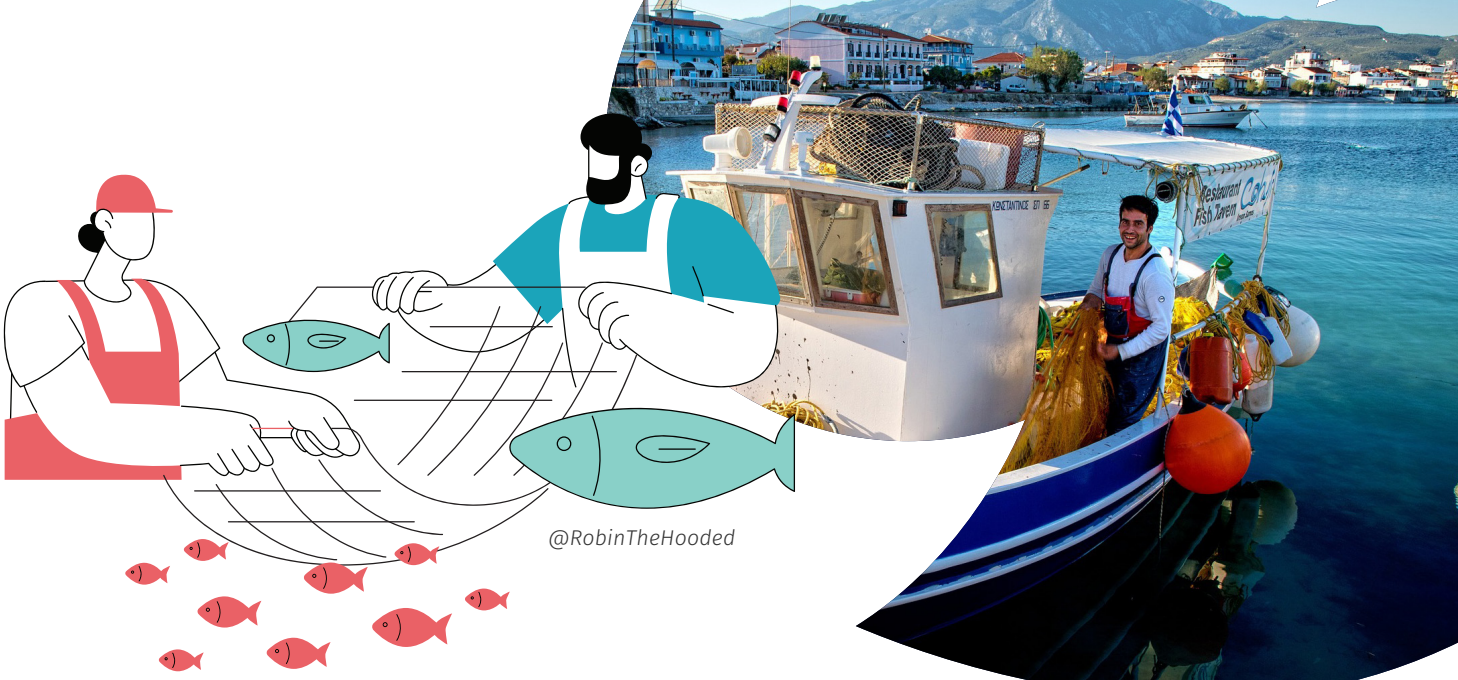
Alongside a constant decline in accessible fish resources and degradation of the ecosystems they depend on, small-scale and coastal fishers also face unfair competition from industrial-scale fishing for access to markets. Bulk landings from larger-scale operations drive down prices, giving small-scale fishers little control over what they earn. Globalisation of the fisheries market has further deepened these imbalances, with European fishers facing intense competition in a distorted marketplace where the social and environmental costs of seafood production abroad are not reflected in the pricing of, or standards applied to, imported products.[23]

Small-scale and coastal fisheries hold great potential to contribute to the recovery of our seas, but that potential is being wasted. These fisheries are typically micro or nano family-owned businesses, often involving the owner and family members as crew. They use polyvalent, low-impact gears to catch small volumes of high-quality fresh fish daily. Yet, the combined environmental and economic pressures are rapidly eroding the viability of small-scale and coastal fishing, leading to job losses, lower likelihood of generational renewal, and ultimately, the decline of entire coastal communities.

At the same time, it is important to acknowledge that small-scale and coastal fisheries are not only victims of external pressures but can sometimes be part of the problem. In many cases, these fisheries are poorly managed, and, even though they just represent 7% of the EU fish catch, there is excessive fishing or Illegal, Unreported and Unregulated (IUU) fishing activities in certain areas, contributing to the poor status of some fish populations. This is often due to a historic lack of attention and support from fisheries managers. Where fisheries are actively managed, fish populations tend to recover, demonstrating the effectiveness of good governance. However, even in managed fisheries, the issue of fair access remains largely unaddressed. Fishing opportunities are still allocated mainly based on catch history, favouring those who fish the most.

More broadly, the current economic model and related food policies have favoured a fisheries food system based on industrialisation, unlimited growth, and the unsustainable extraction of natural resources, with ownership and profits increasingly concentrated in fewer hands. This is a food system that is severely undermining the planet, depleting fish stocks, and threatening the livelihoods and communities that depend on them. An economy based on extracting from finite, though naturally renewable, resources faster than those resources can regenerate is unsustainable. Sooner or later, it will face collapse or require a fundamental reorganisation.

Incremental solutions and technical fixes will not be enough to tackle the environmental, social and economic crisis facing Europe's seafood system. A new model is needed to ensure healthy marine ecosystems and food webs, viable and sustainable fisheries, and thriving coastal communities. A new political economy for the fisheries sector must put the wellbeing of people and nature at the centre, while rewarding those who fish the most sustainably and provide the greatest benefits to society.




# 3. From industrial to low-impact, fair fisheries

The emerging concept of pesco-ecology,[24,25] inspired by the agroecological movement, offers a practical model for transforming fisheries and preventing overfishing. It aims to introduce a new approach to fishing and create an economic model that preserves and benefits marine life, coastal communities, and consumers alike. Didier Gascuel, a professor of marine ecology, coined the 'pesco-ecology' concept and describes it as follows:

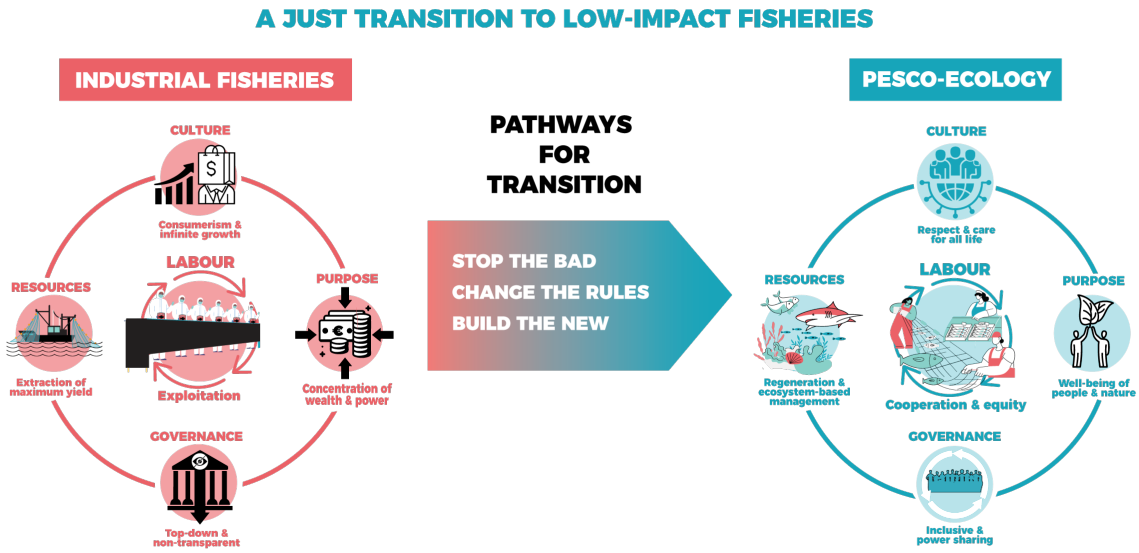
> *"A modern, profitable, and regulated form of fishing, in which fishing permits, catch quotas, regulatory sizes, seasons and closed areas are optimized so we can fish better, with less impact. [...] Fishing that reconciles exploitation and conservation at a profound level, not in a lame compromise between two antagonistic objectives, but as the two interlinked sides of the same ambition, as the unified affirmation of the interconnections between human activities and the functioning of ecosystems. [...] This 'pesco-ecology' will not emerge overnight. It is a process, a virtuous movement that will rely on innovation and on the intelligence of the parties involved."*[25(p185)]

More specifically, pesco-ecology is based on two key principles:

- **Harvesting prudently while minimising the impact of fishing** on all components of the ecosystem, including the targeted population, but also the seabed, juveniles, sensitive species, etc.
- **Maximising the economic, social and societal utility of each kilo of fish caught** for the benefit of coastal communities and society as a whole, not just a few wealthy vessel owners.

Low-impact and fair fisheries need to prioritise robustness over performance. Rather than focusing solely on effectiveness (achieving objectives) and efficiency (minimising resource use), the emphasis should be on maintaining the stability and long-term viability of marine and socio-economic systems. This means designing fisheries that can withstand environmental, economic, and social fluctuations, ensuring that ecosystems remain healthy and communities resilient over time.

Like every economy, the political economy of fisheries has various interlinked components: To serve a given purpose we need natural resources, which we extract and combine with human labour. This process is shaped by an overarching culture or worldview that helps those who participate in the economy understand their role and that defines what is considered possible or desirable. Finally, governance plays a crucial role in organising and facilitating the functioning of the economy in line with its purpose.




*Adapted from 'A strategy framework for just transition' by Movement Generation, May 2017.*[b]

## 3.1. Purpose: From concentration of power to collective wellbeing

Today, the primary goal of European fisheries is to produce large volumes of catch for mass markets and maximise profits. This narrow focus has led to the concentration of wealth and ownership in the hands of a few, driven by the privatisation of fishing rights and the creation of systems that favour those with economic power and political influence. As a result, concerns like food quality, ecosystem health, and job creation are treated as secondary, while environmental and social costs remain unaccounted for.

In contrast, a pesco-ecological model prioritises the wellbeing of people and nature. It fosters fair fisheries, healthy ecosystems, vibrant fishing communities, and decent livelihoods, with profits remaining within local communities and equitably shared. The role of fishers as stewards of the sea – who care deeply about its long-term sustainability and are actors of change for its regeneration – is recognised and rewarded, particularly those who deliver the greatest social, economic, and environmental benefits. Access to the blue commons[26] is fair and equitable, prioritising fishers using low-impact fishing methods and their communities. Fishing rights are held in public trust, managed collectively and transparently, and are not subject to privatisation.

Fisheries play a vital role in local economies and enrich the social, ecological, and cultural fabric of thriving coastal communities. These communities support a diverse network of services and businesses, including shops, schools, tourism, and cultural institutions, that are interconnected and mutually reinforcing. Fishers, often owner-operators who live and work where they fish, are deeply rooted in these communities and committed to the long-term health of the marine ecosystems they depend on.

The foremost priority of fishing must be to produce food for direct human consumption, generate fair economic returns throughout the supply chain, and strengthen the resilience of producer communities. This is best achieved through short, local, community-based, traceable, and transparent supply chains.

b Movement Generation, 'Just Transition', n.d., https://movementgeneration.org/justtransition/.

## 3.2. Resources: From extraction to regeneration

Resource use in the current fishing economy is predominantly characterised by industrial extraction of marine life using large-scale vessels and high-impact equipment with little regard for the natural rhythms or functioning of marine ecosystems. These practices damage the seabed, capture large numbers of juveniles and sensitive species, and generate vast amounts of discards, i.e. unwanted catch returned to the sea, often dead or dying. This leads directly to overfishing, reduced productivity, and diminished resilience of ecosystems, while exacerbating climate change impacts, biodiversity loss, the spread of invasive species, and pollution.

We envisage a rebalanced system centred on low-impact fishing that operates within ecosystem limits. This approach prioritises restoring and maintaining the ecosystem's natural balance and functionality, preserving biodiversity, and allowing both targeted and non-targeted fish populations to recover. Rather than fishing to achieve 'maximum yield', the focus is on ensuring stable yields and predictability for businesses, protecting nursery areas, and avoiding interactions with endangered or vulnerable species. Fishers draw upon scientific knowledge, innovation, and the collective expertise of all stakeholders to minimise the environmental impacts of fishing and actively contribute to the conservation and restoration of marine ecosystems.

In a pesco-ecology model, seafood is harvested at low volumes using selective, low-impact fishing gears and behaviours that respect seasonality and natural life cycles, while causing minimal disturbance to the seabed and habitats. Ghost fishing caused by abandoned gear is actively prevented and minimised, while high-impact, carbon-intensive fishing methods, such as trawling and dredging, are phased out in favour of well-managed, less energy- and carbon-intensive methods, and less destructive techniques like lines, traps, nets, and diving.

With such an approach, the entire food system, from production to consumption, is managed to minimise biodiversity loss and waste and incorporate circular economy principles, including sustainable packaging and the use of biodegradable and recyclable fishing gear. Climate impact is kept as low as possible through the decarbonisation of fisheries and enhanced carbon sequestration and storage, while short, transparent value chains establish a direct connection between consumer and producer and minimise processing, transport, and packaging.

## 3.3. Labour: From exploitation to cooperation

The current economic model treats labour as a cost to be minimised, sometimes resulting in poor and unfair working conditions, especially in large-scale industrial fishing where vulnerable and marginalised groups such as migrant workers frequently endure exploitation. Women's contributions are often undervalued or rendered invisible, while declining prospects make fishing increasingly unattractive to younger generations. This undermines generational renewal, accelerates depopulation of coastal communities, leads to the loss of knowledge and skills, and erodes local cultural identity in which fishing is seen as a traditional and valued way of life.

In contrast, our vision is grounded in a human rights-based approach that ensures dignified work throughout the entire value chain for both business owners and employees. Justice, equity, and cooperation are prioritised at every stage of production and distribution. Women, young people, and other marginalised groups are recognised and respected. Decent jobs in low-impact fishing are secured and expanded, with new opportunities across the local seafood sector contributing to the maintenance, development, and resilience of coastal communities. Organisations, practices, techniques, and gear that maximise local employment within ecological limits are prioritised, while partnerships, networking, and cooperation are strengthened, fostering more cohesive and resilient regions.

In our vision, low-impact fishers are organised into democratic, dedicated structures and are empowered to act as agents of change and stewards of sustainable and equitable food systems. Creativity and networking foster the knowledge-sharing, collective understanding, and mentorship essential for building a better future, leading to innovation and social entrepreneurship. Fishers and other workers in the seafood economy can complement their incomes and diversify their activities, supported by formal and informal training throughout their careers.

Safety, decent working conditions, and social protections are enhanced. Additionally, by fishing less intensively, fishers enjoy improved health and better work-life balance. Their experience and expertise are valued in fisheries management through the co-development of solutions aimed at finding the right balance between human activities and marine ecosystem health.

## 3.4. Culture: From consumerism to care

The prevailing culture or worldview of today's fisheries system is rooted in consumerism and the pursuit of infinite economic growth. Little or no consideration is given to ecological limits, social equity, or the wellbeing of future generations. The production and consumption of fish have long been promoted as inherently positive, often without questioning the impacts on fishers' working conditions and livelihoods, the resilience of fishing communities, the health of marine ecosystems, or the welfare of marine animals as sentient beings. At the same time, the question of how to support the real dietary needs and health of Europeans in a more responsible way has been largely overlooked.

Moving towards a more sustainable future, we envision a system grounded in a culture of respect and care for the ocean and its life. A worldview that recognises humans as part of nature, dependent upon it not just for economic gain, but for shared survival and wellbeing. Low-impact fishing activities are guided by principles of respect and restraint, avoiding unnecessary suffering to marine animals and ensuring that no life taken is wasted. Such a system aligns with the model proposed in Kate Raworth's Doughnut Economics,27 which calls for meeting human needs within planetary boundaries.

This culture strives for a decent quality of life for all, from fishers to consumers, guaranteeing the right to safe, nutritious food and food sovereignty based on real dietary needs and aspirations of the population, without compromising other territories or future generations. It prioritises cooperation, equity and solidarity, where resources are managed collectively and shared fairly.

## 3.5. Governance: From command and control to power sharing

Despite some elements of co-decision and regionalisation within the Common Fisheries Policy (CFP), EU fisheries governance remains largely top-down, centralised, and opaque. Processes are driven by national governments and EU institutions, and heavily influenced by established lobbying groups. Fishers, coastal communities, and civil society are denied any meaningful participation, with fishers' knowledge and experience being undervalued and overlooked in decision-making. The distribution of fishing opportunities lacks transparency and tends to favour those who historically fished the most and caused the greatest harm, while privatisation of quotas in many countries contributes to concentration and speculation. In addition, the restrictive system of Producer Organisations (POs) often excludes new and small-scale fishers, hindering innovation.

Co-management, defined as 'a partnership arrangement between government and the local community of resource users, [...] NGOs and research institutions, and other resource stakeholders, to share the responsibility and authority for management of a resource or an area',[28,29] has an especially relevant role to play in addressing today's fisheries challenges and enabling fisheries, especially small-scale, to survive and thrive.

We envision a system of inclusive, participatory governance that promotes co-responsibility among all local stakeholders through decentralised, community-driven, bottom-up, ecosystem-based, and adaptive management. All types of fishers are fairly represented, alongside scientists, public authorities, environmental organisations, youth groups, and representatives of coastal communities. Together, they manage fisheries as part of the blue commons, sustaining resources and the economy without compromising future generations. Transparent decision-making draws on both scientific knowledge and the experiential and ecological knowledge of fishers and other stakeholders.

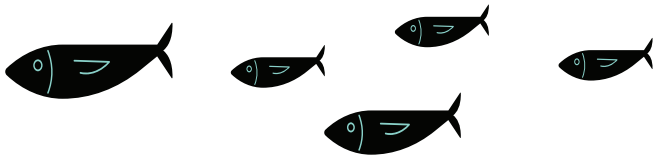
Fishing opportunities are allocated transparently and objectively, based on clear socio-economic and environmental criteria. POs and lobby groups operate with full transparency and accountability, and new dedicated small-scale fisheries POs are established.

Transparency and accountability are ensured throughout the entire value chain through robust traceability and fully documented fisheries. Community Supported Schemes and a Participatory Guarantee System (PGS), which is a locally focused, trust-based quality assurance model pioneered by IFOAM Organics International,[30] are widely adopted. These mechanisms not only enhance accountability, they also communicate the added value and story behind each catch, strengthening trust and engagement with consumers. Within the PGS framework, communities actively participate in monitoring and evaluating fisheries activities, sharing knowledge and issuing collective recommendations to continuously improve practices.

## 3.6. Summary: From industrial fishing to pesco-ecology

The following table summarises the main elements in the transition from industrial fishing to pesco-ecology:

| | Industrial fisheries model | Pesco-ecology model |
|---|---|---|
| **Purpose** | Creation and concentration of wealth and power, high-volume production for mass consumption, maximisation of profits. | Wellbeing of people (including economic, social and nutritional wellbeing) and nature, fair fisheries and healthy ecosystems, vibrant fishing communities, decent livelihoods. |
| **Natural resource extraction** | Industrial extraction of marine life, maximum yield. | Regeneration through ecosystem-based, low-impact and non-intensive fishing. |
| **Labour** | Exploitation, corporate, individualistic and competitive approach, exclusion of women. | Cooperation, human rights-based approach, justice and equity. Dignified, resilient work and generational renewal. Diversification of income sources. |
| **Culture** | Infinite growth, consumerism, externalisation of social and environmental costs. | Respect, care and appreciation of all life, traditions and local knowledge. |
| **Governance** | Top-down and non-transparent.<br>Privileges industrial fishing, concentration and speculation. | Transparent, inclusive, power sharing, co-responsibility.<br>Decentralised, community-based, bottom-up, ecosystem-based, and adaptive management. |

©Dimitrisvetsikas1969

# 4. Pathways for a just transition

Shifting from destructive fisheries practices towards a sustainable, economically viable, and socially inclusive pesco-ecology requires more than just a shared vision – it demands deliberate, coordinated action to not only restore ecosystems and fish populations, but also reshape food systems to prioritise the use of fishery resources for direct local human consumption.

Such a shift is only possible through a just transition – one that emphasises quality over quantity, values sustainable livelihoods and employment, and ensures that the benefits of fishery activities are shared within local communities.

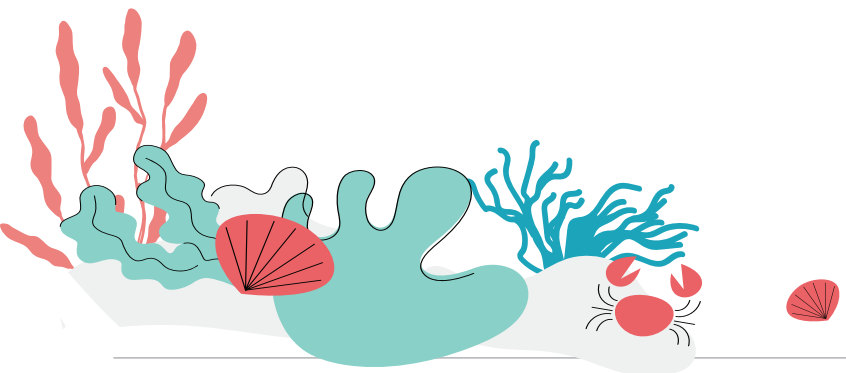
First coined by trade unions in the United States of America in the 1980s, just transition has since increasingly gained recognition as a way to ensure transitions are inclusive and fair. The International Labour Organization (ILO) defines just transition as follows:

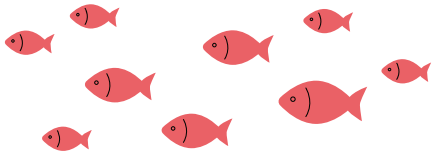
**"Greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind".**

This transition should be organised in a way that fairly distributes both the costs and benefits of the ecological shift, without assigning blame for current or future challenges to the transition itself. It is essential to recognise the transition as a necessary response to pressing environmental and societal needs, not the primary cause of broader economic or social difficulties.

While this ecological and social transition is a vital public objective, it will inevitably bring short- and medium-term disruptions, including investment burdens, market uncertainties, and changes to existing business models. To ensure fairness and maximise the chances of acceptance and long-term success of the transition, targeted support is needed for those most affected. At the same time, opportunities should be actively created for those who stand to benefit. The pace of change must also be realistic, allowing time for adaptation.

This transition will not be simple or straightforward. For the fishing sector, it demands a fundamental change in how, where, when and by whom fishing is carried out, and in how access to fishing is governed. At its core, this means adopting a low-impact approach: using the right gear, in the right place, at the right time, and at the right intensity. This shift is likely to meet resistance, especially by those who benefit most from the status quo. Nevertheless, with climate change and biodiversity loss advancing twice as fast at sea as on land,[31] and with coastal communities and fishers' livelihoods under severe pressure, urgent action is needed.





To translate our vision into reality, the transition should be implemented through **concrete and actionable roadmaps**. These transition roadmaps should provide a detailed framework that outlines, among others, the following key dimensions:

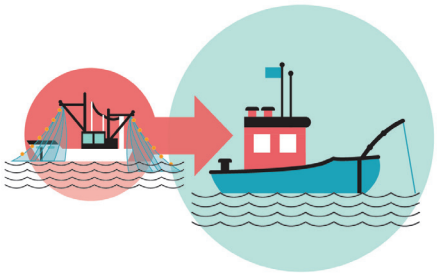
- **Specific area of test**: Choosing a clearly defined geographic or thematic area allows innovative approaches to be trialled and evaluated in a controlled setting before successful solutions are scaled more broadly.
- **Scope of action**: Given the wide variation across the fisheries sectors, both regionally and nationally, strategies to make the transition effective and fair need to be defined at an appropriate level (i.e. European, national, regional, local, etc.).
- **Decision-making processes**: Institutional structures and mechanisms are needed to support inclusive governance and the co-creation of co-management schemes, ensuring that all relevant stakeholders are actively involved in shaping and guiding the transition through co-construction, co-decision, and co-implementation arrangements.
- **Financial support**: Dedicated funding instruments and financial mechanisms must be available and allocated in a transparent way to enable the practical implementation of transition activities. This is essential not only for the transition's effectiveness, but also to ensure fairness and long-term viability.
- **Time schedule**: A structured timeline covering a 10-year period needs to be established, including specific objectives, deliverables, and measurable milestones to track progress and guide adjustments as required.

Such roadmaps will serve as strategic tools to translate vision into action, fostering coordinated, sustainable, and measurable progress over the long term.

These roadmaps should incorporate the following processes.

*© Association Ligneur de la Pointe Bretagne*

## 4.1. Initiate the transition towards low impact fisheries



To restore the physical integrity of ocean habitats and the abundance of marine biodiversity, fishing practices that have the most destructive impact on fish populations, sensitive species, or biodiversity and habitats must be phased out within a clear timeframe. To halt the destruction of the seabed, protect the rich diversity of marine life, and drastically reduce $CO_2$ emissions while enhancing carbon sequestration, **a comprehensive reorganisation plan for European fisheries must be implemented**. Central to this effort is **defining clear thresholds for maximum acceptable impact**. These thresholds should guide the development of future fishing gears and technology to prevent future and cumulative impacts to marine ecosystems.

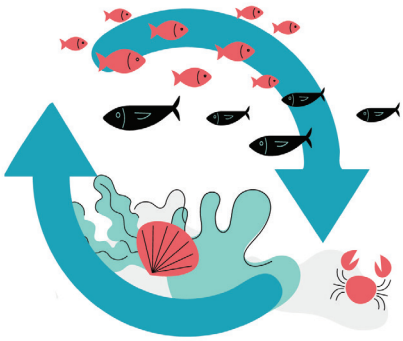
A key element of this reorganisation should be the **phasing out of catch history as the basis for allocating fishing opportunities**. This should be replaced by a fairer and more sustainable system that applies social, economic, and environmental criteria to reward good practices, protect and create space for small-scale, low-impact fishing activities, and support generational renewal. A critical first step is the immediate implementation of a **ring-fenced quota for low-impact fishers**, which can be progressively expanded. In the longer term, all fisheries must become low-impact and prioritise local value chains, supplying fish for direct human consumption via the shortest possible route to end consumers.[32]

Support and access to fishing opportunities should be prioritised for operations where the vessel owner actively works on board and where the catch is landed fresh in the vessel's home port. This approach strengthens local economies, ensures greater accountability at sea, and contributes to more transparent and community-rooted fisheries.

Coastal waters contain fragile ecosystems and habitats that play a vital role in carbon storage, as well as serving as spawning grounds, nurseries, and feeding areas for juveniles of many commercially exploited species. Preserving the physical and biological integrity of these areas is fundamental to maintaining a healthy ocean and productive fisheries, and crucial for restoring depleted fish populations, marine food webs and degraded habitats. To offset the impact of the planned expansion of large-scale blue economy activities and to protect the most productive and biologically rich coastal waters, **privileged access within the 12 nautical mile zone should be granted to small-scale, low-impact fishers and conservation projects**, helping to prevent destructive practices while preserving critical habitats for marine biodiversity, fish reproduction, and the long-term sustainability of fisheries.

The space allocated to small-scale and low-impact fishing activities should be governed by **local co-management systems**, founded on the principles of co-design, co-construction and co-decision making, with the experiential knowledge of fishers being valued alongside scientific knowledge to advise on conservation and management.

## 4.2. Restore fish populations and marine ecosystems



Compared to other parts of the world, the EU's use of maximum sustainable yield (MSY) falls short and fails to ensure healthy fish populations. This is partly due to the absence of an ecosystems and multispecies approach, and to setting the biological reference points for fish population health too low. **Scientific advice for fishing limits must account for the multispecies nature of fisheries, predator-prey relationships, and population age structures.** This is especially important considering the increasing impacts of the climate crisis on fish populations.

**Fishery science must be used to reduce pressures on marine ecosystems**, support their regeneration, and maintain balance within the food web, rather than to extract the maximum biomass possible. This calls for a science-policy relationship grounded in sound scientific principles, with advice prioritising reproductive health, stock growth, and a diversified age structure to ensure sufficient biomass for species to fulfil their roles within marine ecosystems and the wider food web.

The EU should **revise how Total Allowable Catches (TACs) and quotas are calculated**, using biological reference points in a precautionary, ecosystems and multispecies approach, and should treat fishing mortality at MSY (Fmsy) as an absolute limit that must never be exceeded. **For lower-trophic fish populations, i.e. prey species, catch limits should be no more than 50% of Fmsy** to maintain adequate energy transfers throughout the ecosystem, improve stock resilience, ensure prey availability higher up the food chain, and reduce the risk of stock collapse and fishery closure.

A **long-term management strategy** should be developed, **adopting well-defined ecosystem-based approaches**, following the examples of Canada, the USA, and Australia, while integrating seasonal, geographic, and biological variations and dynamics. Local, experiential knowledge from fishing communities must be incorporated, guided by the principle of using the **right gear, in the right place, at the right time, and at the right intensity**.

Current ways of measuring the fishing effort and fishing capacity of large-scale, medium-scale and small-scale fisheries – often quantified in 'fishing days', without accounting for catch efficiency or technological creep – are also outmoded, ineffective, inequitable and give a misleading picture of the impact and benefits of fishing. **Fishing effort monitoring and management should be aligned with the objectives of ecosystem preservation and restoring fish populations**. New methods should measure parameters such as the number of hauls per trip, area of seabed trawled, soak time, number of hooks, and metres of nets deployed, with a differentiated approach for each fleet segment.

**Co-management plans, tailored to local circumstances, should be developed together with fishers**, who can help define the appropriate parameters to monitor. To support the move towards low-impact fisheries, these plans must **significantly increase minimum landing sizes and mesh sizes to protect juveniles effectively, and introduce annual closures** to respect biological periods and ensure good product quality. For species not subject to TACs and quotas, fishers must respect catch limits per boat and define a number of weekly trips, depending on the species, fishing grounds, state of resources, and market conditions. Such measures would help rebuild fish populations while preserving genetic biodiversity within those populations.

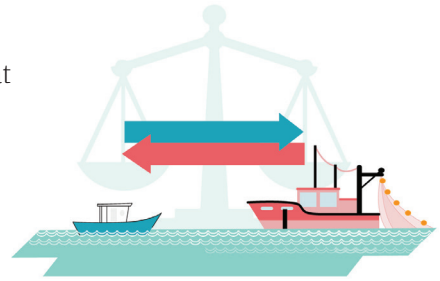
The growing use of **Fish Aggregating Devices (FADs) in industrial-scale tuna fisheries must be phased out**. Unlike devices used in small-scale traditional fisheries, FADs greatly increase catch rate by facilitating the capture of juvenile and non-target species, which contributes significantly to overfishing. They also increase bycatch, disrupt natural fish behaviour and migration patterns, and, when left adrift, become marine litter that damages habitats, contributes to plastic and other pollution, and poses risks to marine biodiversity. Eliminating FADs is vital to promoting more selective, sustainable fishing practices and protecting the health of marine ecosystems.

Finally, coherence and precaution are needed when addressing fisheries and other marine policies, like marine spatial planning. Policies should work together in a coherent, action-oriented way to address existential threats and restore the productivity of our oceans, marine ecosystems, critical habitats and fish populations. Urgent

action is particularly needed to **stop pollution from land and to restore and extend coastal wetlands**, which are important sinks for nutrient run-off from land to sea.

## 4.3. Take a differentiated approach to protect small-scale, low-impact fisheries

Low-impact and local fisheries must be defended as strategically important socio-economic sectors. They provide livelihoods, employment, and economic activity in areas with few alternatives, while contributing to the social fabric, cultural heritage, cultural identity, and bio-cultural diversity that underpin coastal communities.



Yet, current fisheries management regimes fail to differentiate between small-scale, medium-scale, and large-scale fishing activities. This creates an uneven playing field, discourages diversity, and reinforces inequity. A fairer system is needed – one that recognises the value of a diverse fleet and distinguishes between fishery activities that are small in scale and low in impact on the one hand, and on the other, those that are large in scale, high in volume and highly impactful.

**Small-scale fisheries** involve marine and inland fishing vessels of an overall length of less than 12 metres and not using towed gear as defined in point (1) of Article 2 of Council Regulation (EC) No 1967/2006, or fishers on foot, including shellfish gatherers. These activities are often environmentally sustainable and rooted in local economies and traditions.

**Medium-scale fisheries** (vessels between 12 and 25 metres) harvest resources on the continental shelf beyond the 12-mile zone, which may be inaccessible to small-scale fishers. They contribute to the coastal economy by supplying the market with relatively high-volume catches and reducing reliance on imports. However, this segment often uses higher-impact gear, especially bottom trawls, pelagic trawls, ring seiners, shellfish dredges and demersal seines ('flyshooters'), which can damage marine ecosystems.

**Large-scale fishing vessels** (longer than 25 metres) include a wide range of vessel types, such as longliners, drift/gill netters, trawlers, purse seiners, 'super-seiners' and 'super-trawlers'. Super-seiners and super-trawlers include vessels over 80 metres in length equipped with highly efficient technology for finding, catching, handling and processing the catch aboard.

At the heart of this approach should be the **protection and support of small-scale, low-impact fisheries**. These are central to the blue economy, and their right of access must be fully recognised. They should also be protected from being displaced by competing, incompatible uses of marine space through an **inclusive Maritime Spatial Planning (MSP) process in which small-scale, local, and low-impact fishers are empowered to participate effectively**.

**Medium scale fisheries should be supported in transitioning towards less damaging fishing methods**.

**Large scale fishing vessels should be reduced in number and excluded from operating within 12 nautical miles and in low-depth marine areas**. Their activities should be confined to waters inaccessible to other fleets. **They must prioritise catches for direct human consumption, employ selective gear that minimises marine food web damage, and adhere to internationally agreed labour standards**, which must be strictly respected and monitored.[c]

c In line with ILO Convention C180 - Seafarers' Hours of Work and the Manning of Ships Convention.

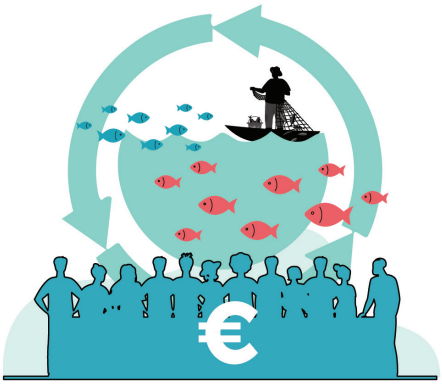
## 4.4. Guarantee fair representation and shared decision-making for all fishers

Large fishing companies and their professional associations of vessel owners have gained disproportionate influence over public decision-making and political representation within the sector. Their ability to hire professional lobbyists and control national and regional bodies, such as Producer Organisations (POs), allows them to dominate discussions and shape decision-making processes to their advantage. In contrast, small-scale fisheries often lack the financial or organisational capacity to make their voices heard, resulting in limited representation and difficulties in having their interests properly considered.

Given the socio-economic significance of their sector, **small-scale, low-impact fishers should be supported to establish fair and effective representation** within European and national bodies, including POs, which serve as the primary interlocutors for the fisheries sector with Member States and European institutions. To facilitate this, the EU and Member States should **remove the administrative and financial barriers involved in setting up new small-scale fisheries POs**, and allocate dedicated support within operational plans to support the creation and capacity-building of these organisations.

Furthermore, **establishing a dedicated small-scale fisheries Advisory Council** would provide small-scale fishers with a platform to collaboratively address shared challenges, develop common positions, and amplify their collective voice. Mechanisms should also be put in place to ensure **meaningful representation of small-scale fishers and other interest groups within existing Advisory Councils**, putting an end to the current bias that guarantees a comfortable majority for the large-scale fishing lobby. This would allow the perspectives and recommendations of the small-scale fisheries sector and other interest groups to be effectively channelled into the European Commission's policies and decision-making processes.

## 4.5. Use public money for the public good



Industrial fishing fleets, particularly those engaging in destructive bottom and pelagic trawling, the most damaging and potentially destructive gears, are heavily reliant on subsidies that fuel overcapacity and overfishing. Instead, **subsidies should serve as instruments for a just transition towards low-impact fisheries**.

The European Commission must initiate a **revision of State aid rules for the fisheries and aquaculture sectors to eliminate all environmentally harmful subsidies**. Vessels using high-impact, environmentally destructive fishing gears should only receive subsidies if they commit to transitioning to low-impact methods. Such a revision would support a shift to a model that respects both climate and biodiversity, while phasing out fossil fuel subsidies.

Public expenditure should prioritise transforming the fishing industry to deliver better ecological and social outcomes, as well as promoting low-carbon methods that minimise harm to marine habitats and ocean biodiversity. Furthermore, public funding must serve the public interest by supporting collective projects that benefit communities. Dedicated provisions should be made for cooperation, social dialogue, and co-management schemes. Each Member State's Operational Programme should allocate a portion of its budget to **supporting generational renewal of small-scale fisheries and facilitating the transition to low-impact practices**.

Support must also extend to include collective projects such as **building infrastructure for decarbonisation and generational renewal**, and **providing small-scale fishers with training** in fisheries management, fish handling, communication and marketing, small business management, digital transformation, decarbonisation, diversification, and other critical areas. To strengthen small-scale, low-impact fishers' role in food supply and sustainable livelihoods, **direct support is needed to establish small-scale fisheries POs** aimed at securing access to fishing opportunities and marketing channels.

European Maritime, Fisheries and Aquaculture Fund (EMFAF) grants should be made more accessible to small-scale fisheries through **simplified procedures and regional support structures established to enable small-scale fisheries associations to obtain and manage these subsidies effectively**.

## 4.6. Establish co-management in Marine Protected Areas and inclusive Maritime Spatial Planning

In Europe, intensive fishing using destructive methods takes place in 86% of areas designated as 'protected'.[33] Meeting the internationally-agreed target of protecting 30% of European waters – with one-third under 'strict protection' – by 2030 will allow for ecosystem restoration and more abundant fish populations, which in turn will contribute to more stable and more valuable catches.[34,35]


However, there is a danger that setting quantitative targets alone for establishing Marine Protected Areas (MPAs) will not lead to real protection. To be effective, these targets must be supported by **co-management approaches that involve stakeholders in the development and implementation of MPAs**. This enables a bottom-up process that builds co-responsibility, secures the buy-in of the fishing sector, and ensures more adaptive and efficient management. As a prerequisite, **a legal framework enabling co-management should be established, along with support instruments and adequate funding for social dialogue**.

To properly integrate the ecosystem approach into sustainable fisheries management, this needs to be done at regional level, with the meaningful participation of all stakeholders. This requires the **development of long-term integrated management plans** – at the fishery, species, or fishing ground level, depending on the particularities of each region – with concrete objectives and measures for the management of all fisheries, including **monitoring plans to evaluate and adapt the measures**. Such plans should contribute to ecosystem resilience and sustainability, recognise the physical, biological, economic and social interactions between fisheries-related stakeholders and ecosystem components, including humans, and seek to optimise benefits across a diverse set of societal objectives.

To achieve this, the EU and Member States must **establish a clear framework for inclusive MSP**, ensuring that small-scale, low-impact fishers are meaningfully supported and empowered to participate in decision-making processes. Within these processes, the small-scale fisheries sector should be granted a dedicated and influential voice, with fair decision-making power, acknowledging their vital role in the coastal blue economy. Their local knowledge, socio-economic contributions, and specific needs must be genuinely integrated into the planning and governance of marine spaces.

## 4.7. Develop a 'women in fisheries' action plan

A **comprehensive, collaborative and sector-wide Action Plan is urgently needed to promote the inclusion and visibility of women in fisheries**. This plan must go beyond mere representation to challenge traditional masculinities, power dynamics, and decision-making cultures. Co-management frameworks that disrupt entrenched norms are essential, as are **gender quotas, grievance systems, and channels for women's voices in governance forums**.

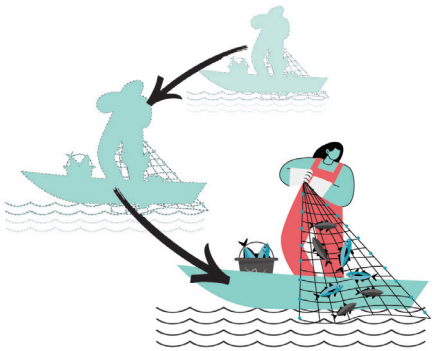
The Action Plan should also mandate decent work standards tailored to women's realities, including **access to social security, health protection (with recognition of work-related illnesses), and social benefits such as maternity and paternity leave, as well as gender-responsive design of equipment, vessels and infrastructure (e.g. adequate facilities). Existing and emerging women's organisations should be supported and strengthened** to enhance their visibility, nurture future generations of leaders, and foster collective action. Providing resources, training, and leadership pathways will enable mentorship and youth engagement.

Comprehensive research is needed to reveal the often-overlooked role of women in European fisheries. **Collecting and analysing gender-disaggregated data** on labour statistics, safety incidents, leadership representation, and income disparities is essential to develop targeted policies that support female fishers and fish workers and monitor progress.

**Capacity-building programmes should also be tailored specifically to women's needs**, promoting their participation in leadership roles and supporting vocational skill development. This includes unconscious bias training across fisheries institutions and collaboration with gender experts to co-create leadership development initiatives and mentorship programmes alongside the development of gender-sensitive technologies and inclusive business models that enable women to participate in – and derive value from – each stage of the value chain.

Finally, embedding gender equality through educational programmes, youth engagement schemes, and community outreach is part of a cultural shift needed to achieve true inclusivity.

## 4.8. Facilitate generational renewal and diversification of activities



Generational renewal is a significant challenge in today's fisheries, characterised by an ageing workforce, a shortage of skilled labour, and an outdated vessel fleet. This presents both a threat and an opportunity. A new generation of well-trained and qualified fishers could become catalysts for change. Realising this potential will require investment in robust energy-efficient vessels, gear and infrastructure to meet decarbonisation goals and adapt to the multiple and wide-ranging impacts of climate change.

**Establishing a network of 'low-impact fishers of the future' demands a rethinking of fisheries education and support systems.** Training should go beyond traditional skills such as navigation and seamanship to encompass mentoring, leadership and communication skills, knowledge of oceanography and fisheries biology, business administration and management, as well as fisheries management and co-management.

To thrive in a sustainable fisheries sector, **future fishers will need both financial and non-financial support**. This includes funding via a just transition mechanism, as well as improved quota and market access, for example, under Article 17 of the Common Fisheries Policy (CFP). **Low-impact fishers should be supported in diversifying their income sources to enhance their resilience and maintain viability.** Rethinking the profession to make it more attractive and resilient will demand investment in training and innovation in areas such as conservation and monitoring, ecotourism, local value chains (including processing), regenerative ocean farming, and integrated low-trophic aquaculture.

## 4.9. Enhance transparency and monitoring

The globalised nature of seafood value chains makes transparency, traceability, and accountability difficult to enforce. This lack of oversight weakens fisheries management, hinders the fight against Illegal, Unreported, and Unregulated (IUU) fishing, and undermines efforts to transition toward sustainable fisheries. To ensure effective governance and long-term sustainability, **all catches must be fully documented, and all fisheries, regardless of scale or location, must be brought under robust management frameworks.**

**Improved transparency is required, starting with the allocation of fishing opportunities and disclosure of the beneficial owners of vessels** using third-country flags to hide their identity or to access fishing rights. **Full implementation of the EU fisheries control system**, including digital traceability of all seafood products, engine power monitoring, and Remote Electronic Monitoring (REM), could contribute to a fairer and more transparent system.

To support small-scale fisheries in this transition, the **co-development of inclusive technologies and equitable digital tools**, tailored to the realities of these fisheries, should be prioritised as a means to strengthen digital literacy, improve safety at sea, empower communities, and enhance their livelihoods and resilience. These innovations must be developed collaboratively with fishers, ensuring they are accessible, affordable, and context-appropriate, rather than imposed in a top-down manner.

While emerging technologies such as satellite-based monitoring, mobile applications, digital catch reporting, artificial intelligence-based tools and e-commerce platforms offer new opportunities, they should be **complemented by low-tech and ecological knowledge-based solutions**. A balanced approach is essential to avoid deepening existing inequalities and to ensure that no community is left behind in the digital transition.

Achieving this requires dedicated capacity-building efforts, local infrastructure support, and policy frameworks that give fishing communities control over both the technologies they use and the data they generate. When well integrated, both high-tech and low-tech approaches can reinforce one another, contributing to sustainable fisheries governance, fairer market access, and stronger community cohesion.

## 4.10. Promote low-trophic level and multi-trophic regenerative aquaculture

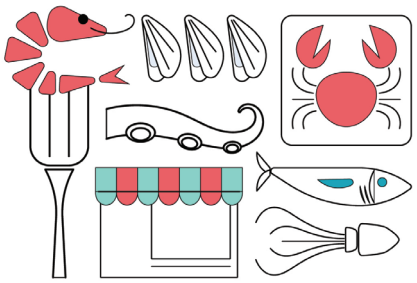
The Western aquaculture model – based on intensive, industrial, feedlot-fattening monoculture – is not sustainable and threatens food security in the medium- to long-term. In Europe, where it dominates, this model has stagnated, leaving a heavy environmental footprint due to disease (exacerbated by overcrowding), mass escapes of fish, widespread and often unregulated use of antibiotics, pesticides and chemical treatments, lack of waste treatment, and poorly controlled discharges. It also relies heavily on industrial production of soybean and industrial reduction fisheries to produce feed for farmed fish, further straining terrestrial and marine ecosystems.[36,37]

**Reduction fisheries have major ecosystem impacts**[d],[38] and in some areas compete directly with small-scale fisheries for both space and aquatic resources, undermining food sovereignty. **Along with industrial feedlot aquaculture, such fisheries should be phased out** in favour of more sustainable, equitable, and ecologically sound alternatives.

A shift is needed towards a completely different use of the marine, coastal and inland space that sustains the marine environment, provides decent livelihoods and fairly distributed socio-economic benefits in coastal communities, and produces quality seafood. Public authorities must support the **development of regenerative, multi-trophic aquaculture based on perma-culture principles**,[39] which harnesses the potential of the entire water column by cultivating species across all trophic levels. For example, seaweed and algae farming can capture excess nutrients and minerals from the water while providing nutritious food for humans, filter-feeding shellfish help purify the water column and offer a sustainable source of protein, and finfish and crustaceans attracted to these areas could be harvested as higher-value products.

## 4.11. Foster a new culture of seafood

Across the EU, seafood consumption continues to exceed what our oceans can sustainably provide. This high demand for aquatic foods drives over-exploitation in EU waters and shifts environmental and social pressures to other parts of the world, particularly regions where local communities depend on marine resources for their food and livelihoods. The EU's reliance on imported seafood externalises the damage caused by overfishing, pollution, habitat destruction, and IUU fishing. It also contributes to global inequities by limiting access to seafood for populations in the Global South.



To protect marine biodiversity, restore depleted fish populations, and ensure fairer food systems, a fundamental shift in consumption habits is needed. **Overall seafood consumption must be reduced**, especially of high-impact products like farmed salmon and shrimp, which are associated with serious environmental concerns such as pollution, antibiotic use, and dependence on wild fish feed. Similarly, frequently consumed species like tuna and cod, as well as highly processed products like surimi, place immense pressure on wild populations and often come with opaque supply chains.

d Between 1950 and 2010, 27% of the world's fish catches were reduced to fishmeal and oil.

Instead of defaulting to these conventional options, consumers should be encouraged to **adopt more conscious and diversified diets focused on local, seasonal, and low-impact seafood alternatives**, including underutilised or invasive species and marine plants. This means **moving away from a quantity-driven model towards one that values quality, sustainability, fairness and local identity**. Awareness-raising campaigns and educational tools, such as recipes and preparation tips, can help consumers expand their seafood choices, while promoting the full use of fish to reduce waste, and encouraging more direct relationships between fishers and consumers are also key steps towards a more sustainable food culture. Public authorities must also provide clear incentives to producers and retailers who follow best practices, ensuring sustainability is rewarded across the entire seafood value chain.

Quality and geographical labels should be developed to help consumers identify seafood that is caught in the right season, sourced locally, and purchased directly from low-impact fishers. A key tool to support this shift is the **introduction of a Participatory Guarantee System** (PGS). A PGS for low-impact fisheries would recognise and reward fishers and market actors working toward fair and sustainable practices. Beyond certification, it could unite local initiatives in a 'community of practice' rooted in transparency, learning, and community-based accountability, bringing together producers and consumers to co-create a fairer, more sustainable seafood system.

European consumers have the power to drive meaningful change. By reducing their seafood consumption, particularly of high-impact and processed products, and choosing a more diverse and regionally sourced mix of seafood and plant-based options, they can help preserve marine ecosystems, support responsible fisheries, and build more resilient coastal communities.

This new seafood culture also needs to consider **marine animal welfare**. Fish, cephalopods and crustaceans are sentient beings, experiencing stress and pain. Dedicated training for fishers should be developed and implemented, covering principles of good handling, care, and the management of stress and pain to safeguard marine animal welfare. Commonly used practices such as asphyxiation, which cause severe suffering, should no longer be used, while live transport, which causes stress and pain, should be reduced to a minimum by prioritising short and local supply chains.

## 4.12. End the over-exploitation of third-country and international waters

Of the total EU fish catch, around 20% comes from waters outside its Exclusive Economic Zone (EEZ), which extends 200 nautical miles from Member State coasts – 10% from third-country waters, and 10% from international waters. Access to these waters is secured through international and bilateral agreements,[e] or via private joint venture and other arrangements under the flag of a third country.

Each year, the EU pays around €160 million to third countries for fishing agreements that allow the EU fleet to access their 200-mile EEZs. Together with 'distant water fishing' by other major nations such as China, Taiwan, and South Korea, these activities potentially undermine economic opportunities and food sovereignty of indigenous people and local communities, whilst contributing to overfishing, sometimes using destructive fishing techniques. Under private joint venture arrangements, value chains and agreements between nations and foreign vessel owners are highly opaque, sometimes allowing for illegally caught products to enter the market and contributing to the use of forced labour and human trafficking in fisheries.

e Bilateral fishing agreements include 'Northern Agreements' with the UK, Norway, Iceland, Faroe Islands and Iceland, and 'Sustainable Fisheries Partnership agreements' (SFPAs). SFPAs are negotiated and concluded by the European Commission on behalf of the EU.

**Transparency in international fisheries relations must be significantly strengthened.** All public and private fishing agreements should be made publicly accessible, including their financial terms, conditions, and implementation reports. The EU should establish a comprehensive **public register of all fishing vessels and seafood processing companies** registered or operating abroad where European citizens are the beneficial owners. This would help prevent the misuse of reflagging and shell companies and ensure accountability in the use of public resources.

## 4.13. Ensure seafood imports comply with EU standards

As one of the world's top three seafood markets (along with the USA and China), the EU plays a crucial role in global aquatic food dynamics – demand for seafood is high, with annual per capita consumption of around 24 kg, of which as much as 70% is covered by imports.[4] This high reliance on imported aquatic products contributes to pressures on marine ecosystems, IUU fishing, and the unequal distribution of aquatic resources, particularly affecting coastal communities in the Global South.

To address these problems, the EU has introduced several mechanisms to ensure imported seafood complies with the same environmental, social, and traceability standards as seafood caught or produced within the EU. The IUU Regulation requires imported fish to be accompanied by catch certificates and allows the EU to take action against countries failing to combat IUU fishing. The Control Regulation ensures seafood can be traced through the supply chain and is being updated to improve enforcement. EU trade agreements also include growing commitments on workers' rights and environmental protection in the seafood sector. The Market Access Regulation ensures imported seafood meets EU standards for food safety, hygiene, and animal health. Finally, new due diligence rules, such as the proposed Corporate Sustainability Due Diligence Directive, aim to make companies responsible for human rights and environmental impacts in their supply chains.

Despite the existence of these frameworks, significant implementation gaps and limited enforcement capacity, particularly in third countries, continue to undermine progress. It is therefore essential for the EU to **strengthen cooperation with exporting countries, offer technical support and capacity building, and enhance transparency and accountability across global seafood value chains.**

Ultimately, a fair and sustainable EU seafood market relies not only on the existence of rigorous standards but also on their consistent application. This is vital to prevent unfair competition, protect marine ecosystems, and support the livelihoods of responsible fishers around the world.

©Dimitrisvetsikas1969

# Conclusion: Building alternatives from the bottom up

Social transformation, whether in urban centres or rural communities, requires a balanced mix of both top-down and bottom-up approaches. While policy development at governmental level is essential, it is crucial to empower local communities through bottom-up initiatives that foster understanding of the need for transition and encourage proactive action. Successful transformation requires adequate financing, the removal of administrative barriers, capacity building, and solutions to overcome scalability challenges.

A diverse range of local solutions will be necessary, including technical innovations, new fishing gear and prototypes, novel organisational structures, innovative business models,[40] energy transition strategies, collective approaches, diversification of fisheries activities, and new management frameworks. These represent seeds of innovation with the potential to be replicated and scaled up, eventually evolving into more mainstream economic models.

A key priority should be supporting and connecting these local fishers and change agents, who might otherwise remain isolated within their communities and organisations. Additionally, recognising and rewarding social enterprises and initiatives that exemplify best practice would serve as valuable incentives and encourage wider buy-in.

The profound transformation of fisheries in Europe towards fair and low-impact practices will not happen overnight. Yet, it is an economic necessity, an ecological duty and a moral imperative if we are to safeguard our marine resources, revitalise our coastal communities and protect decent and dignified livelihoods. This vision provides not only the destination but also the pathways to get there. What is needed now is the political will, public investment, and collective courage to set this transition in motion.

# References


1. Kuepper B. ***Power Structures Shaping EU Fisheries - How the Political Economy Favours Industrial over Small Scale, Low Impact Fishing***. Profundo; 2025. https://seas-at-risk.org/publications/study-power-structures-shaping-eu-fisheries-how-the-political-economy-favours-industrial-over-small-scale-low-impact-fishing/

2. IPBES. ***Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services***. IPBES secretariat; 2019:1148. https://www.ipbes.net/global-assessment

3. European Environment Agency. Seas and coasts. January 10, 2025. Accessed July 15, 2025. https://www.eea.europa.eu/en/topics/in-depth/seas-and-coasts

4. EUMOFA (European Market Observatory for Fisheries and Aquaculture products). ***The EU Fish Market - 2024 Edition***. Publications Office of the European Union; 2024. https://eumofa.eu/the-eu-fish-market-2024-edition-is-online

5. FAO. FAO Report: Global fisheries and aquaculture production reaches a new record high. July 6, 2024. Accessed July 15, 2025. https://www.fao.org/newsroom/detail/fao-report-global-fisheries-and-aquaculture-production-reaches-a-new-record-high

6. US Department of Agriculture, US Department of Health and Human Services. ***Dietary Guidelines for Americans, 2010***. 7th edition. U.S. Government Printing Office; 2010. https://www.dietaryguidelines.gov/about-dietary-guidelines/previous-editions/2010-dietary-guidelines

7. Turenhout MNJ, Melgaard Jensen P, Keller M, et al. ***Finfish Study 2023***. AIPCE - CEP; 2023. https://www.aipce-cep.org/wp-content/uploads/2023/10/Final-draft-Finfish-Study-2023.pdf

8. Baltic Waters. Baltic Sea Brief 58: Let the Baltic Sea fish recover – and the fish caught become food for humans. Baltic Waters. June 27, 2023. Accessed July 15, 2025. https://balticwaters.org/en/baltic-sea-brief-58-let-the-baltic-sea-fish-recover-and-the-fish-caught-become-food-for-humans/

9. Smith P, Bustamante M, Ahammad H, et al. Agriculture, forestry and other land use (AFOLU). In: Edenhofer O, Pichs-Madruga R, Sokona Y, et al., eds. ***Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change***. Cambridge University Press; 2014:811-922. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter11.pdf

10. UNEP. ***Food Systems and Natural Resources***. United Nations Environmental Programme; 2016. https://wedocs.unep.org/20.500.11822/7592

11. European Environment Agency. Status of marine fish and shellfish stocks in European seas. December 18, 2024. Accessed July 15, 2025. https://www.eea.europa.eu/en/analysis/indicators/status-of-marine-fish-and

12. Froese R, Winker H, Coro G, et al. Status and rebuilding of European fisheries. ***Marine Policy***. 2018;93:159-170.

13. Palomares M, Froese R, Derrick B, et al. Fishery biomass trends of exploited fish populations in marine ecoregions, climatic zones and ocean basins. ***Estuarine, Coastal and Shelf Science***. 2020;243:106896.

14. Warmerdam W, Kuepper B, Walstra J, et al. ***Research for PECH Committee - Seafood Industry Integration in All EU Member States with a Coastline***. European Parliament, Policy Department for Structural and Cohesion Policies; 2018.

15. European Commission, Joint Research Centre. ***Scientific Technical and Economic Committee for Fisheries (STECF) – The 2024 Annual Economic Report on the EU Fishing Fleet (STECF-24-03 & STECF-24-07)***. Publications Office of the European Union; 2024.

16. Zanna L, Khatiwala S, Gregory JM, Ison J, Heimbach P. Global reconstruction of historical ocean heat storage and transport. ***Proceedings of the National Academy of Sciences***. 2019;116(4):1126-1131.

17. Pauly D, Froese R. MSY needs no epitaph—but it was abused. ***ICES Journal of Marine Science***. 2021;78(6):2204-2210.

18. Froese R, Winker H, Gascuel D, Sumaila UR, Pauly D. Minimizing the impact of fishing. ***Fish and fisheries***. 2016;17(3):785-802.

19. Edgar GJ, Bates AE, Krueck NC, Baker SC, Stuart-Smith RD, Brown CJ. Stock assessment models overstate sustainability of the world's fisheries. ***Science***. 2024;385(6711):860-865.

20. Earle M. Maximum sustainable yield in the EU's Common Fisheries Policy-a political history. ***ICES Journal of Marine Science***. 2021;78(6):2173-2181.

21. Holt SJ, Froese R. A comment by scientists, Dr Sidney J. Holt and Dr Rainer Froese on management of European fisheries for high sustainable yields, in particular in the Baltic Sea. Published online 2015. https://www.fishsec.org/2015/11/09/scientists-criticise-eu-for-setting-fishing-limits-above-fmsy/

22. European Commission. *Implementation of Regulation (EU) No 1379/2013 on the Common Organisation of the Markets in Fishery and Aquaculture Products*.; 2023. Accessed July 15, 2025. https://oceans-and-fisheries.ec.europa.eu/publications/implementation-regulation-eu-no-13792013-common-organisation-markets-fishery-and-aquaculture_en

23. ClientEarth. Tracing a line – do businesses know the real cost of seafood ? October 7, 2023. Accessed July 15, 2025. https://www.clientearth.org/latest/news/tracing-a-line-do-businesses-know-the-real-cost-of-seafood/

24. Gascuel D. *La Pêchécologie, Manifeste Pour Une Pêche Vraiment Durable*. QUAE édition; 2023.

25. Gascuel D. *Revolution in the Seas: Ending Overfishing and Building Pesco-Ecology, Sustainable Agro-Ecology of Fishing*. Elsevier; 2023.

26. Standing G. *The Blue Commons: Rescuing the Economy of the Sea*. Penguin UK; 2022.

27. Raworth K. A Doughnut for the Anthropocene: humanity's compass in the 21st century. *The Lancet Planetary Health*. 2017;1(2):e48-e49. doi:10.1016/S2542-5196(17)30028-1

28. Cavallé M, Said A, O'Riordan B. *Co-Management for Small-Scale Fisheries: Principles, Practices and Challenges*.; 2020.

29. Berkes F, Mahon R, McConney P, Pollnac R, Pomeroy R. *Managing Small-Scale Fisheries: Alternative Directions and Methods*. International Development Research Centre; 2001.

30. IFOAM - Organics International. Participatory Guarantee Systems (PGS). n.d. Accessed July 15, 2025. https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems

31. Pinsky ML, Eikeset AM, McCauley DJ, Payne JL, Sunday JM. Greater vulnerability to warming of marine versus terrestrial ectotherms. *Nature*. 2019;569(7754):108-111.

32. Le Bras Q, Gascuel D, Quemper F, Levrel H. *Transition et Adaptation, Analyse Des Modalités Du Changement de Pratiques Des Acteurs de La Pêche Professionnelle*. Institut Agro - Rennes Angers ; AgroParisTech; 2024:33 p. https://hal.science/hal-04416609

33. Perry AL, Blanco J, García S, Fournier N. Extensive use of habitat-damaging fishing gears inside habitat-protecting marine protected areas. *Frontiers in Marine Science*. 2022;9:811926.

34. Van Hoey G, Feary D, Brown E, et al. *Assessing Spillover from Marine Protected Areas to Adjacent Fisheries – Baltic and North Seas, Atlantic EU Western Waters and Outermost Regions – Final Report*. Publications Office of the European Union; 2024. doi:doi/10.2926/35237

35. Costello MJ. Evidence of economic benefits from marine protected areas. *Scientia Marina*. 2024;88:1.

36. Pahlow M, Van Oel P, Mekonnen M, Hoekstra A. Increasing pressure on freshwater resources due to terrestrial feed ingredients for aquaculture production. *Science of the Total Environment*. 2015;536:847-857.

37. Poelman M, Andrew J. Temple, van der Burg S, et al. *Study on State-of-the-Art Scientific Information on the Impacts of Aquaculture Activities in Europe – Final Report*. Publications Office of the European Union; 2022:114. doi:doi/10.2926/929238

38. Cashion T, Le Manach F, Zeller D, Pauly D. Most fish destined for fishmeal production are food-grade fish. *Fish and Fisheries*. 2017;18(5):837-844.

39. Spillias S, von Herzen B, Holmgren D. Marine permaculture: Design principles for productive seascapes. *One Earth*. 2024;7(3):431-443.

40. Seas At Risk, Low Impact Fishers of Europe, Ecologistas en Accíon, Sciaena, BUND. *Fisheries for a New Era - Alternative Small-Scale Low-Impact Fisheries Business Models That Are Good for People and Planet*.; 2024.


Published in December 2025
Report design: Iris Maertens

# Contact

**Seas At Risk**

@SeasAtRisk
Seas At Risk
@seasatrisk_ngo
Seas At Risk
@seasatrisk.bsky.social

Transparency Register: 335382815910-56v

**Low Impact Fisheries Europe**

@LIFEplatformEU
@lifeplatform3664
@lifeplatformeu
LIFE platform EU
Low Impact Fishers of Europe

Transparency Register: 335382815910-56

SEAS AT RISK

LOW IMPACT FISHERS OF EUROPE

OCEANS5

Life

*This work has been funded with the support of Oceans 5, Patagonia and the EU LIFE programme.*
*The content of this work should not be regarded as reflecting the position of the funders.*