SEAFOOD 2040

A strategic framework for England

GOVERNMENT APPOINTED INDUSTRY EXPERT WORKING GROUP MEMBERS

CHAIR - Alison Austin, Independent Member, Seafish Board

PORTS AND AUCTIONS - Martyn Boyers, British Ports Association

PRODUCER ORGANISATIONS - Andrew Pillar, Interfish

WILD CATCH - Matthew Cox, National Federation of Fishermen's Organisations (NFFO) (Replacing original member Barrie Deas, NFFO)

WILD CATCH UNDER 10M - Dave Cuthbert,

New Under Ten Fishermen's Association (NUTFA)

SHELLFISH PRODUCTION - David Jarrad,

Shellfish Association of Great Britain (SAGB)

PROCESSING - Mike Mitchell, Seafood Industry Alliance (SIA)

SCIENCE - Dr Neil Auchterlonie,

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AQUACULTURE - Richard Slaski,

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RETAIL - Jeremy Ryland-Langley, Waitrose

(Replacing original member Huw Thomas, Morrisons)

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Growth Strategy Team

SECTION

SECTION SECTION

SECTION SECTION

SECTION ()

INTRODUCTION

1.0 Introduction

SEAFOOD 2040: SETTING OUT OUR AMBITION

- 2.1 Total UK Seafood Supply 2015
- 2.2 UK Seafood Industry Map
- 2.3 Setting out our ambition
- 2.4 A strategic framework for growth

DELIVERING OUR AMBITION

3.0 Action plan

APPENDICES

- 4.1 A thriving seafood industry our rationale for growth
- 4.2 The Seafood 2040 journey
- 4.3 Glossary
- 4.4 References

SECTION



Section 01

Introduction

Seafood 2040 has brought together stakeholders from across the seafood supply chain in pursuit of a single, compelling goal. This document is the result of that shared enterprise and sets out a vision for an industry that is sustainable and truly thriving in every sense of the word; a success story built on collaboration, innovation and best practice.

All of us involved in the 2040 project have recognised that the seafood value chain stands on the brink of enormous opportunity, but quantifying the size of the prize has not been easy. Would it be possible to achieve Public Health England's advice for all of us to eat at least two portions of seafood a week and to do so sustainably? What would be the positive impact on health? How might the supply chain evolve to meet that growing demand? In essence, we set ourselves the task of describing what a thriving industry might look like, and deciding how we might measure it.

This is our vision for the seafood value chain in 2040:

- Seafood consumption has almost doubled to reach recommended levels of at least two portions (one of which is oil-rich fish), per person, per week, fuelling economic growth within the sector and returning substantial health gains and associated cost savings for the UK.
- Our wild catch fisheries are verifiably sustainable and flourishing: a new data framework has ensured all stocks are well managed, fuelling an increase in demand for a wider range of species, which is fully exploited by the enhanced role of Producer Organisations.
- The aquaculture sector has seen significant growth, with a new Aquaculture Leadership Group formed to provide guidance and support to allow the sector to thrive within a safe regulatory framework.
- Business growth has been enabled by infrastructure improvements, ensuring
 potential is maximised right across the value chain from ports, transport and
 logistics, to skills and recruitment, innovation, production efficiency and waste
 reduction.
- With production volumes increased, opportunities for exports have also grown; sustainable seafood is firmly positioned at the heart of the 2020 Export Drive, growing the volume and value of sales as well as extending market reach.
- Access to international markets for responsibly sourced raw seafood materials has been assured, with favourable trade and tariff agreements in place with all seafood producing nations.

While the opportunities are clear, we also recognise the inevitable limitations, not least the rapidly changing external context with its 'unknown unknowns' that may come to light as delivery starts to unfold. Firstly, we are, by constitution, focussed solely on the industry in England, despite the supply chain's oblivion to national boundaries. In mitigation, we have made every effort to ensure we have been well acquainted with the excellent work going on in our Devolved Nations and I believe that the agenda we set out here is well aligned to their approaches. Secondly, while we recognise the opportunities that Brexit as the 'great disruptor' can bring, we have not tried to focus on the detailed requirements of EU exit, leaving other bodies to present their own sector views on quota allocations and other issues. And thirdly, we recognise the limitations of time, both in terms of producing this plan and in delivering it. We are bold in our ambition, but we are patient in our approach, recognising those actions that we can achieve in the next few years, as well as those that are still very much viewed through the window of horizon scanning.

Over the course of that work, we have spoken to stakeholders from all areas of the value chain, piecing together an enormous range of insight with the aim of better understanding how the cogs and wheels of our industry fit together. As our work progressed, it became clear that while there are pockets of deep knowledge, there are also gaps and areas lacking a common agreement of what good looks like. The varied interpretations of the word 'sustainable', for example, make the practical task of establishing sustainable business practices more difficult. Filling knowledge gaps and tying down definitions will be part of our forward work.

'It's all been tried before' has been a common refrain and it is true that there has been good work already delivered, much of which has informed our thinking. However, it is important to note that previous collective effort has focussed on one or other end of the value chain; Seafood 2040 is the first time all stakeholders from sea to plate have come together as one voice at a table shared with Government and there is enormous strength in that act alone. This all-sector approach would not have been possible without the support of Defra, and the contribution of the individual Seafood 2040 members, their sector groups and Seafish, their unifying industry body. We have all brought our own unique sector perspectives and finding our common ground has taken energy and commitment.

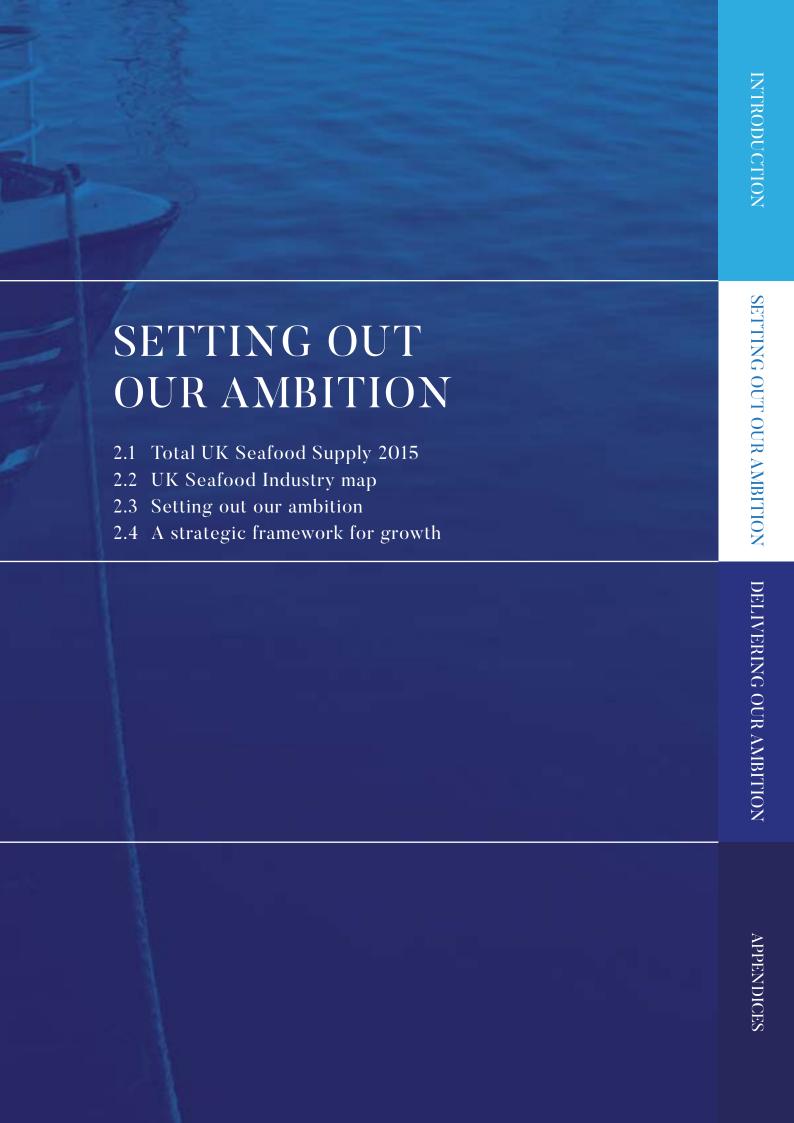
The Seafood 2040 Strategic Framework is merely the first step in a longer journey, but we have set out a shared destination that we believe will inspire great work and deliver real value for the industry we serve. Our vision of a thriving seafood industry with verifiably sustainable sourcing and recommended levels of consumption can only be achieved by a wide range of organisations working together. Whilst different sectors along the seafood supply chain can make a difference, others such as Government policy makers and regulators, NGOs and campaigning groups also have a key role to play.

Our next step is to turn this vision into reality and with that in mind, our lead recommendation is the establishment of an all-sector Seafood Industry Leadership Group (SILG) to drive forward this work, which we will seek to establish as quickly as possible to build on the momentum of this Strategic Framework.

Alison Austin OBE Seafood 2040 Chair







Section 02

Setting out our ambition

The Seafood 2040 Strategic Framework is a unique document; the first to present an all-sector road map to a thriving seafood industry. It was shaped by the expertise and experience of a broad range of stakeholders and if the ambitions it sets out are to be achieved, it will require the passion and commitment of them all.

This document sets out a clear and compelling case for a thriving seafood industry and describes how, by working together, we can make that goal a reality.

- Section two of this document briefly sets out the current state of the industry and the scope of our ambition.
- The ensuing gap analysis is the basis for our action plan, which is detailed in the 25 recommendations in section three.
- Section four contains the evidence base for our work.

The framework has been built to support a single bold ambition, shared by all sectors and all stakeholders:

"Our ambition is to see a seafood industry that is sustainable and truly thriving, in every sense of the word. Where a whole supply chain approach has fostered collaborative working practices, yet allowed the space to fully celebrate the diversity of our different sectors and regions; where seafood is highly valued, driving consumption figures at home and abroad; and where science and a supportive regulatory framework drive innovation and foster best practice from eatch and farm to plate."

2.1

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Total UK Seafood Supply 2015



2.2

UK Seafood Industry Map

This map illustrates the key components and sectors of the seafood value chain. It will be important for all of these sectors to work together to achieve the vision and deliver the actions in this Strategic Framework.

STORAGE

IMPORTS

UK FISHING

PORTS

PRIMARY
PROCESS

AQUAFEED

UK
AQUAFEED

UK
AQUACULTURE

COLD





VALUE ADDED PROCESS

RETAIL

COLD STORAGE COLD STORAGE

AQUAFEED

EXPORTS

2.3

Setting out our ambition

UK SEAFOOD SIZE OF THE PRIZE



FROM 1.15 PORTIONS TO 2 PORTIONS PP/PW

GENERATING SALES OF

RETAIL

FOODSERVICE

TOTAL

£5.5bn

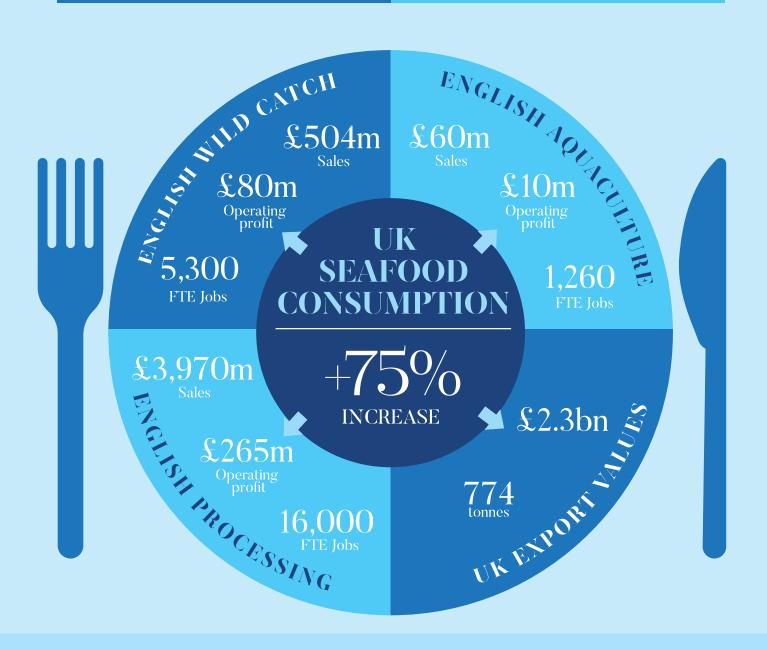
£5.2bn

£10.7bn

creating \$4.6bn

ADDITIONAL SALES

20/21 WHAT MIGHT THRIVING LOOK LIKE?



An increase in seafood consumption could be a driver for growth right across the value chain, from sea and farm to plate. To inspire you, we've shown what a 75% increase in the size of all major industry sectors would look like. See appendix 4.1 for more detail.

2.4

A strategic framework for growth

Driving our goal of a thriving seafood industry is an overarching objective to deliver a substantial increase in seafood consumption:

OBJECTIVE: GROW SEAFOOD CONSUMPTION

Three strategic priorities will fuel that growth:

Priority 1: Maximise sustainable wild catch opportunities

Priority 2: Grow a sustainable aquaculture sector

Priority 3: Enable business growth

Three strategic foundations will support delivery and shape the way we work:

• Foundation 1: Collaboration

• Foundation 2: Science and innovation

• Foundation 3: Best practice

All three founding principles are necessary if our success is to be sustainable. We recognise collaboration as the most crucial hence the establishment of a new all-sector Seafood Industry Leadership Group (SILG), appointed by and accountable to the Minister of State for Agriculture, Fisheries and Food, and importantly, to the supply chain stakeholders it represents.



SEAFOOD 2040 STRATEGIC FRAMEWORK

GOAL:

A THRIVING SEAFOOD INDUSTRY

OBJECTIVE

GROW SEAFOOD CONSUMPTION TO RECOMMENDED LEVELS

PRIORITIES

Maximise Grow sustainable a sustainable wild catch aquaculture opportunities sector

Enable business growth

FOUNDATIONS

COLLABORATION:

A Seafood Industry Leadership Group to drive delivery



SCIENCE:

A new all-stakeholder **Seafood Science and Innovation Group** (SSIG) to enhance the supply chain



BEST PRACTICE:

A Seafood Best Practice Framework to support improvement across the supply chain



Achieving the ambition set out in 2040 will require concerted, collective effort from all stakeholders and we will endeavour to tie in to the many existing areas of current work this Framework supports, both in industry and the third sector, as well as Government policy makers and regulators. An example of this synergy is the Government's Industrial Strategy, which mirrors many of the key areas for growth identified in this Framework. A collaborative approach will better allow the seafood sector to make use of the funding and support opportunities available from Government and other bodies.

Core working partners will be extended as we evolve this work, drawing on the following: Seafish, Industry, Government (policy and regulators), NGOs, and Academia.





THE PLAN

recognises three phases of delivery, highlighting those actions that can be delivered as quick wins, and those that will take longer to achieve. Throughout the document, actions have been prioritised with those that are critical or which can deliver the greatest impact rated four stars.

DELIVERY PHASES ARE:

SHORT TERM

(to March 2019 – EU Transition period)

MEDIUM TERM

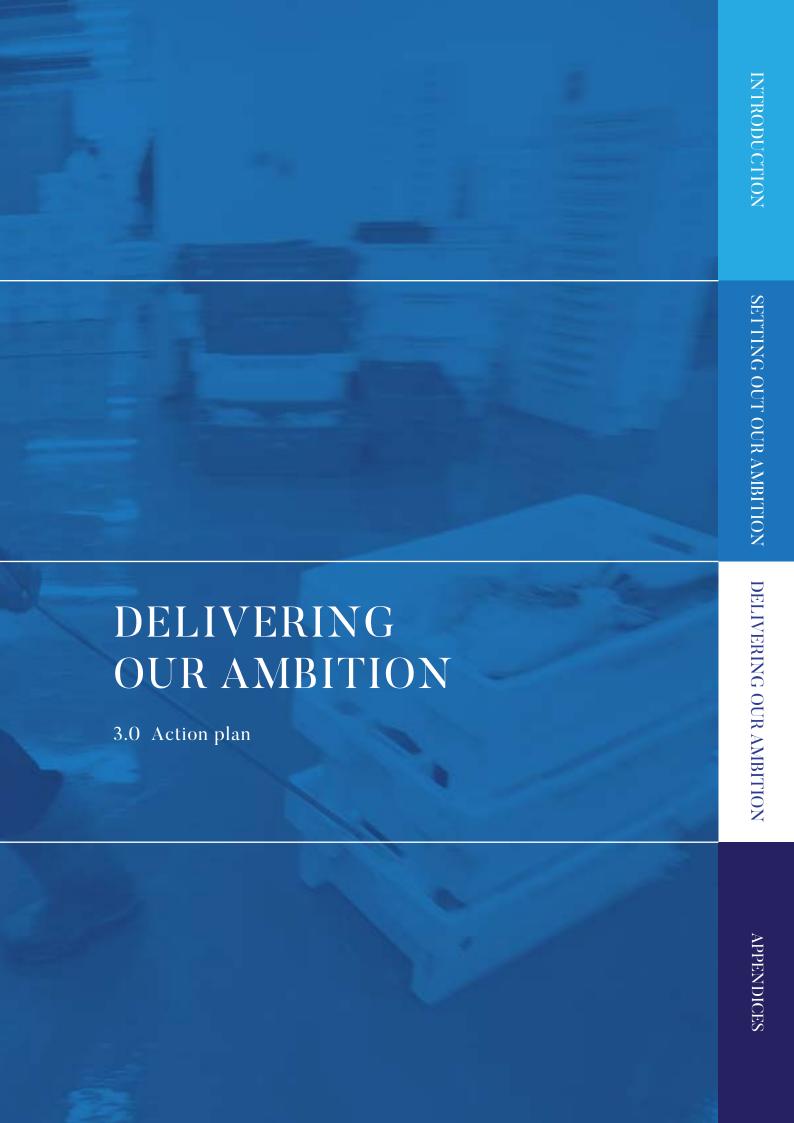
(2019 to 2022 – within five years)

LONG TERM

(2022 to 2030 – within 13 years)

The period on the horizon (2030 to 2040) is highly uncertain and specific deliverables are not recommended for this period at this point. However, a watching brief on the horizon will be maintained and appropriate actions identified in due course by the SILG.





Section 03

Delivering on our ambition



FOUNDATIONS

COLLABORATION:

A SEAFOOD INDUSTRY LEADERSHIP GROUP TO DRIVE DELIVERY

The industry is facing a period of unprecedented opportunity and challenge; by working together and harnessing the collective might of our sector we will be in the best position to embrace both.

One of the most important actions detailed in this document therefore, is the establishment of a Seafood Industry Leadership Group to bring all sectors together to lead and support the work set out in this plan and to hold all partners to account for its delivery.

An effective SILG will galvanise a move from simple information sharing towards a genuine, holistic and shared understanding of 'what good looks like' across the industry and so actively drive improvements. Crucially, value chain partners must want to take up the challenge and be prepared to actively participate and take ownership for driving change.

The SILG can:

- Offer a formal space and framework to connect to disparate groups and other platforms to genuinely support direct action
- Engage in intelligence driven, strategic horizon work to anticipate and address new developments
- Adopt a flexible, agile approach to challenges and opportunities in pursuit of 2040 goals
- Connect existing organisations working for mutual benefit
- Establish shared goals and a common voice
- Ensure successful communication and engagement
- Oversee the delivery of this Seafood 2040 Strategic Framework.

The benefits of an all supply chain approach are already evident in the production of this Seafood 2040 Strategic Framework. The collective validation of shared goals and a common strategy is particularly important, given the breadth and complex nature of our supply chain.

In other Devolved Nations and sectors there are successful models of industry led groups that have delivered strategies for change and harnessed both the private and public sector, to deliver growth where there is a clear vision and a supporting pathway. Our aim is to build on these examples.

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Establish an industry-led English Seafood Industry Leadership Group reporting regularly and directly to the Minister against the clear objectives for growth set out in the Seafood 2040 Strategic Framework.	DEFRA, ALL SECTORS, SEAFISH	SHORT - MEDIUM	****
 Agree collective ownership of this action plan and collective responsibility for its delivery Establish Seafish as secretariat to the SILG and actively investigate initial funding. 	SEAFISH		



Section 03



FOUNDATIONS

SCIENCE:

A NEW ALL-STAKEHOLDER SEAFOOD SCIENCE AND INNOVATION GROUP TO ENHANCE THE SUPPLY CHAIN

Robust science sits as a core foundation stone supporting this strategic framework. A thriving seafood industry relies upon the availability of robust, reliable and readily available data to inform critical decision making, not just in the marine environment but in every area of the supply chain.

Closing knowledge gaps can be problematic, with scientists and industry frequently driven by different interests. Due to the niche nature of work undertaken, scientists can tend to work in silos, and are not always driven by practical application in industry. Industry too, has a role to play in articulating needs and extending its focus from immediate issues that are uncertain and evolving to medium or longer term problems. We have a culture that favours scientific knowledge over practical knowledge; this approach – in failing to appreciate the merits and shortcomings of both – undermines collaboration between stakeholders. Outside the seafood sector, good work has already begun to address this issue, for example through the establishment of new, more industrially focused institutions such as Innovate UK, and by strengthening support for universities to commercialise their research ideas.

Building on the work of current bodies will be key: the knowledge transfer network (KTN), which facilitates improved coordination between academia, industry, the research councils and government; the recently established Food Innovation Network (FIN); and the Scottish Funding Council's Innovation Centre Programme all offer examples that can be developed further for seafood.

By bringing together industry, government and academia we can seek to ensure that research funds^{1,2} are targeted to areas of greatest good, and that research undertaken is both relevant to and accessible by business.

Working under the SILG, a new Seafood Science and Innovation Group (SSIG) will provide the thinking space to deliver on these commitments, reviewing areas of academic research and assessing their practical application to industry challenges. The Group's core objective will be to accelerate the rate of innovation and provide a faster route to the resolution of industry issues.

SSIG will facilitate an inclusive approach for the seafood sector, ensuring that research is co-designed and co-produced where necessary, public and private funds are targeted to areas of greatest good, and that research undertaken is both relevant to and accessible by businesses right across the supply chain³. A strategic framework enabling clear communication with organisations funding research and innovation also ensures that seafood business needs are better reflected in their forward strategies.

As the Government's Industrial Strategy recognises, innovation is not just about new funding for breakthrough technologies or scientific and engineering processes. Effective adoption of technology throughout businesses and improvements in management and workforce skills are just as important, as are new ways of providing services, from financial services and retail to professional advice.

The SSIG will draw on the good work already being delivered in other parts of the UK - for example Fisheries Innovation Scotland⁴ and FIN⁵ - and will contribute to an overarching science and innovation strategic framework that should bring wider benefit across the seafood sector.

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Establish a multi-stakeholder SSIG, bringing academic, private and public sectors together to agree a common approach to research through a shared Seafood Science and Innovation Strategic Framework.	SILG	SHORT - MEDIUM	****
 Identify and map information needs across the seafood value chain from catch to plate Engage with academia and funding bodies to raise awareness of industry needs, engage relevant funding bodies and target key academic institutions to help deliver. Secure reward and recognition for supporting business growth within the seafood value chain Map current public and private sector funding mechanisms for science and innovation relevant to the supply chain and identify how funding could be leveraged from other sources. 	SSIG		

02

Section 03



FOUNDATIONS

BEST PRACTICE:

A SEAFOOD BEST PRACTICE FRAMEWORK TO SUPPORT IMPROVEMENT ACROSS THE SUPPLY CHAIN

The seafood industry is currently working to address every aspect of best practice; not just to ensure sustainability, but responsible practices in terms of social and welfare requirements, regulation as well as product quality and integrity. There are examples of inspirational work being delivered around sustainability issues, but there is nothing in place to bring all these strands together. Examples include seafood brands striving to work in a responsible way, wider industry ventures such as social and environmental sourcing standards and collaborative programmes.

Looking ahead to 2040, the impact of securing the reputation of the industry through the roll out of best practice is significant. Without a social licence to operate, we face stagnation or worse as a sector. Our ambition should be to entirely eradicate bad practices, and deliver demonstrable improvement on all four key strands of sustainability:

- People: health, safety and wellbeing of workers at sea and on shore; healthier lives from a seafood-rich diet; value-added to local communities
- Planet: verifiable sustainable sourcing; waste reduction; carbon management
- Production: traceability, product integrity; fair operating practices
- Transparency and good governance underpinning all of the above.

By establishing a seafood best practice framework, we can agree a clear and common understanding of what good looks like, encourage seafood businesses to 'do the right thing' and actively promote examples of excellence. Our best practice framework will consolidate the current disparate range of initiatives into a cohesive 'one stop shop' resource. Knowledge gaps will be identified, best practice clearly defined with the best and latest information made available.

The result of this would be recognition of the significant steps our industry has taken to operate responsibly, growing our reputation at home and abroad and internationalising best practice by encouraging the adoption of our framework in overseas markets.

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Establish a Seafood Industry Best Practice Programme as a pathway to demonstrable improvement, with agreed specified standards developed for four key strands of sustainability: • People: health, safety and wellbeing of workers at sea and on shore; healthier lives from a seafood-rich diet; value-added to local communities • Planet: responsible sourcing; waste reduction; carbon management • Production: traceability, quality and integrity; fair operating practices • Transparency and and good governance. Support the Seafood Best Practice Framework with training courses, educational materials and communications plans. Within this framework, ensure industry stakeholders have the opportunity to devise and deliver their own sustainability commitments and skills to communicate their successes to support the wider reputation of the industry.	SILG, SEAFISH	MEDIUM - LONG	***



Section 03



STRATEGIC PRIORITIES

GROW UK SEAFOOD CONSUMPTION TO RECOMMENDED LEVELS

A substantial increase in seafood consumption is the central driver for growth (see appendix 4.1).

Although seafood is widely recognised as one of our healthiest⁶ and most sustainable proteins, we are falling far short of the Government's consumption target of at least two portions per person/per week, including one portion of oil-rich fish. With the average person currently managing only 1.15 portions per week⁷, and only one portion of oil-rich fish every three weeks, we are failing to realise significant health cost savings⁸ and losing out on c&4.6 billion additional UK seafood sales. In the protein race⁹, seafood lags behind chicken, beef and pork, not even making it on to the podium.

But a significant opportunity exists: there is now greater debate about what constitutes a healthy diet, including the role played by healthy fats and protein. Seafood is perceived as a nutritious food that contributes to a healthy diet. This comes at a time when UK consumers are changing their eating patterns and retailers, foodservice and food manufacturers are changing the way they produce and sell their products to suit that change in behaviour¹⁰.

Our objective is to double UK seafood consumption to **2 a week**; we believe this can be achieved in a sustainable way and would bring substantial benefits to the economy and the nation's health.

Seafood is currently failing to capitalise on its unique selling points:

- Seafood is widely recognised as our healthiest protein:
 - Oil-rich fish are valued for high-quality, long-chain omega-3 fats EPA and DHA, one of only a few sources of dietary vitamin D.
 - Whitefish and shellfish are valued as low fat protein sources with other beneficial nutrients, such as essential B vitamins and key minerals, for example iron, iodine, selenium, zinc and potassium.
 - The Science Advisory Committee on Nutrition¹¹ recommends consuming at least two portions of seafood a week, recognising the significant public health benefits that a switch to seafood would deliver.

Seafood is recognised as comparing favourably with other proteins when it comes to environmental impacts. A growing number of Life Cycle Assessment studies¹² provide quantification of recognised criteria that indicate that the environmental impacts of many fishing and aquaculture production systems often outperform terrestrial protein systems, and in some cases produce a net benefit¹³.

Improving the coherence of the nutritional and environmental claims used by the seafood supply chain and establishing a collective agreement on 'what seafood stands for' should strengthen confidence with the aim of growing the market in foodservice and public sectors.

The English Public Sector spends an estimated $\pounds 1.2$ billion each year on food and drink, an opportunity seafood has yet to fully realise. We will seek to work with Defra to ensure seafood is well represented in the 'Balanced Scorecard' procurement guidelines and open up the market to more SMEs and local producers, throughout the seafood supply chain.

The power of collective action in the promotion of seafood has been well-evidenced through Seafood Week¹⁴ and other generic campaigns. The newly established Seafood Marketing Optimisation Group (Seafood MOG, run by Seafish) has been created to build on that generic success and to unite stakeholders from across the supply chain under the common goal of getting 'more people eating more seafood more often'.

Through Seafood MOG, we will build a shared understanding of the barriers and opportunities around seafood consumption growth, and agree a shared consumer growth strategy with accompanying one and five-year action plans impacting all areas of the supply chain. We will focus on seafood's wide range of benefits, promoting our product's health, taste and environmental credentials.

The development of markets for underutilised UK-caught species and the creation of links between the fishing sector and tourism and heritage sectors¹⁵ can provide a firm foundation for investment and growth in coastal communities, and across the supply chain.



Section 03

GROW UK SEAFOOD CONSUMPTION TO RECOMMENDED LEVELS (CONTINUED)



05

06

WHAT?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Establish a validated and universally agreed nutritional profile for all UK seafood products Work with the relevant authorities to ensure the health benefits of seafood are better reflected in Government recommendations and the Balanced Scorecard, with increased take up and use of the recommendations by public sector procurement.	SEAFISH PUBLIC HEALTH ENGLAND FOOD STANDARDS AGENCY DEFRA	SHORT	***
Establish a review of the environmental credentials for English and UK seafood production: Review the available data for fisheries and aquaculture systems production, providing comparisons with other geographical regions, and other protein supply.	SEAFISH	SHORT	**
Review the impacts of a population shift to 2 a week seafood consumption to better quantify the substantial socio-economic impacts of improved heart health.	SEAFOOD MARKETING OPTIMISATION GROUP	SHORT	**
Build a shared understanding of the barriers and opportunities around seafood consumption growth, and agree a shared consumer growth strategy, with accompanying one and five-year action plans for key sectors:	SEAFOOD MARKETING OPTIMISATION GROUP	SHORT	****
 Retail - recognising the value of chains and independents Foodservice - addressing the fragmented nature of the sector Public sector - with a focus on hospitals, colleges and schools, linking in with the balanced scorecard. 			

	WHAT?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
08	Deliver sustained industry-wide generic seafood consumer campaigns with shared messages on key benefits: Healthy - the unique nutritional benefits and the value to health Tasty - how easy and delicious seafood can be Affordable - right person, right fish, right price Sustainable - demonstrating that seafood can be sustainable.	SEAFOOD MARKETING OPTIMISATION GROUP	MEDIUM - LONG	***
09	Create domestic market demand for a wider variety of English-caught species: Investigate potential domestic market opportunities for underutilised species in and outside of the human food chain Develop a common approach to marketing less well-known species where greater consumer acceptance could be achieved, working with retail, foodservice and public sectors Explore whether mutual benefit between the tourism and heritage sectors and the primary fishing and seafood sectors can be achieved.	SEAFOOD MARKETING OPTIMISATION GROUP	MEDIUM - LONG	**



Section 03





MAXIMISE SUSTAINABLE WILD CATCH OPPORTUNITIES

Reaching our 2 a week goal could bring substantial growth in wild catch fisheries, potentially increasing the first sale value of landings (UK and abroad) by English registered vessels from £288 million to £504 million.

Our seas are as much a national asset as our land and should be sustainably managed and verified as such for the benefit of the nation and for future generations. We should consider all human activities within a marine management strategy and seek to protect marine ecosystems as well as harvest sustainable wild catch, whilst securing economic benefit for landing and processing on our shores and supporting coastal communities.

More than half the seafood on UK dinner tables is imported ¹⁶. Whilst recognising the key role imported seafood plays in the UK supply chain, it is clear that more can be done to maximise the value of our domestic wild catch.

Three key areas of opportunity are identified in this action plan:

- Growing the onshore value of English-caught seafood
- Increasing the range of species available for sale by addressing the issue of data deficient stocks
- Enhancing the role of Producer Organisations to bridge the gap between sea and shore and ensure market potential is fully realised.

Although current UK Fishing Vessel Licences¹⁷ demand evidence of economic value returned to shore, more can be done to maximise the value of this requirement. An estimated 72,000 tonnes of fish caught under UK licence¹⁸ is landed abroad, partly due to inadequate facilities and infrastructure in UK ports. The added value this fish could bring to the wider UK economy in terms of support services is lost. By amending the requirements of the Vessel Licence, we could grow the economic returns to the UK, adding value not just within fishing ports and markets but in terms of skills training, onshore infrastructure, storage and processing facilities, which all bring social benefits to coastal communities. Other countries have successfully implemented measures to

ensure a proportion of revenues are returned to source, not only supporting the onshore value chain but also driving added value exports. To maximise the value and growth the seafood sector can bring to the economy it will be key to review the economic link requirements of the Vessel Licence.

Data is key in terms of sustainable stock management, but it also has huge implications for fleet profitability. Without data, individual fisheries cannot be judged as sustainable by any certification scheme or for Corporate Responsibility purposes, and as a result, struggle to find a domestic market. While the economic value of solid data is clear, funding new data development programmes for non-quota species has proven to be difficult.

There are also concerns that the current data management programmes delivered through Cefas may struggle to find a secure footing outside the requirements of the CFP. Industry recommends that the current programmes are maintained, or equivalent programmes developed, and that we continue to collaborate with our European partners in this area. We also recognise that funding models will need to be reviewed. We believe a well-funded, well-respected fisher/science programme has a valuable role to play in extending the data coverage of UK fisheries. Incentivised through an uplift in quota for fishers enrolled in the scheme, the programme would return high quality data to support a roll out of stock management plans for all English fisheries by 2025.

We believe that by improving connectivity between ship and shore through digital investment in the fisheries sector, data capture can be improved and made less onerous, enforcement of fisheries management measures can be more efficient and transparency and traceability to satisfy growing supply chain demands can be enhanced.

Producer Organisations have a crucial role to play in supporting the work to maximise wild catch opportunities and consideration should be given to how their role could be strengthened after our exit from the European Union, both in terms of UK quota management and the realisation of new marketing opportunities.

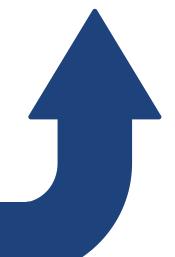




Section 03

MAXIMISE SUSTAINABLE WILD CATCH OPPORTUNITIES (CONTINUED)

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Review the impact of a preferential English landings regime on downstream economic activity, onshore infrastructure and other social impacts in coastal communities:	DEFRA	SHORT	***
 Quantify the benefits of a move to a minimum of 50% English catch landed through English ports, for first sale at home (taking into consideration analysis undertaken in Scotland¹⁹). Based on this analysis, consider amending the Fishing Vessel Licence to strengthen the 'economic link' requirements around this provision. Consider an equivalence mechanism for foreign flag vessels with access to UK waters so securing downstream economic value through UK ports from activity in UK EEZ waters. 			





WHAT?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
 Eliminate data deficiency and have effective stock management plans in place for all English fisheries by 2025: Develop a new data framework, looking beyond the requirements of ICES to cover all stocks in response to the needs of the market. Ensure the future of data management by developing a new funding programme to support a comprehensive programme of fisheries monitoring and data collection post EU exit. Consider using the fisheries resource to pay for science by incentivising fisher participation through quota uplifts. Devise and deliver a new world-leading English Fisher-Science Partnership Programme learning lessons from, and building on, current programmes such as Project Inshore. Consider how data from industry and recreational sea angling sectors could be used to support fisheries management. Ensure all fisheries have approved, appropriate and effective stock management plans by 2025. Investigate opportunities to enhance supply chain knowledge and provide increased traceability through digital connectivity between ship and shore. 	DEFRA, CEFAS, UKAFPO, SSIG	MEDIUM - LONG	***
 Strengthen the role of Producer Organisations to better support fisheries management and the provision of data. Ensure the legal recognition of Producer Organisations following the UK's exit from the EU. Formalise shared Government/Producer Organisations objectives for the management of UK fisheries on an annual basis. Ensure Producer Organisations are consulted on all negotiations and agreements impacting fishing opportunities in UK waters. Consider the potential of extending the role of Producer Organisations beyond quota management to other key areas such as labour sourcing, product grading and economic link compliance. Ensure transparency and accountability by introducing the requirement to report on an annual basis. Ensure fit for purpose regulation and effective enforcement underpins a level playing field and high standards. 	DEFRA, UKAFPO, MMO	SHORT	***

Section 03



GROW A SUSTAINABLE AQUACULTURE SECTOR

Seafood consumption levels of **2 a week** will drive growth in aquaculture, with the potential to double production values to to £60 million.

Sustainable aquaculture offers substantial potential to grow revenue and increase its current contribution to the UK economy. As a vital protein source, farmed seafood can contribute to domestic food production and thereby meet the requirements of both the health and food security agendas. Aquaculture is also one of the few industries in a position to provide growth in both rural and coastal communities, a fact recognised worldwide by governments, scientists and industry²⁰.

Despite its promise, the aquaculture sector is far from realising its full potential. Attempts to grow the sector through a Defra-led English Aquaculture Strategy²¹ failed to land and the original strategy remains to be progressed.

England has the third longest coastline in the EU, after Scotland and Greece. Aquaculture theoretically offers the greatest opportunity for expansion of seafood output, yet English aquaculture accounts for only 4% of the total 214,345 tonnes of UK farmed seafood production²².

Opportunities include:

- The production of filter feeding bivalves (mussels, scallops and oysters) which would generate sustainable protein for domestic consumption or high value exports, support the driver for 'slow clean'²³ water onshore and the coastal leisure industry, and provide employment in fragile coastal communities
- Significant ecosystem services offered by the environmentally benign nature of bivalve mollusc production²⁴ acting as a carbon and nitrogen sink as well as a water 'cleanser'
- Trout, as one of the most efficient converters of feed to fish, has a role to play in increasing home-grown supply; by using current farm capacity, with some additional investment for modernisation and the development of new sites, it would be possible to increase trout production by 50%, growing volumes to 6,000 tonnes²⁵
- The nascent seaweed industry and new shellfish species such as abalone, other fin
 fish species, sea-urchins and clams also offer considerable growth potential.

A thriving aquaculture sector depends upon, and can contribute to, a healthy marine ecosystem, which in turn ensures clean water, raw materials for feed and wild stocks for cultivation.

The major constraints to industry development are regulation and water quality, and specifically the complex, unclear and challenging licensing process which is a significant barrier to entry and results in very few licence applications for new sites, issues already considered within the Seafish/Industry Aquaculture Regulatory Toolbox for England²⁶.

The creation of Prioritised Aquaculture Areas may be desirable to enable agencies to 'approve' cultivation sites and would offer the desirable protection such areas require. Water quality problems in UK coastal waters will take time to address. Focusing improvements in areas prioritised for aquaculture could offer a pragmatic route, driving localised land and sea stakeholder engagement and enabling real world change to support the shellfish industry to expand within realistic culture conditions. Waste water treatment improvements (from point and diffuse agricultural pollution) will lead to incremental water quality improvements that can be incorporated into shellfish culture management approaches. It is crucial that areas prioritised for shellfish production support rather than hinder ambitions for sustainable growth. In this way prioritised areas could encourage expansion in shellfish aquaculture by supporting the industry to successfully mitigate, and ideally avoid, poor water quality episodes and so deliver consumer protection, whilst working towards improving the culture environment in that specific prioritised location.

The aquaculture industry is equally as complex as wild catch fisheries, but there is little understanding of the diversity of its systems and species within the different public bodies that regulate the sector. This lack of understanding of the realities of production also has an effect on the consultation process for new sites and the regulation of operational sites. There is considerable scope to improve and streamline the regulatory framework and consenting process without risking any drop in standards. In line with Government aspirations in the Industrial Strategy to reduce red tape, our aim is to bring all of the bodies involved in regulating the aquaculture sector together to reduce bureaucratic and regulatory barriers to growth, innovation and productivity.

As a relatively young industry, aquaculture is still regarded as a high risk investment by the finance sector. Government support for the sector is key and a clear commitment to making the necessary changes will allow the sector to grow and thrive. Improved access to finance for businesses looking to start-up or grow and the backing of institutions that can catalyse private sector equity investment will help drive growth. Local Enterprise Partnerships also have a role to play in leveraging regional funding opportunities.

Section 03

GROW A SUSTAINABLE AQUACULTURE SECTOR (CONTINUED)

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
 Establish an Industry-Government English Aquaculture Leadership Group to drive sustainable growth. Deliver an English Aquaculture Growth Strategy, with Government supported growth targets and a revised short, medium and long term delivery plan. Develop an English Aquaculture Science and Innovation Plan investigating the potential of establishing Priority Aquaculture/Coastal Development Zones around England's coast with industry support, tax concessions, infrastructure incentives and targeted public/private funding. Ensure that shellfish harvesting waters are afforded the protection given under the Water Framework Directive²⁷ and that this protection is maintained and delivered by the Environment Agency (EA) and others. In reference to Action 14, consider the findings of the Patient Capital Review²⁸ and the support available for the aquaculture sector through current mechanisms and determine whether other fiscal incentives such as capital investment grants and Government guarantees for commercial bank loans are necessary. 	AQUACULTURE LEADERSHIP GROUP AQUACULTURE LEADERSHIP GROUP, SSIG DEFRA, ENVIRONMENT AGENCY	SHORT- MEDIUM	***

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Instigate a step change approach to Aquaculture regulation: Commission a comprehensive review of all current legislation and regulation impacting aquaculture, identify where these can be streamlined or require amendment and work with Government to deliver this, as well as: Develop a one-stop-shop for aquaculture legislation and regulation, aligning industry and regulators to streamline the application process and sources of advice. Secure better alignment of terrestrial and marine-based water quality legislation and regulation with regulators realising a common aim of 'slow clean' water. Strengthen the links between shellfish operators, nationally recognised relevant industry associations and authorising or regulating bodies to deliver streamlined processes to support the expanding sector. Ensure clear policy leadership and vision to support an expansion of aquaculture to instil a climate of confidence and positivity in decision-making within regulatory bodies through an awareness raising initiative. Strengthen industry/regulatory partnerships to ensure the shellfish testing regime is robust, accurate and fit for purpose to reduce	AQUACULTURE LEADERSHIP GROUP ENV. AGENCY, FOOD STANDARDS AGENCY, DEFRA, CEFAS DEFRA, ENV. AGENCY DEFRA AQUACULTURE LEADERSHIP GROUP AQUACULTURE LEADERSHIP GROUP AQUACULTURE LEADERSHIP GROUP STANDARDS		***
duplication across different agencies, reduce costs and grow public confidence in aquaculture.	AGENCY		







ENABLE BUSINESS GROWTH

IMPROVE INFRASTRUCTURE – A BETTER PLACE TO FARM, CATCH, PRODUCE AND SELL SEAFOOD

Seafood consumption levels of **2 a week** could add benefit right along the value chain, growing:

- English fleet employment to a record 5,300 FTE jobs, generating £150 million in wages
- English aquaculture employment to 1,260 FTE jobs, generating £20 million in wages
- English processing sector employment to 16,000 FTE jobs, generating £465 million in wages.

Additionally, the industry could benefit from an increase in spending on Research & Development and capital investment, ensuring long term and sustained plans for investment in innovation, engineering, IT/digital technologies delivering, desirable, attractive and modern businesses fit for the future (See appendix 4.1).

An efficient, profitable and responsible supply chain is the fulcrum of a thriving seafood industry. Bridging the span between demand and supply are the thousands of operators between sea and plate, from single person operations to large, multinational businesses with multibillion turnover.

While the range of requirements is as diverse as the market itself, there are some crucial areas that if improved, can enable substantial growth.

First of these is the requirement for better places to grow, catch, land and sell seafood, thereby ensuring economic value remains onshore. Infrastructure needs are varied and our work in this area will start with gaining a thorough understanding of requirements right across the value chain from sea or farm to plate. We welcome the Industrial Strategy Green Paper's²⁹ proposals to align the planning of infrastructure more effectively with local economic plans, recognising the role that Local Enterprise Partnerships (LEPs) can play in better understanding alignments across multiple sectors within the local economy.

To truly thrive, the seafood value chain needs to attract, retain and develop the right skills for growth. The capacity to manage increasingly rapid change is vital and as technologies and market conditions evolve, so must skills. We support the view in the Industrial Strategy that Government has a key role to play as the major contributor to investment in skills and recognise that we, as a supply chain, need to help shape qualifications and the curriculum to ensure the qualifications offered are useful to employers.

We therefore need to look right across the seafood supply chain and identify training and skills provision mapped against both current and future skills needs. This work will ensure that current Government initiatives, for example the Apprenticeship Levy³⁰ and the Post-16 skills Plan Pathfinder Routes³¹, deliver for the seafood supply chain, and that existing strategies for attracting and retaining talent such as 'Get In Go Far'³², and 'Tasty Careers'³³ can be utilised to maximum benefit.

Strengthening business capability will ensure new opportunities can be fully realised. A task and finish group will survey what the industry needs in terms of support and capacity-building, assessing whether there is a need for a business support hub to grow knowledge in key areas such as regulation and finance.

Lastly, we will look at opportunities to maximise the use and value of the seafood resource, through better but sustainable exploitation of underutilised species, current and future possibilities in the co-products market and improvements in supply chain logistics.

Throughout this work, the strength of our partnerships will be key and we will reach out to existing bodies out with and within the sector, to realise currently untapped opportunities and to develop new ventures.



40

Section 03

IMPROVE INFRASTRUCTURE – A BETTER PLACE TO FARM, CATCH, PRODUCE AND SELL SEAFOOD (CONTINUED)

HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
Establish an infrastructure task and finish group to map existing facilities against current and future needs across the entire seafood value chain, linking with relevant development bodies such as LEPs. Identify barriers to maintaining and improving key infrastructure and facilities, from deep water berths, ice production and vessel new build and maintenance, to physical and virtual auctions, digital connectivity, distribution and storage. Commission a feasibility study into agreed seafood grading standards between boats and auctions, and propose policy recommendations. Building on the work of the Blue Marine Foundation, commission a report on economic and social benefits of shortening supply chains for inshore fisheries (under 10m) through to regional and localised foodservice sectors.	SILG BPA, SSIG SEAFISH SILG	SHORT	***
Devise and deliver a single cross-sector seafood training and skills plan based on needs and requirements: Map skills, recruitment and retention needs and issues across the entire value chain. Review of best practice with regards to training, skills development and workforce retention, within the UK and overseas. Ensure the Post-16 skills Plan Pathfinder Routes meet the needs of the seafood supply chain. Consider future funding of voluntary safety courses for experienced fishermen and the Introduction to Commercial Fishing course beyond the European Maritime and Fisheries Fund (EMFF).	SEAFISH, DEFRA	SHORT - MEDIUM	***

	HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
17	 Assess current provision against the business requirements of the supply chain to identify major gaps and highlight opportunities. Consider the creation of a virtual business support hub to signpost: information about export requirements; regulatory requirements; Government initiatives^{35 36 37} and support programmes, for example UK Trade and Investment (UKTI) export advice; wider funding and support opportunities for research and innovation; and best practice programmes. Consider the findings of the Patient Capital Review³⁸ and the support available for the seafood sector through current mechanisms and identify whether other fiscal incentives such as capital investment grants and Government guarantees for commercial bank loans are necessary. In consultation with the SILG, establish a replacement funding mechanism for EMFF that addresses those high priorities that cannot be supported through other funding mechanisms. Improve knowledge throughout the supply chain about the demands of the market, for example, Corporate Social Responsibility (CSR), the expectations of consumers and how product quality and shelf-life relate to care of catch and logistics. 	SEAFISH, SILG SILG DEFRA, SILG SEAFISH	MEDIUM - LONG	**
18	 Maximise the use and value of the seafood resource: Investigate opportunities to reduce waste and maximise value in production; specific focus should be paid to identifying prospects for creating high-value by-products from residual resources for external industries and recovery of food grade product for subsequent manufacture. Waste minimisation: Signpost processors to existing information and tools on WRAP's website to help address opportunities to reduce waste and maximise value in production³⁹. Co-product optimisation: Maximise the value of fish meal, fish oil and by-products from seafood and freshwater fisheries, for fishmeal, health and other markets such as neutraceuticals. Exploit potential markets for verifiably sustainable underutilised species. Quantify socio-economic importance of fishmeal sector in protein to better inform policy and decision making within the seafood value chain. 	SSIG	MEDIUM - LONG	**

STRATEGIC PRIORITIES

ENSURE ACCESS TO THE INTERNATIONAL MARKETPLACE

UK industry is highly asymmetric 40 most of what we catch we export and most of what we consume we import. Ensuring access to international markets is a key requirement from both a producer and a processor perspective.

The 2020 Export Drive⁴¹ and the associated UK Food and Drink International Action Plan⁴² present an opportunity to substantially grow the value of English sustainable seafood exports and increase the take up of seafood exporters accessing UK Export Finance (UKEF) funds.

UK seafood exports currently amount to around 442,000 tonnes and make a \$1.34 billion contribution to the UK economy. With the UK's total food and drink exports amounting to \$18 billion, there is room to grow the value of seafood exports and make a greater contribution to the Government's wider food and drink export targets. In line with policy recommendations from industry, NGOs and Government we should seek to base our seafood export strategy on offering high quality sustainable product from well managed fisheries.

Potential export growth could see substantial gains:

- 5% increase 22,000 additional tonnes, £67 million additional value
- 25% increase 111,000 additional tonnes, £335 million additional value
- 50% increase 221,000 additional tonnes, £669 million additional value (See appendix 4.1)

Currently, UK seafood exports are heavily directed towards Europe, but by rebalancing our 'export portfolio', we can diversify into export markets in other major regions. Potential growth areas include products processed to secondary or even tertiary levels, with opportunities in product innovation, packaging and branding; and new markets for underutilised species.

An EU Protected Food Name (PFN) equivalent scheme may potentially generate additional sales and marketing opportunities, both at UK and regional level.



Current funding opportunities such as EMFF could potentially support the inception phase of this work.

The UK is not now, nor is it ever likely to be, self-sufficient in seafood. Imports are an essential and integral part of the market, providing the continuity, volume and diversity of supply essential to compete with chicken and other alternative protein sources. The UK needs substantial levels of imports to meet consumer demand, even for the fish species that are caught by UK fleets. Without continued access to the supplies that the nation needs at competitive prices, UK processors will find it increasingly difficult to remain viable, and consumers will face price rises, leading to reduced consumption – and the loss of the potential national health benefits of eating fish.

Seafood is an internationally traded commodity. If UK buyers are not competitive in that marketplace against nations which enjoy free trade and favourable tariff agreements with seafood producing nations, there will be a significant deficit in sustainable seafood supply, representing a food security challenge for the UK.

It is essential that seafood processors are able to operate within a regulatory framework that recognises this food security challenge, and that they have strong communication channels and supportive policy decisions within UK government on issues pertaining to international trade.

Through this strategic framework we will seek to ensure:

- UK seafood buyers benefit from free trade or preferential tariffs for seafood raw material commodities with all the major producing nations, and most critically with: Europe, Norway, the United States, Russia, China and Iceland
- New non-traditional trading partnerships for seafood are investigated
- Seafood buyers have close working relations with HMRC and have developed expedient and workable tariff relief processes for raw material imports
- Streamlined and efficient import processes make the UK a priority destination market for traded raw material commodities
- Efficient and fit-for-purpose port infrastructure and border inspection processes expedite the import of containerised frozen and chilled seafood raw materials
- UK government recognises the food security imperative to import seafood raw material commodities and have developed close working relationships with the processor and importer sector representative bodies.

Section 03

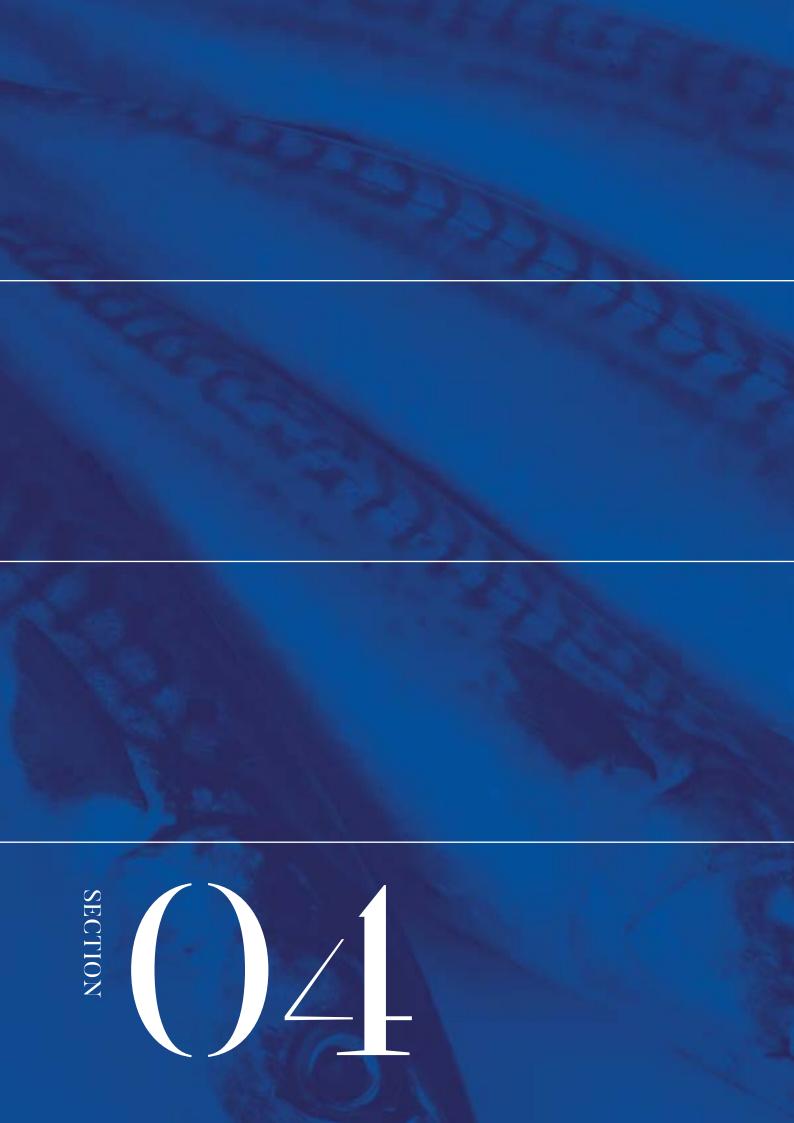
ENSURE ACCESS TO THE INTERNATIONAL MARKETPLACE (CONTINUED)

	EXPORTS -HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
19	Establish a Seafood Exporter's Group (SEG) to promote opportunities and drive progress. Through SEG, devise and deliver a Seafood Export Strategy and Growth Action Plan, delivering against a key commitment in the International Action Plan for Food and Drink 2016-2020.	SEAFISH	SHORT	**
20	Ensure seafood is fully factored in to the Government's export growth and promotion activities.	DEFRA, SEAFOOD EXPORTERS GROUP	SHORT	***
21	Conduct a review of current English seafood products to assess whether any could potentially benefit from Protected Geographical Indication (PGI) ⁴³ status and if this may be feasible prior to the UK exiting the EU. • Ensure the seafood sector's requirements are taken into account for any English-/UK-wide PGI replacement scheme following EU exit • Assist businesses in making the most of PGI designation when marketing for exports.	SEAFISH DEFRA SEAFISH	SHORT	**
22	Consider the establishment of seafood friendly trade hubs to ease export routes, with streamlined logistics and administration facilities.	GOVERNMENT	MEDIUM	***



	IMPORTS -HOW?	WHO?	WHEN? Timeframe for delivery: Short (18mths) Medium (5yrs) Long (13yrs)	PRIORITY
23	Ensure adequate resource is provided by UK Government to facilitate favourable international free trade and preferential tariff agreements negotiated with seafood producing nations.	GOVERNMENT	SHORT	****
24	Establish mechanisms to ensure that national raw material commodity needs are accurately calculated by agreement with the industry sector bodies such as the Seafood Industry Alliance (SIA) and are translated into tariff quotas in accordance with the sector's requirements.	GOVERNMENT, DEFRA, SEAFOOD INDUSTRY ALLIANCE	SHORT	****
25	Review and revise Border Control customs processes to expedite efficient logistics and tariff relief recovery.	GOVERNMENT, SEAFOOD INDUSTRY ALLIANCE	SHORT	***







4.3 Glossary – assumptions, definitions and abbreviations

4.4 References

4.1 Appendix

A THRIVING SEAFOOD INDUSTRY – A RATIONALE FOR GROWTH

We can't predict longer term futures accurately. This is particularly the case in seafood, a complex dynamic industry with high levels of uncertainty. The table on page 49 is an illustration of how industry could look in 2040 if every aspect increased by 75%. Future seafood consumption is based on simply increasing the number of seafood portions (per person per week) from 1.15 portions consumed today, to two portions consumed in 2040; an increase of around 75%.

Getting to 2 a week UK consumption in 2040

We show:

- UK consumer spend (UK retail sales and units, UK foodservice sales and servings) in 2040 increased by around 75% on the current position.
- English industry activity and UK exports in 2040 increased by 75% on the current position.

It is important to bear in mind that this illustration is very simplistic and has not taken into account any trade-offs between sectors that are likely to occur if a 75% growth was achieved. For example, if a 75% increase in consumption was achieved it is likely that this would be spread between imports, the UK catching sector and UK aquaculture sector.

	CURRENT POSITION*	2040	INCREASE	APPROX. % INCREASE
UK consumption				
Portions per person per week	1.152 ²	2	0.85	75
UK Retail				
Sales value (£bn)	3.11	5.5	2.4	75
Units (millions)	1,200¹	2,086	886	75
UK Foodservice				
Sales value (£bn)	3 ¹	5.2	2.2	75
Servings (millions)	967^{1}	1,681	714	75
Total UK sales value (£bn)	6.1	10.7	4.6	75
UK Exports**				
Sales value (£bn)	1.338^{2}	2.342	1.004	75
Volume ('000 tonnes)	4422	774	332	75
English Processing				
Sales value (£m)	$2,270^3$	3,970	1,700	75
Operating profit (£m)	150^{3}	265	115	75
Wages (£m)	266^{3}	465	199	75
Employment (FTE jobs)	$9,200^{1}$	16,000	6,800	75
English wild catch fishing				
Sales value (£m)	288¹	504	216	75
Operating profit (£m)	45¹	80	35	75
Wages (£m)	86^2	150	64	75
Employment (FTE jobs)	$3,040^2$	5,300	2,260	75
English Aquaculture				
Sales value (£m)	35^2	60	25	75
Operating profit (£m)	6.1^{2}	10	3.9	75
Wages (£m)	11 ³	20	9	75
Employment (FTE jobs)	720 ³	1,260	540	75

^{*}Based on most recent data. ** UK export only figures (export figures are not available by home nation). $^1\text{Based}$ on 2016 data

 $^{^2}$ Based on 2015 data

³Based on 2014 data

Section 04

4.2 Appendix

THE SEAFOOD 2040 JOURNEY

In October 2015, a Task Force representing all sectors of the seafood industry in England was established at the request of George Eustice MP, Minister of State for Agriculture, Fisheries and Food.

Chair - Alison Austin (Seafish Board)

Martyn Boyers (British Ports Association)

Barrie Deas (NFFO)

David Jarrad (SAGB)

Mike Mitchell (Fair Seas Ltd)

Richard Slaski (SARF/FIS)

Dr Jonathan Shepherd (Seafish Board)

Laky Zervudachi (Direct Seafoods)

Peter Andrews (British Retail Consortium)

Dr Tom Pickerell (Seafish Director)

The Task Force was asked to explore the challenges and opportunities facing the English industry and to shape a long-term ambition that could realise the full potential of the industry by 2040.

To support the Task Force in its work, Seafish delivered a consultation exercise, to ascertain the views of industry from sea and farm to plate. The results of that exercise were made available to the Task Force and informed this document. The Task Force members submitted their own vision for the industry in an exercise that asked 'what would constitute success for the industry?' and these two things combined were used to shape a strategic vision for the seafood sector in 2040 – 'Seafood 2040'⁴⁴ which was submitted to Minister Eustice in February 2016.

In May 2016 the Minister appointed members to a new Seafood Industry Expert Working Group, to take forward the next stage of this work: the development of an action plan to help realise the ambitions set out in Seafood 2040. The Group has a membership that is truly sea and farm to plate:

Chair - Alison Austin, Independent Member of Seafish Board

Ports and auctions - Martyn Boyers, British Ports Association (BPA)

Producer organisations - Andrew Pillar, Interfish

Wild catch - Matthew Cox, National Federation of Fishermen's Organisations (NFFO) (Replacing original member Barrie Deas, NFFO)

Wild catch under 10m - Dave Cuthbert, New Under Ten Fishermens Association (NUTFA)

Shellfish production - David Jarrad, Shellfish Association of Great Britain (SAGB)

Processing - Mike Mitchell, Seafood Industry Alliance (SIA)

Science - Dr Neil Auchterlonie, The Marine Ingredients Organisation (IFFO) (Replacing original member Dr Tom Pickerell, Seafish and Jonathan Shepherd, Independent)

Land-based Aquaculture - Oliver Robinson, British Trout Association (BTA) Aquaculture - Richard Slaski, Scottish Aquaculture Research Forum (SARF) / Fisheries Innovation Scotland (FIS)

Retail - Jeremy Ryland-Langley, Waitrose (Replacing original member Huw Thomas, Morrisons)

Foodservice - Laky Zervudachi, Direct Seafoods

Seafish lead: Mel Groundsell, Corporate Relations Director

Defra lead: Georgina Karlsson, Seafood Industry Growth Strategy Team

Over the course of 15 months, the Group came together regularly, evolving their initial strategic overview into this fully-formed strategic framework. Throughout this period, the Group reached out to others in industry, Seafish and Government to ensure a wide range of expert insight shaped their thinking and ensured the 2040 Strategic framework was comprehensive, well-researched and recommendations were supported by evidence and also industry. Sincere thanks are due to Georgina Karlsson for supporting the Group and organising its meetings and industry visits. Finally, a big debt of gratitude is due to Mel Groundsell for her commitment to this project as well as her excellent drafting skills, ably used in the production of this Seafood 2040 Strategic Framework.

4.3 Appendix

GLOSSARY – ASSUMPTIONS, DEFINITIONS AND ABBREVIATIONS

BPA: British Ports Association. **BTA:** British Trout Association.

Cefas: Centre for Environment, Fisheries and Aquaculture Science.

CFP: Common Fisheries Policy of the European Union.

CSR: Corporate Social Responsibility.

DHA: Docosahexaenoic acid, an omega-3 fatty acid.

EA: Environment Agency.

EEZ: Refers to a nation's exclusive economic zone; 'an area of coastal water and seabed within a certain distance of a country's coastline, to which the country claims exclusive rights for fishing, drilling, and other economic activities' (OED). The UK EEZ is defined by agreed treaties with neighbouring countries. In the north west and south west it is calculated by 200 nautical mile arcs from the territorial sea baseline. In other areas the outer boundary of the UK EEZ is the median line between the UK and adjacent countries' waters (Denmark, Germany, Netherlands, Belgium, France, Ireland, Norway, the Faroe Islands).

EMFF: European Maritime and Fisheries Fund.

EPA: Eicosapentaenoic acid (EPA), an omega-3 fatty acid.

FIN: Food Innovation Network.

FIS: Fisheries Innovation Scotland.

FTE: Full Time Equivalent.

GVA: Gross Value Added (calculated as operating profit plus wages).

HMRC: Her Majesty's Revenue and Customs.

ICES: International Council for the Exploration of the Sea.

IFFO: The Marine Ingredients Organisation.

KTN: Knowledge Transfer Network. LEP: Local Enterprise Partnership.

MMO: Marine Management Organisation.

NFFO: National Federation of Fishermen's Organisations.

NGO: Non-Government Organisation.

NUTFA: New Under Ten Fishermen's Association.

PFN: Protected Food Name.

PGI: Protected Geographical Indication.

PO: Producer Organisation. These are set up by fishery or aquaculture producers to support the management of quotas and the marketing the fisheries products of their members. Officially recognised bodies, there are 11 such organisations in England, and 24 across the UK (further information available at https://www.gov.uk/government/collections/fish-producer-organisation-po).

PROJECT INSHORE: Project Inshore was an ambitious initiative led by Seafish, the Marine Stewardship Council (MSC) and the Shellfish Association of Great Britain (SAGB) which sought to work towards an environmentally sustainable future for English inshore fisheries. This project carried out MSC pre-assessments for an extensive range of fisheries around the English coast. The results of these assessments have formed the basis for Strategic Sustainability Reviews for English inshore fisheries to provide a road map to guide future management decisions. It was officially launched on 8th June 2012 coinciding with World Oceans Day, and ran for three years.

QUOTA: To preserve fish stocks, there are legal limits on the amount of fish that may be landed each year; known as the total allowable catch (TAC). Under EU law, the TAC applies to stocks within the common fishery and thereafter each member state (including the UK) is given a quota which represents its agreed share of the TAC. In the UK, quota is further split between England, Wales, Scotland and Northern Ireland with uptake subject to detailed quota management rules. Fishing fleets that exceed their quotas can face financial penalties and a reduction in future quotas (further information available at https://www.gov.uk/guidance/manage-and-lease-fishing-quota).

SAGB: Shellfish Association of Great Britain.

SARF: Scottish Aquaculture Research Forum.

SEAFOOD MOG: Seafood Marketing Optimisation Group.

SIA: Seafood Industry Alliance.

SILG: Seafood Industry Leadership Group.

SLOW CLEAN WATER: Slow clean water is an approach to water management that uses the natural environment to store more water in the landscape, slowing the flow downstream. Slowing water in this way can reduce flood peaks in towns and villages whilst reducing the loss of soil and nutrients from the land and the associated consequences for coastal water quality.

SSIG: Seafood Science and Innovation Group.

SUSTAINABLE: The ability to maintain an activity at a certain rate or level over time. In a production context, the sustainable exploitation of natural resources involves maintaining an ecological balance to ensure resources are not depleted over time.

THIRD SECTOR: The third sector is an umbrella term that covers a range of non-governmental, non-profit, values driven organisations including cooperatives, charities, voluntary and community groups. Such organisations belong neither to the public sector or the commercial sector.

UK FISHING VESSEL LICENCE: UK registered fishing vessels must have a licence to fish. Licensing helps manage the size of the UK fleet and keep fishing opportunities within quotas. The licence sets out where fishing can take place, fish that are prohibited, and fish that can be targeted (and the limits for the stocks of these fish). Further information is available at https://www.gov.uk/guidance/do-i-need-a-fishing-vessel-licence.

UKAFPO: UK Association of Fish Producer Organisations.

UKEF: UK Export Finance.

UKTI: UK Trade and Investment.

2 A WEEK: Refers to the Government's consumption target of at least two portions per person/per week, including one of oil-rich fish and is based on an average portion size of 140g.

Section 04

4.4 Appendix

REFERENCES

1 BBSRC

(http://www.bbsrc.ac.uk/innovation/collaboration/collaborative-programmes/uk-aquaculture-initiative/)

2 Innovate UK

(https://www.gov.uk/government/organisations/innovate-uk)

- 3 FDF A Pre Competitive vision for the UK's Food & Drink Industries (https://www.fdf.org.uk/events/Pre-Comp-Food-Booklet-Final.pdf)
- 4 Fisheries Innovation Scotland (http://www.fiscot.org/)
- 5 Food Innovation Network (http://foodinnovationnetwork.co.uk/)
- 6 Seafood health benefits (http://www.seafish.org/eating-seafood/seafood-for-health/health-benefits)
- 7 Seafood Consumption Factsheet (http://www.seafish.org/media/publications/seafood_consumption_2016_update.pdf)
- 8 **Health cost savings of omega-3** (http://www.foodsupplementseurope.org/sites/0023/uploads/content/hccs-omega-3/hccs-omega-3-summary.pdf)
- 9 **Seafood Consumption Factsheet** (http://www.seafish.org/media/publications/seafood_consumption_2016_update.pdf)
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- 11 SACN: Advice on Fish Consumption Benefits & Risks (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338801/SACN_Advice_on_Fish_Consumption.pdf)
- 12 Atlantic Salmon: the super chicken of the sea? (https://globalsalmoninitiative.org/files/documents/atlantic-salmon-the-super-chicken-of-the-sea.pdf)
- 13 **Seafood in Europe; A Food System Approach for Sustainability** (https://www.eea.europa.eu/publications/seafood-in-europe-a-food)
- 14 **Seafood Week** (http://www.fishisthedish.co.uk/seafoodweek)
- 15 England's Seafood Coast (http://englishrivieratourism.co.uk/englands-seafood-coast.php)
- 16 Seafish Seafood Value Chain (http://www.seafish.org/media/Publications/UK_Seafood_Value_Chain_2015.pdf)
- 17 **UK Fishing Vessel Licence** (https://www.gov.uk/guidance/do-i-need-a-fishing-vessel-licence)
- 18 Seafish Seafood Value Chain (http://www.seafish.org/media/Publications/UK_Seafood_Value_Chain_2015.pdf)
- 19 Scottish Government: Consultation on a proposal to amend the economic link licence condition (https://consult.gov.scot/marine-scotland/amendment-of-the-economic-link-licence-condition/)
- 20 Value of Scottish Aquaculture 2017 (http://www.hie.co.uk/common/handlers/download-document.ashx?id=7d238cc0-4700-4b00-938c-3bc83067c34d)
- 21 Planning for Sustainable Growth in the English Aquaculture Industry (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/82402/120112-aquaculture-consult-doc.pdf)
- 22 **Future of the Sea: Trends in Aquaculture** (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/635209/Future_of_the_sea_-_trends_in_aquaculture_FINAL_NEW.pdf)

Seafood 2040

A strategic framework for England

Section 04

23	Green Alliance: New markets for land	and nat	ure	!		
	(http://www.green-alliance.org.uk/resources/New	markets	for	land	and	nature.pdf

SARF078: Carbon Footprint Of Scottish Suspended Mussels And Intertidal Oysters

(http://www.sarf.org.uk/projects/sarf078.php)

SR694: Aquaculture in England, Wales and Northern Ireland (http://www.seafish.org/media/Publications/FINALISED_Aquaculture_in_EWNI_FINALISED__-_Sept_2016.pdf)

${\bf Seafish/Industry\ Aquaculture\ Regulatory\ Toolbox\ for\ England\ (http://www.seafish.org/industry-support/aquaculture/aquaculture-regulatory-toolbox-for-england)}$ 26

27 Water Framework Directive

(http://ec.europa.eu/environment/water/water-framework/index_en.html)

28 **Patient Capital Review**

 $(https://www.\cite{gov.uk/government/publications/patient-capital-review})$

29 **Building our Industrial Strategy**

(https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/611705/building-our-industrial-strategy-green-paper.pdf)

31 Post-16 Skills Plan

(https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536043/Post-16_Skills_Plan.pdf)

32 Get in Go far

(https://www.getingofar.gov.uk/)

33 Tasty Careers

(http://tastycareers.org.uk/)

34

Blue Marine Foundation (http://www.bluemarinefoundation.com/project/lyme-bay/)

35 UK Food & Drink Export Plan

(https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/560786/food-drink-export-action-plan-2016-2020.pdf)

36 InnovateUK

(https://www.gov.uk/government/organisations/innovate-uk)

37 Agri-tech Catalyst Fund

(https://www.gov.uk/government/publications/agri-tech-catalyst-innovationfunding-in-developing-countries)

38 **Patient Capital Review**

(https://www.gov.uk/government/publications/patient-capital-review)

39 WRAP

(http://www.wrap.org.uk/)

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Seafish Seafood Industry Factsheet 2017 (http://www.seafish.org/media/publications/SIF_March_2017_AW_download.pdf)

41 Export 2020

(https://www.gov.uk/government/publications/2020-export-drive)

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UK Food & Drink Export Plan (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/560786/food-drink-export-action-plan-2016-2020.pdf)

43

 $\label{protected-Geographical Indication (PGI)} Protected Geographical Indication (PGI) \\ (https://www.gov.uk/guidance/eu-protected-food-names-how-to-register-food-or-drink-products) \\$

44

Seafood 2040 Task Force (http://www.seafish.org/about-seafish/news-and-events/news/seafood-2040-strategy-for-england)