

Scottish Pelagic Sustainability Group

Sustainable and Environmental Policy

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I. Introduction

The UK RSW (Refrigerated Sea Water) pelagic industry, centred in North East Scotland and Shetland, ranks among the best in the world; where a modern, technologically advanced fleet of RSW vessels supplies a progressive, well-equipped processing sector. The industry catches and processes some of the most abundant pelagic fish stocks found in the North East Atlantic and North Sea, which include mackerel, herring, blue whiting and horse mackerel.

Today, there is an expectation and demand that the harvesting of the world's fishery resources should be from demonstrable sustainable sources. This industry led document addresses the sustainability issues involved in the fisheries exploited by the UK RSW pelagic industry.

The Scottish Pelagic Sustainability Group (SPSG) was established in 2007 following a strategic review by the Scottish pelagic industry. The SPSG represents all sectors of the industry, from fishing to the processing and marketing of pelagic fish. The SPSG took ownership of the industry's sustainable and environmental development and has since launched several sustainability initiatives from sustainable certification to programmes of scientific work and data collection.

II. Background

Pelagic fisheries in the North East Atlantic represent a significant value to the seafood industry of participating nations. These fisheries produce large volumes of high quality, oil rich fish which are highly sought after. This has been achieved through investment in modern fishing vessels and processing factories in response to a growing global demand for pelagic fish and fishery products. However, they require very careful and often complex regulation and management to ensure these fisheries are harvested responsibly and sustainably.

The post war era of the 20th century saw rapid development and market driven exploitation in world fisheries. Naturally, coastal States sought to invest in modern fishing fleets to capitalize on the growing demand for fish and fishery products. However, by the 1980's it was recognised that fisheries resources could not sustain such rapid and often uncontrolled increases in exploitation, and it was realised that unregulated fisheries on the high seas, in some cases involving straddling and highly migratory fish species, which occurred both inside and outside Exclusive Economic Zones (EEZ) were becoming a matter of increasing concern.

A new approach to fisheries management which recognised conservation and environmental needs was needed. This led to the FAO Governing Bodies recommending the development of a global Code of Conduct for Responsible Fisheries. The Code established principles and standards applicable to the conservation, management, and development of all fisheries. It was adopted in 1995 and provides a necessary framework for national and international efforts to ensure sustainable exploitation of aquatic living resources.

Scottish pelagic fisheries are governed through the UK Fisheries Act 2020 which became enshrined in UK law following the royal assent of the Fisheries Bill on the 23rd November 2020. The UK fully left the EU on the 1st of January 2021 and the Fisheries Act 2020 gives the UK full control of its fishing waters for the first time since 1973.

The Act sets out eight fisheries objectives and creates a legal requirement for the UK's four national fisheries policy authorities (Marine Management Organisation (MMO), Scottish Ministers, Welsh Ministers, and the Northern Ireland department) to produce a Joint Fisheries Statement (JFS) that will lay out how these objectives will be met. The Act delegates this task because the majority of fisheries policy is devolved, and so the authority and responsibility for legislation lies with the separate authorities in England, Scotland, Wales and Northern Ireland. The Act requires these authorities to produce the JFS within two years of the Fisheries Act being passed.

III. Concepts and definitions of sustainability

In this policy document, it is important to explain what we mean by sustainability.

In marine ecosystems, sustainability is the characteristic of resources that are managed so that the natural capital stock is non-declining through time, while production opportunities are maintained for the future.¹ However, in fisheries; the term sustainability is often used in fisheries management to describe the long-term exploitation objectives on a stock.

When describing specifically sustainable fishing activities, those are activities which do not cause or lead to undesirable changes in the biological and economic productivity, biological diversity, or ecosystem structure and functioning from one human generation to the next.² In terms of the catch or yield from a defined stock, the sustainable yield is the amount of biomass or the number of units that can be harvested currently in a fishery without compromising the ability of the population/ecosystem to regenerate itself.³

Over the last twenty years there is a growing consensus that stocks should be managed so that they produce 'Maximum Sustainable Yield' (MSY); this means catching the maximum quantity that can safely be removed from the stock while maintaining its capacity to produce sustainable yields (catches) in the long term. This follows commitments made at the World Summit on Sustainable Development (WSSD), in Johannesburg in 2002, to aim towards MSY in world fisheries.⁴

1. Sutinen, J.G., ed. 2000. A framework for monitoring and assessing socioeconomics and governance of large marine ecosystems. NOAA Technical Memorandum NMFS-NE-158, 32 pp

2. Anonymous (1998): Sustaining Marine Fisheries. A report of the Committee on Ecosystem Management for Sustainable Fisheries; Ocean Studies Board; Commission on Geosciences, Environment, and Resources; National Research Council. National Academy press.

3. FAO (1997): Fisheries management. FAO Technical Guidelines for Responsible Fisheries, 4: 82 p

4 [Seafish – Overview of Maximum Sustainable Yield.](#)

IV. The Sustainable Policy of the Scottish pelagic industry

The Scottish pelagic industry is committed to the achievement and ongoing principle of sustainability in all fisheries in which it operates and regards this policy as an essential tool in pursuit of this goal. The Scottish pelagic industry considers the following principles to form the basis of this policy:

- The industry will take all appropriate and necessary measures to ensure that the pelagic fisheries in which it operates are fished and managed responsibly to preserve the sustainable use of all marine resources and their habitats for current and future generations.
- The industry recognises that pelagic fisheries are a shared resource at national and international level; and as such will cooperate with all industry stakeholders and regulatory authorities in their sustainable management.
- The industry supports the equitable implementation of the UK Fisheries Act 2020 and Scotland's Future Fisheries Management Strategy 2020-2030 to deliver and build upon the framework of the FAO Code of Conduct for Responsible Fisheries.
- The industry acknowledges ICES advice as the basis of best scientific advice which will contribute to management measures governing pelagic fisheries. To fully support this and actively contribute in scientific input to ICES; the Scottish industry directly employs scientific expertise to implement a data collection strategy and ensure innovative and efficient use of data from the Scottish pelagic fleet in stock assessments and advice.
- The industry is committed to the maximization of product quality. This is achieved through the application of best practice in all fishing activities; from the methods of fishing; bringing the catch aboard; onboard storage of the fish through to the discharging of the catch once in port. It is also committed to encouraging training of personnel to achieve these objectives.

Scottish pelagic processing factories are located in the North-East of Scotland and Shetland near to the main fishing grounds. These modern plants are equipped with the latest machinery for receiving, grading, filleting, packing, and freezing herring mackerel and blue whiting. They are specifically designed to handle high volumes of pelagic fish and can ensure the highest quality is maintained throughout the process.

The industry is further committed to minimise the carbon footprint of pelagic fish production and has supported analysis and benchmarking studies^{5,6} of the carbon footprint of Scottish pelagic fisheries and will use findings to deliver continuous improvement to reduce these impacts.

⁵ [Estimation of the Carbon Footprint of the Shetland Fishery for Atlantic Mackerel](#)

⁶ [Identifying Climate Smart Development Pathways for the Scottish Pelagic Fishing Industry](#)

V. Operational management

Instrumental to the sustainable development of the Scottish pelagic industry is the ongoing viability of both businesses and communities from a socio-economic perspective. To achieve this aim, it is important that the industry meets these goals whilst operating to the highest standards of maritime and employment safety.

The Scottish pelagic industry fully supports the implementation of new legislation to deliver improved standards at sea for fishermen through the International Labour Organisation's Work In Fishing Convention (ILO 188). This builds on existing standards to provide safer and fairer working, living and employment conditions for all fishermen.

The Scottish pelagic industry will:

- Operate vessels and carry out fishing activity to the highest possible standards of maritime safety. Ensuring that all gear conforms to safety requirements, that regular inspection and scheduled maintenance are carried out in addition to statutory inspections, paying particular regard to engines and safety equipment.
- Always provide a safe working environment for all members of crew and any third parties, whilst promoting a fair and amicable working environment which seeks to encourage strong teamwork.
- Ensure that all training needs of fishermen are met in terms of the statutory minimum MCA requirements, and furthermore; will strive to provide the best training, education, and awareness programmes to the benefit of all members.
- Practice a reasonable and mutually respectful attitude to all sea vessels and other users towards the exploited resource and the marine environment. In particular, where competition for sea space arises whilst working on fishing grounds, amicable agreement or compromise will be sought with other fishing parties to avoid conflicts of interest while paying particular regard to historical rights in the area.

The quality of product and marketing opportunities for Scottish pelagic fish are the basis to the success of the industry sector. All stakeholders of the pelagic industry will constantly work to:

- Maintain the highest possible standards of hygiene onboard vessels and throughout the process chain.
- Optimise the conditions in which the fish are caught, held, handled and processed in order to maximise their market value and encourage the widest choice of value adding potential. This supports not only quality but additionally the nutritional value of the fish.
- Provide advanced landing information concerning quality, size, volume and traceability of the catch in order to maximise processing potential and improve the efficiency of landing activities.

- Operate all processing plants with defined Quality Management Systems and meet strict hygiene and food safety standards which are monitored by both local Environmental Health Departments and by the standards of their customers.

VI. Commitment to a Sustainable Development Programme

The Scottish pelagic industry is committed to sustainable fisheries. To evidence this, the Scottish Pelagic Sustainability Group was established in 2007 with the aim of securing independent certification for the main pelagic fisheries in which it operates. The group was initially successful in gaining Marine Stewardship Council (MSC) certification for the North Sea herring and Western mackerel fisheries.

Since formation, the SPSG has evolved and developed a wider approach in its activity to support sustainable development of pelagic fisheries. The group is not only responsible for sustainable certification, but it also promotes and supports data collection in factories, supports scientific research and actively employs scientific staff to take forward projects to enhance species knowledge and stock management (see section IX).

The SPSG remains committed to the principles of sustainable certification, currently North Sea herring holds MSC certification. However, due to complex international management issues impacting all pelagic coastal States which are beyond SPSG control, the group is at present unable to meet the criteria required to maintain certification across other Scottish pelagic stocks.

The SPSG is an active member of the Executive Committee of the Association of Sustainable Fisheries (ASF). Within ASF the SPSG offers its experience and provides input to the forum assisting in sustainable policy development at an international level.

The SPSG continues to explore the potential benefit of any programmes or projects which promote and enhance the marine ecosystem and environment, thus reducing the environmental impact and footprint the fleet may have during fishing operations.

In particular pelagic vessels will:

- Follow practices that minimise the emissions of dangerous substances during all fishing activities. As an absolute minimum, vessels will meet national standards but will endeavour to operate at a level promoting best practice.
- Explore new and innovative technologies to minimise fuel consumption and other practices to save energy^{5,6}.
- Follow good fishing practices which minimise gear loss and make every effort to follow procedures/protocols to mark and report lost gear. Wherever possible vessels will make every effort to retrieve lost gear and to retrieve any discarded or ghost gear which may become apparent during fishing activity.
- Ensure end of life gear is taken ashore and disposed of through a safe and recognised route. Many Scottish pelagic vessels now recycle their end-of-life gear

through a voluntary scheme which donates monies generated to support charitable foundations working across Africa.

- Operate waste management plans on-board and will communicate and implement the plan during all operations.

Whilst marine litter is not frequently encountered in pelagic fishing, the SPSG fleet are committed to retain and dispose of any marine litter caught through the KIMO Fishing for Litter programme.

VII. Responsible fishing

Corporate Social Responsibility (CSR) has become a fundamental driver in all business and now often supports a 'license to operate' for customers and society. CSR policies and codes of conduct cover a business's environmental impact, including waste, recycling, carbon footprint and procurement. Furthermore, the scope of CSR also covers ethical standards and social welfare considerations. Fishing vessel operators are considered the same as any other business, and therefore vessel owners and operators should be aware of these demands from their supply chains and apply standards to meet these requirements.

The Seafish Responsible Fishing Scheme (RFS) was developed and launched to provide the industry with a tool to demonstrate best practice in fishing and standards of crew welfare. It aimed to raise standards in the UK catching sector, enabling the seafood supply chain to demonstrate a responsible commitment to sourcing seafood. The Scottish pelagic industry was an active participant to the RFS and supported the scheme as a means to provide reassurance to the supply chain, customers and society in general of their responsible approach to good operational practice.

The Seafish RFS has now been replaced by the new Responsible Fishing Vessel Standard (RFVS). The RFVS was launched internationally in 2020 by Global Seafood Assurances (GSA) who are a not-for-profit organisation. GSA now own, manage, and deliver the scheme on a global scale. The RFVS is a globally applicable scheme providing third party assurance of decent working conditions for the crew by demonstrating operational best practice from the catch to the quay, in line with internationally agreed protocols and guidelines.

The Scottish pelagic industry supports the RFVS and the value the scheme delivers to its general CSR commitments. In the final development of the new RFVS, Scottish pelagic vessels were actively involved in piloting the standard. Now launched, in 2021 a number of vessels in the Scottish pelagic fleet have already achieved certification to the RFVS, becoming some of the first fishing vessels in the world to meet this standard.

VIII. Management regimes and Coastal State/bilateral agreements

The blue whiting and Atlanto-Scandian herring and mackerel fisheries are managed by Coastal States and ratified through NEAFC agreements. North Sea herring is jointly managed by the UK, European Union and Norway. The West of Scotland herring, North Sea horse mackerel and western horse mackerel are jointly managed by the UK and the European Union.

The Scottish pelagic industry closely follows the management process and keeps stakeholders up to date with new developments in the management of these stocks.

IX. Long Term Management Strategies

Long Term Management Strategies (LTMS) are in place to manage the blue whiting and Atlanto-Scandian herring fisheries. LTMS for NE Atlantic mackerel and North Sea herring are currently being revised.

Given there has been consistent overshoot of the recommended TAC for the mackerel, Atlanto-Scandian herring and blue whiting fisheries; implementation of current LTMS may no longer be precautionary.

X. Sustainability principles

To realise the goals of the sustainable policy as described in section IV, members acknowledge that they must operate in a manner which clearly demonstrates these principles. Pelagic stocks are an international resource which migrate through UK, EU, third country and international waters throughout different seasons of the year.

The Scottish pelagic industry demonstrates its commitment to sustainability by:

- Supporting protocols which promote international cooperation between the UK, the EU and third countries of this multi-national industry who are involved in the exploitation of pelagic fisheries.
- Engaging with other industry client groups who work to realise sustainable certification of NE Atlantic pelagic stocks.
- Accepting that to have a well managed and fairly allocated share of fishing opportunity for all pelagic species; fish stocks must be estimated using the most reliable, mathematical, and scientific assessment models available. The quality of such data is paramount to the accurate process of determining Total Allowable Catches (TACs).
- Accepting that to prevent overfishing and ensure sustainability, the methods required to support such TAC's need to be effectively monitored and regulated. This entails accurate registration of catches; and may include the use of technical measures in permitted gear.
- Actively supports and assists in gathering and sharing scientific data on the state of pelagic fish stocks; thus, securing the most detailed information available for use in the assessments necessary for sustainable fisheries management.
- Encouraging coastal States to agree comprehensive management strategies for NE Atlantic pelagic stocks, which includes a binding quota sharing mechanism.

XI. Scientific support

Successful and responsible fisheries management requires sound scientific advice and data. All fisheries stakeholders should ensure sufficient resources and facilities are available to provide a comprehensive foundation in order that necessary scientific research can be carried out. The Scottish pelagic industry fully supports scientific study to maintain and strengthen the future sustainability of the pelagic fisheries.

The Scottish pelagic industry focusses on two key actions to underpin data collection. To establish pelagic vessels as scientific research vessels and to work with onshore processing factories to promote the collection of scientific and biological data. Through the Scottish Pelagic Fishermen's Association, the SPSG employ a scientific officer to deliver these goals.

The industry actively cooperates and assists in this scientific vision to deliver the following objectives:

- Establish pelagic fishing vessels as research platforms, mapping changes in the abundance and distribution of pelagic fish in the areas they operate. Equip and train in relevant methods to achieve this. The SPSG fleet undertake a programme of continuous self-sampling on all catches across all fisheries in which they operate.
 - E.g. West of Scotland herring survey, Self-sampling, Acoustic monitoring
- Work with fish factories to promote the collection of scientific biological data on pelagic fish.
 - E.g. Mackerel tagging, Fish fats as ecosystem indicators
- Actively contribute to European and international developments of the science agenda influencing approaches to management of pelagic stocks.
 - E.g. ICES, PELAC
- Strengthen and promote collaborative science partnerships involving industry government and academia.
 - E.g. Guidelines for industry science, Training – Fishing into the Future
- Build awareness and understanding of the science concepts and issues relevant to the pelagic industry through engaging and informative media.
 - E.g. various communication channels
- Uphold scientific standards and maintain scientific reputation at all times.

This approach has built a close working relationship with Marine Scotland Science on various projects and may lead to future studies with government, management and

scientific programmes with international institutes. It has also initiated projects with other co-funding partners including Fisheries Innovation Scotland, North East Atlantic Fisheries College, and the University of Aberdeen.

Furthermore, the SPSG fleet undertakes to record any interactions during fishing activities and fishing trips with endangered threatened and protected (ETP) species. Concerns have been raised in some pelagic fisheries of interactions between cetaceans and fishing gear, the SPSG fleet has co-operated fully with cetacean observer programmes over many years with no observed bycatch incidents. However, as a measure of additional best practice vessels undertake to record any interactions, should they occur. Species included in this reporting scheme include whales, dolphins, porpoises, seabirds, and turtles.

XII. Monitoring and compliance

Stakeholder compliance with national and international management regimes is fundamental to the sustainable policy of the Scottish pelagic industry. The industry recognises that pelagic fisheries are most effectively controlled by TAC's and quotas and believes that quotas must be respected if stocks are to remain healthy.

The monitoring of fishing activities is an essential part of the sustainable policy of any fishery. The main goals and objectives of any fishery monitoring programme will generally be:

- The collection of information on catch; bycatch; protected species; discards and wider environmental data which is used for management and stock assessment purposes.
- The monitoring of fishing activity in adherence to regulations governing the fishery.
- The monitoring of fishing activity and effort to develop a better understanding of the operation of the fishery.

At-sea observers offer one means of gathering independent, cost effective data, and may be used to reduce conflicts between stakeholders; concerns regarding over-exploitation and to provide a better understanding of how particular fisheries work. Whatever their motivation for use, they should provide outputs that contribute to the development of international management measures that encourage good fishing practices and promote both stock and fishery sustainability. To this end the Scottish pelagic industry supports their use as one means to provide this assurance and information, and will work with scientific agencies, and industry groups to facilitate such programmes where considered appropriate.

The Scottish pelagic fleet already has strong relationships in this field with Marine Scotland Science (MSS); the Sea Mammal Research Unit (SMRU), St Andrews University and the Scottish Fishermen's Federation, cooperating with monitoring programmes in place under agreed protocols to ensure that these goals can be met.

It is recognised that monitoring programmes help to provide evidence and demonstrate compliance of conservation and helps support measures in place for the management of the fishery. The Scottish pelagic industry is an active participant of the Scottish Discard Steering Group (SDSG) whose role is to contribute advice to Scottish Government to help develop policy with regard to future catching policy.

In Scotland, vessels may only land to buyers who are registered within the compliance regulations laid down by the Scottish Government. Under this scheme the buyers are obliged to keep records and be open to inspection by Marine Scotland Compliance at any time. This, added to the existing regulation on the catching sector, extends control throughout the supply chain. The Scottish pelagic industry regards this as an essential tool to deliver total and uniform compliance with all fisheries management regulations. It is however essential that there is parity within all nations fishing pelagic stocks in the NE Atlantic.

A pelagic inspection protocol governing the inspection and monitoring procedures for pelagic processing plants has been agreed between Marine Scotland Compliance and the pelagic processing industry. This is essential to ensure widespread and total confidence in the pelagic monitoring and compliance regime.

The Scottish pelagic fleet also works closely with Food Standards Scotland and with local authorities to ensure the fleet is inspected in accordance with current hygiene legislation.

XIII. Optimising selectivity to promote conservation

Pelagic fishing targets mid-water single species shoals so bycatch of non-target species is generally insignificant, and given fishing takes place in mid-water there is very little impact on the seabed.

Cetacean bycatch has not been an issue within Scottish pelagic fisheries. This has been verified by studies carried out by SMRU, initially under a voluntary agreement, and now covered under regulation. Within the framework of Scottish pelagic fisheries, the methods of fishing, the natural habitat and characteristics of the target species mean that incidental bycatch of other non-target marine species is extremely rare ⁷.

The Scottish pelagic industry has, and will continue to consider, how best to operate a total catch policy to mitigate discarding issues through fleet-wide measures.

The SPSG fleet make every effort to prevent catches of mixed species, or poor size composition by undertaking accurate shoal identification and by taking pre-fishing samples from newly identified shoals. SPSG vessels operate a communication and move on policy in the event that they do encounter commercially undesirable shoals of fish. In this event communications are be made to any Scottish or international vessels fishing in the area.

⁷. Protected Species Bycatch Monitoring in UK Pelagic Trawl Fisheries - A summary report for the Pelagic Advisory Council. / Kingston, AI; Northridge, Simon.

XIV. Conclusion

This “Sustainable Policy of the Scottish Pelagic Industry” lays out the current views of the whole industry and provides a statement of intent outlining a general policy and plan of conduct. The Scottish pelagic industry is committed to ensuring this policy is followed during all direct and indirect operations concerning the fishing, processing and business activities of all stakeholders to Scottish pelagic resources.

The Scottish Pelagic Sustainability Group will undertake to review this policy at regular intervals and will make this policy fully available and transparent to all parties within industry and to society in general.

The SPSG will welcome feedback and critical comment on this policy and will take into consideration any relevant suggestions received; amendments arising from such feedback will be published in the next review.

To submit any comments for review, please contact:

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