

More Food, More Jobs and More Money in the UK
Oceana's Recipe for Fish Recovery



Overview

The United Kingdom (UK) is a global fishing nation and a major player in fisheries in Europe. However, fisheries in Europe are in an alarming state of affairs. Sixty-four percent of stocks in European seas are now classed as ‘overfished’¹, meaning that fish are caught at a quicker rate than they can naturally reproduce.

Key fishing waters for UK vessels – such as North-Western Waters and the North Sea – now have an overfishing rate of 49% and 44% respectively¹. Some stocks – such as cod in the West of Scotland – have suffered historical critical lows, which put jobs and livelihoods at risk.

Overfishing is now a global environmental and food security problem that not only affects our oceans and its resources but also jobs, people and coastal communities.

The UK’s decision to leave the European Union (EU) has brought the future of UK fisheries under public and political scrutiny and into the media spotlight. As the way EU and UK fisheries are managed is set to change following Brexit, there is a window of opportunity to transition to a more sustainable management that would benefit the fishing industry, business, the economy and society.

Oceana’s ground-breaking study showcases the socio-economic benefits of rebuilding UK fisheries, setting a political, economic and employment business case for sustainable fishing.

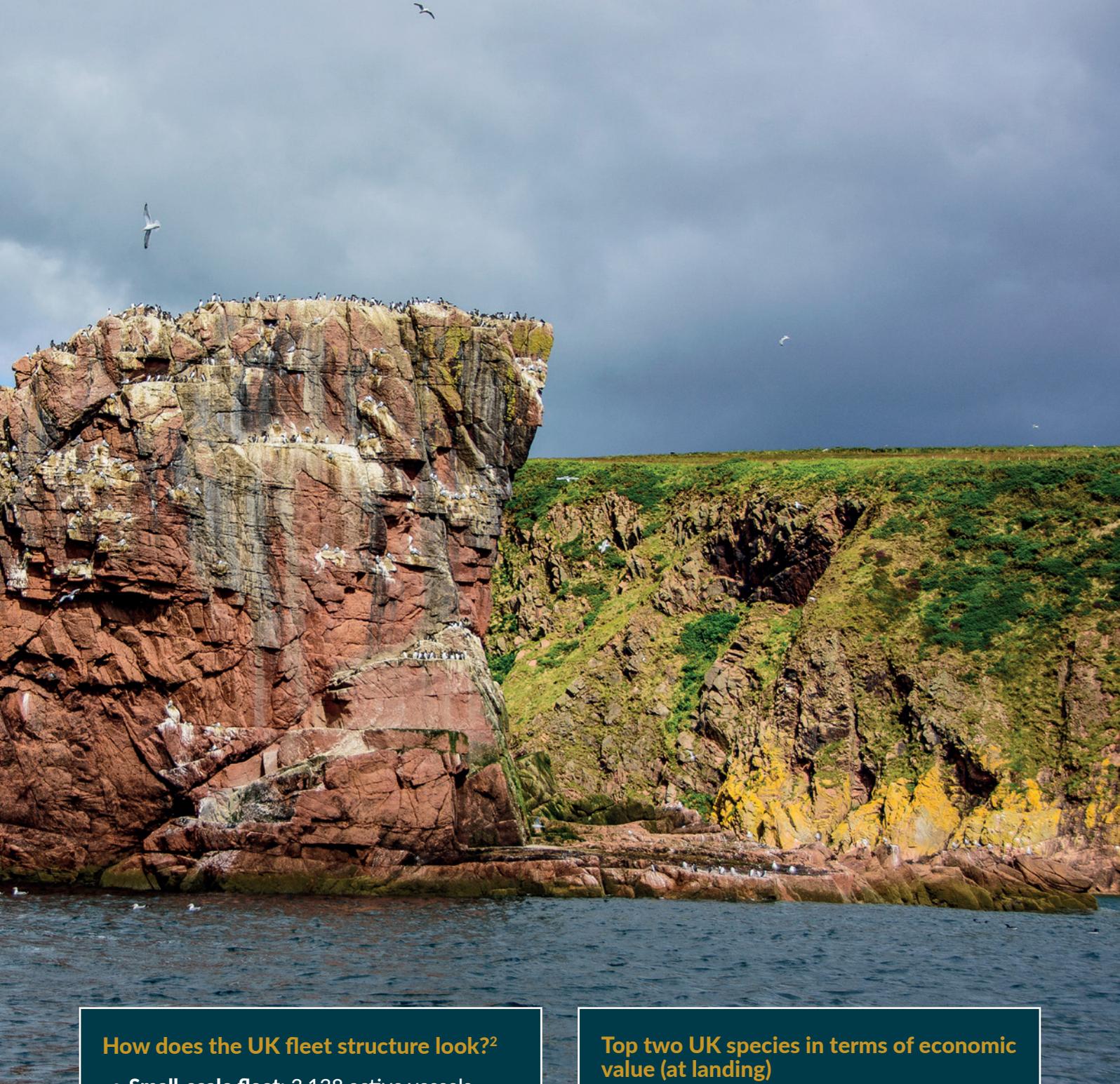
As fisheries in the UK are currently not sustainably managed in a way to reach their full potential, **Oceana analysed 75 of the most important species for the UK in EU waters based on commercial value and landings**. The findings conclude that if UK fisheries were managed sustainably over the next ten years, the socio-economic benefits could be major.



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IN A NUTSHELL: UK SOCIO-ECONOMIC BENEFITS OF WELL-MANAGED FISHERIES

- Catches in fish volume increasing by 153,000 tonnes (a 27% rise)
- The economic value of fish landings increasing by £244 million per year (a 37% rise)
- The UK fishing fleet expanding by around 800 new vessels (a 23% rise)
- Net profits in the fishing sector increasing by £84 million annually (a 137% rise) with a net profit margin of approximately 15%
- Gross Domestic Product (GDP) increasing by £319 million per year
- 5,100 new full-time jobs being created



How does the UK fleet structure look?²

- **Small-scale fleet:** 3,138 active vessels, made up of vessels under 12m in length using passive gears
- **Large-scale fleet:** 1,427 active vessels, made up of all vessels using active gears and vessels over 12m using passive gears
- **Catch area:** 62% of all landings by UK vessels were caught from Northern North Sea and West of Scotland

Top two UK species in terms of economic value (at landing)

| | |
|-------------------|-------|
| Atlantic mackerel | (21%) |
| Norway lobsters | (11%) |

Fishing as UK employer

- **Employment:** 12,107 jobs, of which 8,135 are full-time jobs. Of these, 46% were based in England, 40% in Scotland, 7% in Wales, and 7% in Northern Ireland

Almost two-thirds of all landings by UK vessels come from Northern UK waters

Revitalizing the UK fishing sector

If the 75 species analysed in this study were rebuilt at **maximum sustainable yield (MSY)** – in other words to a long-term sustainable level - Oceana estimates **landed weight of these species by UK vessels could reach 730,000 tonnes**, which would be worth around **£910 million**.

Considering no changes in the current catch share of the fishing fleet, the **UK fishing fleet could expect to grow by 23%*** to face demand from the **additional catches from a sustainable fishing management scenario**.

This would mean steady growth, after a brief transition period, before reaching sustainable levels, when catches would stabilise and remain high indefinitely, generating increased profits continually.

THE BENEFITS FOR THE FISHING INDUSTRY WOULD BE

- 1,400 new full-time jobs created across the UK fishing sector to handle the increases in catches
- £84 million more in net profits for UK fishing fleet (a 137% increase), generating £39 million more in wages and salaries from new jobs creation
- £148 million direct contribution from UK fisheries to UK GDP
- Tax revenues up by more than £27 million
- As these fish stocks rise in volume, more labour and fuel would be required to manage larger catches
- The costs would overall rise by around 23%, but revenues increase more, which would result in an improved profit margin of about 15% (compared to a 9% status quo scenario)

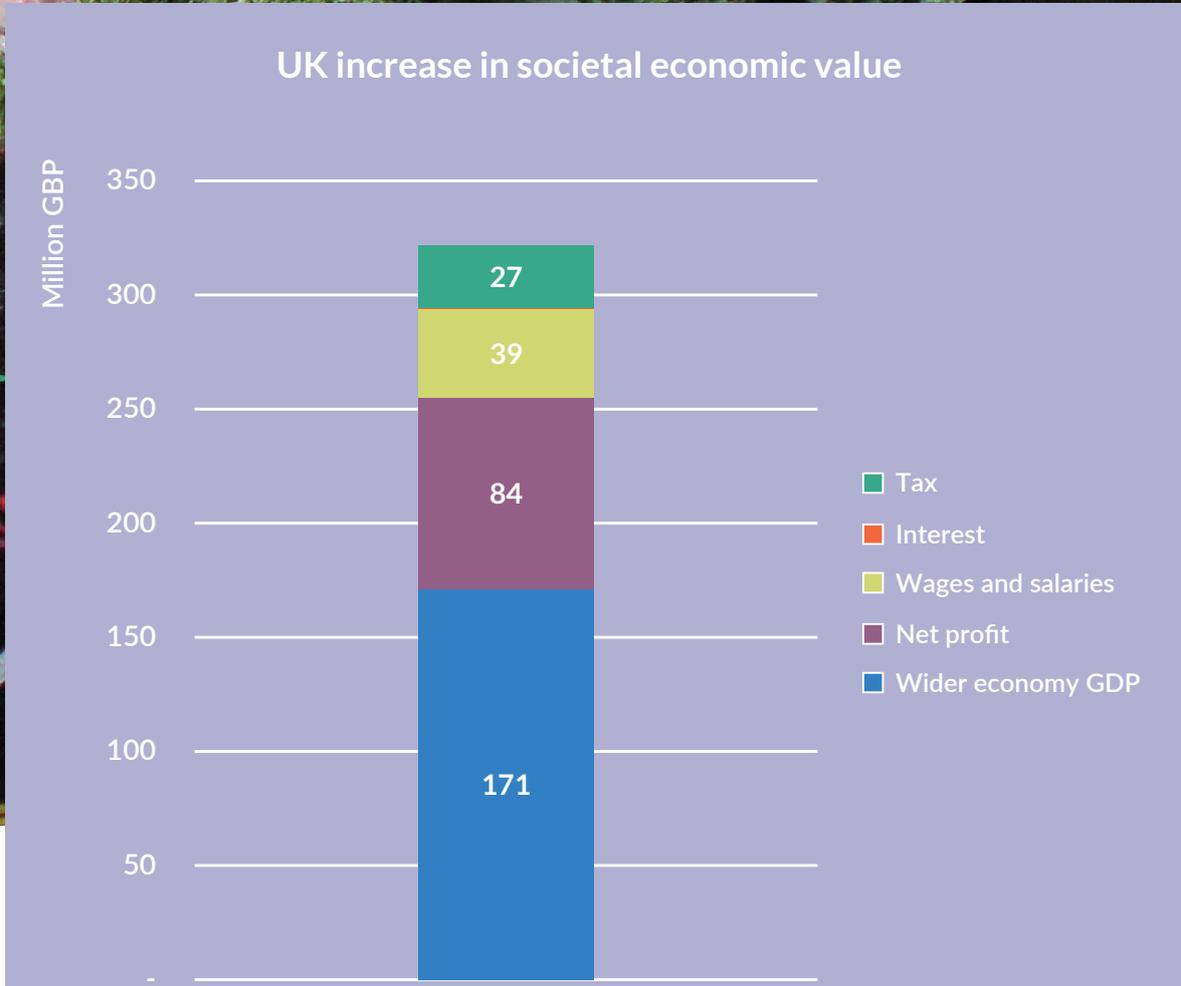


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* Refers to 2015 data.

Could UK fisheries be an engine of economic growth outside the fishing industry?

Quite simply, yes. The injection of revenue into the UK fishing economy would have a ripple effect, benefiting the wider economy through boosted spending in downstream industries such as food, retail, consumer goods and services, the so-called “wider economy”.



How would the UK economy be better off?

Net profits in the fishing sector could grow by 137%, generating an extra £84 million.

Besides a healthy profit for fishing industry, the benefits could stretch even further. The UK's employment and Gross Domestic Product (GDP) could also reap the advantages from sustainable fishing and management.

GDP

In the UK's case, the increase in GDP would be substantial, amounting to £171 million or 53% of the total increase in societal economic value (SEV), on top of a direct £148 million from the fisheries sector. **The total impact resulting from rebuilding fish stocks to MSY would therefore be additional £319 million to UK economy.**

Employment

Similarly, for employment, of the 5,100 full-time jobs that could be added to the UK workforce, 3,700 of those would come from industries outside of the fisheries sector. In that respect, the UK could create an extra **2.5 jobs more jobs in the wider economy for every job created for every job created in the fisheries sector.**

It should be noted that the sizeable contribution from the UK fish processing industry to the wider economy could not be estimated in detail, as data limitations prevented a breakdown at country level. Nevertheless, a rise in fish landings in UK would naturally lead to increased level of activity in the UK processing industries, which is currently the largest in Europe in terms of employment and turnover.

1 new job in fisheries creates, on average, 2 and a half more jobs in the UK

Fisheries employment in Scotland

In 2015, the main UK fishing ports were in the Scottish ports of Peterhead, Lerwick and Fraserburgh that accounted for 48% of all fish landed in the UK.

The UK is one of EU's countries most dependent on fishing for jobs in the EU with 3 regions in Scotland making the top ten: the Shetland Islands in the second most fishing-dependent region, Eilean Siar in the Western Isles ranks third and the Orkney Islands is 7th⁹.

More than £664 million in revenue from just six species

In a species recovery scenario, Oceana estimates that catches of the 6 species below would make up more than 70% of the total value of catches for the UK fishing fleet in EU waters, worth £664 million.

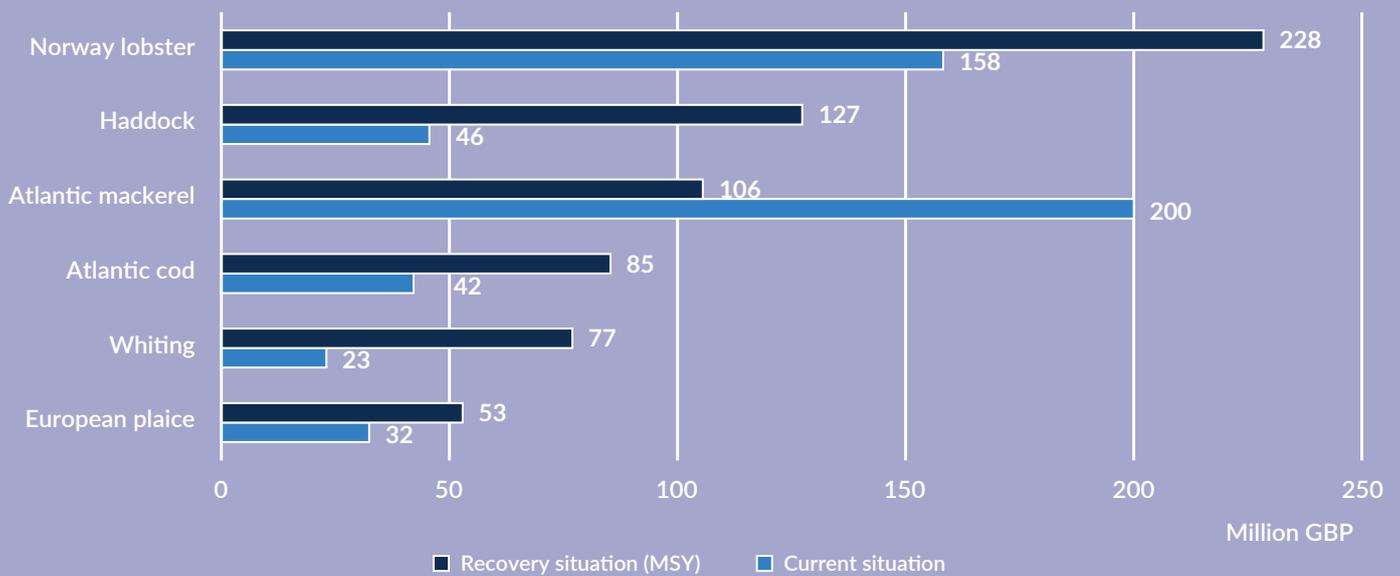
From an economic perspective, **Norway lobster** would become the key species economically, generating £228 million followed by

- **haddock** bringing in £127 million
- **mackerel** £106 million
- **cod** £85 million
- Other economically important species such as **whiting** (£77 million) and **plaice** (£53 million) would also see their value rise at MSY levels.

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UK landings value per species, before and after MSY recovery scenario



In volume, the growth in catch would come mostly from pelagic species (142,000 tonnes of herring and 133,000 tonnes of mackerel), followed by demersal whitefish (98,000 tonnes of haddock, 65,000 tonnes of whiting and 55,000 tonnes of cod).

Better managed Norway lobster stocks could generate £228 million

Among economically important fish species analysed for the UK, in an MSY scenario, only mackerel would face a reduction in catches (47% less), because it is currently fished far beyond sustainable levels. This situation would negatively affect the UK fleet operating in EU Atlantic waters. Nevertheless, the potential unrealized loss would be greater compensated by increases in catches for the rest of the stocks.



Haddock

Haddock (*Melanogrammus aeglefinus*) is a good example of how current overexploitation hampers potential economic gains from a natural renewable resource, and how large of an impact rebuilding this fishery could have.

The UK is the EU's largest player in the haddock fishery, with catches of approximately 33,000 tonnes in 2015, corresponding to approximately 66% of the total EU quota.

The top three ports for landing haddock in the EU are located in the UK, precisely in Scotland: Peterhead, Scrabster, and Fraserburgh.

The graph below illustrates the current, economically sub-optimal situation of the haddock stock in the North Sea, West of Scotland and Skagerrak. Years of overfishing have hampered the potential economic gains for the Scottish fishing fleet in particular.

Haddock is not one of the top seafood species consumed in the EU, but it is still among the most popular fish in the UK, which is the **EU's largest whitefish market**. In 2015, 30,000 tonnes of haddock were consumed, making it the UK's 4th most consumed species after cod, salmon, and pollack.

The UK depends strongly on importing haddock to fulfil its domestic demand. In 2015, it imported 59% of its total supply of haddock products, at a value of £95 million and 29,000 tonnes. Very little is exported⁵. Rebuilding and managing haddock to sustainable level stocks could therefore address the UK's dependency on imports as well.

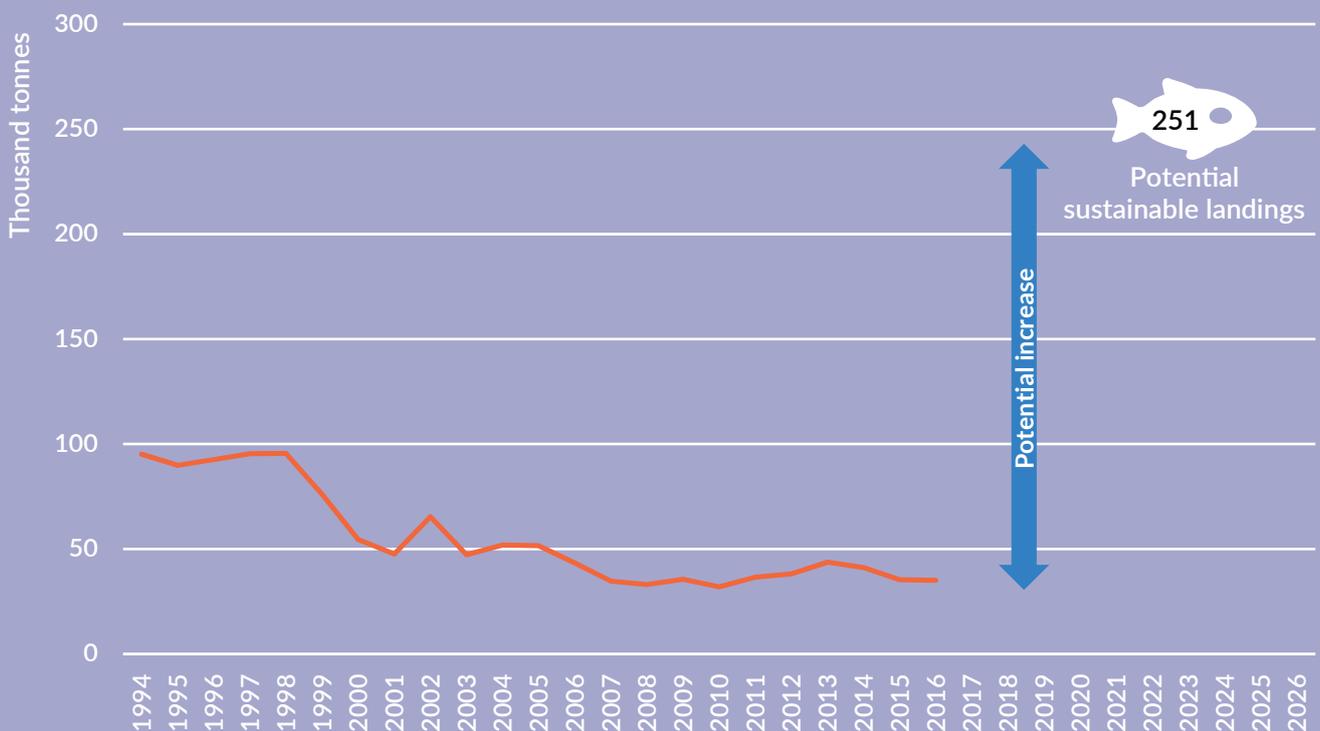
BENEFITS OF SUSTAINABLY-MANAGED HADDOCK

According to Oceana, the potential catches for haddock in EU waters, if fished sustainably, could be more than 140,000 tonnes, representing a 179% increase in volume compared to 2015.

For the UK fleet alone, this would result in 63,000 additional tonnes of catches, generating £82 million in additional revenues per year.



Landings of Haddock in the North Sea, West of Scotland and Skagerrak



Norway lobster

Norway lobster (*Nephrops norvegicus*) is mainly managed under a total allowable catch (TAC) and most of the EU quota is taken around the British Isles, the Norwegian Sea, and the Faroe Islands. The UK is the main fishery nation in the EU, holding about 57% of the total EU quota, corresponding to 36,455 tonnes in 2015.

The EU takes the absolute majority of catches and landings of this species, as well as being the main consumer market. Its main fishery and export nations are located in northern Europe (the UK, Denmark, and Ireland) whereas the main markets are located in southern Europe, namely in Italy, Spain, and France, who all depend on imports to satisfy domestic demand⁶.

In 2015, 65% of the EU landings of Norway lobster occurred in UK ports. Fraserburgh (Scotland), Kilkeel (Northern Ireland), and Mallaig (Scotland) were the top three ports. Scottish vessels accounted for most UK landings, and in 2015, they landed approximately 16,500 tonnes (75%).

BENEFITS OF SUSTAINABLY-MANAGED NORWAY LOBSTER

Oceana calculates the potential total increase in catches of Norway lobster in EU waters, if fished sustainably, could be close to 75,000 tonnes, an increase of 44% in volume compared to 2015.

For the UK demersal fleet operating in these waters, this would result in an additional 14,000 tonnes of catches generating £70 million in additional revenues.



Cod and Fish and Chips

The UK has the largest cod (*Gadus morhua*) fisheries in the EU, followed closely by Denmark and Germany. It holds about 17% of the total EU quota, corresponding to 28,541 tonnes in 2015. That year, cod accounted for the largest total value of demersal fish landed by the UK fleet.

The UK is the main EU supplier of fresh cod and the second largest EU market after France. The British population consumes more cod than any other white fish. However, the UK is heavily reliant on imports of cod to meet internal consumer demand: in 2015, approximately 90% of the cod supply in the UK was imported from non-EU countries (primarily from Iceland, China and Norway).

Fish and chip sector

- The British spend an annual £1.2 billion on fish and chips⁷.
- UK fish and chip shops serve over 380 million meals per year⁸.

BENEFITS OF SUSTAINABLY-MANAGED COD

Although the North Sea, Eastern English Channel and Skagerrak cod stock is now showing some encouraging signs of recovery. Oceana estimates that if the stock were fished sustainably, cod catches could top 275,129 tonnes per year (more than 5 times the current 2015 catch volume).

In addition, rebuilding cod stocks also offers opportunities for developing UK auction markets for fresh-cod (e.g. Peterhead), and reducing cod-dependency on imports from third-countries.

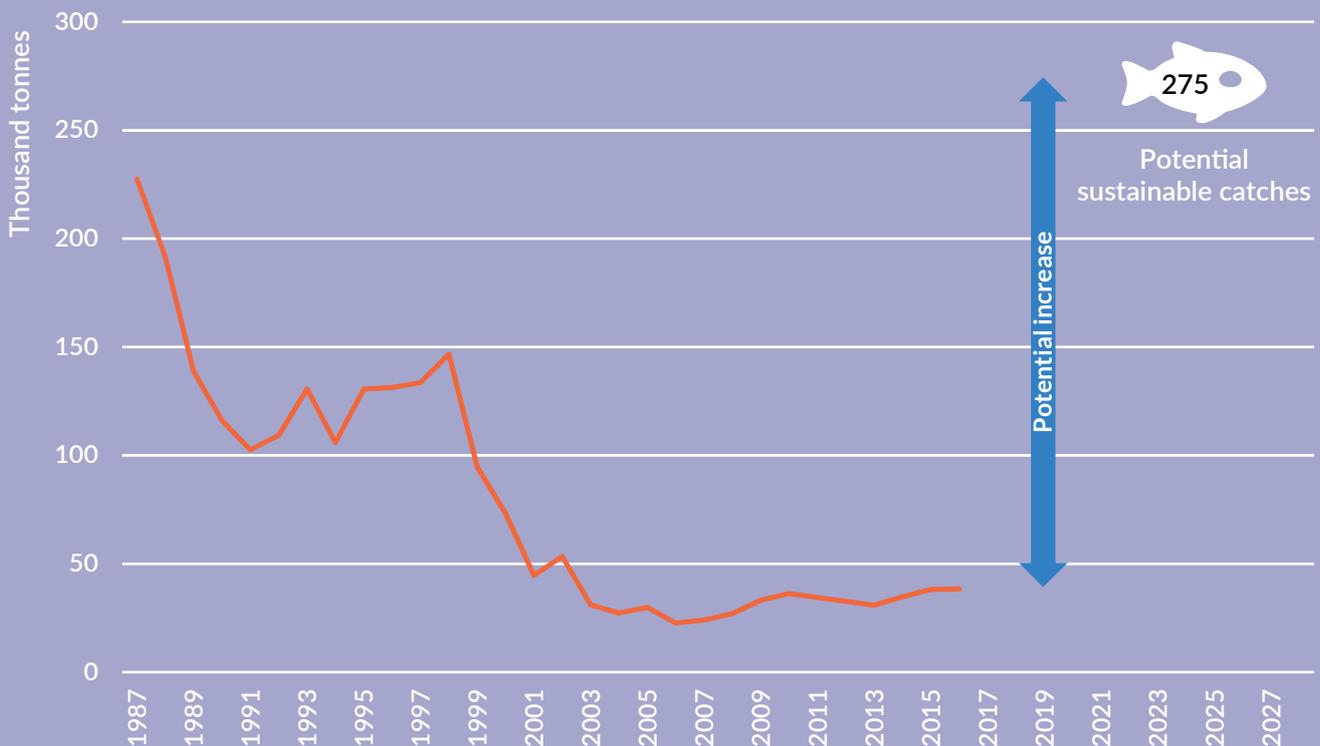
For the UK fishing fleet, the recovery of cod stocks in EU waters would mean doubling the amount of catch compared to 2015, increasing from 27,700 to 54,700 tonnes. This would potentially generate about £43 million additional revenues per year.



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Landings of Cod in the North Sea, English Channel (E) and Skagerrak





Herring

Herrings are, by definition, highly mobile and fishing seasons for herring are relatively short, usually lasting just several weeks. The UK's pelagic catches are dependent upon coastal state agreements with Norway, Iceland, Russia, Faroe Islands and other EU states. Therefore, landings of these stocks are often influenced by political and economic matters.

The EU accounts for about 45% of herring (*Clupea harengus*) catches (726,000 tonnes), with the dominant herring fishing nations being Denmark, Finland, the UK, the Netherlands, Sweden, and Germany.

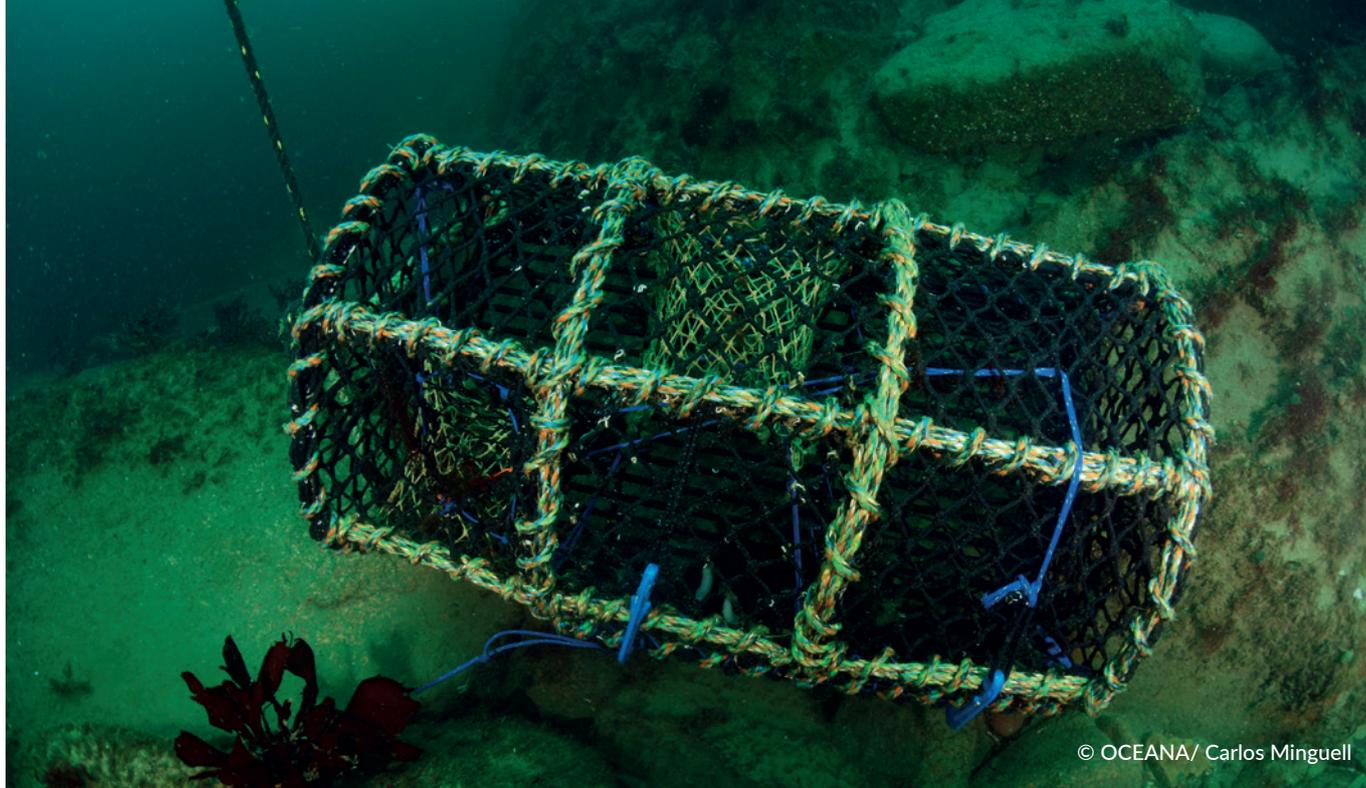
The UK holds about 11% of the total TAC for the EU, which was 88,000 tonnes in 2015. Herring is mostly caught by the UK's Scottish fleet in the North Sea and West of Scotland waters.

Herring is the second main pelagic species, after mackerel, landed by the UK fleet and is the 3rd most important species export by the UK (after salmon and mackerel).

BENEFITS OF SUSTAINABLY-MANAGED HERRING

For all herring stocks caught by UK vessels in EU waters, Oceana estimates that a complete recovery at MSY would lead to a catch of almost 142,000 tonnes per year, corresponding to an increase of 60% of catches compared to those in 2015 (+54,800 tonnes).

Such recovery scenario would potentially generate £17 million in additional revenues for the UK pelagic fishing fleet.



Study assumptions and limitations

The study only provides a partial view of the likely socio-economic outputs of rebuilding sustainable fisheries. The analysis is limited in scope to the number of stocks, fishing areas and data availability considered by Froese et al (2016). These findings should therefore be interpreted with caution, and do not represent the entire fisheries sector.

This economic study makes a number of important assumptions about the dynamics of fishing at MSY. In particular, the biological foundations for this work examined a subset of all fish stocks. This study for the UK accounts for 77% of the total volume of landings and 71% of the total value, for approximately 75 species. However, the difference between *status quo* and MSY remains unaffected by this limitation, and species covered by the study are a representative subset of important UK commercial fish stocks in terms of fish type and behaviour.

The data informing the *status quo* scenario in this study are from 2015 and where not possible from 2014, for completeness across Europe. The most recent complete data for the UK, from 2015, show that the cost structure of UK fisheries has remained relatively constant over the years, despite variations in landings and fuel prices. For example, the UK had a 1% decrease in total income compared to 2014.

- 1 Froese, R. et al (2016) Exploitation and status of European stocks. Updated version. World Wide Web electronic publication. <http://eu.oceana.org/en/publications/reports/exploitation-and-status-european-stocks-froese-report>
- 2 STECF, The 2017 Annual Economic Report on the EU Fishing Fleet (STECF-17-12).
- 3 STECF, The 2015 Annual Economic Report on the EU Fishing Fleet (STECF-15-07) – here measured as the ratio between the fishing fleet employment and total employment in the region.
- 4 Seafood Processing Industry Report 2016, Seafish Report No: SR700
- 5 EUMOFA Monthly Highlights No. 7/2017
- 6 EUMOFA Monthly Highlights No.12-2016
- 7 <http://www.federationoffishfriers.co.uk/pages/facts-and-figures-603.htm>
- 8 http://www.seafish.org/media/publications/sif_march_2017_aw_download.pdf

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