Life below water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Key to RAG ratings

- **GREEN**: Global or proposed UK target has been met, exceed or close to being met
- **AMBER**: Some progress or aspect of the targets met
- **RED**: Off target, poor progress, not addressed in existing policies

Prepared by

Supported by

[Logos of WWF and Thai Union]
**Target 14.1:** by 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution

<table>
<thead>
<tr>
<th>Indicator</th>
<th>14.1.1* Nitrogen use efficiency composite indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Indicator 14.1.1 updated during research: Index of coastal eutrophication and floating plastic debris density.</td>
<td></td>
</tr>
</tbody>
</table>

**Applicable UK policy / legislation**
- Water Framework Directive and sister Directives
- Marine and Coastal Access Act, Marine (Scotland) Act and NI Marine Act
- Environmental Regulations/SIs on marine litter, e.g. microbeads
- Environmental Impact Assessment Regulations

**National SDG target**

Relevant targets are included in the UK Marine Strategy, including:
- **Eutrophication:** Human-induced eutrophication in UK seas is minimised and all UK marine waters are non-problem areas;
  - Nutrient concentrations do not lead to an undesirable disturbance to the balance of organisms present in the water or to the quality of the water concerned resulting from accelerated growth of algae;
  - Concentrations of contaminants in water, sediment, or biota are kept within agreed levels and these concentrations are not increasing
  - The amount of litter, and its degradation products, on coastlines and in the marine environment is reducing over time and levels do not pose a significant risk to the coastal and marine environment, either as a result of direct mortality such as through entanglement, or by way of indirect impacts such as reduced fecundity or bioaccumulation of contaminants within food chains.
- **Loud, low and mid frequency impulsive sounds and continuous low frequency sounds introduced into the marine environment through human activities do not have adverse effects on marine ecosystems**

**UK commensurable indicator**

**Baseline status / performance**
Thanks to better sewage treatment, bathing water quality at our coasts has improved but only 65% of UK waters are rated 'excellent' compared to a European average of 85%. Input of hazardous metals into the marine environment has decreased by almost 80% compared to 1990 levels, although legacy impacts of chemicals such as PCBs continues to this day with little action proposed to deal with this. All other forms of pollution are increasing. Diffuse pollution including nutrient runoff remains a major issue in all river basin districts in the UK, leading to continued runoff into the sea with extensions on taking action to reduce agricultural point source pollution. Plastics are a particularly pervasive scourge that has gone unnoticed for decades and now dominates UK marine litter, making up almost 80% of all litter items on the seabed, out of sight out of mind. Recent government commitments, for example on banning microbeads, are welcome but require more ambition and urgency to meet targets under the timeframe of Target 14.1. As shipping, offshore wind and oil and gas decommissioning activities all increase in UK waters over the next 20 years, urgent solutions are also needed to prevent underwater noise impacts on fish and marine mammals. Recent trends on these issues therefore make it extremely unlikely that Target 14.1 can be met by 2025 without urgent action.
Other relevant UK indicator/s

Eutrophication:
Scotland State of environment/Wales State of Marine Natural Resources indicators on nutrient input Nutrient, Cholorophyll and Dissolved oxygen levels in the water column

Contamination and pollution:
UK marine pollution biodiversity indicator: [http://jncc.defra.gov.uk/page-6183](http://jncc.defra.gov.uk/page-6183)
Number of beaches in Excellent Status under revised Bathing Water Directive
Marine litter/debris:
OSPAR indicators for marine litter (beach items, seabed litter, plastic in fulmar stomachs)
Natural England Environment Indicators for litter/plastics and Devolved equivalents
Marine Conservation Society Beach Watch report
Underwater Noise:
UK marine noise registry: [http://jncc.defra.gov.uk/page-7070](http://jncc.defra.gov.uk/page-7070)

Assessment of current state

RAG Rating: RED
This rating is based on the conclusions of individual pollution types below:
Eutrophication: local issues of high nutrient inputs especially around estuaries (amber)
Sewage Pollution: has decreased over time, problems remain on some beaches (amber)
Litter: increase over time, especially plastics (red)
Noise: Likely major impacts to increase over time (red)
Air quality: Significant underestimates in Nitrogen Oxides (NOx) and Sulphur Dioxide (SO2) emissions from both fishing and non-fishing vessels affecting port cities, although these are predicted to reduce over time. (red)

Notes/ Disaggregation

* Deliver on river basin management - freshwater frameworks directive to overcome eutrophication issues.
* link to poverty and health goals (Goals 1 and 3) eg beach sewage - stats saying that we are one of the worst in Europe on this
* link to agriculture and food production (Goal 2) for nutrient production and eutrophication

Coherence issues & synergies

Local to International Dimensions
Significant responsibility on UK Government to work in collaboration on transboundary pollution issues, such as movement of plastic items in ocean currents and air pollution from fisheries and shipping.

Trends
**Actions needed**

- Implement and resource for River Basin Management Plans - these provide the most effective means to reduce agricultural pollution that leads to eutrophication through nitrate and phosphate runoff.
- Implement and extend measures to reduce plastic pollution, starting with Deposit Return Schemes on plastic bottles, extending to innovative fiscal incentives and taxes on the production of single-use plastic and ultimately to a ban on avoidable single use plastic items.
- Update marine pollution protocols to include both transport oil-based substances and non-oil based chemicals.
- A comprehensive UK noise reduction strategy, including both ambient and impulsive noise, that requires action to keep noise levels within agreed thresholds/limits.

**Target 14.2 by 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>14.2.1* Percentage of coastal and marine development with formulated or implemented integrated coastal management/maritime spatial planning plans (that are harmonized where applicable), based on an ecosystem approach, that builds resilient human communities and ecosystems and provides for equitable benefit sharing and decent work.</th>
</tr>
</thead>
</table>

* Indicator 14.2.1 updated during research: Proportion of national exclusive economic zones managed using ecosystem-based approaches.

**Applicable UK policy / legislation**

- Water Framework Directive and sister Directives
- Marine and Coastal Access Act, Marine (Scotland) Act and NI Marine Act
- Habitats and Birds Directives, and domestic regulations
- Well-being of Future Generations Act (Wales)
- Environment Act (Wales)

**National SDG target**

- Relevant targets are included in the UK Marine Strategy, including:
  - At the scale of the MSFD sub-regions, and in line with prevailing conditions, the loss of biodiversity has been halted and, where practicable, restoration is underway:
  - The abundance, distribution, extent and condition of species and habitats in UK waters are in line with prevailing environmental conditions as defined by specific targets for species and habitats.
  - Marine ecosystems and their constituent species and habitats are not significantly impacted by human activities such that the specific structures and functions for their long-term maintenance exist for the foreseeable future.
  - Habitats and species identified as requiring protection under existing national or international agreements are conserved effectively through appropriate national or regional mechanisms.
  - Well-being Goals under Well-being of Future Generations Act (Wales) including “A Resilient Wales”

**UK commensurable indicator**
### Baseline status / performance

The Marine environment is not in Good Environmental Status - there have been measurable declines in seabirds and condition of most major seabed habitat groups in the last 15 years, as well as corresponding increases in pressure from human activities.

Marine plans are in place for Scotland and part of English waters at the time of writing (April 2018) although these are not fully ecosystem based (ref UNEP-WCMC report for WWF), are lacklustre in their ambitions for encouraging environmental restoration and continue to entourage economic development strategically without equivalent strategic attempts to avoid environmental impacts.

### Other relevant UK indicator/s


Targets under High Level Marine Objectives and UK Marine Policy Statement which guide marine spatial planning in the UK

### Assessment of current state

**RAG Rating: AMBER**

Some marine plans are in place but marine plans will not cover all UK waters by 2020. Furthermore, current plans are lacklustre, not ecosystem based and risk of causing further environmental decline through a heavily economic focus on “Blue Growth”. There is very little practical prospect of restoration at a major scale through these plans and plans are not harmonised across jurisdictional borders.

At a wider level, the UK is not on track to meet its own targets for Good Environmental Status by 2020, and there is evidence of a lack of effective enforcement of existing marine protection policies that would encourage restoration.

Comment: GES by 2020 will also be failed, how much by will be debatable. But the question is whether the rating applies to the intention to deliver the SDG goal, or if they are actually achieving it. Arguably that it should be a red assessment as were still failing to create the change that the environment needs, the pace of change is simply too slow. However politically it may be more sensible to say amber and recognise they are developing the mechanisms to deliver the change – but seem to lack the ambition or pace required to deliver them?

Comment: A third point - there is evidence of a lack of effective enforcement of existing marine protection policies, for example scallop trawling in marine protected areas - [https://www.mcsuk.org/news/dedgin_firth_lorn](https://www.mcsuk.org/news/dedgin_firth_lorn)

### Notes/ Disaggregation

**Coherence issues & synergies**

- coherence across borders with MSP - marine plans are not talking to each other both within the UK and with other countries

- link to Goal 7 on promoting clean energy (offshore wind and tidal) though not considering environmental constraints strategically

- link to responsible production and consumption in terms of impact of human activities on biodiversity, e.g. habitat damage.

Comment: Or even within England

Comment: And include all activities - commercial fishing not effectively addressed in current England or Wales plans

**Local to International Dimensions**

Ecosystem based marine plans and coastal management plans require integration with terrestrial planning and neighbouring marine spatial plans both within and outside the UK sharing a common sea basin. Currently, the UK is part of the European Union Maritime spatial planning Expert Group which offers a means of discussing key issues, but has shown less interest beyond updating others on truly integrating spatial plans across jurisdictional competencies (in common with most other countries in these sea basins).

Comment: Invest in enforcement - in particular all fishing boats to have on-board tracking systems and CCTV, which must be switched on, to help prevent illegal fishing

### Trends
## Actions needed

* Improve quality of marine plans to be fully ecosystem based and include all human activities, including commercial fisheries, such that sustainable development can be achieved by guiding sea use away from environmentally sensitive times or places.
* Complete well-managed ecologically coherent marine protected area networks in place (Target 14.5) and other conservation measures to restore biodiversity.

* A more ambitious UK Marine Strategy, with stronger targets for recovery of various aspects of UK marine ecosystems.

## Target 14.3 minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

<table>
<thead>
<tr>
<th>Indicator</th>
<th>14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable UK policy / legislation</td>
<td>Integrated Climate Change legislation, including Carbon Budgets under the Climate Change Act, development of renewable energy under relevant Planning legislation</td>
</tr>
<tr>
<td>National SDG target</td>
<td>No specific UK targets on ocean acidification. Impacts on ecosystems likely to be minimised through reduction of direct human impacts (e.g., reduce overfishing, well-managed site protections)</td>
</tr>
<tr>
<td>UK commensurable indicator</td>
<td>Measuring buoys in place in selected UK locations. Strong seasonal and spatial variation in ocean chemistry.</td>
</tr>
</tbody>
</table>

### Baseline status / performance

Over the last 300 million years, global oceans have had a pH level of around 8.2. Ostle et al. (2016) show a decline in pH levels across UK waters between 2008-15 (from roughly 8.2 to 7.9-8.1). Emerging research suggests that this may lead to significant future impacts on the level and value of UK fisheries in the next century (Fernandes et al., 2016), as well as affecting ecosystem components throughout the food chain, as changes in the distribution and species of plankton drive changes to species such as sand eels that anchor the diet of higher predators such as seabirds (Carroll et al., 2017).

### Other relevant UK indicator/s

Assessment of current state

RAG Rating: AMBER

Minimising the impacts linked to wider marine work to address direct threats and transition to a zero-carbon economy. (from MCCIP) Until 200 years ago atmospheric CO2 had been constant for 650,000 years and possibly for 20 million years.

In the last 200 years ocean acidity has increased by 30%, a rate much faster than any time in the last 65 million years. Substantial extinctions of benthic and planktonic organisms could result.

Minimising the impacts linked to wider marine work to address direct threats and transition to a zero-carbon economy. As understood, there is no new major research programme on impacts of ocean acidification planned. No timeframe attached to SDG target.

Notes/ Disaggregation

Coherence issues & synergies

Local to International Dimensions

Dealing with the effects of ocean acidification can be an international issue requiring collaboration across countries and regions.

Trends
**Actions needed**

*Continuation of UK Ocean Acidification Research Programme, which ran up to 2016.*

*Added protections for key species affected by the direct or indirect impacts of ocean acidification and climate change, in order to build resilience. This could include marine protected areas or other closed areas around key fishing nursery or spawning areas or important prey availability for mobile species.*

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**Target 14.4 by 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>14.4.1* Proportion of fish stocks within biologically sustainable levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UK Marine and Coastal Access Act for inshore fisheries in England and Wales</td>
</tr>
<tr>
<td></td>
<td>Note: new Fisheries Bill(s) will replace the CFP upon EU exit.</td>
</tr>
<tr>
<td><strong>Comment:</strong></td>
<td>The plans on the new Fisheries Bill(s) has to be made clear at this stage especially if the UK will not be bound to the existing CFPs. Will they seek to enter into direct Sustainable Fisheries Partnership with third countries? Will they introduce their own quotas or be guided by existing regulations post Brexit? There needs to be clarity on this, to better understand how the sustainable exploitation of the oceans, seas and marine resources in the nation’s EEZ can be achieved. Equally important is the link between SDG14 and other SDGs -- 1,2,3,4 and 8 (to name a few) these links should be highlighted to show the urgency in ensuring the sustainable exploitation of fisheries.</td>
</tr>
<tr>
<td><strong>National SDG target</strong></td>
<td>Relevant targets are included in the UK Marine Strategy, which states:</td>
</tr>
<tr>
<td></td>
<td>The exploitation rate of each stock is either at or below FMSY, or within the range of plausible fishing mortalities consistent with FMSY. Where data does not allow FMSY, or FMSY proxies, to be calculated exploitation of each stock will be based on the precautionary approach with limits defined by agreed proxies for sustainable exploitation.</td>
</tr>
<tr>
<td></td>
<td>The reproductive capacity of the stock shall be maintained at, or above levels that will support the long-term exploitation of stocks at FMSY, as indicated by spawning stock biomass of all stocks being above 8pa.</td>
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<tr>
<td></td>
<td>More than 30% (by weight) of demersal fish in the Greater North Sea and 40% (by weight) of demersal fish in the Celtic Seas exceed a length of 40cm and 50cm respectively.</td>
</tr>
<tr>
<td></td>
<td>Also: UK fisheries or waters where UK has direct responsibility.</td>
</tr>
<tr>
<td></td>
<td>UK responsible wherever they are. IUU. Dutch boats flagged to UK caught fishing in MPAs illegally Council decisions for each stock by species and area.</td>
</tr>
<tr>
<td><strong>Comment:</strong></td>
<td>GUK line for Fisheries Bill work is that we should be aiming below Fmsy – not ‘at or below’. Worth highlighting here, or somewhere else in this section.</td>
</tr>
<tr>
<td><strong>UK commensurable indicator</strong></td>
<td>Number of fish stocks at or above BMSY and below FMSY</td>
</tr>
<tr>
<td></td>
<td>OSPAR Ecological Quality Indicators for commercial and non-commercial fish age and size Distribution (e.g. Large Fish Indicator)</td>
</tr>
<tr>
<td></td>
<td>JNCC fish stock indicator: <a href="http://jncc.defra.gov.uk/page-4244">http://jncc.defra.gov.uk/page-4244</a></td>
</tr>
<tr>
<td></td>
<td>ICES advice - <a href="http://www.ices.dk/Pages/default.aspx">http://www.ices.dk/Pages/default.aspx</a></td>
</tr>
<tr>
<td><strong>Comment:</strong></td>
<td>ONS NRP reports on percentage of fish stocks harvested sustainably and at full reproductive capacity, using sustainable fisheries data from Defra</td>
</tr>
<tr>
<td><strong>Baseline status / performance</strong></td>
<td>Compliance of IUU at UK level unclear, partly due to lack of inspections, lack of reporting</td>
</tr>
<tr>
<td></td>
<td>54 of 70 species at FMSY (AGrifish 2017, Mireille to send info)</td>
</tr>
<tr>
<td><strong>Comment:</strong></td>
<td>In 2013 (most recent reported on ONS NRP), 30.8% of fish stock were harvested sustainably at full reproductive capacity</td>
</tr>
</tbody>
</table>
Other relevant UK indicator/s

Assessment of current state

RAG Rating: AMBER

The most recent aggregated data for UK fisheries show that a third of fish stocks in UK waters are harvested sustainably. This is a significant improvement compared to 20 years ago, when shamefully only 8% of stocks were at their maximum sustainable yield, but much work remains to end overfishing in line with target 14.4. Cod in the North Sea, for example, has been restored from commercial collapse to being MSC-certified. Historically, however, even North Sea cod biomass remains at half of levels seen in the early 1970s, necessitating careful management, while some commercial fisheries (particularly for shellfish) reflect the consequences of “fishing down the food chain” and maintaining degraded ecosystems that would otherwise contain much richer marine diversity (See for example http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0101506 and http://www.gov.scot/Publications/2012/06/7562/0). There is also some concern about the impacts of ocean acidification on future fisheries. Fisheries subsidies in the UK are generally considered not to directly themselves lead to or support overcapacity or illegal fisheries. The impacts of the UK’s exit from the European Union on catching and importing the fish we currently consume are still to be determined at the time of writing.

There have been improvements in recent years to several commercial fish species in UK waters but several stocks are still overfished and low by historical standards. There is an overall positive outlook but high uncertainty on future management of fisheries in the UK after it leaves the EU Common Fisheries Policy and EU trade agreements. It is unlikely that Target 14.1 will be met for all species, and much uncertainty remains at the time of writing (March 2018), in particular how the sustainable exploitation of the oceans, seas and marine resources in the nation’s Exclusive Economic Zone can be achieved.

A revised approach to managing fisheries in English Marine Protected Areas has led to byelaws regulating fisheries around sensitive habitat features, such as seagrass, reef and Sabellaria.

The UK is still to publish a seabird Bycatch plan of action for the UK or adequately address bycatch of other taxa such as cetaceans. A UK small conservation strategy in development to help address this.

The EU IUU Regulation has made positive steps to address the issue of IUU fishing in Europe, but levels of IUU fishing in UK waters are unknown and thought to be underestimated.

Comment: Not sure if this is the right place for this, but an opportunity to flag that they have started to consider damaging fishing practices, but are yet to comprehensively tackle it.

Notes/ Disaggregation

Coherence issues & synergies

Percentage of inspections of fishing vessels to ensure compliance is limited

Local to International Dimensions

Fish is an inherently mobile public resource that does not respect national borders. Management of both domestic and transboundary stocks require agreements with EU members and/or third countries for the right to access and harvest these resources. This is particularly true for Scottish fisheries, which constitute the majority of the UK’s fishing industry in terms of value and landing.
**UKSSD — Measuring up Annex: Sustainable Development Goal 14**

### Actions needed

A revised fisheries regime that takes an ecosystem approach and restores all fish stocks to sustainable levels by reducing effort where necessary below that which would lead to Maximum Sustainable Yield (MSY) and ensure stock levels are above thresholds needed to maintain MSY into the future. This should be accompanied by access to fisheries as a common resource according to environmental, social and economic criteria, with quotas set according to independent scientific advice.

Investment in enforcement - in particular all fishing boats should have on-board tracking systems, remote electronic monitoring systems and (where possible) CCTV, which must be switched on.

Further management of fishing inside Marine Protected Areas that removes all damaging activities and allows for ecosystem recovery in and around these sites.

Comment: Add other GUK key ‘asks’ for Fisheries Bill here? – as with above comments, linked to ‘destructive practices’ element of target

### Target 14.5 by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information

#### Indicator

14.5.1 Coverage of protected areas in relation to marine areas

#### Applicable UK policy / legislation

- Marine and Coastal Access Act, Marine (Scotland) Act and NI Marine Act
- Habitats and Birds Directives, and domestic regulations

#### National SDG target

Commitment by all four UK governments to “an ecologically coherent and well managed network of marine protected areas” as well as a 2017 commitment to designate 25% of UK seas by 2020. Habitats and species identified as requiring protection under existing national or international agreements are conserved effectively through appropriate national or regional mechanisms.

#### UK commensurable indicator

(not MSFD) The percentage of UK seas covered by well-managed marine protected areas, the coherence of the network and the degree of management. Currently 23% of UK seas have some form of legal protection but level of practical management of these sites is low. There are identified gaps in some areas, habitats and species groups, including deepwater, offshore, mud, sand and mobile species.

Comment: NRP reports total extent of protected areas at sea, in million hectares, using Protected Areas data from Defra

#### Baseline status / performance

Comment: In 2017 protected areas at sea had increased to 20.7million hectares, compared to 4.05million hectares in 2010

#### Other relevant UK indicator/s

Assessment of current state

RAG Rating: AMBER

23% of UK seas are currently designated in some form as providing conservation protection (greater than the 10% Aichi target for spatial coverage), and over 100 sites have been designated over the last 10 years across the UK. However, gaps in this network remain to ensure that as a whole these sites are ecologically coherent, in particular for deeper sites with offshore muds and sands, and for mobile species. Further designations are planned to address some of these gaps, as well as add further habitats and species to existing sites.

There are some efforts to ensure that these sites are well managed to prevent damaging activities (such as for protecting reef and other sensitive features from damaging bottom towed fishing gear in England and Scotland through inshore fishing byelaws) but overall evidence of effective management is lacking and as a whole the network cannot be regarded well managed or in favourable condition. There is an absence of local resources to ensure that MPAs in coastal areas are managed locally with agreed management plans, while offshore sites require complex multilateral agreements to restrict fishing that have been extremely long in progressing. It is likely that this target cannot be met by 2020 on the management aspect, despite recent improvements.

Notes/ Disaggregation
## Coherence issues & synergies

### Local to International Dimensions

### Trends

**Actions needed**

- Full completion of an ecologically coherent and well-managed network of marine protected areas, that covers all benthic types, including offshore sands and muds, as well as mobile species, both of which are current gaps in the network.

- Greater efforts and resources into management of the MPA network across the UK, with associated monitoring to determine progress in meeting conservation objectives.

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**Target 14.6 by 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation**  

**Indicator 14.6.1** Dollar value of negative fishery subsidies against 2015 baseline

* Indicator updated during research: Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing

### Applicable UK policy / legislation

- [https://www.gov.uk/topic/commercial-fishing-fisheries/funding](https://www.gov.uk/topic/commercial-fishing-fisheries/funding)

### National SDG target

- Objectives from European Maritime and Fisheries Fund - Operational Programme for the United Kingdom:
  1. Adapting the fisheries sector to the requirements of the reformed CFP.
  2. Fostering growth potential in key areas across fisheries, aquaculture and processing.
  3. Supporting the increased economic, environmental and social sustainability of the sector
  4. Fulfilling the UK's control and enforcement and data collection obligations

### UK commensurable indicator

- Include UK Fish footprint here

### Baseline status / performance

**RAG Rating: GREEN**

The UK has had a policy since 1997 of not providing subsidies for new capacity and it is not considered that fishing subsidies in the UK contribute to Illegal, Unregulated or Unreported fishing directly. The UK Operational programme for the European Maritime and Fisheries Fund (EMFF) contains objectives to support ecosystem health although environmental projects have received less funding that other categories, such as improving health and safety. The establishment of EMFF funded local Fisheries Local Action Groups (FLAGs) has encouraged sustainable fisheries in local areas.

The future achievement of this target is dependent on what will replace the EMFF regime once the UK leaves the EU. A UK Fisheries Act and wider fisheries regime that uses financial support to incentivise actions to reduce the impacts of fishing on marine ecosystems, which reflects the impact of fishing upon the marine ecosystem and supports the protection of the marine environment. A replacement for the EMFF

Comment: How come this is Green? There is evidence to suggest that EU subsidies contributes to unsustainable practices such as IUU fishing especially in third countries -- please, provide justification for the result of the rating.

Comment: Ironically the white paper “fisheries bill” may well undermine this assessment!
UKSD — Measuring up

Notes/ Disaggregation

Coherence issues & synergies  Loss of EMFF to UK post EU exit.

Local to International Dimensions

Trends
There is high uncertainty about whether this target can be reached, as details of the UK's financial regime for fisheries after the EMFF fails to apply to UK waters is not clear. As long as current Operational Programme is effectively implemented with sufficient replacement funding, this target has a reasonable chance of being met.

Actions needed
Check Key elements of GUK doc - fishermen to pay into scheme. Polluter pays principle. No new negative subsidies. All public funding for sustainable fisheries. Cost recovery system for fisheries management.

Comment: Again worth double checking the white paper – it’s got some odd ideas in there that may well reduce the good work done so far

Comment: Agreed – especially with comments on ‘incentive’ charge. Where low value bycatch choking valuable fishery, ‘incentive’ charge based on commercial value of bycatch species just seen as additional overhead rather than changing behaviour?

Target 14.7 by 2030, increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

Outside of the scope of the research

Target 14.A Increase scientific knowledge, develop research capacity and transfer marine technology taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular SIDS and LDCs

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Proportion of total research budget allocated to research in the field of marine technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>National SDG target</td>
<td>n/a</td>
</tr>
<tr>
<td>UK commensurable indicator</td>
<td>n/a</td>
</tr>
<tr>
<td>Baseline status / performance</td>
<td>The UK maintains an internationally recognised marine science and technology community, based around academic institutions such as Plymouth Laboratory, National Oceanography Centre Southampton, St Andrews University Sea Mammal Research Unit and others. This supports work by UK Statutory Nature Conservation Bodies (SNCBs) and other organisations, including Non-Governmental Organisations. The UK Parliament Science and Technology Committee has repeatedly made recommendations that marine science receives the funding and support needed to maintain this, and recently has outlined the risks to marine research and science from leaving the European Union, to which the UK Government has provided reassurances.</td>
</tr>
</tbody>
</table>

Other relevant UK indicator/s

Assessment of current state
SDG Rating: GREEN

The UK maintains an internationally recognised marine science and technology community, based around academic institutions such as Plymouth Laboratory, National Oceanography Centre Southampton, St Andrews University Sea Mammal Research Unit and others. This supports work by UK Statutory Nature Conservation Bodies (SNCBs) and other organisations, including Non-Governmental Organisations. The UK Parliament Science and Technology Committee has repeatedly made recommendations that marine science receives the funding and support needed to maintain this, and recently has outlined the risks to marine research and science from leaving the European Union, to which the UK Government has provided reassurances.
**Notes/ Disaggregation**

**Coherence issues & synergies**

**Local to International Dimensions**

**Trends**

**Actions needed**

**Target 14.b provide access of small-scale artisanal fishers to marine resources and markets**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>14.b.1* Proportion of national fishery production by country that are catches by small-medium fishery businesses or; Progress by countries in adopting and implementing a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries</th>
</tr>
</thead>
<tbody>
<tr>
<td>National SDG target</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Quota allocations by UK and Devolved Fisheries Administrations |
| Baseline status / performance | Small scale fishers in UK are continually disadvantaged in quota allocation, in part as quota is allocated on a track record basis and ability to trade and collect quota. Currently, 3 trawlers control 61% of England and Wales quota. (Greenpeace, 2016) |
| Other relevant UK indicator/s | |

**Assessment of current state**

<table>
<thead>
<tr>
<th>RAG Rating: AMBER</th>
</tr>
</thead>
</table>
| Small scale fishers in UK are continually disadvantaged in quota allocation, in part as quota is allocated on a track record basis and ability to trade and collect quota. Currently, 3 trawlers control 61% of England and Wales quota. 
The Marine Management Organisation is currently responsible for EU-agreed quota allocation in English waters has started to take some actions to improve access of small scale fishermen through actions such as withholding part of recovered quota from larger scale operators to go to smaller scale fishers. There are indications that in transitioning to a new fisheries management regime post EU Exit that UK will negotiate an agreement based on a more up to date and equitable allocation of quota based on a fairer balance of economic, social and environmental criteria, which could lead to greater access for low impact fishermen. Much will depend on outcome of these negotiations, the final Fisheries Bill that creates the access and quota regime for the UK marine area, and wider reforms to fisheries management after EU exit. |

**Comment:** Agree – and as noted above this may or may not be solved by the white paper. 
**Comment:** There needs to be an assessment of the fisheries in the UK waters post Brexit to ascertain whether it is in the interest of the marine environment to increase and or decrease the quota allocation. -
Local to International Dimensions

Currently quota for shared stocks in areas beyond 12nm (and beyond 6nm for States that have historical fishing rights) are negotiated through annual December meetings of Fisheries Ministers at the European Council. UK allocations are subsequently devolved and allocated by each UK Fisheries Organisation in England, Scotland, Wales and Northern Ireland. These agreements are politically agreed and often exceed scientific advice on catch limits by the International Council for the Exploration of the Sea (ICES).

Trends

Actions needed

A UK Fisheries Act and wider fisheries regime that allocates access and quote to fisheries based on a full balance of economic, social and environmental criteria, rather than historical access, which reflects the impact of fishing upon the marine ecosystem and supports the protection of the marine environment. There also needs to be an assessment of the fisheries in the UK waters post EU exit to ascertain whether it is in the interest of the marine environment to increase and or decrease the quota allocation.

14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want

Outside of the scope of the research
3. http://jncc.defra.gov.uk/page-6183
4. https://www.nature.com/articles/srep18573
7. As shown for example by the Celtic Seas Partnership Future Trends Report: http://futuretrends.celticseaspartnership.eu/