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Marine Scotland Directorate

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Attitudes in Scotland on the  
Marine Environment and  
Marine Issues

# Attitudes in Scotland on the Marine Environment and Marine Issues

2019 Report

YouGov  
Marine Scotland

**YouGov**<sup>®</sup> What the world thinks

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## 1 Executive summary

### 1.1 Introduction

- 1.1.1 Marine Scotland is a Directorate of the Scottish Government, responsible for the integrated management of Scotland's seas for prosperity and environmental sustainability, working closely with its key delivery partners and others.
- 1.1.2 Marine Scotland identified a need to conduct research to improve understanding of how Scottish residents interact with the marine environment (sea and coastal areas), their perceptions of how it should be managed and their environmental concerns, amongst other issues.
- 1.1.3 The research consists of a nationally representative survey of adults aged 16 and over in Scotland and a series of focus groups to investigate attitudes to the Scottish marine environment, carried out by YouGov. A survey of 2,198 adults in Scotland was carried out online using the YouGov panel. The sample was representative by gender, age, social grade and region. Alongside this, six face-to-face focus groups were conducted across coastal, rural and urban locations in Scotland. Each group consisted of between nine and ten participants, taking place in Aberdeen, Peebles and Glasgow. Throughout the report, this is referred to as the qualitative phase.

### 1.2 Summary of findings

#### *Leisure activities at the coast*

- 1.2.1 The majority (63%) of Scottish residents that have visited the Scottish marine environment (coastal areas or sea) in the last year have gone walking, hiking or running. Following this, the next most common activities are on the beach, such as games, picnics or BBQs (35%) and photography (33%).
- 1.2.2 Older respondents aged over 65 are most likely to say they go walking, hiking or running at the coast (68% vs. 56% of 16-24s), as well as engaging in less active activities, including wildlife watching (35%) and beachcombing (24%). This finding was mirrored by evidence from the qualitative phase of the research, with older respondents saying they spend time at the coast not only to stay active, but also to enjoy the scenery.
- 1.2.3 Those aged 16-24 are more likely to do group activities at the beach, from games, picnics and BBQs (42% vs. 30% of those aged over 65), to going swimming (20% vs. 4%).

### *Business trips to the coast*

- 1.2.4 Twelve percent of Scottish residents say they have visited the Scottish coast or sea for work or business reasons in the last year. This is higher among those living in rural areas (17%) than urban dwellers (10%).
- 1.2.5 Among those who have visited the Scottish sea or coast for work or business reasons, this was most likely for the tourism industry (37%), followed by oil and gas sector (8%) and the shipping sector (7%).

### *Marine knowledge*

- 1.2.6 Scottish residents are most knowledgeable about renewable energy (such as wind, waves and tidal), with three in ten (31%) saying they know this sector very well or a fair amount. This was also apparent in the qualitative phase with focus group respondents speaking knowledgeably about marine-based wind farms in Scotland. Non-renewable energy, such as oil and gas (29%) and coastal tourism, recreation, cruises (25%) are also areas where people report having relatively high levels of knowledge.
- 1.2.7 The increasing popularity of nature documentaries, such as Blue Planet, has left its mark, with Scottish residents most likely to say they have found out about the Scottish Marine environment from films or nature / wildlife documentaries (48%). Newspapers, books magazines or online articles are also highly informative (42%), as is TV or radio news (40%).
- 1.2.8 Scottish residents have the greatest desire to learn about the Scottish marine environment (73%), followed by the marine environment around the world (60%) or in the rest of the UK (59%).
- 1.2.9 At the time this report was written with great uncertainty surrounding Brexit, it is unsurprising that learning about the likely changes to the marine environment following exiting the European Union is the area Scottish residents want to know more about (35%), followed by the impacts of climate change on the marine environment (27%) and renewable energy (25%).

### *Using the sea*

- 1.2.10 When thinking about important services and benefits that the marine environment provides, two in three (67%) say that marine habitats (marine plants and animals) are important, followed by renewable energy (59%) and food to eat (45%).

1.2.11 The qualitative phase revealed that the greatest benefits of the Scottish marine environment accrue to local people, with respondents recognising that they are fortunate to have access to the marine environment for leisure and recreation, and see it as a valuable, low-cost resource in terms of spending time outdoors, keeping fit, looking after mental wellbeing, and entertaining children / young people.

#### *Marine Protected Areas*

1.2.12 Marine Protected Areas (MPAs) are areas of sea designated to the protection of some of the most vulnerable marine animals and habitats and important historic sites. One in seven (14%) Scottish residents say they are very or quite familiar with Marine Protected Areas (MPAs), whilst a third (33%) are not familiar with them. Seventeen percent have heard of them but know nothing about them and a sizable portion (37%) have not heard of them at all. Knowledge was highest among those living in the Highlands & Islands, rising to around a quarter (27%) who say they are very or quite familiar with MPAs.

1.2.13 The vast majority (80%) of Scottish residents say they support the creation of MPAs in Scotland, with only 1% opposing them.

#### *Marine sectors*

1.2.14 When considering the social value of various marine sectors, it is most common for Scottish residents to say that ports and harbours and coastal tourism / recreation / cruises are important to Scotland in terms of their social value (82%).

1.2.15 This also comes out top in terms of economic value, alongside transportation of goods / commercial shipping (both 82%) and ports and harbours (81%).

#### *Marine issues*

1.2.16 Just under a third (31%) of Scottish residents believe that the health of Scotland's seas has worsened in the last year, whilst 8% say that there has been an improvement. Over a quarter (28%) do not feel they know enough to judge.

1.2.17 When thinking about the marine environment, most (63%) Scottish residents say the government should pay more attention to the scientific community than the public, although a quarter (26%) feel there should be equal attention.

#### *Environmental concerns*

1.2.18 Amidst current environmental debates, plastics dominate perceptions of the main types of litter in Scotland's sea and coastal areas, led by bottles (67%), bags (60%) and micro plastics (49%). Those aged 16-24 are also likely to cite food wrapping and packets (53%) and plastic straws (29%) as main types of litter.

- 1.2.19 When thinking about the causes of Scottish marine litter, the most common causes mentioned are food production and packaging (67%), general household waste (64%), tourism-related waste (55%) and sewerage (49%).
- 1.2.20 Scottish households are the most frequently mentioned group that respondents felt should have responsibility for reducing marine litter, with around half (53%) mentioning this. This is followed by industrial users of the coast (48%) and the Scottish Government (47%).
- 1.2.21 The qualitative phase showed that many felt reducing marine litter in Scotland is a joint responsibility which requires both residents and businesses to commit to more responsible use of the marine environment, as well as both local and the UK Government.
- 1.2.22 Around a quarter (23%) say that marine litter affects their family a great deal or a fair amount.

### *Environmental behaviours*

- 1.2.23 In an attempt to reduce marine litter over the course of the past year, reducing the use of single use plastic bags is the most common action people have taken (68%). Two-thirds (66%) think they have recycled more in general and close to half (47%) say they have used fewer plastic straws. For almost all of the actions listed, women are more likely than men to have undertaken them.
- 1.2.24 The qualitative phase also revealed that a conscious effort is being made to behave in a responsible manner when it comes to reducing marine litter. In the focus groups, the general tendency, especially among those with children, is to dispose of their own litter or taking it home with them if waste / recycling facilities are unavailable.
- 1.2.25 Looking into the future, among those that have not taken each action already, reducing use of single use bags (59%) was the most likely action to be supported in the next 12 months.
- 1.2.26 In line with earlier findings, TV programmes, documentaries and news outputs are felt to have influenced environmental behaviour most in the last 12 months, with just under half (46%) reporting this. This is followed by TV / radio news and environmental campaigns (both 35%). Politicians (5%), celebrities and information from children through their school (both 4%) are the influences least likely to have had an impact on behaviours.

### *Coastal management*

- 1.2.27 Scottish residents are more likely to say that the cost of managing marine industries to protect Scotland's coast and sea should be met by taxes / fees from marine industries that use it, instead of all taxpayers in Scotland.

- 1.2.28 When thinking about how the Scottish coast and sea is managed, respondents tended to favour all Scottish residents having more of say, as opposed to people who live by and / or work on the sea.
- 1.2.29 On balance, Scottish residents are more likely to say that, with regards to the marine environment, we should use less resources and therefore conserve them, as opposed to using more.
- 1.2.30 The majority (63%) disagreed with the suggestion that enough is being done to protect the Scottish marine environment. There is an expectation for the government (82%) and business (84%) to do more, though three in five (60%) hold themselves accountable and believe that they should do more to help. Despite that, only two in five (43%) feel they can personally make a difference.

#### *Seafood and sustainability*

- 1.2.31 Forty percent of Scottish residents regularly (at least once a week) eat seafood and two-thirds (68%) eat it at least once a month.
- 1.2.32 Around half (52%) of respondents agreed that they would pay 'a bit extra' for Scottish seafood, a sentiment more common among women and older Scottish residents.
- 1.2.33 Respondents were shown a range of sustainability labels. Scottish residents are most familiar with the Fairtrade label (88%), with half (52%) aware of any of the seafood sustainability labels, driven mainly by recall of the Marine Stewardship Council Certification (36%) and Dolphin Safe (27%).
- 1.2.34 Among those aware of each label, Dolphin Safe was considered to be the most influential, with 62% reporting this.

## **2 Methodology**

### **2.1 Overview**

2.1.1 Marine Scotland commissioned YouGov to undertake a nationally representative survey of adults aged 16 and over in Scotland and a series of focus groups to investigate attitudes to the Scottish marine environment.

### **2.2 Survey design**

2.2.1 Once the initial questionnaire draft was completed, YouGov carried out 10 cognitive interviews with the Scottish public. These respondents completed the draft online survey while on the phone with an interviewer. The purpose of these cognitive interviews was to check respondents' understanding of the questions and whether they found the questions to be clear and relevant.

2.2.2 Following the cognitive interviews, a small number of revisions were made to the questionnaire, namely:

- Adding in examples to specific answers codes in order to increase understanding
- Adding in new answer codes where respondents felt they were missing
- Adding definitions to certain questions to make them clearer to respondents

2.2.3 The questionnaire was subsequently piloted to 100 respondents, after which minor textual revisions were made, alongside the addition of any answer codes that were felt to be missing.

2.2.4 The survey was carried out online and fieldwork ran between the 5<sup>th</sup> and 20<sup>th</sup> December 2018. The total number of responses was 2,198 and the sample was representative by gender, age, social grade and region. Further details of the respondent breakdown within the data can be found in Annex A.

## **2.3 Focus groups**

- 2.3.1 In February 2019, six face-to-face focus groups were conducted across coastal, rural and urban locations in Scotland. Nine to ten participants attended each of the groups in Aberdeen, Peebles and Glasgow. Focus groups were split across three life stages – pre-family (18-30, no children), family (30-60, children under 16 living at home), and empty nesters (50+, no children / children left home) to ensure a broad range of views, needs and experiences were captured. There was also a mix of locations (coastal, rural and urban), as location was expected to impact respondents' views of, and engagement / interaction with the Scottish marine environment. The locations – Aberdeen, Peebles, and Glasgow – were selected as we had good coverage in each area for recruitment, and they reflected the coastal, rural and urban split required for the research. Alongside these quotas, there was also a mix of gender and socio-economic grade in the groups.
- 2.3.2 Focus groups used a combination of group activities and open discussion to generate qualitative feedback. All respondents completed a pre-task diary exercise ahead of the focus group, detailing their most recent visit to the Scottish coast or sea, ensuring that they were primed for discussion.
- 2.3.3 The detailed specification for the qualitative focus groups is outlined in the grid overleaf:

## 2.4 Demographic analysis

2.4.1 In this report, distinctions are drawn between different social grades. Social grade allows us

<b>Six focus groups across three locations</b>		
<b>Coastal location – Aberdeen</b>	<b>Semi-rural – Peebles</b>	<b>City location – Glasgow</b>
<b><i>Empty Nesters</i></b>	<b><i>Empty Nesters</i></b>	<b><i>Pre-family</i></b>
<ul style="list-style-type: none"> <li>• All Empty Nesters (50+, single / married / co-habiting; children have left home)</li> <li>• All regular visitors to the coast (i.e. at least once in last 2 months; mix of frequencies)</li> <li>• Mix of maritime activities (e.g. walking, swimming, beach, fishing water sports etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• All Empty Nesters (50+, single / married / co-habiting; children have left home)</li> <li>• All regular visitors to the coast (i.e. at least once in last 2 months; mix of frequencies)</li> <li>• Mix of maritime activities (e.g. walking, swimming, beach, fishing water sports etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• All Pre-family (18-29, single / married / co-habiting; no children in the household)</li> <li>• All regular visitors to the coast (i.e. at least once in last 2 months; mix of frequencies)</li> <li>• Mix of maritime activities (e.g. walking, swimming, beach, fishing, water sports etc.)</li> </ul>
<b>Coastal location – Aberdeen</b>	<b>Semi-rural – Peebles</b>	<b>City location – Glasgow</b>
<b><i>Pre-family</i></b>	<b><i>Family</i></b>	<b><i>Family</i></b>
<ul style="list-style-type: none"> <li>• All Pre-family (18-29, single / married / co-habiting; no children in the household)</li> <li>• All regular visitors to the coast (i.e. at least once in last 2 months; mix of frequencies)</li> <li>• Mix of maritime activities (e.g. walking, swimming, beach, fishing, water sports etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• All Family (30-49, single / married / co-habiting; children &lt;16 at home)</li> <li>• All regular visitors to the coast (i.e. at least once in last 2 months; mix of frequencies)</li> <li>• Mix of maritime activities (e.g. walking, swimming, beach, fishing, water sports etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• All Family (30-49, single / married / co-habiting; children &lt;16 at home)</li> <li>• All regular visitors to the coast (i.e. at least once in last 2 months; mix of frequencies)</li> <li>• Mix of maritime activities (e.g. walking, swimming, beach, fishing water sports etc.)</li> </ul>

to classify people based on their occupation, which in turn allows for the classification of entire households, based on the Chief Income Earner (CIE) of that household. The most widely used system used to classify social grade is derived from the British National Readership Survey (NRS), which classifies people into six groups: A, B, C1, C2, D and E.

- 2.4.2 The socio-economic groups refer to the National Readership Survey social grades: A (upper middle), B (middle), C1 (lower middle), C2 (skilled working), D (working), E (lowest). These are defined as: A: Higher managerial, administrative or professional. B: Intermediate managerial, administrative or professional. C1: Supervisory or clerical and junior managerial, administrative or professional. C2: Skilled manual workers. D: Semi and unskilled manual workers. E: Casual or lowest grade workers, pensioners and others who depend on the welfare state for their income (see *Annex B*). Throughout the report, differences between socio-economic groups are highlighted, with comparisons often being drawn between the classes.
- 2.4.3 For regional analysis, local authorities have been grouped together into the following regions: North East Scotland, Highlands & Islands, South Scotland, West Scotland, Central, Mid-Scotland & Fife, Lothians and Glasgow. The breakdown of each region can be found in Annex A and a map of the regions in Annex C.
- 2.4.4 Analysis based on coastal proximity has been included throughout the report. This is based on whether respondents' data zones (the small geographical area in which they live) are considered to be 'coastal'. For the purpose of this report, a coastal region is defined as being up to 10km from the coast, excluding estuaries and rivers.
- 2.4.5 The report will also analyse the results by 'nature relatedness' (NR) which aims to capture how close individuals feel to the natural world. Someone with high nature relatedness feels they are closely connected to nature and is often associated with having environmental concern.<sup>1</sup> NR-6 is a short form version of the nature relatedness scale, where respondents are asked how strongly they feel about six statements relating to the natural environment using a 5-point likert scale, where '1' is disagree strongly and '5' is agree strongly. An average is calculated from this with higher scores indicating stronger connectedness. Results are analysed by the mean scores, where a 'high NR score' relates to a mean score of 4 or 5, and a 'low NR score' relates to a mean score of 1 or 2.
- 2.4.6 Throughout the report, we highlight interesting differences between sub-groups where these are significantly different than could be expected by chance ( $p < 0.05$ ). The data is mostly analysed by gender, age, region, social grade, location (urban, town and fringe, rural) and NR-score, amongst other demographic factors.

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<sup>1</sup> The NR-6: a new brief measure of nature relatedness (Nisbet and Zelenski, 2013)  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3814587/>

### 3 Visiting the Scottish Sea / Coast

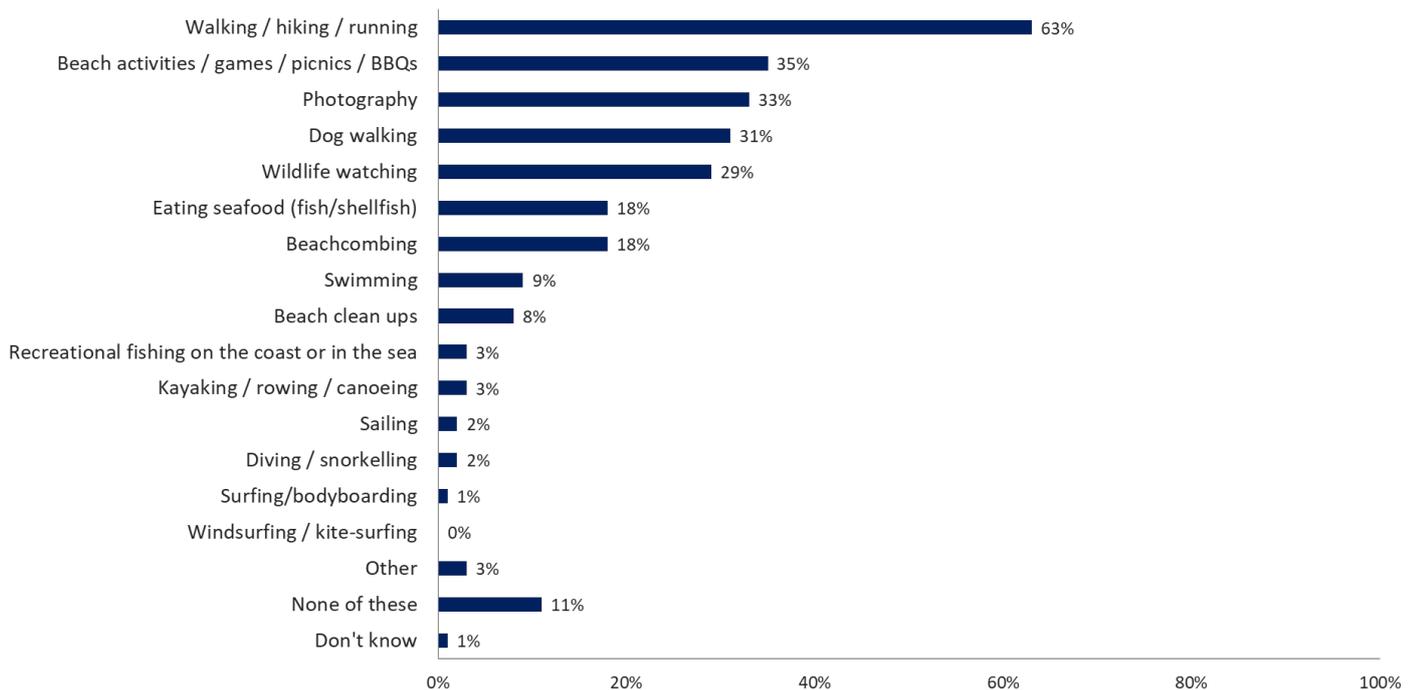
#### 3.1 Leisure activities at the coast

##### *Summary of key findings*

- Among Scottish residents that have visited the Scottish coast or sea in the last year, the majority (63%) say they have gone walking, hiking or running.
- Activities on the beach, such as recreational games, picnics and BBQs (35%), photography (33%) and dog walking (31%) are also popular.
- There is age variation, with older respondents aged over 65 more likely to go walking, hiking or running (68%), or engage in less active activities than their younger counterparts, such as wildlife watching (35%) and beachcombing (24%).
- Younger respondents are more likely to do group activities at the beach, including games, picnics and BBQs (42%) and going swimming (20%).

3.1.1 From simply walking along the Scottish coast and admiring the scenery and wildlife, to swimming in the sea, there are a wide range of leisure activities to do at the Scottish coast and sea. The majority (63%) of Scottish residents that have visited the Scottish coast or sea at least once or twice in the last year say they have gone walking, hiking or running with the next most popular being activities on the beach, such as games, picnics or BBQs (35%) and photography (33%).

**Figure 1: Leisure activities done at the Scottish sea or coast in the last year**



Base: All those visiting the Scottish coast or sea at least once or twice in the last year (N=1,825)

- 3.1.2 There are notable differences in the leisure activities that different age groups engage in at the coast. Those aged over 65 are most likely to say they go walking, hiking or running at the coast (68% vs. 56% for 16-24 year olds), in addition to less strenuous activities such as wildlife watching (35% vs. 14% for 16-24 year olds) and beachcombing (24% vs. 9%).
- 3.1.3 Older respondents in the focus groups – especially those that are retired – spend time at the coast not only to stay active (for example, walking the dog), but also to enjoy the scenery, the wildlife, and the sea air, mirroring the higher percentages for this age group seen in the quantitative survey. For older respondents visiting with grandchildren, the coast offers an exciting, engaging place that they can visit with children for free. Many speak about taking their grandchildren rock pooling, or to play on the beach, or even to see seals and other sea life, which provides a ‘cheap day out’ when contrasted with other activities (for example, trips to the cinema).

*“[At the Estuary at Newburgh] I saw seals and sea life with the grandchildren” Empty Nester, Aberdeen*

*“I go bird watching at the nature reserve and enjoy the views” **Empty Nester, Aberdeen***

- 3.1.4 Contrastingly, 16-24 year olds are more likely to do group activities at the beach, including games, picnics and BBQs (42% vs. 30% of those aged over 65), and water sports from swimming (20% vs. 4%) to activities such as kayaking, rowing, canoeing and diving and snorkelling (5% vs. 0%).
- 3.1.5 Similar to the quantitative findings, pre-family participants of focus groups living in Aberdeen (coastal location) often talk about exercising on the beach (for example, running), alone or with friends, and socialising with friends on the beach in summer, with picnics and BBQs both mentioned. This group use the beach for sports and group activities more regularly than their counterparts in Glasgow and the Peebles, due to their proximity to the coast.

*“Up where I live all along the coast and at the harbour they do a Gala every year” **Pre-family, Aberdeen***

*“I’ve done surfing and wakeboarding – that seems to be the new thing” **Pre-family, Aberdeen***

*“If you can drive it makes it easier, but with public transport – Troon is about 45 minutes away – but a lot of places on the West Coast you can’t really get to” **Pre-family, Glasgow***

- 3.1.6 The Highlands & Islands are known for their stunning landscapes and vast stretches of coastline. Therefore it is unsurprising that residents of this region are more likely than average to have partaken in almost all of the marine-based activities in the past year, with three quarters (74%) saying they have been walking, hiking or running at the coast (compared to 63% average), close to half (47%) wildlife watching (compared to 29% average) and a similar proportion (45%) doing photography (compared to 33% average), amongst other activities.

3.1.7 This ties in with whether people reside in urban or rural areas, as reflected in the qualitative phase. Scottish residents in rural areas are more likely than those living in urban areas to go dog walking at the Scottish sea or coast (42% vs. 28%), wildlife watching (36% vs. 26%), beachcombing (29% vs. 14%) and to participate in beach clean ups (13% vs. 7%), amongst others. However, those living in rural areas inland are surrounded by countryside, valleys, lakes and rivers, which are more accessible than the coast. Therefore, they have to make a concerted effort to travel to the Scottish sea and coast to engage with the environment.

*“We’re spoilt here, there’s plenty to do if you like mucking about outside, would you always want to go to the coast?” **Family, Peebles***

3.1.8 In line with this, those living in coastal zones are more likely than those that do not to say they go walking / hiking / running at the coast (66% vs. 60%), do beach activities / games / picnics / BBQs at the coast (38% vs. 32%) or go wildlife watching (32% vs. 25%).

3.1.9 Women are more likely than men to engage in many of the marine recreation activities – for example, walking, hiking or running at the coast (66% vs. 60%), beach activities, games, picnics and BBQs (41% vs. 28%), dog walking (34% vs. 27%) and wildlife watching (31% vs. 26%).

3.1.10 Scottish residents of social grade ABC1 are more likely than C2DEs to say they go walking, hiking or running at the coast (67% vs. 59%), as well as photography (35% vs. 31%).

3.1.11 Although those participating in the focus group discussions say they enjoy using the marine environment for leisure, many comment that they would like to see better facilities available to encourage further use. Many, especially families, note a lack of clean, working toilet facilities and availability of drinking water, while a lack of well-maintained walkways in coastal areas can mean access for people with buggies or in wheelchairs is limited. Cheap parking, close by to coastal areas, is also raised by participants as an influential factor in deciding which areas to visit and make use of.

*“You have to walk across lots of rocky/stony passages, and even the walkways that do exist can be quite gratey/holey which can be difficult for people in wheelchairs.” **Pre-family, Glasgow***

*“Council toilets aren’t manned now, they’re pretty grotty and no toilet paper.”* **Empty Nester, Peebles**

3.1.12 There is a clear link between NR score and the activities people partake in at the coast; those with a high NR score are more likely than those with a low one to say they have done each of the activities in the past year.

### 3.2 Business trips to the coast

#### *Summary of key findings*

- Twelve percent of Scottish residents report visiting the Scottish coast or sea for work or business reasons in the last year; this is higher among those living in rural areas (17% vs. 10% urban dwellers).
- Reasons for visiting were most often for the tourism industry (37%), the oil and gas sector (8%) and the shipping sector (7%).

3.2.1 Around one in nine (12%) Scottish residents say they have visited the Scottish coast or sea for work or business reasons in the last year. This rises to one in six (17%) of those living in rural areas, compared to one in ten (10%) in urban areas. Men are more likely than women to have visited for work or business reasons (14% vs. 10%), though there are no differences by age, social grade or NR score.

3.2.2 Of those visiting the Scottish sea or coast for work or business reasons, this was mostly linked to the tourism industry (37%), followed by oil and gas sector (8%) and the shipping sector (7%). Men were more likely than women to have visited for the oil and gas sector (13% vs. 1%), the shipping sector (11% vs. 2%) and commercial sea fishing (6% vs. 0%). In the coastal focus groups (Aberdeen), many worked, either currently or in the past, in the oil and gas industry, or had friends and family working in the industry. Even in the urban (Glasgow) and rural (Peebles) focus groups, some had a strong connection to the oil and gas industry.

*“My business works for it (oil and gas industry), the majority of friends do, and my dad does... it’s the obvious juggernaut in the Scottish economy”* **Peebles, Pre-family**

## 4 Marine Knowledge and Services

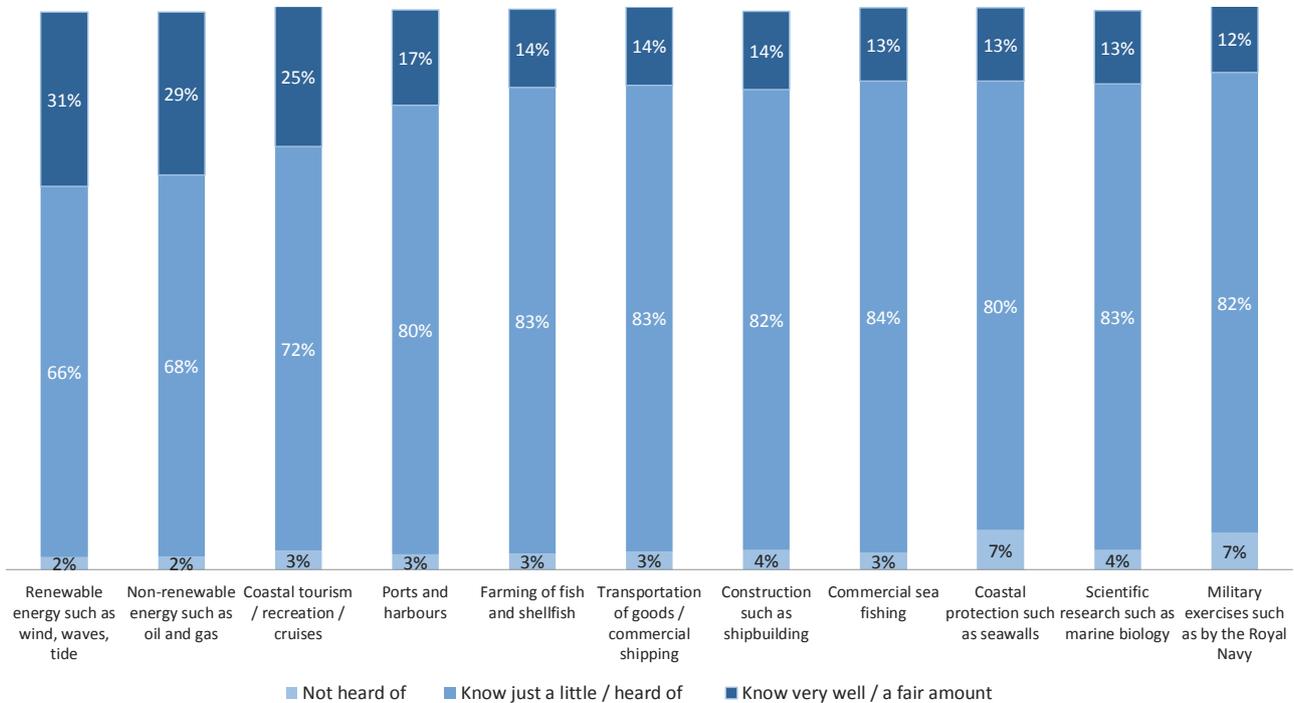
### 4.1 Marine knowledge

#### *Summary of key findings*

- Scottish residents are most knowledgeable about renewable energy (such as wind, waves and tide) (31%), non-renewable energy, such as oil and gas (29%) and coastal tourism (including cruises) and recreation economic sectors (25%).
- The rise in popularity of nature documentaries, such as Blue Planet, over the past decade has left its mark, with close to half (48%) saying they have found out about the Scottish Marine environment from films or nature / wildlife documentaries.
- Newspapers, books, magazines or online articles are also informative sources, with two in five (42%) citing these, as with TV or radio news (40%).
- Close to three-quarters (73%) of Scottish residents want to learn about the Scottish marine environment, followed by the marine environment around the world (60%) or in the rest of the UK (59%).
- In the current climate with great uncertainty surrounding Brexit, it does not come as a surprise that people want to learn more about the likely changes to the marine environment following exit from the European Union (35%), in addition to the impacts of climate change on the marine environment (27%) and renewable energy industry (25%).

4.1.1 The general picture from the survey is that awareness about marine economic sectors is low. Three in ten (31%) Scottish residents say they know about renewable energy (such as wind, waves and tide) very well or a fair amount, followed by non-renewable energy, such as oil and gas (29%) and coastal tourism, recreation, cruises (25%). Survey respondents felt least informed about military exercises, such as those by the Royal Navy, with only one in nine (12%) saying they know this area very well or a fair amount.

**Figure 2: Knowledge of Marine Sectors**



Base: All Scottish residents (N=2,198)

4.1.2 This awareness is reflected in the qualitative focus groups. Although participants felt they did not have much knowledge about marine economic sectors, when probed many spoke knowledgably about the current use of wind farms in Scotland, the possibility of increasing reliance on tidal energy, and the benefits and drawbacks of this.

*“Wind turbines are expensive to build but there are lots of problems (they don’t work in high winds, which Scotland gets often), so tidal is better.” Pre-family, Glasgow*

- 4.1.3 Levels of knowledge are highest among younger Scottish residents, with over one third (36%) of those aged 16-24 saying they know this area very well or a fair amount, compared to 27% of 35-54 year olds. Those living in the Highlands & Islands (41%) have better knowledge of renewables, as do men compared to women (38% vs. 25% of women) and social grade AB (37%). Blue Planet watchers also have better knowledge (36% vs. 27%) which is likely a result of their interest in the marine life generally.
- 4.1.4 Patterns emerge in overall knowledge of the marine sectors. For almost all of the areas, men are more likely than women to say they know the sector very well / a fair amount. There is also a correlation between NR score and knowledge; the higher the score, the higher the level of knowledge about the marine environment. Those aged over 65 tend to say they have high levels of knowledge, particularly high for coastal tourism / recreation / cruises (31% vs 19% of 16-24s). Contrastingly, 16-24 year olds are most likely to be in the know about scientific research, such as marine biology (20% vs. 9%), which is likely due to the majority of this age group being in education where topics such as these are on the curriculum.
- 4.1.5 Following from the quantitative findings, the suggestion that education plays a part in the awareness and knowledge of younger age groups is evident to a small extent in the qualitative focus groups, with some saying their education has helped to develop their knowledge of the marine environment.

*“I did quite a bit of work for my dissertation on the impact of intense agriculture.” **Pre-family, Aberdeen***

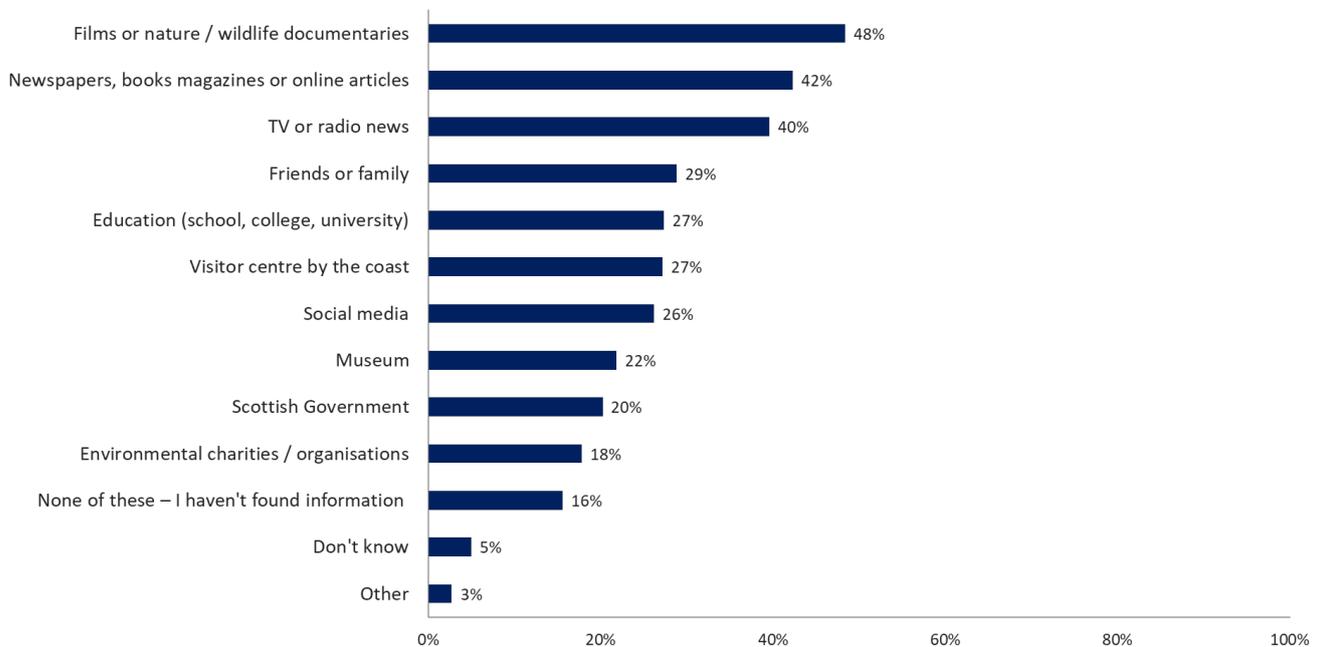
- 4.1.6 There are some regional differences, with people living in the Highlands & Islands having generally higher levels of knowledge. Whilst those from North East Scotland know most about the non-renewable sector (38%), people residing in West Scotland know most about engineering, such as ship building (24%).
- 4.1.7 Likely a result of their location, those living in coastal areas are more likely than those that do not to say they are knowledgeable about coastal tourism / recreation / cruises (28% vs. 21%), ports and harbours (19% vs. 15%) and coastal protection such as sea walls (16% vs. 10%).

4.1.8 The rise of Blue Planet and nature documentaries over the course of the past decade have had an impact on people’s awareness of the marine environment, with people being most likely to say they have found out about the Scottish Marine environment from films or nature / wildlife documentaries (48%). Following this, newspapers, books magazines or online articles have been informative for two fifths (42%), as has TV or radio news (40%). Museums (22%), the Scottish Government (20%) and environmental charities / organisations (18%) are less used information sources.

4.1.9 This pattern is consistent with findings from the focus groups, which generally cited documentaries as instrumental in increasing their knowledge about uses of and issues involving the marine environment more generally, although not necessarily specific to the *Scottish* marine environment. Some also say they get information from petitions and other links shared on social media.

*“Big Fish Fight on TV helped to get people using the types of fish they don’t usually use.” Pre-family, Aberdeen*

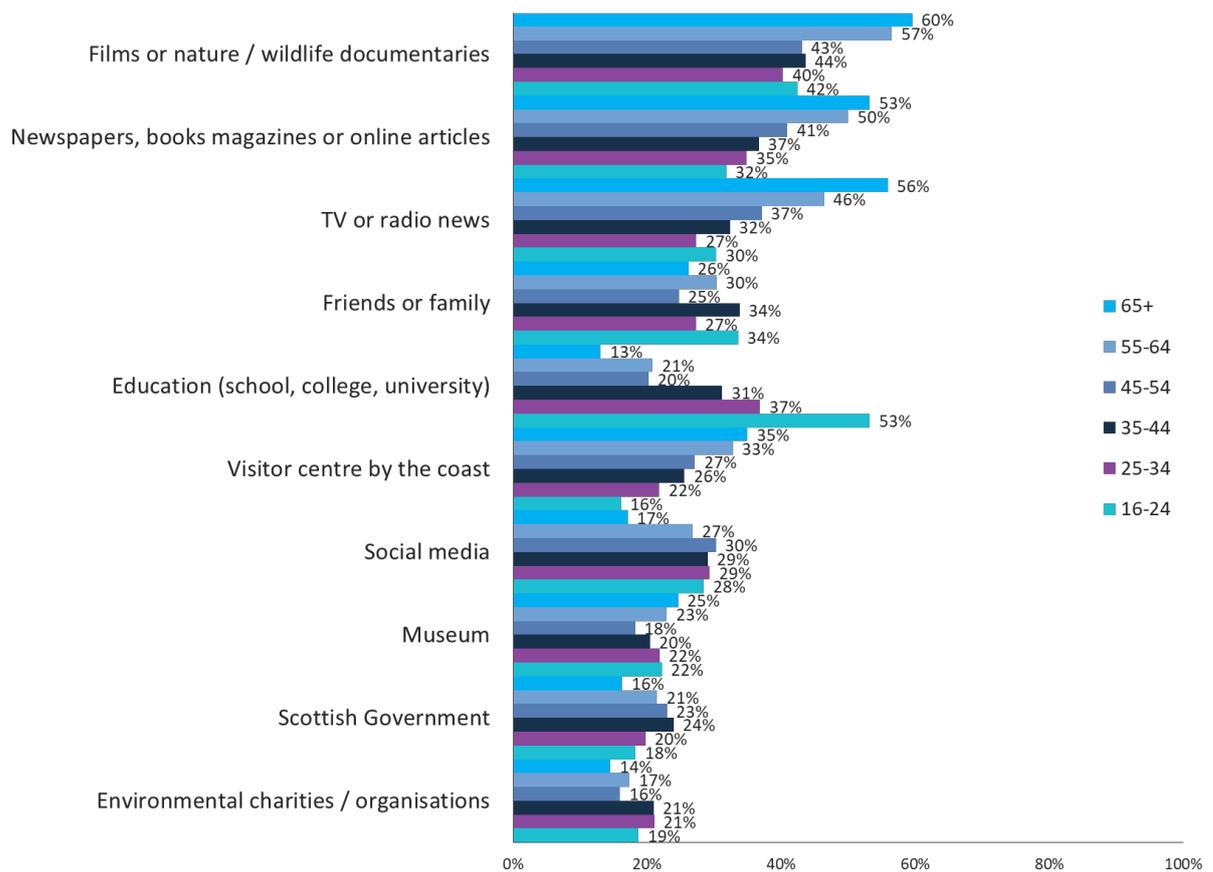
**Figure 3: Information sources about the Scottish marine environment**



Base: All Scottish residents (N=2,198)

4.1.10 Scottish residents aged over 65 are most likely to say they have found out information from films or nature / wildlife documentaries (60%), newspapers, books magazines or online articles (53%), TV or radio news (56%) or a visitor centre by the coast (35%). Younger people aged 16-24 are more likely to have found out information from education, whether that be school, college or university (53% vs. 13% of over 65 year olds), or friends or family (34% vs. 26% of over 65 year olds).

**Figure 4: Information sources about the Scottish marine environment by age**



Base: All Scottish residents (N=2,198)

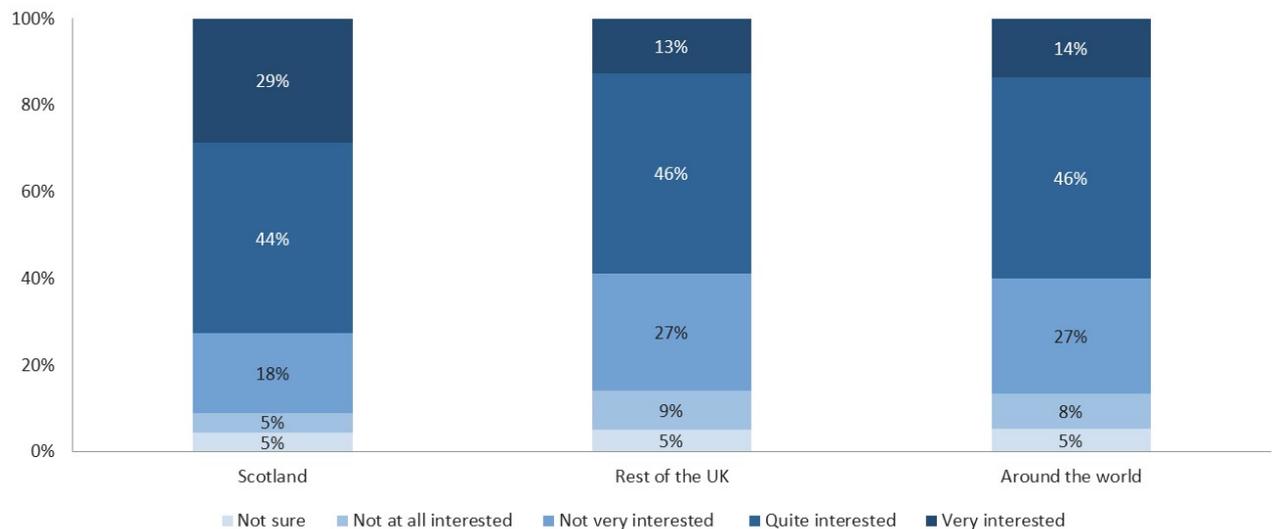
4.1.11 Men are more likely than women to say they have found out information from a museum (25% vs. 19%) or the Scottish Government (24% vs. 16%), whilst women are more likely to have got information from films or documentaries (51% vs. 46%) or friends or family (32% vs. 26%).

4.1.12 Scottish residents of C2 (skilled working class) and DE (working and lowest class) social grade are less likely than ABs (upper and middle class) to have found out information through any of the sources, with close to one in five (18%) not having found information on the Scottish marine environment, compared to one in ten (10%). For almost all of the sources of information, social grade AB are most likely to have used them.

4.1.13 Those living in coastal zones are more likely to have got information about the Scottish marine environment from friends or family than those that do not reside in them (31% vs. 27%), though this is the only difference when considering coastal proximity.

4.1.14 It is more common for Scottish residents to have a desire to learn about the Scottish marine environment (73%), than about the marine environment around the world (60%) or in the rest of the UK (59%)

**Figure 5: Interest in learning more about the marine environment**

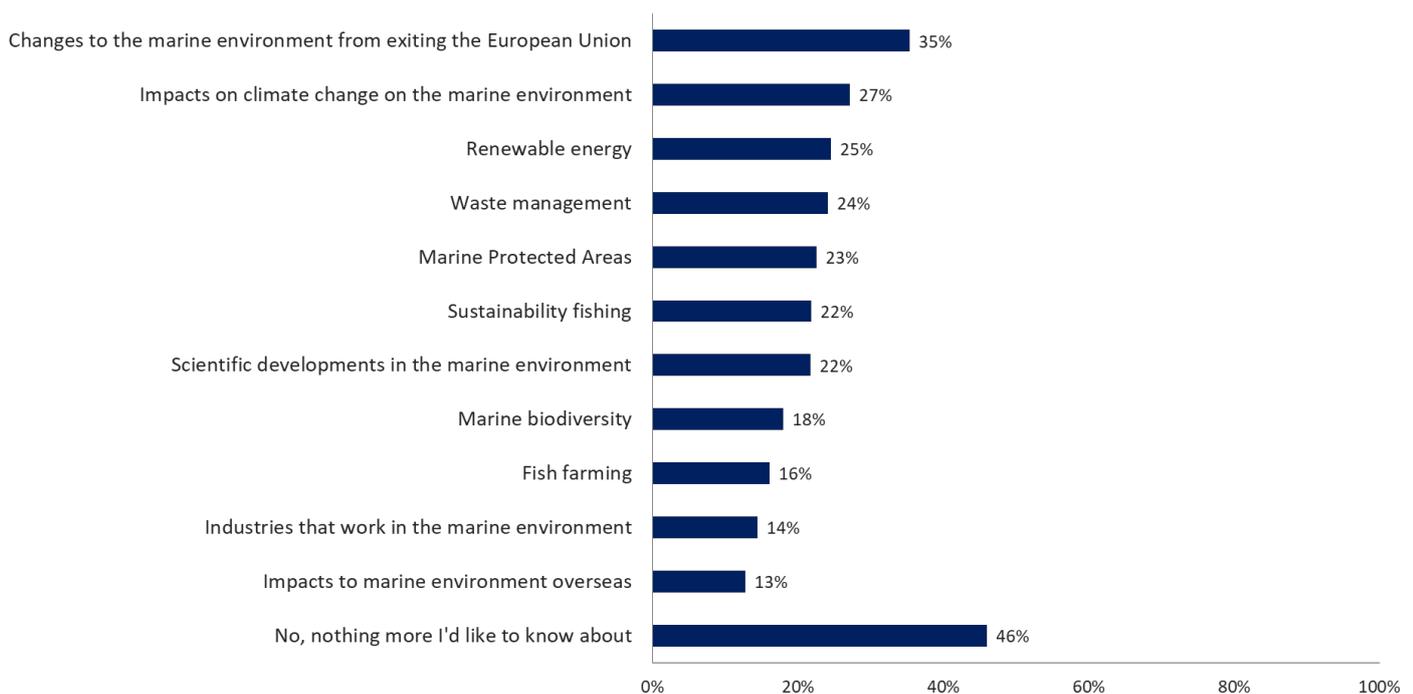


Base: All Scottish residents (N=2,198)

4.1.15 Older people were more likely to show an interest in learning more about the Scottish marine environment, with four in five (79%) of those aged 55+ expressing this, compared to two-thirds (66%) of 16-24 year olds. Those residing in the Highlands & Islands also show a keener interest (79% vs. 67% of residents of the Central region), as do Blue Planet watchers (85% vs. 61%), social grade AB and rural dwellers.

- 4.1.16 There is a strong correlation between NR score and an interest in learning more about the Scottish marine environment, with nearly all (96%) of people with the highest NR score (5) reporting an interest.
- 4.1.17 Those residing in coastal zones are more likely than those that do not to say they are interested in learning more about the marine environment in Scotland (75% vs. 70%), which could be due to the fact this is likely to have a more direct impact on their lives.
- 4.1.18 There are similar patterns when considering interest in learning more about the marine environment around the world or the rest of the UK. Older residents, people living in the Highlands & Islands, Blue Planet watchers, social grade AB, rural dwellers and those with a high NR score are all more likely to want to learn more about the marine environment.
- 4.1.19 Around half (54%) of Scottish residents report wanting to learn more about one or more of the aspects of the marine environment listed. At a time of great uncertainty surrounding Brexit, it is unsurprising that learning about the likely changes to the marine environment following exiting the European Union was most often cited (35%), followed by the impacts of climate change on the marine environment (27%) and renewable energy (25%).

**Figure 6: Aspects of the marine environment people want to learn more about**



Base: All Scottish residents (N=2,198)

- 4.1.20 It is notable that almost all of the young people aged 16-24 were most likely to say they were interested in learning more. For example, they were more likely than their older counterparts (aged over 65) to express an interest in wanting to learn more about potential changes to the marine environment following exiting the European Union (42% vs. 34%), impacts on climate change on the marine environment (32% vs. 23%), scientific developments in the marine environment (32% vs. 15%) and marine biodiversity (26% vs. 13%), amongst others. This is likely a product of this age group being the prime age for education, therefore having a greater appetite to learn.
- 4.1.21 There was not much variation in opinion by location (urban / town and fringe / rural) or by gender. There was no variation by coastal proximity. For each of the topic areas, Blue Planet watchers were more likely than non-watchers to say they were interested in learning more; perhaps as their watching the show is already an attempt at increasing knowledge of the marine environment.
- 4.1.22 The same pattern exists across NR score, with those feeling most closely associated with nature (high NR score) reporting they are keen to learn more. In fact, wanting to learn about changes to the marine environment from exiting the European Union increases to over half (57%) for this group.

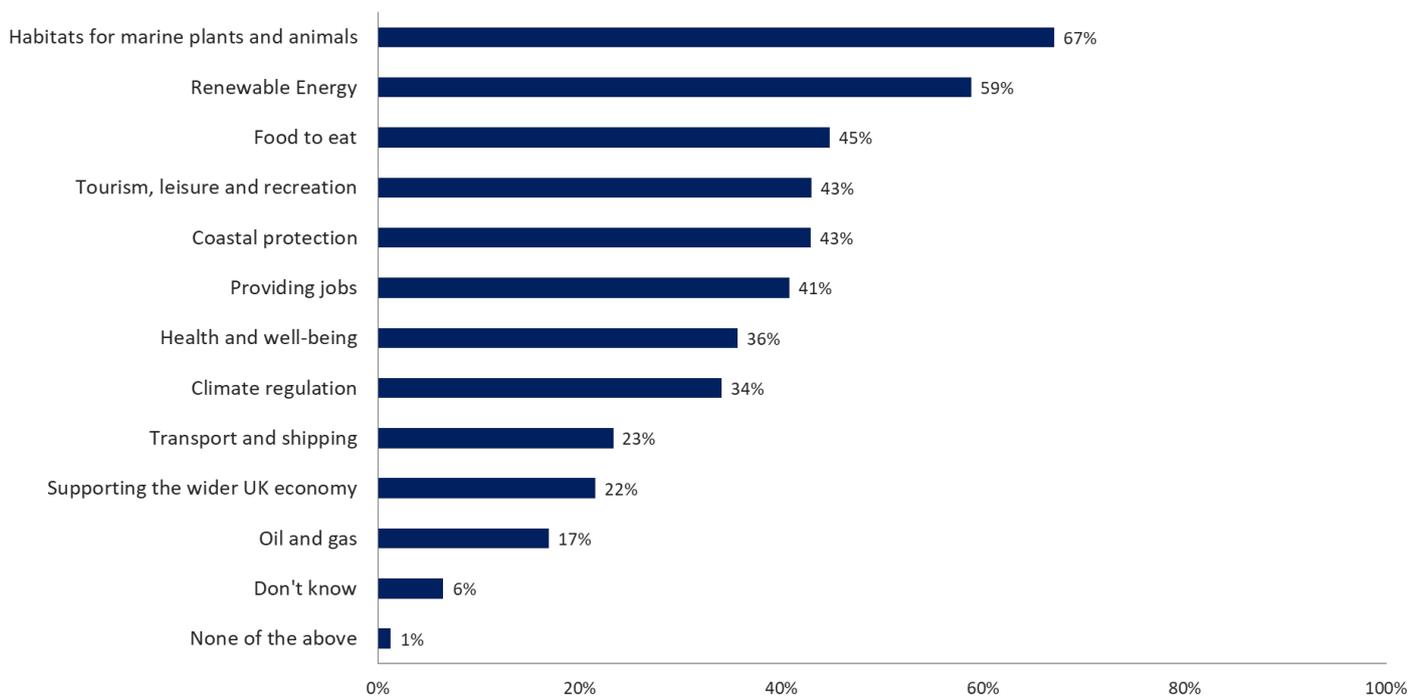
## 4.2 Using the sea

### *Summary of key findings*

- Two in three (67%) Scottish residents report that marine habitats (marine plants and animals) are important services that the marine environment provides. Renewable energy (59%) and food to eat (45%) are also perceived to be important.
- The qualitative phase showed that the greatest benefits of the Scottish marine environment are those to local people, for example being able to spend time outdoors, keeping fit, looking after mental wellbeing and entertaining younger people.

4.2.1 Marine habitats (marine plants and animals) dominates the list of services and benefits that Scottish residents think are important, with two in three (67%) saying these are important. Following this, it is most common for people to say renewable energy (59%) and food to eat (45%) are important.

**Figure 7: Important services and benefits that the marine environment provides**



Base: All Scottish residents (N=2,198)

- 4.2.2 Women are more likely than men to cite environmental services and benefits as important aspects of the marine environment. For example, they are more likely to see the value of habitats (72% vs. 62%), coastal protection (48% vs. 38%), health and well-being (39% vs. 32%) and climate regulation (36% vs. 32%). Contrastingly, men are more likely to place importance in resources and the economy: food to eat (50% vs. 40%), transport and shipping (29% vs. 18%), supporting the wider economy (26% vs. 18%) and oil and gas (21% vs. 13%).
- 4.2.3 Young people tend to recognise the importance of climate regulation, with 40% of 16-34 year olds citing this, compared to 28% of those aged over 65. Scottish residents aged over 65 are more likely than their younger counterparts to say that food to eat (57% vs. 32% of 16-24s), providing jobs (49% vs. 39%) and tourism, leisure and recreation (48% vs. 30%) are important.
- 4.2.4 For participants in the qualitative focus groups, the greatest benefits of the Scottish marine environment are those to local people. They recognise that they are lucky to have access to the marine environment for leisure and recreation, and see it as a valuable, low-cost resource in terms of spending time outdoors, keeping fit, looking after mental wellbeing, and entertaining children / young people. Furthermore, although they express concern about the sustainability and environmental impact of tourism, and oil and gas, they say that these industries bring money into Scotland's economy and provide jobs for local people, something that they hold as important.

*“Oil and gas is good and bad, it provides a lot of jobs but it's probably not great for marine life.” **Pre-family, Aberdeen***

*“For me, the beach in the bad weather is incredible – wrap the kids up and watch from the car – it's good for the soul.”  
**Family, Glasgow***

### 4.3 Marine Protected Areas

#### *Summary of key findings*

- Generally, knowledge about MPAs among Scottish residence is low. Fourteen percent report being very or quite familiar with Marine Protected Areas (MPAs), whilst 33% are not familiar with them, 17% have heard of them but know nothing about them and 37% have not heard of them at all.

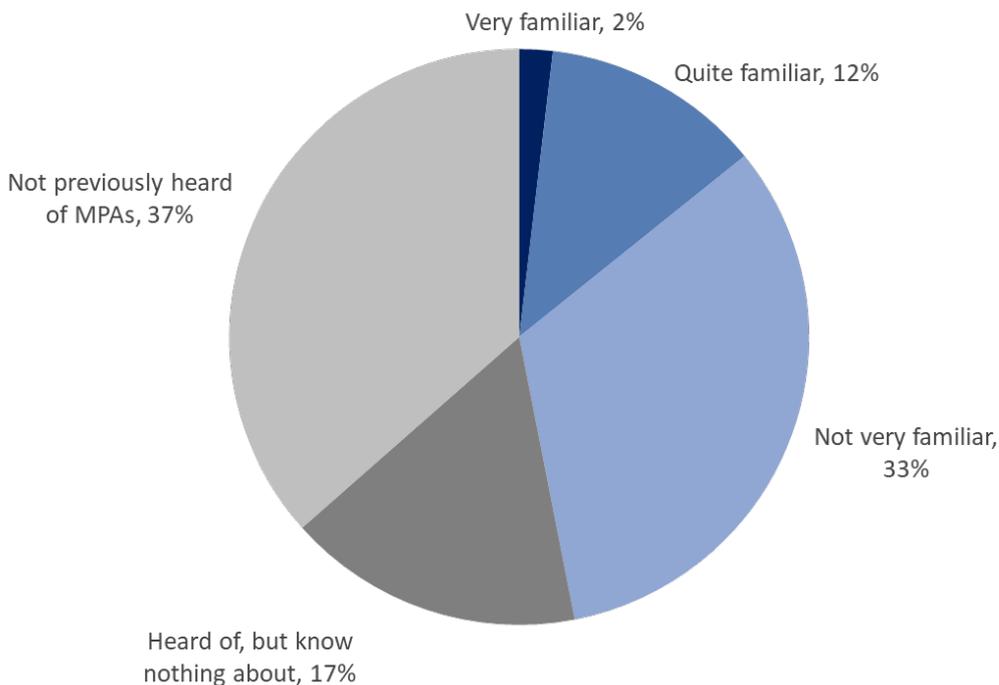
- The majority (80%) of Scottish residents say that they support their creation, with only 1% opposing them.

4.3.1 One in seven (14%) say they are very or quite familiar with Marine Protected Areas (MPAs). A third report being not very familiar with them, 17% have heard of them but know nothing about them and a sizable portion (37%) have not heard of them at all. This low level of awareness was also evident in the qualitative focus groups.

*“I wouldn’t know where marine protection areas were.”*

***Empty Nester, Peebles***

**Figure 8: Familiarity with Marine Protected Areas (MPAs)**



Base: All Scottish residents (N=2,198)

4.3.2 Those residing in the Highlands and Islands were notably more familiar with them, with around a quarter (27%) saying they were very or quite familiar with MPAs, whilst people from West Scotland were least familiar (8%). Those living in coastal zones were slightly more familiar than those living further from the coast (16% vs. 12%).

- 4.3.3 Awareness about MPAs was lowest amongst young people, with 46% of those aged 16-24 reporting they had not previously heard of MPAs in comparison to 28% of those aged over 65.
- 4.3.4 Respondents were shown the following definition of MPAs and then asked to what extent they support or oppose their creation in Scotland.

*Marine Protected Areas (MPAs) are areas of sea that are designated to ensure protection of some of the most vulnerable marine animals and habitats (e.g. marine mammals, seabirds and seagrass beds) and important historic sites (e.g. ship wrecks).*

*MPAs are protected under Scottish and UK legislation and are managed to reduce the impact of human activities on marine animals and/or habitats. This management can restrict some industries, such as fishing, shipping, renewable developments, oil and gas, which can have both positive and negative economic impacts to different people and businesses.*

- 4.3.5 Support for MPAs was high, with the majority (80%) feeling this way. Only 1% opposed their creation, whilst around one in ten (11%) neither supported nor opposed them and 8% did not know. There was greater support from older Scottish residents, social grade AB, Blue Planet watchers and those with a higher NR score.
- 4.3.6 This support was mirrored in the qualitative groups, with many saying that designated areas for protection sound like a positive step; however, some were surprised to hear that MPA's currently cover 22% of Scotland's seas, which was felt to be quite low.

*"They [Scottish govt.] should be putting the bar much higher than 22%." **Pre-family, Aberdeen***

- 4.3.7 Opposition was highest amongst people who argue that the Government should pay more attention to the public, as opposed to those that believe it should pay more attention to scientists (16% vs. 1%). This is likely due to this group focusing on the people related impacts, for example industries being restricted, and any potential negative impacts this may have on jobs and livelihoods.

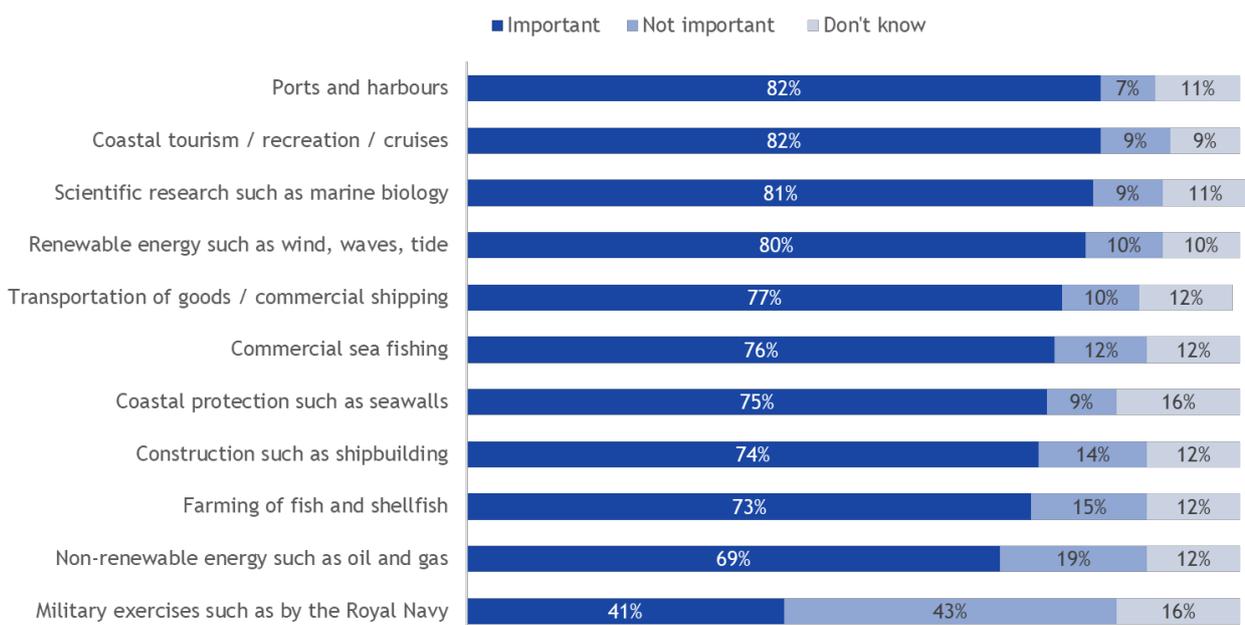
## 4.4 Marine sectors

### Summary of key findings

- Almost all current uses of the marine environment were judged to be socially or economically important. The exception is military exercises; less than half of the respondents to the survey judged them as important.
- In terms of social value, four in five (82%) say that ports and harbours and coastal tourism / recreation / cruises are important to Scotland. The Royal Navy is considered to be of lesser importance, with two in five (41%) citing this.
- In terms of economic value, coastal tourism / recreation / cruises is also perceived to be important to Scotland, alongside transportation of goods / commercial shipping (both 82%) and ports and harbours (81%).

4.4.1 Most of the respondents said that ports and harbours and coastal tourism / recreation / cruises are important to Scotland in terms of their social value, with the vast majority (82%) reporting this. Non-renewable energy, such as oil and gas (69%) and military exercises, such as the Royal Navy (41%) are perceived to be the least important, though the figure for non-renewable energy is still relatively high.

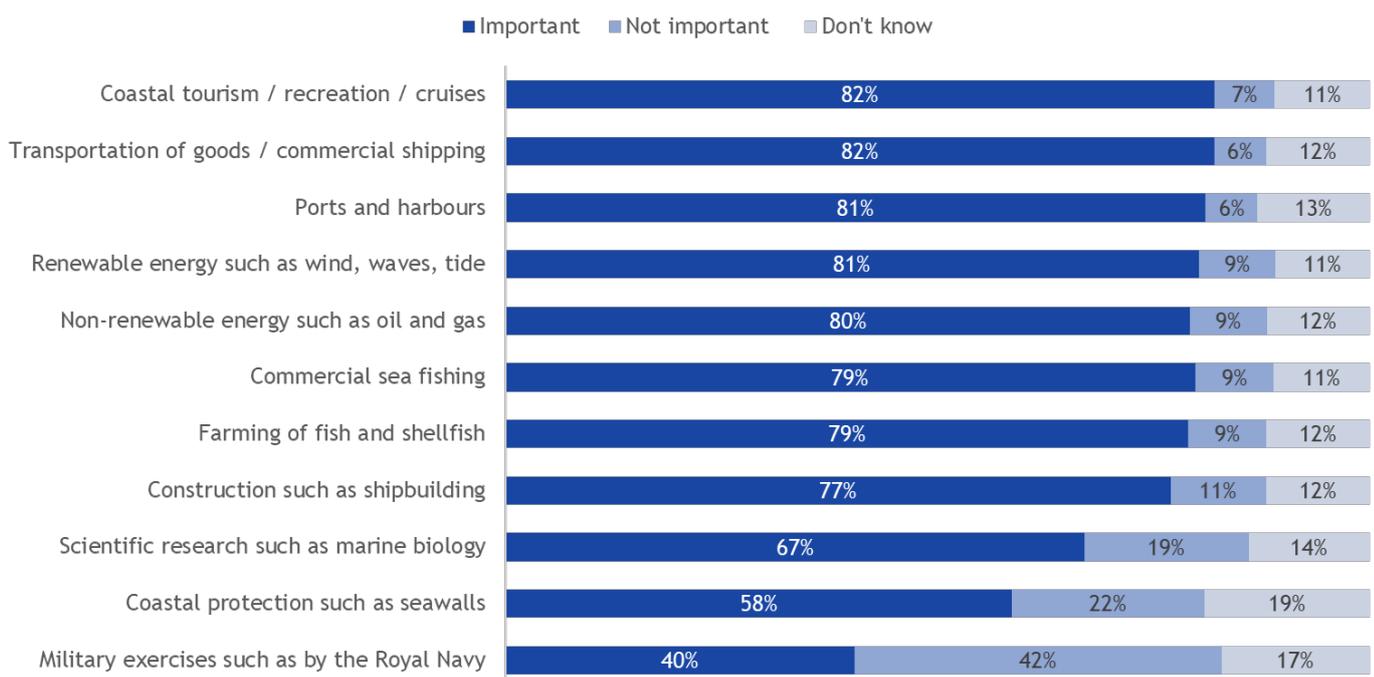
**Figure 9: Importance of sectors to Scotland in terms of their social value**



Base: All Scottish residents (N=2,198)

- 4.4.2 For each of the sectors, there is a higher tendency for older age groups to say they are important to Scotland in terms of their social value. For example, those aged over 65 are more likely than 16-24s to cite ports and harbours (92% vs. 67%), coastal tourism / recreation / cruises (88% vs. 75%) and scientific research such as marine biology (92% vs. 67%), amongst other sectors.
- 4.4.3 There are also similar patterns when looking across different social grades, with social grade AB often placing greater importance in the sectors than DE. However, going against the general pattern, social grade C2 are more likely to say that military exercises such as by the Royal Navy have important social value (52% of C2 compared to 42% AB, 35% C1 and 38% DE).
- 4.4.4 For each, there is a correlation between higher importance and NR score, as with earlier findings, though there is no variation by coastal proximity.
- 4.4.5 There are rarely differences across gender, though men are more likely than women to say that commercial sea fishing (79% vs. 74%), construction, such as ship building (76% vs. 72%) and non-renewable energy such as oil and gas (73% vs. 65%) are more important socially.
- 4.4.6 When considering the sectors that are important to Scotland in terms of their economic value, similar sectors come out top. Coastal tourism / recreation / cruises is most commonly mentioned, followed by transportation of goods / commercial shipping (both 82%) and ports and harbours (81%).

**Figure 10: Importance of sectors to Scotland in terms of their economic value**



- 4.4.7 The same patterns are apparent, with older age groups being more likely to place economic importance in each of the sectors, alongside social group AB and people with a higher NR score.
- 4.4.8 Although there was much acknowledgement in the qualitative focus groups that industrial use of the marine environment has potential to cause damage, there was also a feeling that industry has a positive impact in terms of its economic and social value. The provision of jobs for local people was used in defence of some industries, especially tourism and commercial fishing / farming of fish and shellfish; some had a personal connection to the fishing industry, either directly or through friends/family.

*“Definitely should be focussing on [the fishing industry] as it is a large contribution to the country itself – if it starts declining, you’re creating more problems through lack of jobs and lack of income.” **Family, Peebles***

*“I’m from a fishing background so I do support fishing and it’s a huge part of the economy, as long as they’re doing it sustainably it’s great.” **Pre-family, Aberdeen***

- 4.4.9 When looking at the figures on employment and GVA (gross value added), focus group reactions were mixed. Some feel that numbers should be higher (especially for well-known industries such as aquaculture, commercial sea fishing and the oil and gas industry) in order to justify the damage being done, while others feel that numbers are as they had expected. Ultimately, participants across groups tend not to oppose use of the marine environment altogether, rather they emphasise the need for use to be sustainable and well managed, in a way that maximises benefit to Scottish residents whilst protecting resources for generations to come. Key factors here are employing local people and ensuring capital is invested back into the Scottish economy.

*“Protect the fishing industry, help get the shipping industry back on its feet, realise the assets we’ve got and use them better - we’ve got this coastline – it’s about maximizing it and making the most of it.” **Empty Nester, Peebles***

## 5 Marine Issues and the Environment

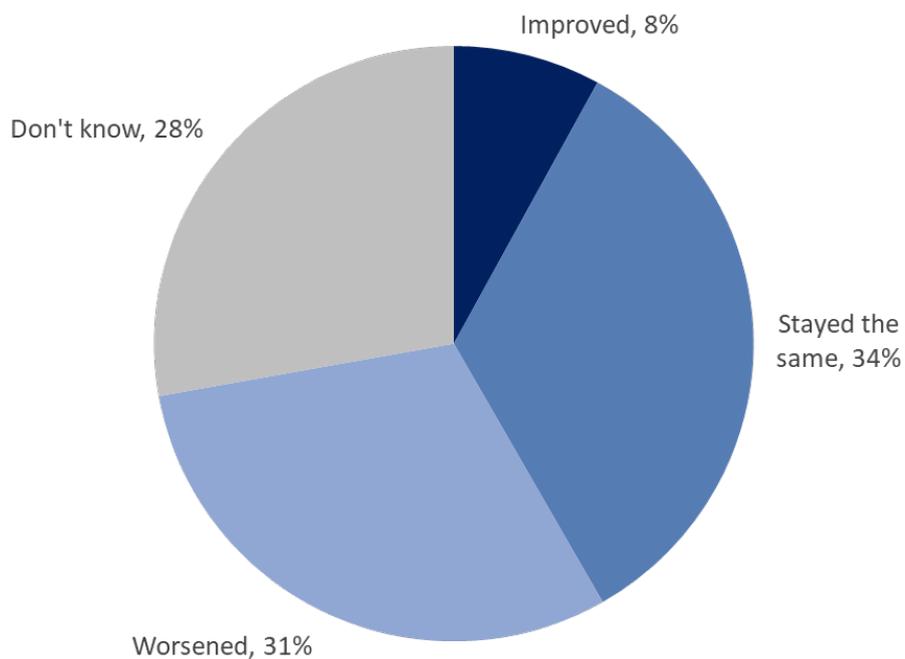
### 5.1 Marine issues

#### *Summary of key findings*

- Scottish residents have mixed views on whether the Scottish marine environment is improving or not. Thirty-one percent of Scottish residents think the health of Scotland's marine environment has worsened in the last year, whilst 8% think it has improved and 28% do not feel they know enough to judge.
- The majority of Scottish residents (63%) say the government should pay more attention to the scientific community than the public when thinking about the marine environment, though a quarter (26%) feel there should be equal attention.

5.1.1 Just under a third (31%) believe that the health of Scotland's seas has worsened in the last year, with only 8% saying that there has been an improvement. Over a quarter (28%) do not feel they know enough to judge.

**Figure 11: In the past year, do you think the health of Scotland's seas has...**



Base: All Scottish residents (N=2,198)



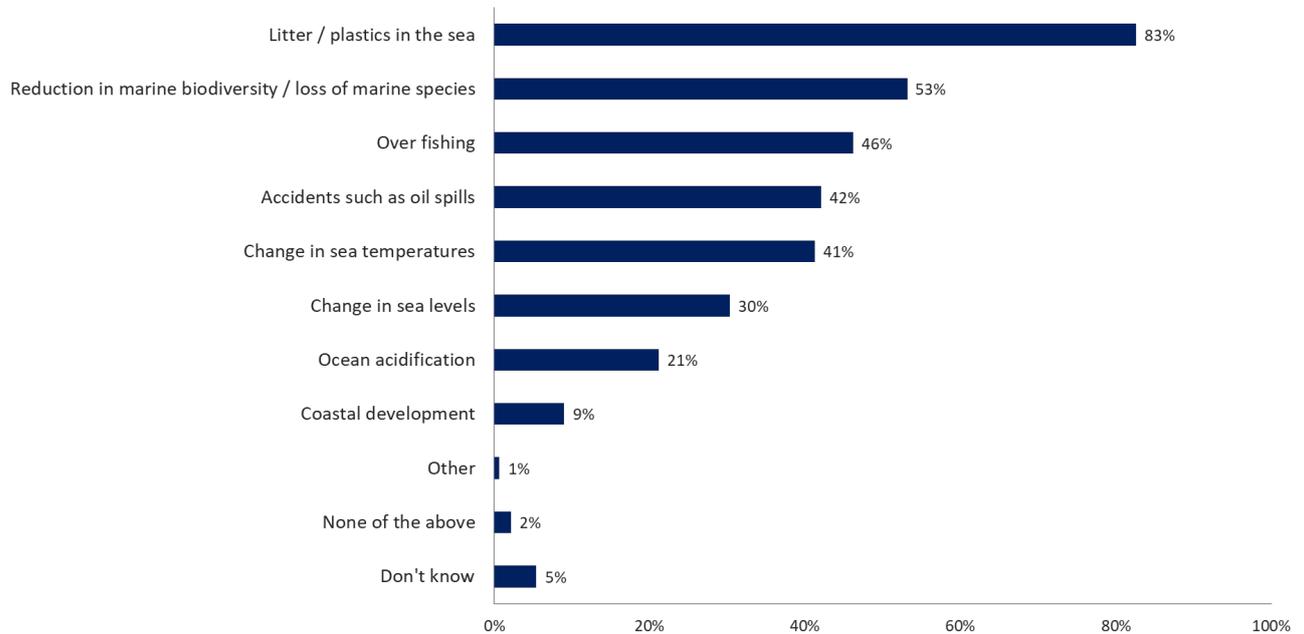
*understand they have to keep improving and maintaining the health of our coast.”*

*“I think this as there has been an overall increase [in] knowledge about the damage that has been caused, also more and more things are being set up so anyone can help be it a beach clear up or something further, before there was no such thing as any if this to as wide if an audience.”*

*“I’ve worked in a marina for the last 15 years and have noticed the condition of the water and sea life improving. However I’ve also noticed some invasive species becoming more prevalent.”*

5.1.5 The amount of litter / plastics in the seas dominates concerns about the marine environment, with the vast majority (83%) reporting this as a top concern. Reduction in marine biodiversity / loss of marine species (53%), over fishing (46%) and accidents such as oil spills (42%) are the next most common concerns.

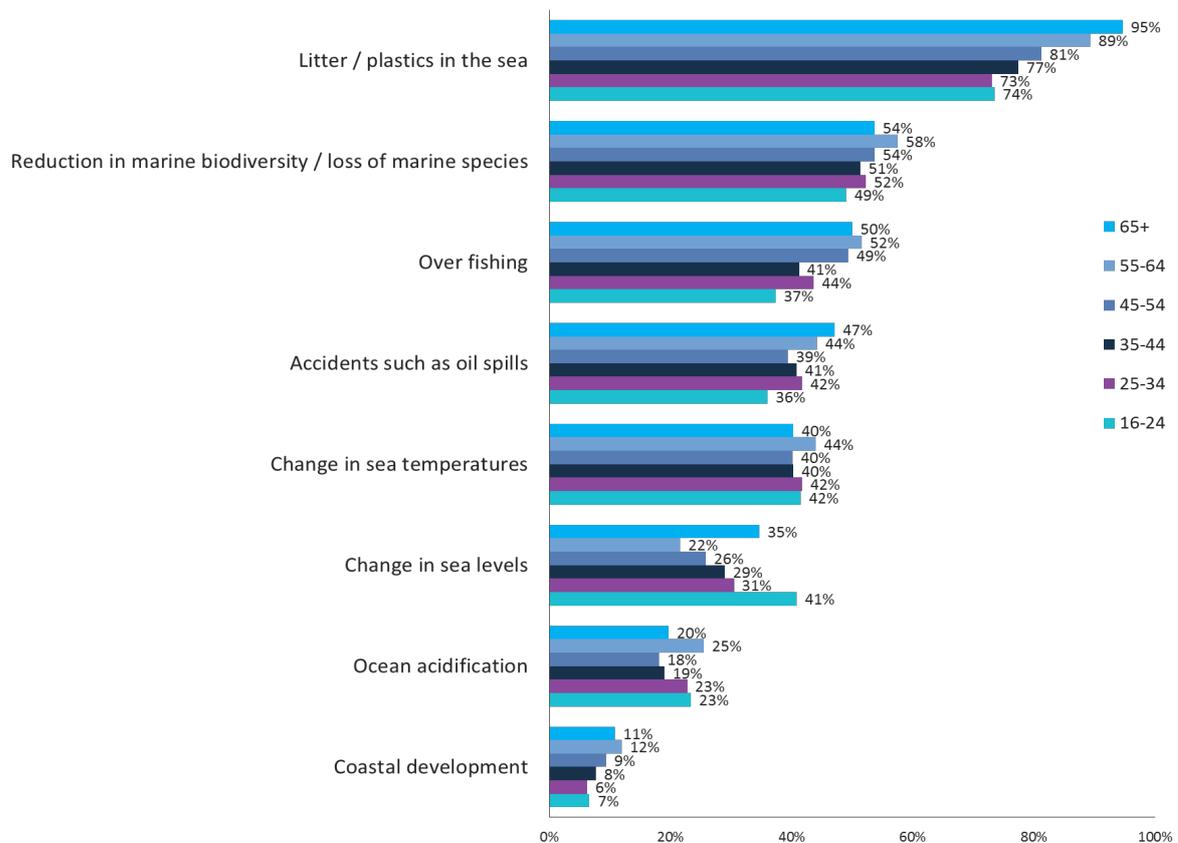
**Figure 13: Which of the following are you most concerned about in the marine environment globally? You can pick up to FOUR.**



Base: All Scottish residents (N=2,198)

5.1.6 Concern over the amount of litter / plastics in the sea is most common among older Scottish residents, with almost all (95%) of over 65 year olds citing it as a key concern, compared to around three in four (73%) 25-34 year olds; the same pattern is true for over-fishing and oil spills. Younger people have a greater focus on the ‘change in sea levels’ due to climate change, with two in five (41%) 16-24 year olds mentioning this as a concern, in comparison to approximately one in five (22%) 55-64 year olds. This could be due to younger respondents focussing on this at school.

**Figure 14: Which of the following are you most concerned about in the marine environment globally? You can pick up to FOUR. By age**



Base: All Scottish residents (N=2,198)

5.1.7 This is also true of the participants in the qualitative stage, with pre-family groups showing greater concern about the impact of global warming, referring to both rising sea levels and water temperatures. Over-fishing and need for sustainability of the fishing industry were also frequently raised as concerns across the qualitative groups, while oil spills were less commonly mentioned.

- 5.1.8 Those watching Blue Planet and nature / wildlife programmes have generally higher levels of concern about the marine environment, except for oil spills and coastal development. For example, Blue Planet watchers are more likely than non-watchers to say they are concerned about litter / plastics in the sea (89% vs. 77%), reduction in marine biodiversity / loss of marine species (59% vs. 47%) and over-fishing (50% vs. 42%), amongst other concerns.
- 5.1.9 However, non-viewers still placed plastics significantly ahead of the ‘reduction in marine biology / loss of marine species’ (77% vs. 47%).
- 5.1.10 For almost all of the marine environmental issues, those with a higher NR score were more likely to express concern.
- 5.1.11 Residents living further from the coast were more likely than those in coastal zones to say they did not know what they were most concerned about (7% vs. 4%).
- 5.1.12 When explored in the qualitative groups, concerns over the marine environment also extended to concerns for the socio-economic health of Scotland’s coastal communities. Many expressed their worries that, with cheaper air travel encouraging UK citizens to holiday abroad, and cost of accommodation and travel in Scotland being comparatively high, the appeal of Scotland’s marine environment for tourism is in decline.

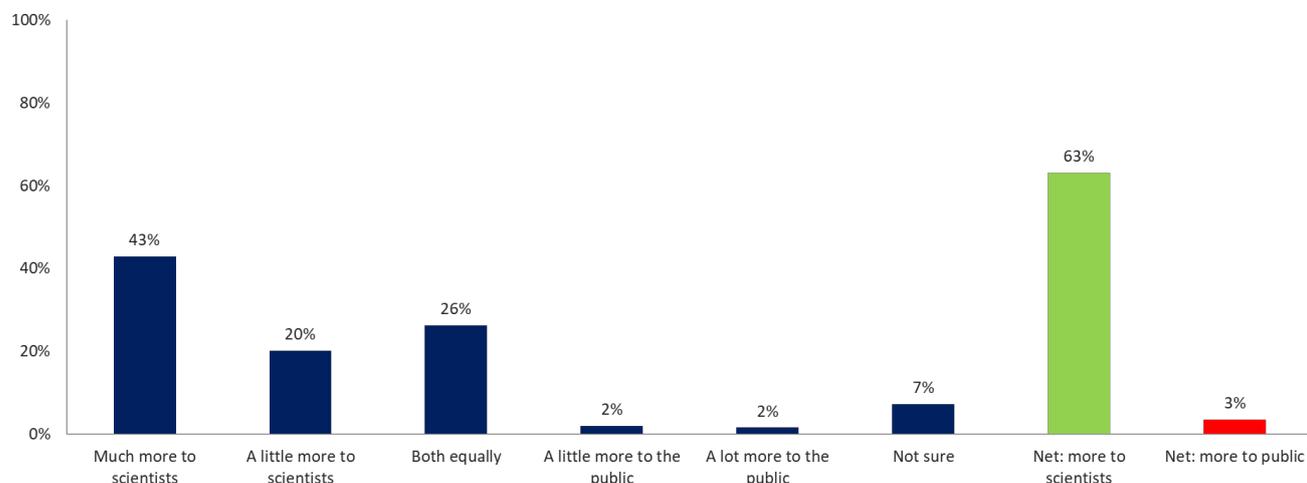
*“Accommodation is expensive in peak season, but even in the down season it can be £100 for a rubbish B&B, it can be cheaper to go abroad.” **Pre-family, Glasgow***

- 5.1.13 In contrast, many also have concerns over the negative impact of tourism, particularly in terms of people polluting and littering, and say that during busy periods the marine environment in popular locations can feel crowded and lose its appeal. Ultimately, while tourism is generally seen as a good thing, many say that it must be well managed in order to ensure the costs do not outweigh the benefits to Scotland’s marine environment.

*“It’s kind of a chicken and egg thing – as the tourism grows, then the access grows, and then more people use it...then they in some ways become less attractive” **Empty Nester, Aberdeen***

- 5.1.14 Most (63%) Scottish residents feel the government should pay more attention to the scientific community than the public, and a quarter (26%) feel there should be equal attention.

**Figure 15: When thinking about the marine environment do you feel the government should pay more, less or equal attention to the views of scientists or the views of the public?**



Base: All Scottish residents (N=2,198)

- 5.1.15 More men than women feel more strongly that the Government must pay greater attention to scientists on matters affecting the marine environment (66% vs. 60%). Young people sit more towards the scientific side of this debate, but some admit they are not sure, with one in seven (13%) 16-24 year olds saying they are uncertain. The older age groups are more likely to support an equal balance, with a third (35%) of over 65 year olds reporting this compared to one in six (16%) 16-24 year olds.
- 5.1.16 Those with a higher NR score are more likely to say that the Government should pay more attention to scientists, as do Blue Planet watchers (67% of those that watch it vs. 59% of non-watchers).
- 5.1.17 There are also regional differences, with 66% of urban dwellers supporting scientists, compared to 59% of those living in rural areas and 54% of those residing in town and fringe areas. Rural dwellers are more likely to urge a balance between the public and scientists, with this being the case for a third (33%), compared to a quarter (24%) of urban dwellers.

## 5.2 Environmental concerns

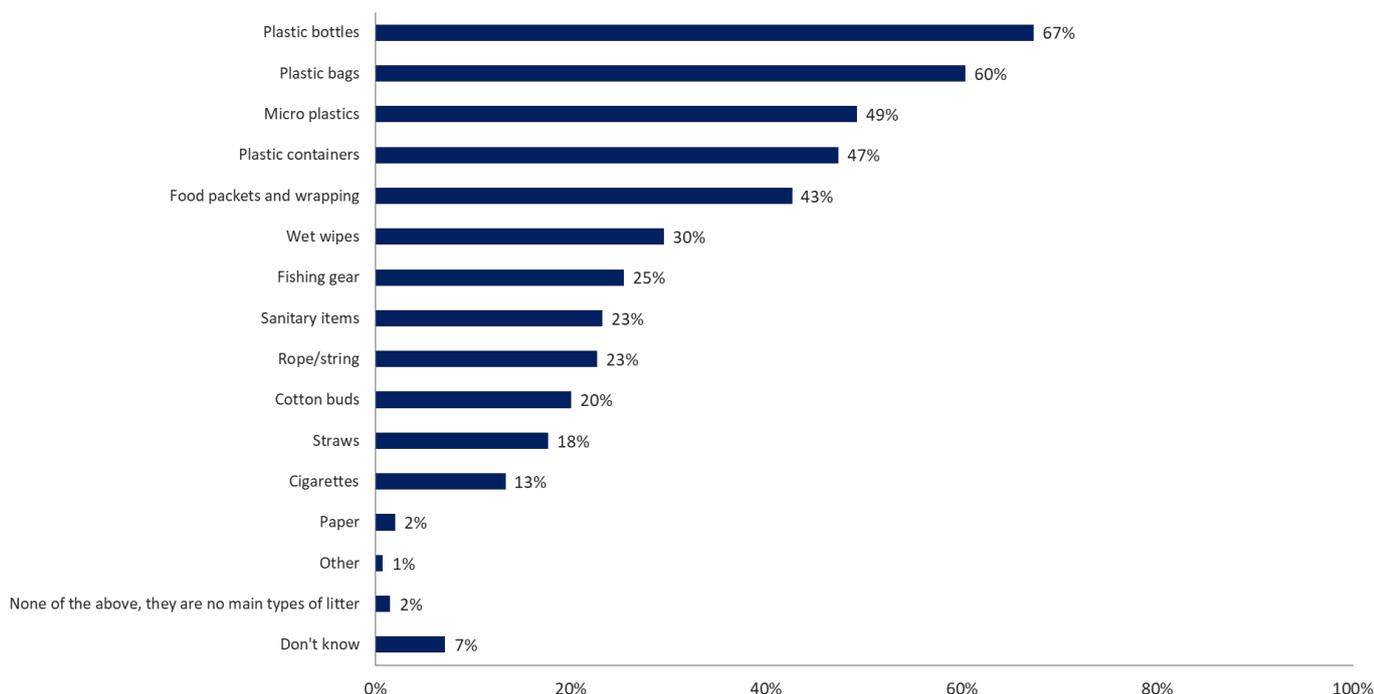
### *Summary of key findings*

- Amidst current environmental debates, there is a large focus on plastics and marine litter. Two-thirds (67%) say that bottles are a main type of marine litter, followed by bags (60%) and micro plastics (49%).

- Scottish residents are most likely to say the causes of marine litter are food production and packaging (67%), general household waste (64%), tourism waste (55%) and sewerage (49%).
- When thinking about who is responsible for reducing marine litter, Scottish households are most commonly mentioned (53%), followed by industrial users of the coast (48%) and the Scottish Government (47%).
- The qualitative phase revealed that many residents felt reducing marine litter in Scotland is a joint responsibility which requires both residents and businesses to commit to more responsible use of the marine environment, as well as for both local and the UK Government.

5.2.1 Plastics dominate perceptions of the main types of litter in Scotland’s sea and coastal areas, led by bottles (67%), bags (60%) and micro plastics (49%). Scottish residents were less likely to cite cotton buds (20%), straws (18%) and cigarettes (13%) as main litter types.

**Figure 16: Which, if any, of the following do you think are the main types of litter in Scotland’s sea and coast? You can tick up to FIVE.**

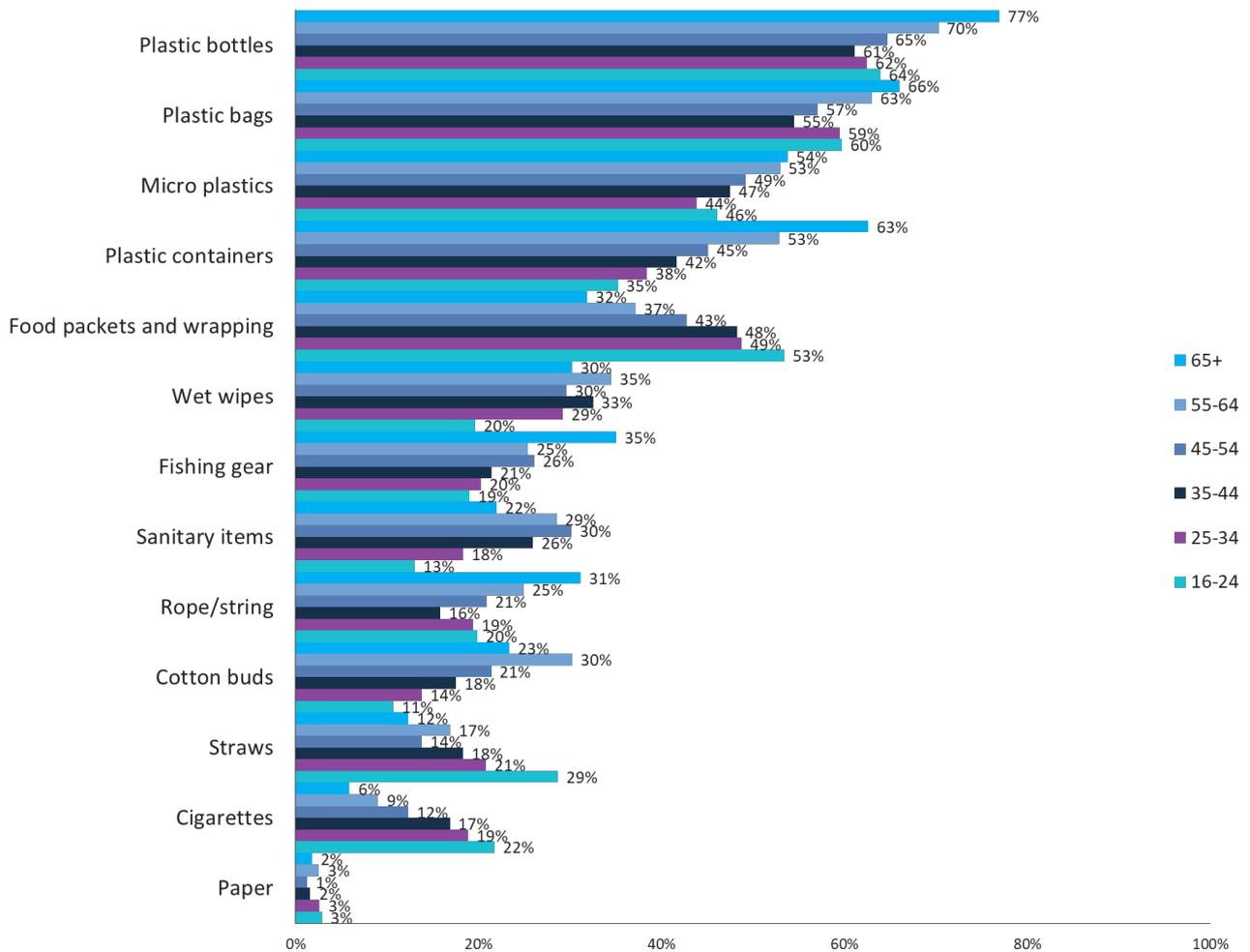


Base: All Scottish residents (N=2,198)

5.2.2 Younger people were more likely than their older counterparts to select food wrapping and packets as main types of litter, with half (53%) of 16-24 year olds reporting this, as opposed to a third (32%) of over 65 year olds. By contrast, older residents aged over 65 were more likely than those aged 16-24 to mention plastic bottles (77% vs. 64%), plastic containers (63% vs. 35%) and fishing gear (35% vs. 19%), amongst others.

5.2.3 There is a strong association among young people that plastic straws are a main contributor to litter, with 29% of 16-24 year olds mentioning this, compared to 18% overall and a low of 12% of over 65 year olds. Younger people were also especially likely to identify cigarettes as a litter contributor, but to a lesser extent.

**Figure 17: Which, if any, of the following do you think are the main types of litter in Scotland’s sea and coast? You can tick up to FIVE. By age**

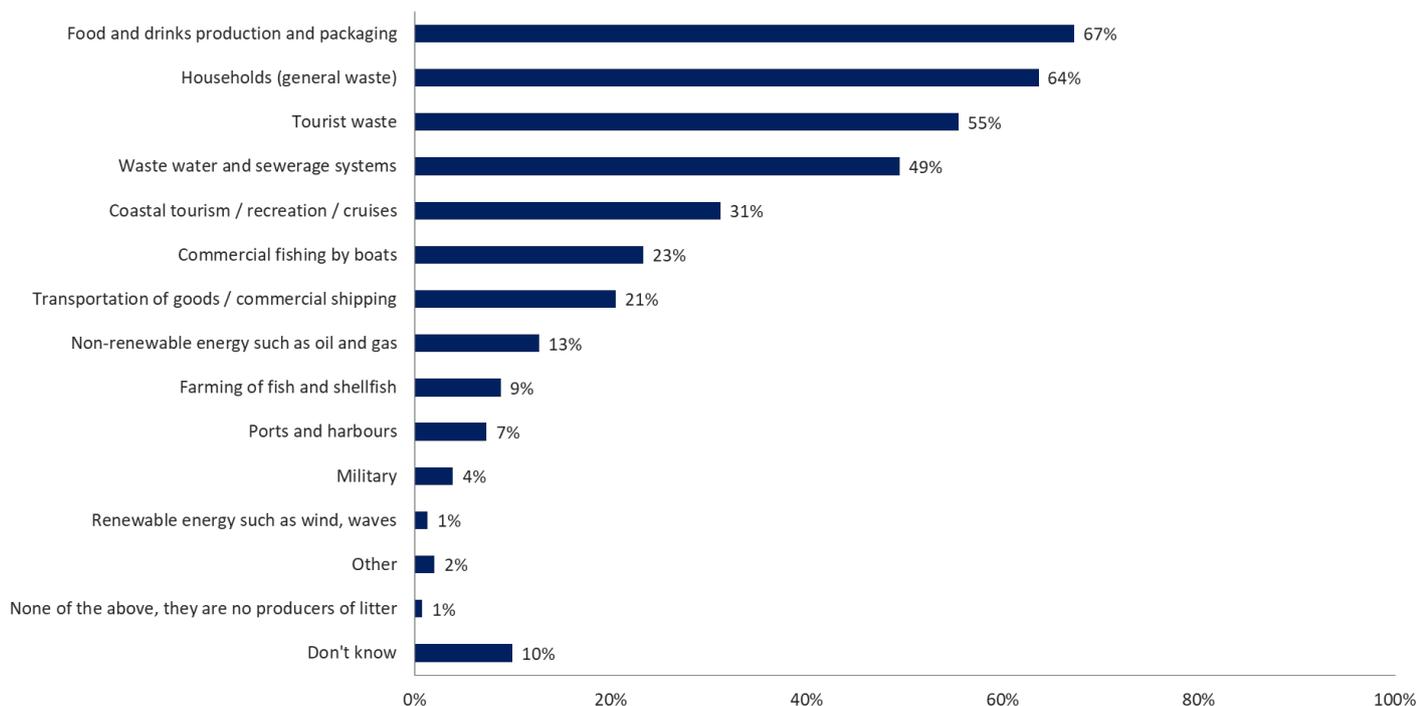


Base: All Scottish residents (N=2,198)

5.2.4 Those living in the Highlands & Islands tend to cite slightly different types of litter as being a problem. For example, they were more likely to highlight micro plastics (58%), fishing gear (39%) and rope / string (36%) than residents living in other parts of Scotland. Urban residents were more likely to cite wet wipes (32% vs. 23% of rural) and likewise plastic straws (19% vs. 14%).

5.2.5 There is a common belief that much of Scottish marine litter comes from food production and packaging (67%), but general household waste (64%), tourism waste (55%) and sewerage (49%) also feature prominently in public perceptions of the sources of marine litter.

**Figure 18: Which, if any, of the following do you think are the main causes of marine litter in Scotland’s sea and coast? You can pick up to FIVE.**



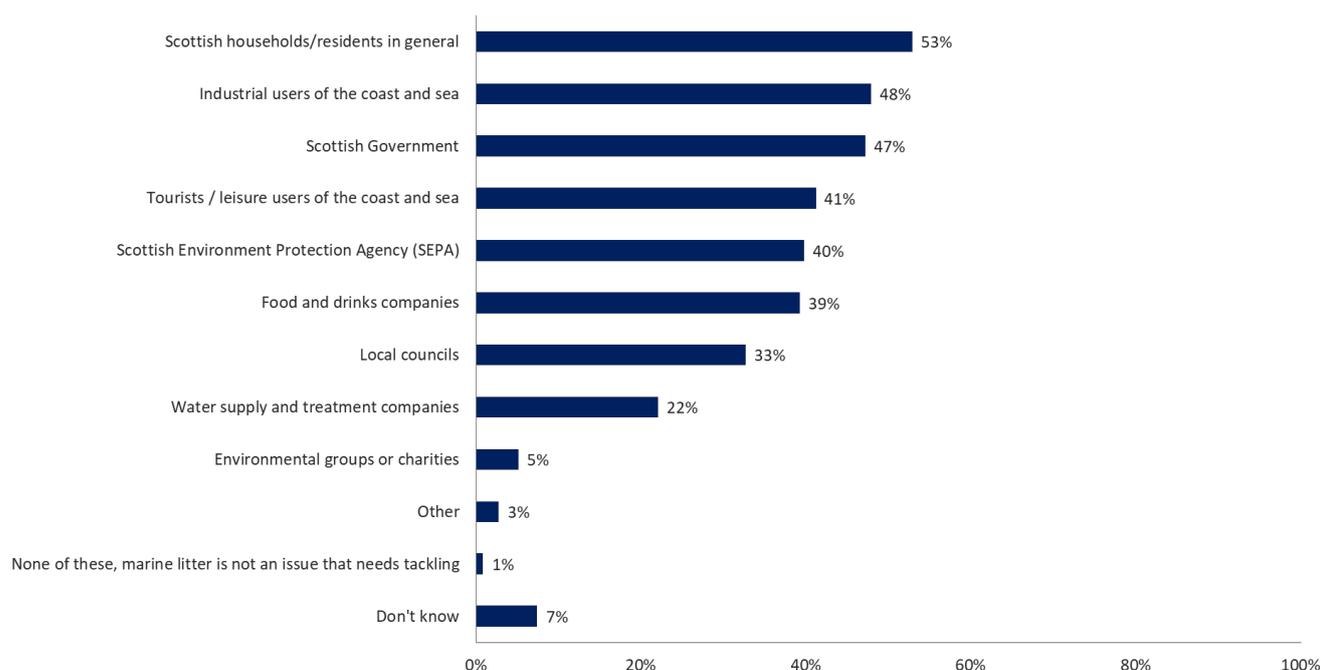
Base: All Scottish residents (N=2,198)

5.2.6 As with types of litter, older people were more likely to express what they felt was the main source of marine litter, with younger people either admitting they are unsure or placing more focus than older people on items such as non-renewable energy or ports and harbours. For example, 59% of 55-64 year olds identified sewerage as a cause of marine litter in Scotland’s seas, compared to 44% of 16-24s. Four in five (80%) over 65 year olds chose food production materials and packaging, versus three in five (61%) of 16-24 year olds. One in five (21%) 16-24 year olds say non-renewable energy is a main cause of litter across Scotland’s seas and coasts, compared to just 7% of the over 65 year olds.

5.2.7 Those living in West Scotland were more likely to cite sewerage as a greater source of litter, with half (54%) reporting this. Those in the Highlands & Islands were more likely to cite commercial fishing as the main source when compared to the average in the sample (33% vs. 23% average), as well as being the most likely to identify food and drinks production and packaging, with three in four (75%) mentioning this.

- 5.2.8 Those with a lower NR score were more likely to say they did not know what the main causes of Marine litter in Scotland's sea and coast were.
- 5.2.9 Those living in coastal zones were more likely than those that do not to say commercial fishing by boats was a main cause of marine litter (26% vs. 21%), which could result from these residents seeing or hearing about this more frequently due to where they live.
- 5.2.10 It is interesting that Scottish households are the most frequently named group felt to bear responsibility for reducing marine litter, with around half (53%) mentioning this. This is followed by industrial users of the coast and sea (48%) and the Scottish Government (47%). Given that many associate food and drinks packaging as a prominent form of litter, it is perhaps surprising that not more than two in five (39%) believe that food and drink manufacturers should bear core responsibility.

**Figure 19: Which, if any of the following, do you think should be responsible for reducing marine litter in Scotland? You can pick the FOUR you think should bear most responsibility.**



Base: All Scottish residents (N=2,198)

- 5.2.11 Women more readily admit households should bear responsibility (56% vs. 49% of men), and are also more likely to place responsibility for reducing marine litter on tourists / leisure users of the coast and sea (44% vs. 38% of men). Younger people notably default to saying local councils and the Scottish Government are responsible, more so than older residents. For example, 58% of 16-24 year olds and 56% of 25-34 year olds identify that the Scottish Government should be responsible, compared to 39% of over 65 year olds. Older people are more likely to hold all households, industrial users and tourists responsible.

- 5.2.12 Those living in South Scotland and Highlands & Islands are the most likely to hold tourists responsible (both 45%). Around half (48%) in the latter areas report that food and drink companies are responsible, whilst residents of North East Scotland are the strongest in identifying local councils as responsible (39%).
- 5.2.13 Those living in coastal zones were more likely than those living further than the coast to hold the Scottish Government responsible (50% vs. 45%).
- 5.2.14 In the qualitative focus groups, many were quick to highlight that reducing marine litter in Scotland is a joint responsibility, which requires both residents and businesses to commit to more responsible use of the marine environment. However, it is also clear that the Government (both local and UK) has a vital role to play through use of policy to encourage users of the marine environment in Scotland to do so responsibly.

*“The Scottish government and Westminster both have responsibility.” **Pre-family, Glasgow***

*“Everyone should be responsible.” **Pre-family, Aberdeen***

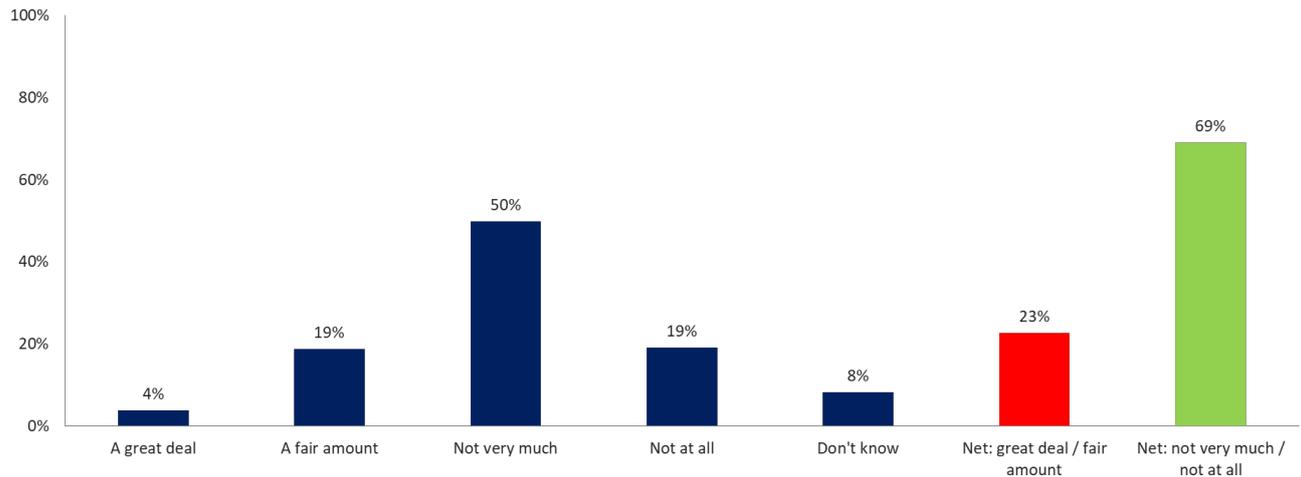
*“If industry has been granted permission to use the coastline and it decides to leave [the coastal area] it should be responsible for cleaning up the [marine] environment” **Empty Nester, Peebles***

- 5.2.15 While some support the idea that local councils should bear some responsibility for maintaining the Scottish marine environment, there was some concern that this would mean variable efforts in different areas.

*“At some level it has to be local because the councils are there – but if the council is dealing with it, it could be patchy.” **Pre-family, Glasgow***

- 5.2.16 Just short of a quarter (23%) of all Scottish residents say that their family is affected by marine litter a great deal or a fair amount. This feeling is greatest among 55-64 year olds (28%) and lowest for younger people.

**Figure 20: Thinking about your use of the Scottish sea or coast, to what extent are you or your family affected by marine litter?**



Base: All Scottish residents (N=2,198)

5.2.17 The survey shows the impact of marine litter on respondents or their families is generally judged to be low. It is worth noting that, in the qualitative discussions, impact of litter appears to be somewhat linked to use of the marine environment. For example, those tending to use the marine environment for day-to-day tasks such as exercise or dog walking say they would not necessarily be put off by litter, as convenience here is more important. However, participants visiting with children say that, when visiting the marine environment for a family day out, cleanliness is key.

*“I don’t look at it [green flag cleanliness] – if were taking the grandkids swimming I’d look...I just go to the beaches that I know.” Empty Nester, Peebles*

5.2.18 Those in South Scotland (30%) and Highlands & Islands (31%) are the most likely to feel marine litter affects them and their family, whilst those living in the Central region are the least (18%). This is also true for those living in coastal zones, with 28% feeling an impact in comparison to 18% of those living further from the coast. Among urban residents, 22% feel that marine litter affects them, rising to 28% of rural.

5.2.19 There is a correlation with Scottish residents NR score, with those with a higher score being more likely to feel that them and their family are affected by marine litter a great deal or a fair amount. This likely correlates with them having a general higher sense of environmental concern and awareness of issues.

### 5.3 Environmental behaviours

#### *Summary of key findings*

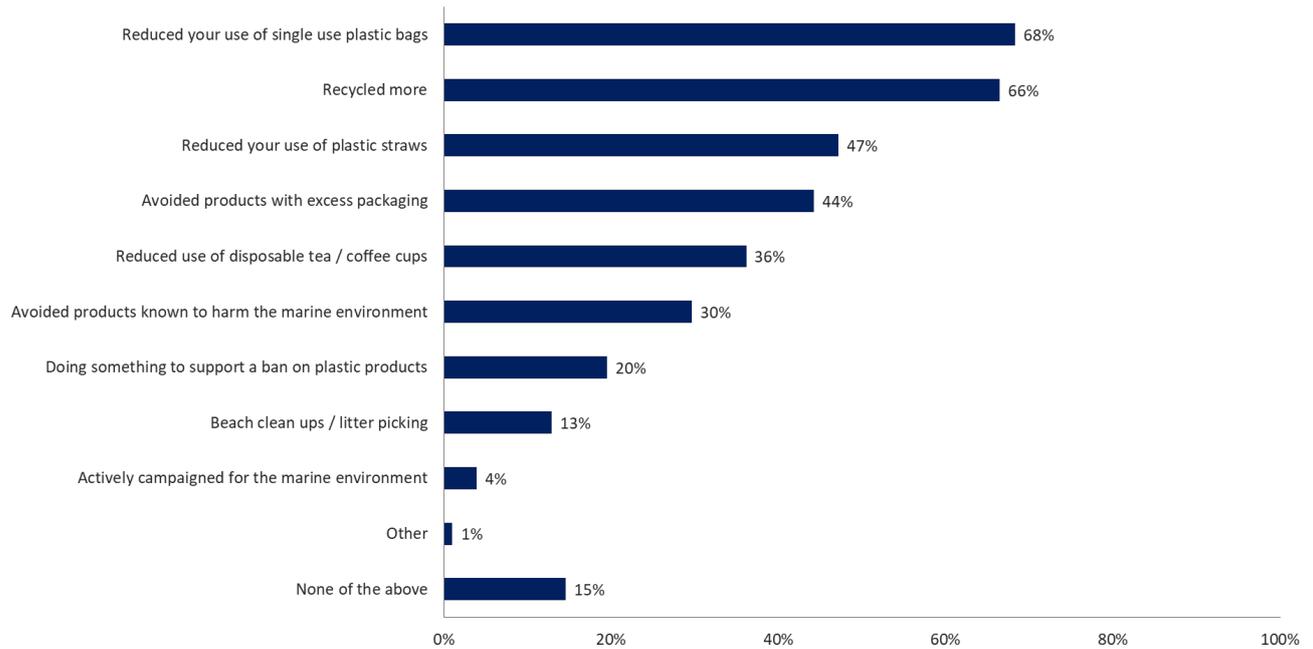
- When trying to help reduce marine litter over the course of the last 12 months, reducing use of single use plastic bags is the most common

action taken (68%), followed by recycling more (66%) and using fewer plastic straws (47%).

- Looking ahead, among those that have not taken each action already, reducing use of single use bags (59%) was the most likely action to be supported in the next 12 months.
- TV programmes, documentaries and news outputs are felt to have had the greatest influence on environmental behaviour in the last 12 months, with 46% reporting this, followed by TV / radio news and environmental campaigns (both 35%).

5.3.1 Reducing the use of single use plastic bags is the most common action people have taken to help reduce marine litter in the last 12 months (68%). Two-thirds (66%) think they have recycled more in general and close to half (47%) have used fewer plastic straws.

**Figure 21: Which, if any, of the following have you done in the last 12 months to help reduce marine litter? Please tick all that apply.**



Base: All Scottish residents (N=2,198)

- 5.3.2 Women are more likely than men to have taken all but two of the forms of action listed, for example, reducing their use of disposable tea / coffee cups (42% vs. 30%). Those living in the Highlands & Islands are most likely to have taken part in beach litter picking (25%), followed by South Scotland (17%). Those living in coastal regions are more likely than those that do not to report going to beach clean ups / litter picking (16% vs. 10%).
- 5.3.3 Those living in Lothians report more actions than most other Scottish regions, particularly on excess packaging (49%) and disposable tea / coffee cups (41%).
- 5.3.4 Young people aged 16 to 24 are particularly likely to report using fewer plastic straws (55%), compared to 38% of over 65 year olds who perhaps do not consume as many drinks with straws. Many have instead reduced their use of single use bags (78% vs. 59% of 16-24 year olds).
- 5.3.5 For each of the actions, those with a higher NR score are more likely to have reported doing them in the last 12 months.
- 5.3.6 An effort to behave more responsibly when it comes to reducing marine litter was also clear in the qualitative groups. A majority, especially those with children, say they do ensure they dispose of their own litter or take it home with them if waste / recycling facilities are unavailable, and a majority spoken to in the family groups say they actively educate their children about the consequences of littering and encourage them to pick up after themselves when using the marine environment.

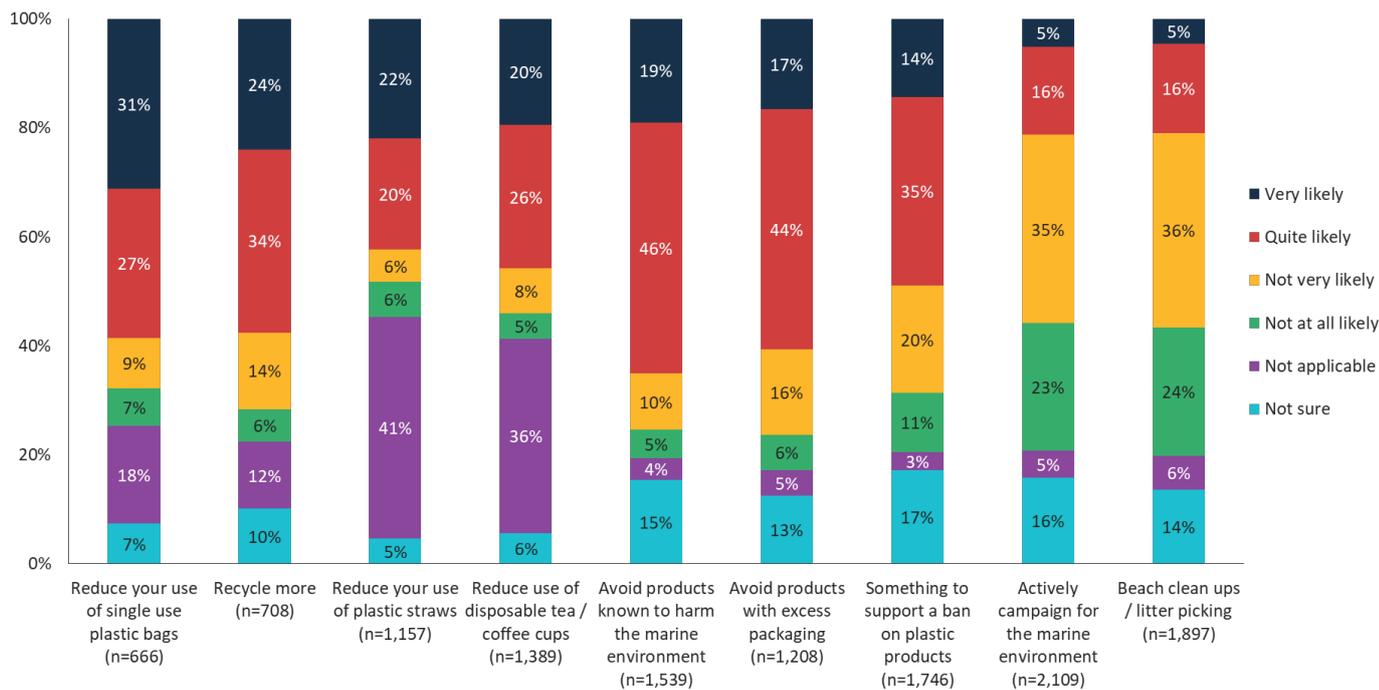
*“We can start educating our kids, culture wise it’s got to come from us.” **Family, Peebles***

5.3.7 Relating to this however, many participants in the qualitative groups highlight the need for facilities to support a reduction in litter; for example, waste and recycling bins must be available, and regularly emptied, in order to encourage people to take responsibility for their litter and more water points would encourage re-use of bottles.

*“There’s this whole thing about cutting down on single use plastics, and people will have refillable bottles with them, but you have to go and buy a bottle.” **Pre-family, Glasgow***

5.3.8 Those who do not currently engage in the actions listed above were asked how likely they are to engage in these actions in the future. Reducing use of single use bags (59%) was the most likely to be supported in the next 12 months and, perhaps understandably given proximity to the coastline, participating in beach litter clean ups was the least likely action with relatively few feeling they would ‘actively campaign’ for the marine environment (both 21%).

**Figure 22: How likely or unlikely are you to do the following in the next 12 months to help reduce marine litter?**



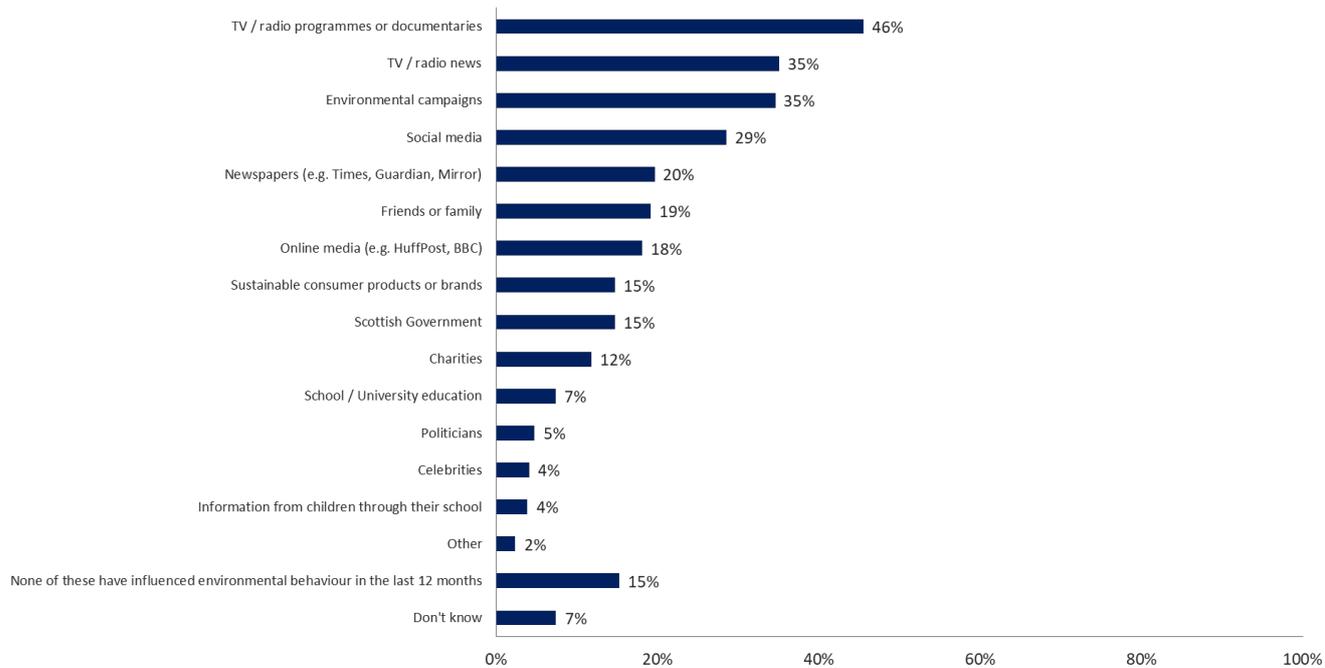
Base: All those who do have not taken those actions in the last 12 months (as shown on chart)

- 5.3.9 The survey showed a high likelihood that people in Scotland are likely to focus on reducing use of single use plastic bags, recycle more, avoid products known to harm the marine environment and avoid products with excess packaging to help reduce marine litter. Twenty-eight percent of those living in the Highlands & Islands region who did not take part in beach clean-ups in the last year think that they might do in the next 12 months. Many older people feel that reducing use of plastic straws is not applicable because they do not generally use them; although close to half (47%) of 25-44 year olds think it is likely that they will do that in the future.
- 5.3.10 Older people are more likely to think they will actively avoid products that harm the marine environment (76% of 55-64 year olds vs. 57% of 16-24 year olds), as are those with a higher NR score.
- 5.3.11 Among those who have not made an effort to recycle more in the last year there is not much variation across NR score, though this is likely due to the fact those with a higher NR score are already making a conscious effort to recycle more. Scottish residents with higher NR scores are however more likely to say they are likely to avoid products with excess packaging, actively campaign for the marine environment and participate in beach clean ups / litter picking.

5.3.12 In line with earlier findings, there is a correlation between those engaging with wildlife and nature through the media, and behaviour or intention to look after the marine environment in their lives. Around a quarter (27%) of Blue Planet watchers who have not recently campaigned about the marine environment think they might do so in the future, in comparison to a sixth (16%) who do not watch the programme.

5.3.13 TV programmes, documentaries and news outputs are felt to have influenced environmental behaviour most in the last 12 months, with just under half (46%) reporting this. TV / radio news and environmental campaigns are the next most common influences (both 35%). Politicians (5%), celebrities and information from children through their school (both 4%) are the influences least likely to have had an impact on behaviours. Only 15% feel that there has not been any influence on their environmental behaviours.

**Figure 23: Which, if any, of the following have influenced your environmental behaviours in the last 12 months? Please select all that apply.**



Base: All Scottish residents (N=2,198)

5.3.14 There is a very clear age divide with the influence of TV programmes, documentaries and TV and radio news affecting the environmental behaviours of older people significantly more than younger age groups. They in turn are more likely to have been influenced by social media, products and brands, friends and family and unsurprisingly school / university education.

- 5.3.15 For example, around half (53%) of over 65 year olds cite TV / radio news as an influencing source, compared to just one in five (22%) 25-34 year olds. By contrast, social media has influenced the behaviours of over two in five (43%) 16-24 year olds, but just one in five (19%) of over 65 year olds.
- 5.3.16 Increased engagement with nature seems to increase the chances that people's behaviour towards the environment will be influenced by the various sources of information on the marine environment. Across almost all of the influences, there is a correlation with NR score; those with a higher score are more likely to report that they have been influenced. Scottish residents with a lower score are more likely to say that none of these have influenced their environmental behaviour in the last 12 months.
- 5.3.17 The age differences are reflected in Scottish regions with those living in Glasgow and Lothians being influenced more by social media, friends and family and environmental campaigns (a high of 41% in Lothians). Central, Mid Scotland & Fife, Highlands & Islands and South Scotland follow the pattern of older residents in being influenced by TV and radio.
- 5.3.18 The influence of media is mirrored across the qualitative groups with the general view, especially among those in the pre-family age group, citing David Attenborough's Blue Planet 2 and social media as drawing much needed attention to the consequences of single use plastics and motivating a change in their own environmentally responsible behaviour. However, the impact of this is strongest where increased awareness dovetails with policy to support behaviour change and buy-in from local businesses, for example retailers charging for plastic bags and food outlets switching to paper straws.

*“You see so many viral videos now, like the turtle with the straw, and now straws are banned everywhere, you have to ask for a straw now which is great.” **Pre-family, Aberdeen***

## 5.4 Coastal management

### *Summary of key findings*

- Overall, Scottish residents are more likely to say that the cost of managing marine industries to protect Scotland's coast and sea should be met by taxes / fees from marine industries that use it, instead of all taxpayers in Scotland.
- They tend to favour all Scottish residents having more of say when thinking about how the Scottish coast and sea is managed, as opposed to people who live by and / or work on the sea.

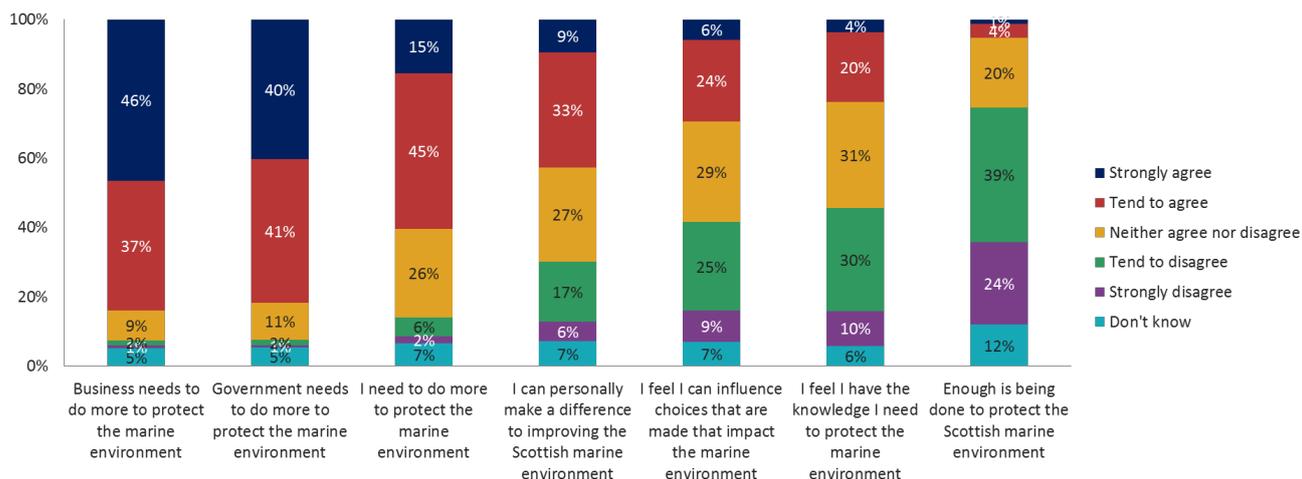
- Scottish residents are more likely to say that we should use less marine resources and therefore conserve them, as opposed to using more.
- Over three in five (63%) disagree that enough is being done to protect the Scottish marine environment. People agree that the government (82%) and business (84%) should do more, though three in five (60%) hold themselves accountable, with a feeling that they should also do more to help. Yet only around two in five (43%) feel they can personally make a difference, suggesting a lack of knowledge surrounding how to help.

- 5.4.1 Respondents were asked a set of questions about marine and coastal protection where they indicated their view on various issues using a scale of 1-100, with 1 representing least favourable and 100 representing the most favourable views. For example, on the topic of cost, 1 represents the view 'the cost of managing marine industries to protect Scotland's coast and sea should be met by taxes / fees from marine industries that use it' and 100 represents 'the cost of managing marine industries to protect Scotland's coast and sea should be met taxes / fees from all tax payers in Scotland'; a score of 50 represents a balance between marine industries and tax payers bearing the costs.
- 5.4.2 The average score of 39 indicates that on balance, more Scottish residents feel that the cost of managing marine industries to protect Scotland's coast and sea should be met by taxes / fees from marine industries that use it, as opposed to all taxpayers in Scotland.
- 5.4.3 The mean was not over 50 for any of the demographic sub-groups, indicating that on average, none of the sub-groups felt that the cost of managing marine industries to protect Scotland's coast and sea should be met taxes / fees from all taxpayers in Scotland.
- 5.4.4 Women were more likely than men to lean towards a balance, with an average score of 40 compared to 37 for men. Older people were also more likely to strike towards a balance, with a score of 42 for over 65 year olds compared to 36 for 25-34 year olds, the group most likely to say that marine industries should bear more of the cost of managing marine industries to protect Scotland's coast and sea. Those living in Highlands & Islands were the closest region to sharing that view.
- 5.4.5 The more affluent social grades AB were more likely to favour a balance with taxpayer contributions and fees from marine industries, with an average score of 42 compared to a score of 38 among social grade DE.

- 5.4.6 When thinking the management of the Scottish coast and sea, 1 represents the view 'people who live by and / or work on the sea should have more of a right to 'have a say' in how the Scottish coast and sea is managed' and 100 represents 'all Scottish residents should have more of a right to 'have a say' in how the Scottish coast and sea is managed'; a score of 50 represents a balance between people who live by and / or work on the sea and all Scottish residents.
- 5.4.7 With an average score of 61, the survey respondents tended to favour all Scottish residents having more of say when thinking about how the Scottish coast and sea is managed, as opposed to people who live by and / or work on the sea.
- 5.4.8 The mean was not under 50 for any of the demographic sub-groups, indicating that on average, none of the sub-groups felt that people who live by and / or work on the sea should have more of a say about how the Scottish coast and sea is managed.
- 5.4.9 Older people were most likely to feel that all Scottish residents should have a say, with a mean score of 66 for those aged over 65, compared to a score of 53 for 16-24 year olds.
- 5.4.10 Strongest in their feeling that all residents ought to have a say in the management of the Scottish sea and coast were those living in North East Scotland (65) and least so Glasgow (57).
- 5.4.11 On the topic of resources, 1 represents the view 'we should seek to use more resources and therefore benefit from them' and 100 represents 'we should use less resources and therefore conserve them'; a score of 50 represents a balance between using and conserving resources from the Scottish coast and sea.
- 5.4.12 The average person favoured using less and conserving more resources, with a mean score of 65. The mean was not under 50 for any of the demographic sub-groups, indicating that on average, none of the sub-groups felt that we should seek to use more resources and therefore benefit from them, when thinking about the Scottish coast and sea.
- 5.4.13 Women feel particularly strongly about this, with an average score of 67 in comparison to 62 for men. Younger people also tended to favour conserving more, with a mean score of 68 for 25-34 year olds compared to 62 for those aged 55-64.
- 5.4.14 When considering region, the opinion towards conserving more and using fewer resources is strongest in Glasgow and Lothians (both 66) and lowest in Mid-Scotland & Fife (62).

5.4.15 Only 5% agree that enough is being done to protect the Scottish marine environment, whilst over three in five (63%) disagree. People expect both government (82%) and business (84%) to do more, but 60% members of the public, thinking that they should also do more to help. Despite that, only 43% feel they can personally make a difference and close to a quarter (23%) think they cannot. This may be due to a lack of knowledge about how to help.

**Figure 24: To what extent do you agree or disagree with the following statements?**



Base: All Scottish residents (N=2,198)

5.4.16 These findings are mirrored in the qualitative focus groups as few believe that enough is being done to protect the Scottish marine environment at present; although personal responsibility among all members of the public is seen as important, some feel they are restricted in the impact they can have when looking at their own use versus that of businesses.

*“Us – who put it there? Us” Empty Nester, Aberdeen*

*“It’s all well and good to say we need to be personally accountable but the big businesses are the ones that have the greatest impact.” Pre-family, Aberdeen*

5.4.17 Similarly, only 29% feel they can have an influence on the choices that affect the marine environment and 35% disagree leaving many feeling powerless or daunted by the perceived challenges.

- 5.4.18 Those in Highlands & Islands (69%) and North East Scotland (67%) are strongest in their belief that not enough is being done to protect the Scottish marine environment. Those residing in Highlands & Islands are most likely to participate in beach clean ups, suggesting that their willingness to help might stem from a feeling that not enough is currently being done. This is also true for those living in coastal zones in comparison to those living further from the coast (65% disagree vs. 60%) – a group that were also more likely to have participated in beach clean ups.
- 5.4.19 While many acknowledge that there is a role for residents, tourists, and businesses alike, the Scottish government is seen as key in managing coastal areas. Many believe that the Scottish government want to ensure the health of the marine environment, but some do not trust that the environment is high up enough on the Government agenda to see a difference made.

*“The Scottish government could be doing more to bolster the marine areas, they could pay more attention and put more money into it” **Pre-family, Glasgow***

*“It’s difficult with conflicting priorities – we have to recognise that the Scottish Government has lots of priorities, I can’t imagine that this is top 20.” **Family, Peebles***

- 5.4.20 Many say they want to see action from the Scottish government to support both individuals and businesses to care for the marine environment; this includes the development and enforcement of policies and regulations around use of the marine environment, and imposing meaningful penalties on those who do not comply. There are also demands for the Scottish government to place greater emphasis on education – ensuring that younger generations understand how to care for and protect the marine environment – in order to reduce littering and other antisocial behaviours in future.

*“Scottish government should start at the top and push it down to us, and it will filter down to the next generation as well.” **Family, Peebles***

*“Government should put out warnings and regulations...more policing of the coastline, and there should be more penalties for people that misuse it.” **Empty Nester, Peebles***

5.4.21 There is also a desire for business – especially oil and gas – to do more. Many feel that businesses that benefit from the Scottish marine environment should do what they can to ‘put something back’ and ensure the health of the marine environment for the future.

*“You’d like to think that the industries that make the most out of the marine environment also put something back, that corporate responsibility, it comes back to caring – you’ve got to care or what’s the point” Empty Nester, Aberdeen*

5.4.22 The feeling that the government should do more is felt by more women than men (85% vs. 78%). This is the case also among those aged 55 and over (86%) when compared to those in younger age groups. Those with higher engagement with nature and wildlife share that view, with the majority (84%) reporting this compared with 65% of those that do not tend to watch.

5.4.23 Business tends to be held accountable by older people (88% of those aged 55 and over), although again this is affected by younger people’s higher admission of not being sure one way or the other, with 8% of 25-34 year olds feeling they did not know enough to comment. Those in Highlands & Islands (90%) and South Scotland (87%) feel strongest that businesses ought to do more to protect the marine environment, with those residing in coastal zones more likely than those who are not also more likely to report this (86% vs. 82%).

5.4.24 Those with a higher NR score are more likely to feel they can personally make a difference, and disagree that enough is being done to protect the Scottish marine environment.

5.4.25 Those in the young and middle age groups (18-34 and 35-44) are most likely to feel they can do more to protect the marine environment, around half for both age groups. of the proportion of those that feel that they can do more to protect the marine environment drops to 43% for the 45-54 year. Just under a third (31%) for the over 65 year olds believe they can do something to make a difference; however, as previously noted, older age groups are more likely than their younger counterparts to report reducing their use of plastic bags and recycling more so they perhaps do not make the connection between that behaviour and protecting the marine environment.

5.4.26 Belief in the ability that people can personally make a difference does not vary across Scottish region, nor by socio-economic status. The feeling that people have the knowledge about what to do to protect the marine environment varies by age, with younger people being more confident. A third (33%) of 16-24 year olds agree they have that knowledge, compared to one in five (21%) 55 to 64 year olds and one in six (17%) over 65 year olds.

5.4.27 In the qualitative focus groups, younger respondents (pre-family) spoke more often than other groups about ways in which they could make a difference, especially among those living on the coast. Group activities, such as organised beach cleans (where people join together to pick up litter on the beach), are well known, often publicised locally and on social media. Individual activities (such as limiting single use plastics) are also mentioned. Many also feel that climate change and pollution is more talked about than before – whether on social media or face-to-face – which is making it more prominent.

*“A lot of people talk about climate change on social media, you watch documentaries. It’s a lot more talked about now” **Pre-family, Aberdeen***

*“Someone organized a beach party where people picked up the litter” **Pre-family, Glasgow***

5.4.28 About 28% of those in North East Scotland and 29% of those in the Highlands & Islands share the belief that they feel they have the knowledge they need to protect the marine environment, but there is no variation by socio-economic group. An engagement with nature also correlates with knowledge about what to do. Just under a third (31%) of those who had watched Blue Planet agreed they had that knowledge, compared to one sixth (17%) of those who had not watched.

5.4.29 Perhaps connected to knowing what to do, energy and positivity, younger people are more confident that they can influence the choices that are made that impact the marine environment. Thirty-eight percent of 16-24 year olds and 35% of 25-34 year olds share that belief, which contrasts to 27% of 55-64 year olds and 22% of over 65 year olds.

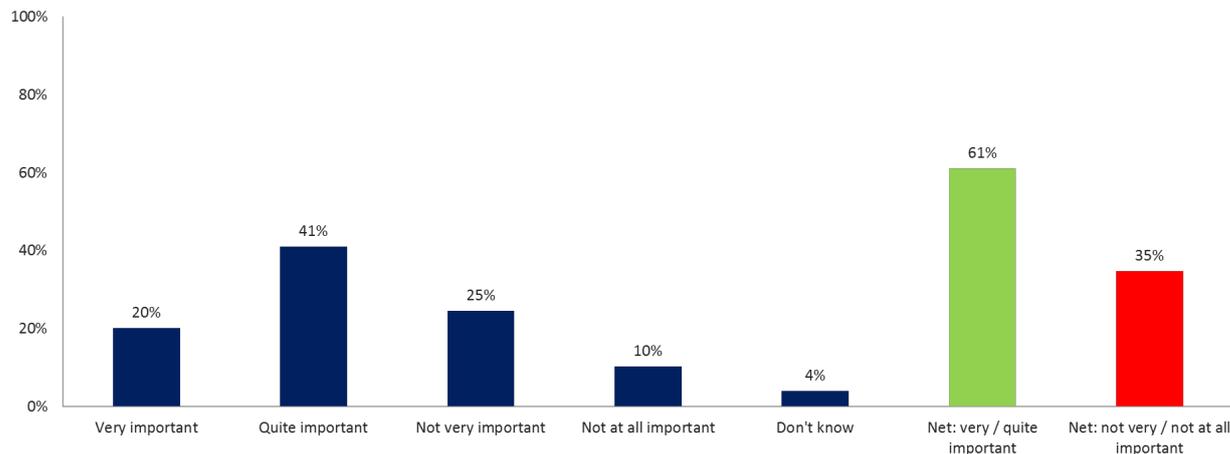
## **5.5 Seafood and sustainability**

### *Summary of key findings*

- Forty percent of Scottish residents regularly (at least once a week) eat seafood and two-thirds (68%) eat it at least once a month.
- Around half (52%) say that they would pay ‘a bit extra’ for Scottish seafood.
- Fifty-two percent are aware of any of the seafood labels, with Dolphin Safe perceived to be the most influential among those aware, with 62% reporting this.

5.5.1 Two-fifths (40%) of Scottish residents state that they eat seafood at least once a week and over two-thirds (68%) do so at least one a month. A sizeable minority (18%) say they never eat seafood, and this is highest among 25-34 year olds (26%). Men are more likely than women to report eating seafood, both weekly (44% vs. 37%) and monthly (73% vs. 63%).

**Figure 25: How important or not is it to you that the seafood you eat is farmed or caught in Scottish waters?**



Base: All those who eat seafood (N=1,811)

5.5.2 Frequency of seafood consumption is highest in Highlands & Islands areas (48% at least once a week), closely followed by Mid-Scotland & Fife (47%), while those in Glasgow and West Scotland report a lower level of seafood consumption (both 32%).

5.5.3 The frequency of seafood consumption increases with levels of affluence, with those in social grades AB more likely to regularly eat seafood (52% at least once a week), compared to DE (36%).

5.5.4 Those living in coastal zones are more frequent seafood eaters than those living further from the coast, both weekly (43% vs. 38%) and monthly (71% vs. 66%).

5.5.5 For the majority of people in Scotland it is important to them that the seafood that they eat is farmed or caught in Scottish waters. Three in five (61%) of those who eat seafood feel it is important that it comes from Scotland, however a third (35%) do not mind where their seafood comes from. The origin of seafood is more important to women (66%) than men (56%), as it is to older people with 67% of those aged over 65 feeling this is important, compared to 51% of 16-24 year olds.

5.5.6 Among those that eat seafood, there is a correlation between NR score and importance of eating seafood from Scottish waters, with those with a higher score more likely to believe this.

- 5.5.7 There are also regional differences when considering the importance of seafood being caught or farmed locally; this matters most to those living in Highlands & Islands and North East Scotland (both 66%), and least to those in Glasgow and Lothians (both 40% - although over half in those regions, 53% and 55% respectively, agree that it is important). Locally caught seafood is also felt to be important by around two in three (69%) rural residents compared to three in five (58%) of those living in urban areas.
- 5.5.8 Respondents in the focus groups are aware of the Scottish fishing industry, its strong heritage, and its contribution to the Scottish economy. Some also have family members working in the industry, and recognise its value for fishing communities. Many say that they eat local fish when they can – for example, visiting fish restaurants or buying fish and chips when they visit the coast.

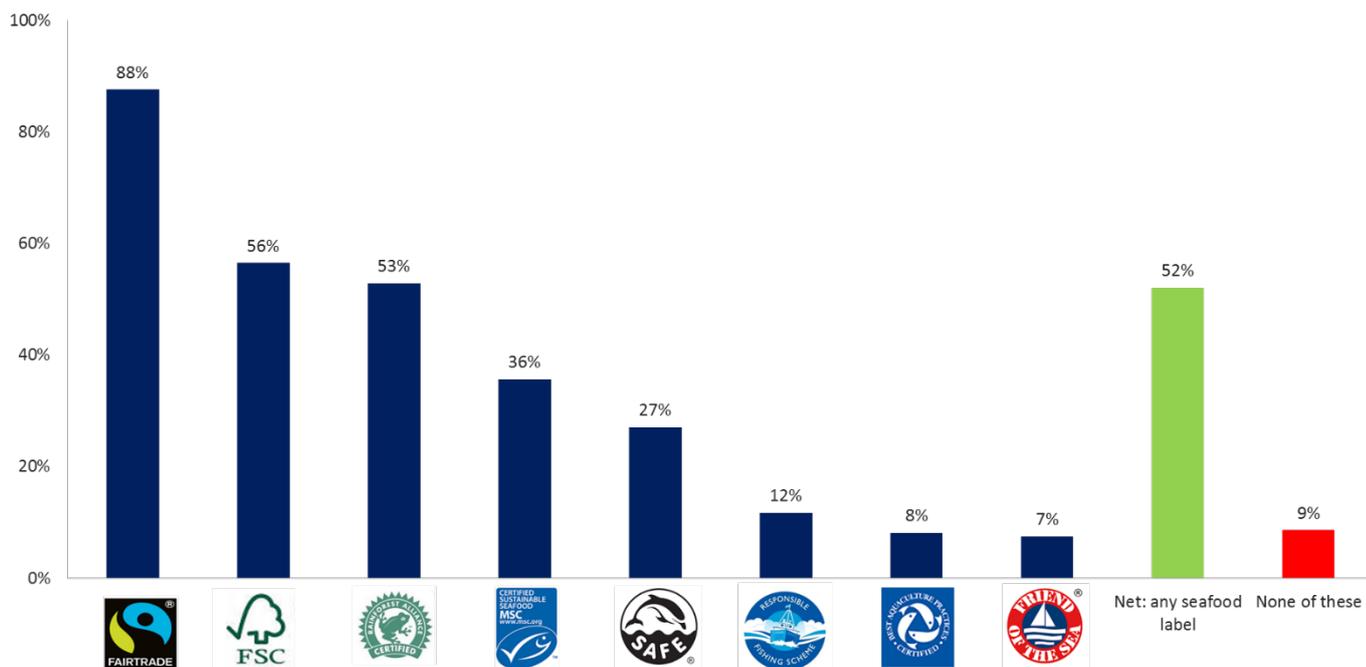
*“We’ve got such good Scottish sea food so that’s always something I take into account” **Pre-family, Glasgow***

*“[We went for] fish and chips, and then had a wander with my friend” **Empty Nester, Aberdeen***

- 5.5.9 While farmed fishing is known to positively impact the economy, most think that the majority of seafood produced (especially oysters, lobster and salmon) is exported, rather than made available for the local market. Many also raise questions about how seafood / fish is farmed, due to the processes involved, and how sustainable it is.
- 5.5.10 All respondents were asked whether they would pay ‘a bit extra’ for Scottish seafood and over half (52%) agreed that they would. Women were more likely than men to say they would pay a higher price for Scottish seafood (56% vs. 48%), as were older respondents (57% of those aged 65 and over vs. 45% of 16-24 year olds). This is consistent with the pattern on the importance of locally sourced seafood seen previously.
- 5.5.11 Again, the willingness to pay more for Scottish seafood among Scottish residents increases with levels of affluence, with three in five (60%) Scottish residents of social grade AB saying they were willing to pay more, compared to half (50%) of those in groups C2, D and E.
- 5.5.12 Knowledge on seafood sustainability labels is generally low, especially when the Fairtrade label is used a benchmark. Grouped together the net recognition figure for the seafood labels shown is around half (52%) of Scottish residents, driven mainly by recall of the Marine Stewardship Council Certification (36%) and Dolphin-Safe (27%).

5.5.13 Awareness of seafood labels is higher among women than men (55% vs. 49%) which may reflect who the main shopper in the household is. Recognition is highest in the Highlands & Islands, with three in five (61%) aware of seafood labels compared to half (48%) in Glasgow. In Highlands & Islands the recognition is particularly strong for Marine Stewardship Council Certification (45%) and Friend of the Sea (13%) labels.

**Figure 26: Which if any of these sustainability labels have you seen before? Please click on all that apply.**



Base: All Scottish residents (N=2,198)

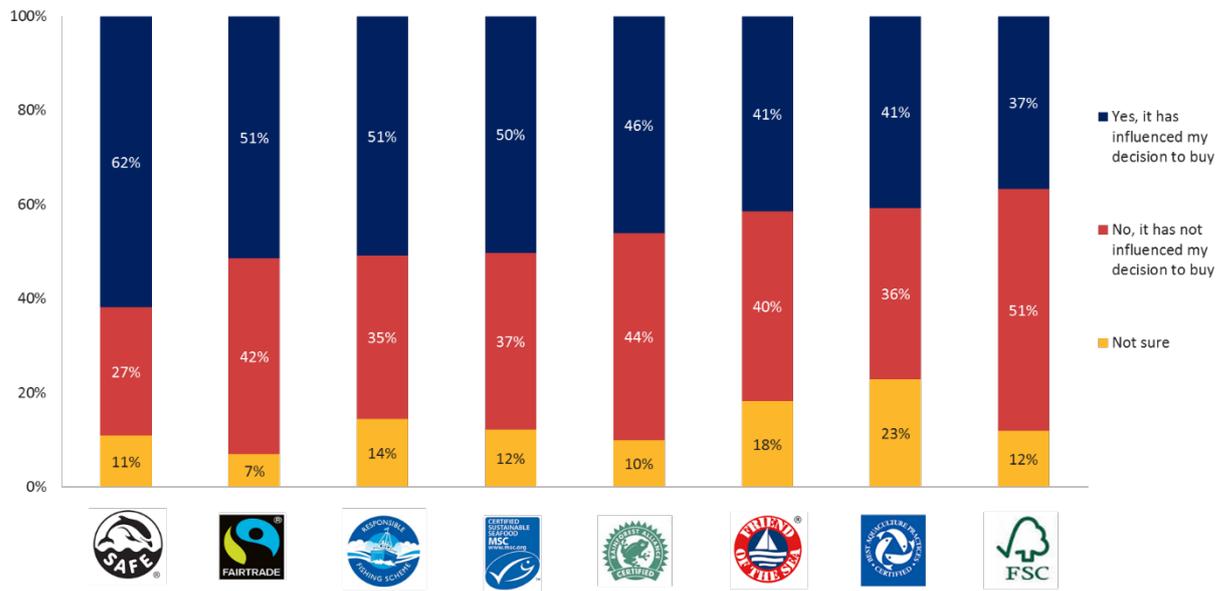
5.5.14 Those aware of each label indicated whether the label had influenced their decision to buy a product. Dolphin Safe was considered the most influential (62%), followed by Fairtrade (51%), Responsible Fishing Scheme (51%) and Marine Stewardship Council Certification (50%). The Forest Stewardship Council label was perceived to be the least influential (37%). Dolphin Safe was thought to be particularly influential among women (67% vs. 54% of men).

5.5.15 Fairtrade was the only label to have particularly influenced younger Scottish residents, with 60% of 16-24 year olds saying it has previously influenced their decision to buy, compared to 48% of those aged 65 and over.

5.5.16 The Marine Stewardship Council Certification resonated more with those aged 55 or older and is especially influential for those living in the Highlands & Islands region (63% vs. 50% average).

5.5.17 Each of the labels resonated more for those with a higher NR score.

**Figure 27: Has seeing these labels on a product influenced your decision to buy?**



Base: All those aware of each label (MSC 789; Dolphin Safe 594; Best Aquaculture Practices 175; Friend of the Sea 166; Responsible Fishing Scheme 257; Fairtrade 1927; Forest Stewardship Council 1,231; Rainforest Alliance Certified 1,128)

## 6 Conclusion

- 6.1.1 The key conclusions from this study on attitudes in Scotland toward the marine environment and marine issues are outlined below.
- 6.1.2 Scottish residents interact with the Scottish marine environment in numerous ways, from walking along the Scottish coast and admiring the scenery and wildlife, to going for a swim in the sea or a picnic on the beach. The most common interaction with the coast or sea is going walking, hiking or running, with the majority (63%) of those that have visited the Scottish coast or sea in the last year reporting this.
- 6.1.3 Age is a factor in the activities undertaken at the coast or sea, with older people more likely than their younger counterparts to walk, hike or run, in addition to watching wildlife and beachcombing. By contrast, younger people are more likely to engage in active group activities, such as games, picnics and BBQs, or swimming.
- 6.1.4 A number of concerns relating to the marine environment are voiced by Scottish residents. Amidst current conversations in the media, it is unsurprising that litter / plastics in the sea is the most commonly cited concern, with almost all (83%) reporting this. Reduction in marine biodiversity / loss of marine species (53%), over fishing (46%) and accidents such as oil spills (42%) are the next most common concerns with regards to the marine environment.
- 6.1.5 The responsibility for reducing marine litter in Scotland is not clear cut, and lies with both the consumer and the Government. Half (53%) of Scottish residents feel that Scottish households / residents in general should bear core responsibility for reducing marine litter in Scotland, whilst relatively similar proportions mention industrial users of the coast and sea (48%) and the Scottish Government (47%), suggesting that everyone has a role to play in reducing marine litter. Given that many associate food and drinks packaging as a prominent form of litter, it is somewhat surprising that not more than two in five (39%) feel that food and drink manufacturers should have the core responsibility.
- 6.1.6 It is evident that people are taking action in order to try and reduce marine litter. In the last year, two-thirds (68%) of Scottish residents say they have reduced their use of single use plastic bags. The same proportion (66%) report generally recycling more and close to half (47%) have reduced their use of plastic straws, which is likely linked to the constant attention they have received in the media.
- 6.1.7 The majority of Scottish residents eat seafood, at least once a week (40%) or at least once a month (68%), though around a fifth (18%) say they never eat seafood. When given the choice, around half (52%) say they would pay 'a bit extra' for Scottish seafood.

## Annex A: Sample breakdown

The main demographics of the sample are shown below in unweighted and weighted form.

<b>Gender</b>	<b>Unweighted base</b>	<b>Weighted base</b>
Male	1027	1077
Female	1171	1121
<b>Age</b>		
16-24	271	290
25-34	322	360
35-44	306	324
45-54	382	386
55-64	388	345
65+	529	493
<b>Social grade</b>		
AB	532	484
C1	689	659
C2	434	440
DE	543	615
<b>Location</b>		
Urban	1459	1561
Town and Fringe	256	242
Rural	483	396
<b>Region</b>		
North East Scotland	300	307
Highlands & Islands	235	199
South Scotland	308	300
West Scotland	214	220

Central	255	348
Mid-Scotland & Fife	271	250
Lothians	355	319
Glasgow	260	255

The Scottish regions quoted in this report have been formed from the following local authority areas.

<b>Region</b>	<b>Local Authorities</b>
North East Scotland	Aberdeen City, Aberdeenshire, Angus, Dundee City
Highlands & Islands	Argyll & Bute, Highland, Moray, Orkney Islands, Shetland Islands, Eilean Siar
South Scotland	Scottish Borders, Dumfries & Galloway, East Ayrshire, East Lothian, North Ayrshire, South Ayrshire
West Scotland	West Dunbartonshire, East Dunbartonshire, East Renfrewshire, Inverclyde, Renfrewshire
Central Scotland	Clackmannanshire, Falkirk, North Lanarkshire, South Lanarkshire
Mid-Scotland & Fife	Fife, Perth & Kinross, Stirling
Lothians	City of Edinburgh, Midlothian, West Lothian
Glasgow	City of Glasgow

## Annex B: Social grade breakdown

<b>Social grade classification</b>	<b>Local Authorities</b>
A	Higher managerial, administrative and professional
B	Intermediate managerial, administrative and professional
C1	Supervisory, clerical and junior managerial, administrative and professional
C2	Skilled manual workers
D	Semi-skilled and unskilled manual workers
E	State pensioners, casual and lowest grade workers, unemployed with state benefits only

**Annex C: Map of Scotland**



## **Annex D: Questionnaire**

**[Q1] {grid}** For each of the following, please rate the extent to which you agree with each statement, using the scale from 1 to 5 as shown below. Please respond as you really feel, rather than how you think “most people” feel.

**[1] Disagree strongly    [2] Disagree a little    [3] Neither agree or disagree  
[4] Agree a little    [5] Agree strongly**

**[Q1\_1] My ideal vacation spot would be a remote, wilderness area.**

**[Q1\_2] I always think about how my actions affect the environment.**

**[Q1\_3] My connection to nature and the environment is a part of my spirituality.**

**[Q1\_4] I take notice of wildlife wherever I am.**

**[Q1\_5] My relationship to nature is an important part of who I am.**

**[Q1\_6] I feel very connected to all living things and the earth.**

**[Q2] {grid}** How worried do you personally feel about each of these issues?

**[1] Very worried    [2] Quite worried    [3] Not worried    [4] Not worried  
at all**

**[Q2\_1] Raw sewage put into sea**

**[Q2\_2] Nuclear energy / nuclear waste**

**[Q2\_3] Protection of wildlife**

**[Q2\_4] Protection of areas of conservation interest**

**[Q2\_5] Forestry**

**[Q2\_6] Genetically modified crops**

**[Q2\_7] Pesticides, fertilisers and chemical sprays**

**[Q2\_8] Pollution of rivers, lochs and seas**

**[Q2\_9] Waste disposal**

**[Q2\_10] New developments in the countryside**

**[Q2\_11] Farming methods**

**[Q2\_12] Using up non-renewable resources**

**[Q2\_13] Quality of drinking water**

**[Q2\_14] Road traffic**

**[Q2\_15] Global warming by greenhouse effect**

**[Q2\_16] Derelict land in towns and cities**

**[Q2\_17] Fish farming**

**[Q2\_18] Fumes and smoke from factories**

**[Q2\_19] Over fishing**

**[Q2\_20] Lack of access to parks**

**[Q2\_21] Plastics in the oceans**

**[Q3] {single} How often on average, if at all, do you watch nature/wildlife programmes?**

**(Allows one selection)**

**[1] Every day**

**[2] A few times a week**

**[3] Once a week**

**[4] A few times a month**

**[5] Once a month**

**[6] Less often than once a month**

**[7] Never**

**[99] Not sure**

**[Q4] {multiple} Which, if any, of the following nature/wildlife programmes have you watched in the past 12 months? Please select all that apply.**

**(Allows multiple selections)**

**[1] Blue Planet 1 / 2**

**[2] Coast**

**[3] Countryfile**

**[11] Dynasties**

**[4] Frozen Planet**

**[5] Landward**

**[6] Life**

**[7] Natural World**

**[8] Planet Earth 1 / 2**

**[9] Spring/Autumn/Winter Watch**

**[10] The Living Planet**

**[96] Other**

- [99] None of these
- [98] Don't know

**[Q5] {grid} Thinking about the last 12 months, how often have you visited each of these outdoor spaces in Scotland?**

[1] Once a week or more often [2] Once every 2 or 3 weeks [3] Once a month  
[4] Once every 2 or 3 months [5] Once or twice [6] Not in the last 12 months  
[98] Not sure

**[Q5\_1] Parks or gardens**

**[Q5\_2] The coast, beaches or cliffs**

**[Q5\_3] The sea or ocean (for example for swimming, diving, sailing surfing etc)**

**[Q5\_4] Woodlands or forests**

**[Q5\_5] Hills, mountains, moors or heathland**

**[Q5\_6] Lochs, lakes or reservoirs**

**[Q5\_7] Rivers or canals**

**[Q5a] {single} Have you visited the Scottish coast or sea for **\*\*work / business reasons\*\*** in the last year?**

**(Allows one selection)**

- [1] Yes
- [2] No
- [99] Not sure

**[Q5b] {multiple} If you have visited the Scottish sea or coast for work / business, was it for any of the following industry sectors? Please tick all that apply**

**(Allows multiple selections)**

- [1] Commercial sea fishing
- [2] Fish farming
- [3] Oil / Gas sector
- [4] Renewable energy sector
- [5] Scientific research
- [6] Shipping sector
- [7] Tourism industry

- [96] Other

**[Q6] {multiple} Which, if any, of the following leisure activities have you done at the Scottish coast or sea in the last year? Please select all that apply.**

**(Allows multiple selections)**

- [1] Beach activities / games / picnics / BBQs
- [14] Beachcombing
- [15] Beach clean ups
- [2] Diving / snorkelling
- [3] Dog walking
- [4] Eating seafood (fish/shellfish)
- [5] Kayaking/rowing/canoeing
- [6] Photography
- [7] Recreational fishing on the coast or in the sea
- [8] Sailing
- [9] Surfing/bodyboarding
- [10] Swimming
- [11] Walking / hiking / running
- [12] Wildlife watching
- [13] Windsurfing/kite-surfing
- [97] Other
- [99] None of these
- [98] Don't know

**[Q6a] {grid} How often have you done each of the following leisure activities at the Scottish coast or sea in the last year?**

**[1] Once a week or more often   [2] Once every 2 or 3 weeks   [3] Once a month   [4] Once every 2 or 3 months   [5] Once or twice a year   [99] Don't know**

- [Q6a\_1] Beach activities / games / picnics / BBQs
- [Q6a\_14] Beachcombing
- [Q6a\_15] Beach clean ups
- [Q6a\_2] Diving / snorkelling
- [Q6a\_3] Dog walking
- [Q6a\_4] Eating seafood (fish/shellfish)
- [Q6a\_5] Kayaking/rowing/canoeing
- [Q6a\_6] Photography
- [Q6a\_7] Recreational fishing on the coast or in the sea

- [Q6a\_8] Sailing
- [Q6a\_9] Surfing/bodyboarding
- [Q6a\_10] Swimming
- [Q6a\_11] Walking / hiking / running
- [Q6a\_12] Wildlife watching
- [Q6a\_13] Windsurfing/kite-surfing
- [Q6a\_97] Other

[Q6c1] {grid-check} And where on the Scottish coast have you most frequently done each of these activities in the last year? Please choose only one location for each.

- [1] Argyll    [2] Clyde    [3] Forth and Tay    [4] Moray Firth    [5] North Coast
- [6] North East    [7] Orkney Islands    [8] Outer Hebrides    [9] Shetland Islands
- [10] Solway    [11] West Highlands    [99] Not sure

[Q6c1\_1] Beach activities / games / picnics / BBQs                    

[Q6c1\_14] Beachcombing                                   

[Q6c1\_15] Beach clean ups       

[Q6c1\_2] Diving / snorkelling

[Q6c1\_3] Dog walking

[Q6c1\_4] Eating seafood (fish/shellfish)

[Q6c1\_5] Kayaking/rowing/canoeing

[Q6c1\_6] Photography

[Q6c1\_7] Recreational fishing on the coast or in the sea

[Q6c1\_8] Sailing

[Q6c1\_9] Surfing/bodyboarding

[Q6c1\_10] Swimming

[Q6c1\_11] Walking / hiking / running

[Q6c1\_12] Wildlife watching

[Q6c1\_13] Windsurfing/kite-surfing

[Q6c1\_97] \$Q6\_other

transpose: None

[Q7] {grid} How much knowledge do you think you have about each of the following sectors or industries in Scotland's marine environment?

[1] Know very well [2] Know a fair amount [3] Know just a little [4] Heard of, know almost nothing about [99] Not heard of

[Q7\_1] Commercial sea fishing

[Q7\_2] Farming of fish and shellfish

[Q7\_3] Non-renewable energy such as oil and gas

[Q7\_4] Renewable energy such as wind, waves, tide

[Q7\_5] Transportation of goods / commercial shipping

[Q7\_6] Coastal tourism / recreation / cruises

[Q7\_7] Coastal protection such as seawalls

[Q7\_8] Scientific research such as marine biology

[Q7\_9] Ports and harbours

[Q7\_10] Military exercises such as by the Royal Navy

[Q7\_11] Construction such as shipbuilding

[Q8] {multiple} From which, if any, of the following sources have you ever found information about the Scottish marine environment? Please select all that apply.

**(Allows multiple selections)**

**[1] Education (school, college, university)**

**[2] Films or nature / wildlife documentaries**

**[3] Friends or family**

**[4] Newspapers, books magazines or online articles**

**[5] Scottish Government**

**[6] Social media**

**[7] TV or radio news**

**[8] Environmental charities / organisations**

**[9] Museum**

**[10] Visitor centre by the coast**

**[97] Other**

**[98] None of these – I haven't found information on the Scottish marine environment**

**[99] Don't know**

**[Q9] {grid} How interested are you in learning more about the marine environment in Scotland, the rest of the UK and in general around the world?**

**[1] Very interested [2] Quite interested [3] Not very interested [4] Not at all interested [98] Not sure**

**[Q9\_1] In Scotland**

**[Q9\_2] Rest of the UK**

**[Q9\_3] Around the world**

**[Q10] {grid} To what extent do you support or oppose the following ways of using the sea and coastline in Scotland?**

**[1] Strongly support [2] Slightly support [3] Neither support nor oppose [4] Slightly oppose [5] Strongly oppose [99] Don't know**

**[Q10\_1] Commercial sea fishing**

**[Q10\_2] Farming of fish and shellfish**

**[Q10\_3] Non-renewable energy such as oil and gas**

**[Q10\_4] Renewable energy such as wind, waves, tide**

**[Q10\_5] Transportation of goods / commercial shipping**

**[Q10\_6] Coastal tourism / recreation / cruises**

**[Q10\_7] Coastal protection such as seawalls**

**[Q10\_8] Scientific research such as marine biology**

**[Q10\_9] Ports and harbours**

**[Q10\_10] Military exercises such as by the Royal Navy**

**[Q10\_11] Construction such as shipbuilding**

**[q10a] {multiple} Our marine environment provides a number of services and benefits. Which of the following do you think are most important? You can choose up to 5 priorities**

**(Allows multiple selections)**

- [1] Oil and gas**
- [2] Renewable Energy**
- [3] Food to eat**
- [4] Coastal protection**
- [5] Climate regulation**
- [6] Health and well-being**
- [7] Tourism, leisure and recreation**
- [8] Transport and shipping**
- [9] Habitats for marine plants and animals**
- [10] Providing jobs**
- [11] Supporting the wider UK economy**
- [98] None of the above**
- [99] Don't know**

**[Q10b] {single} In the past year, do you think the health of Scotland's seas has...**

**(Allows one selection)**

- [1] Improved**
- [2] Stayed the same**
- [3] Worsened**
- [99] Don't know**

**[Q10c] {open} You said that you think the health of Scotland's seas has worsened in the past year. Why do you think this?**

**A text field with 4 lines of 70 characters.**

**[Q10d] {open} You said that you think the health of Scotland's seas has improved in the past year. Why do you think this?**

**A text field with 4 lines of 70 characters.**

**[Q11] {multiple} Which of the following are you most concerned about in the marine environment globally? You can pick up to FOUR.**

**(Allows multiple selections)**

- [1] Change in sea levels**
- [2] Change in sea temperatures**
- [3] Accidents such as oil spills**
- [4] Ocean acidification**
- [5] Over fishing**
- [6] Litter / plastics in the sea**
- [7] Reduction in marine biodiversity / loss of marine species**
- [8] Coastal development**
- [96] Other**
- [98] None of the above**
- [99] Don't know**

**[Q12] {single} When thinking about the marine environment do you feel the government should pay more, less or equal attention to the views of scientists or the views of the public?**

**(Allows one selection)**

- [1] Much more to scientists**
- [2] A little more to scientists**
- [3] Both equally**
- [4] A little more to the public**
- [5] A lot more to the public**
- [99] Not sure**

**[Q13] {multiple} Which, if any, of the following do you think are the main types of litter in Scotland's sea and coast? You can tick up to FIVE.**

**(Allows multiple selections)**

- [1] Plastic bottles**
- [2] Plastic bags**
- [3] Cotton buds**
- [4] Wet wipes**
- [5] Straws**

- [8] Fishing gear**
- [9] Micro plastics**
- [11] Paper**
- [12] Sanitary items**
- [13] Cigarettes**
- [14] Plastic containers**
- [15] Rope/string**
- [16] Food packets and wrapping**
- [96] Other**
- [98] None of the above, they are no main types of litter**
- [99] Don't know**

**[Q14] {multiple} Which, if any, of the following do you think are the main causes of marine litter in Scotland's sea and coast? You can pick up to FIVE.**

**(Allows multiple selections)**

- [1] Commercial fishing by boats**
- [2] Farming of fish and shellfish**
- [3] Non-renewable energy such as oil and gas**
- [4] Renewable energy such as wind, waves**
- [5] Transportation of goods / commercial shipping**
- [6] Coastal tourism / recreation / cruises**
- [7] Ports and harbours**
- [8] Military**
- [9] Households (general waste)**
- [12] Waste water and sewerage systems**
- [10] Tourist waste**
- [11] Food and drinks production and packaging**
- [96] Other**
- [98] None of the above, they are no producers of litter**
- [99] Don't know**

**[Q15] {multiple} Which, if any of the following, do you think should be responsible for reducing marine litter in Scotland? You can pick the FOUR you think should bear most responsibility.**

**(Allows multiple selections)**

- [1] Industrial users of the coast and sea**
- [2] Tourists / leisure users of the coast and sea**

- [3] Scottish households/residents in general**
- [4] Food and drinks companies**
- [5] Scottish Environment Protection Agency (SEPA)**
- [6] Water supply and treatment companies**
- [7] Local councils**
- [8] Scottish Government**
- [9] Environmental groups or charities**
- [96] Other**
- [99] None of these, marine litter is not an issue that needs tackling**
- [98] Don't know**

**[Q16] {single} Thinking about your use of the Scottish sea or coast, to what extent are you or your family affected by marine litter?**

**(Allows one selection)**

- [1] A great deal**
- [2] A fair amount**
- [3] Not very much**
- [4] Not at all**
- [98] Don't know**

**[Q17b] {multiple} Which, if any, of the following have you done in the last 12 months to help reduce marine litter? Please tick all that apply.**

**(Allows multiple selections)**

- [1] Reduced your use of plastic straws**
- [2] Reduced your use of single use plastic bags**
- [3] Doing something to support a ban on plastic products**
- [4] Avoided products known to harm the marine environment**
- [5] Recycled more**
- [6] Reduced use of disposable tea / coffee cups**
- [7] Avoided products with excess packaging**
- [8] Actively campaigned for the marine environment**
- [9] Beach clean ups / litter picking**
- [96] Other**
- [99] None of the above**

**[Q17c] {grid} How likely or unlikely are you to do the following in the next 12 months to help reduce marine litter?**

[1] Very likely      [2] Quite likely      [3] Not very likely      [4] Not at all likely  
[99] Not sure      [98] Not applicable

[Q17c\_1] Reduce your use of plastic straws

[Q17c\_2] Reduce your use of single use plastic bags

[Q17c\_3] Something to support a ban on plastic products

[Q17c\_4] Avoid products known to harm the marine environment

[Q17c\_5] Recycle more

[Q17c\_6] Reduce use of disposable tea / coffee cups

[Q17c\_7] Avoid products with excess packaging

[Q17c\_8] Actively campaign for the marine environment

[Q17c\_9] Beach clean ups / litter picking

[Q18] {multiple} Which, if any, of the following have influenced your environmental behaviours in the last 12 months? Please select all that apply.

(Allows multiple selections)

[1] Newspapers (e.g. Times, Guardian, Mirror)

[2] Online media (e.g. HuffPost, BBC)

[3] Social media

[4] Friends or family

[5] TV / radio news

[6] Scottish Government

[7] Environmental campaigns

[8] TV / radio programmes or documentaries

[9] Celebrities

[10] Sustainable consumer products or brands

[11] Information from children through their school

[12] Charities

[13] Politicians

[15] School / University education

[97] Other

[99] None of these have influenced environmental behaviour in the last 12 months

[98] Don't know

**[Q23] {single} How familiar are you with Marine Protected Areas (MPAs)?**

**(Allows one selection)**

- [1] Very familiar**
- [2] Quite familiar**
- [3] Not very familiar**
- [4] Heard of, but know nothing about**
- [5] Not previously heard of MPAs**

**Marine Protected Areas (MPAs) are areas of sea that are designated to ensure protection of some of the most vulnerable marine animals and habitats (e.g. marine mammals, seabirds and seagrass beds) and important historic sites (e.g. ship wrecks).**

**MPAs are protected under Scottish and UK legislation and are managed to reduce the impact of human activities on marine animals and/or habitats. This management can restrict some industries, such as fishing, shipping, renewable developments, oil and gas, which can have both positive and negative economic impacts to different people and businesses.**

**[Q24] {single} To what extent do you support or oppose the creation of MPAs in Scotland?**

**(Allows one selection)**

- [1] Strongly support**
- [2] Tend to support**
- [3] Neither support or oppose**
- [4] Tend to oppose**
- [5] Strongly oppose**
- [98] Don't know**

**[Q24a] {open} If there are any Scottish marine animals that you are concerned about for the future, please type in here.**

**A text field with 3 lines of 60 characters.**

**[Q25] {grid} How important or not do you feel these sectors or industries are to Scotland in terms of their social value? By social value we mean their value to society as a whole or local communities.**

**[1] Very important [2] Quite important [3] Not very important [4] Not at all important [99] Don't know**

**[Q25\_1] Commercial sea fishing**

**[Q25\_2] Farming of fish and shellfish**

- [Q25\_3] Non-renewable energy such as oil and gas**
- [Q25\_4] Renewable energy such as wind, waves, tide**
- [Q25\_5] Transportation of goods / commercial shipping**
- [Q25\_6] Coastal tourism / recreation / cruises**
- [Q25\_7] Coastal protection such as seawalls**
- [Q25\_8] Scientific research such as marine biology**
- [Q25\_9] Ports and harbours**
- [Q25\_10] Military exercises such as by the Royal Navy**
- [Q25\_11] Construction such as shipbuilding**

**[Q26] {grid} How important or not do you feel these sectors or industries are to Scotland in terms of their economic value? By economic value we mean generating tax revenue, creating and providing jobs.**

**[1] Very important [2] Quite important [3] Not very important [4] Not at all important [99] Don't know**

- [Q26\_1] Commercial sea fishing**
- [Q26\_2] Farming of fish and shellfish**
- [Q26\_3] Non-renewable energy such as oil and gas**
- [Q26\_4] Renewable energy such as wind, waves, tide**
- [Q26\_5] Transportation of goods / commercial shipping**
- [Q26\_6] Coastal tourism / recreation / cruises**
- [Q26\_7] Coastal protection such as seawalls**
- [Q26\_8] Scientific research such as marine biology**
- [Q26\_9] Ports and harbours**
- [Q26\_10] Military exercises such as by the Royal Navy**
- [Q26\_11] Construction such as shipbuilding**

**[Q27] {single} How often, if ever, do you eat seafood?**

**(Allows one selection)**

- [1] A few times a week**
- [2] Once a week**
- [3] A few times a month**
- [4] Once a month**
- [5] Less often than once a month**
- [6] Never**

[Q28] {single} How important or not is it to you that the seafood you eat is farmed or caught in Scottish waters?

(Allows one selection)

- [1] Very important
- [2] Quite important
- [3] Not very important
- [4] Not at all important
- [98] Don't know

[Q29] {single} Would you be prepared to pay a bit extra for Seafood that is caught or farmed in Scottish waters compared to the similar produce from elsewhere?

(Allows one selection)

- [1] Yes
- [2] No
- [98] Don't know

[Q30] {multiple} Which if any of these sustainability labels have you seen before? Please click on all that apply.

YouGov

Which if any of these sustainability labels have you seen before? Please click on all that apply.

<input type="checkbox"/>		<input type="checkbox"/>	 <small>Certified from sustainable fisheries www.friendofthesea.org</small>	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	 <small>CERTIFIED SUSTAINABLE SEAFOOD MSC www.msc.org</small>	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	None of these

>

[Q31] {grid} Has seeing these labels on a product influenced your decision to buy?

- [1] Yes, it has influenced my decision to buy
- [2] No, it has not influenced my decision to buy
- [99] Not sure

[Q32] {dyngrid} To what extent do you agree or disagree with the following statements?

- [1] Strongly agree
- [2] Tend to agree
- [3] Neither agree nor disagree
- [4] Tend to disagree
- [5] Strongly disagree
- [99] Don't know

**[Q32\_1] Enough is being done to protect the Scottish marine environment**

**[Q32\_2] I need to do more to protect the marine environment**

**[Q32\_3] Government needs to do more to protect the marine environment**

**[Q32\_4] Business needs to do more to protect the marine environment**

**[Q32\_5] I can personally make a difference to improving the Scottish marine environment**

**[Q32\_6] I feel I have the knowledge I need to protect the marine environment**

**[Q32\_7] I feel I can influence choices that are made that impact the marine environment**

**[Q33] {multiple} Now you have completed this survey, is there anything else about the marine environment that you would like to know more about? Please tick all that apply.**

**(Allows multiple selections)**

**[1] Changes to the marine environment from exiting the European Union**

**[2] Fish farming**

**[3] Impacts on climate change on the marine environment**

**[4] Impacts to marine environment overseas**

**[5] Industries that work in the marine environment**

**[6] Marine biodiversity**

**[7] Marine Protected Areas**

**[8] Renewable energy**

**[9] Scientific developments in the marine environment**

**[10] Sustainability fishing**

**[11] Waste management**

**[96] Other**

**[99] No, nothing more I'd like to know about**

## Annex E: Focus group discussion guide

- The subject of our discussion will be the Scottish marine environment – this includes the sea and ocean, as well as cliffs and beaches.
- To start with, I'd like to find out a little more about you. Please introduce yourself to the person sitting next to you, sharing your name, how long you have lived in the area, and your hobbies / interests, and then introduce your new friend to the rest of the group.

### **Pre-task review (15 mins)**

**Moderator:** *Go round the room and ask respondents to talk through their pre-tasks, to explain when / why they most recently engaged in the Scottish marine environment (e.g. sea and ocean, as well as cliffs and beaches). Moderator to flipchart key themes on the board, and explore any emergent themes with the group.*

- Where did you go on your most recent visit? What shaped your decision around where to visit on your most recent trip? What made you choose to visit that specific place (e.g. proximity/familiarity/recommendations etc.)?
- What did you do during your visit? Is this how you usually spend your time there? Do you expect the way you use the Scottish marine environment change at all in the future (5-10 years)?
- How would you describe the visit overall – was it a positive/negative experience? Were there any benefits/drawbacks to your visit in particular? (for you/others you were with)

**Moderator:** *Now I'd like you to get into a pair with the person next to you. Please think about your impression of the Scottish marine environment at the moment. Is this positive/negative? Why is this? Is this the same or different to your impression of this 5 years ago? And if different, has this change been positive or negative? I'll give you a couple of minutes to discuss, and then we'll feedback as a group.*

- Can you give an example?
- What impact, if any, has this change had on the way you interact with the marine environment?

### **Marine Activities/Interaction (50 mins)**

*Now I'd like to speak about the way you interact with the Scottish marine environment (e.g. sea and ocean, as well as cliffs and beaches) in a bit more depth – please remember that Scottish marine environment refers to cliffs and beaches as well as the sea and marine areas in Scotland.*

**Moderator:** *split the group into two teams of 4, and ask each group to take on either leisure or business, and work as a team to come up with examples of how the Scottish marine environment is used and the impact it has in this area.*

**Flip chart exercise (15-20 mins):** *I'd like you to think about the ways in which the Scottish marine environment (e.g. sea and ocean, as well as cliffs and beaches) is used – in terms of both business and leisure. Please think as broadly as possible. I'll give you a minute to think about this, and then we'll discuss as a group. Moderator to note down uses of the Scottish marine environment on flip chart – one column for leisure, one for business.*

- **Probes – leisure:**
  - In terms of leisure, which are the most common ways that you interact with the Scottish marine environment? Why is this?
  - Are you aware of any organised activities/clubs available here? If so, do you make use of these?
  - Are there ways you would like to use it that you are unable to currently?
- **Probes – business:**
  - In terms of business use – what impact, if any, do you think this has on the Scottish marine environment (e.g. positive / negative)?
  - How, if at all, does the use of the Scottish marine environment for business/industry impact upon you personally? Or your family?
  - How knowledgeable or not would you say you are about the use of how the Scottish marine environment is used for business? Is this an area you'd like to know more about?

**Moderator:** *bring the two teams back together, and discuss the following section as a group*

- Are there any uses of Scotland's marine environment that you particularly support or oppose?
  - **Probe:** Non-renewable energy such as oil and gas, commercial sea fishing, transportation of goods/ shipping, coastal tourism

**Moderator:** *show respondents a list of different uses of the marine environment, and explore their prompted responses to these in detail*

- How do you feel about what's shown on the list – anything you particularly support or oppose?

**Moderator:** *show respondents details of what each of these industries contribute to the economy (GVA, turnover and headcount employment), and explore their prompted responses to these in detail*

- How do you feel about these industries now? Do you feel the same or different than you did before? Why / why not?
  - **Fishing:** GVA = £296 million / Turnover = £571 million / Employment headcount = 4.8,000
  - **Aquaculture:** GVA = £216 million / Turnover = £797 million / Employment headcount = 2.3,000
  - **Support for oil & gas:** GVA = £1,631 million / Turnover = £4,483 million / Employment headcount 19.7,000
  - **Processing:** GVA = £391 million / Turnover = £1,602 million / Employment headcount = 7.6,000
  - **Ship building:** GVA = £202 million / Turnover = £1,001 million / Employment headcount = 7,000

- **Construction and water transport services:** GVA = £422 million / Turnover = £672 million / Employment headcount = £4,000
  - **Passenger water transport:** GVA = £63 million / Turnover = £168 million / Employment headcount = £1.4,000
  - **Freight water transport:** GVA = £65 million / Turnover = £178 million / Employment headcount 500
  - **Renting and leasing of water transport equipment:** GVA = £8 million / Turnover = £14 million / Employment headcount = 1,000
  - **Marine Tourism:** GVA = £554 million / Turnover = £1,031 million / Employment headcount = 27.9,000
- How important or not is having access to the Scottish marine environment for you personally? For your family?
    - What, if anything, are the benefits of having access to the Scottish marine environment?
    - **Probe:** physical/mental health
  - What, if anything, is a barrier/challenge to engaging with the Scottish marine environment more often? (e.g. time, activities available, other facilities, distance, transport links)
    - What, if anything, would encourage you to engage with the Scottish marine environment more often?
  - To what extent, if at all, does cleanliness impact your experience of visiting / spending time in and around the Scottish marine environment?
    - Have you heard the term 'green flag' in relation to Scottish marine environment before? If so, what does this mean? What do you associate with a green flag area?

**Moderator:** *show Green Flag Award logo on a board and explain what it involves / means in the context of the Scottish marine environment i.e.: 'The Green Flag Award is the benchmark standard in the UK for publicly accessible parks and green spaces in the United Kingdom. The scheme recognises green spaces that meet high standards'.*

- Are you aware of which parts of the Scottish marine environment areas, particularly beaches, are green flag?
- To what extent, if at all, does this influence the places you choose to visit?

**Flash card task:** *introduce flashcards – each showing different man-made elements around the Scottish marine environment inc. signposting, accessibility, safety features and facilities), plus some blank cards and ask them to work as a team to sort them into 2 piles – what's **working well** and what's **working less well** – and discuss as a group.*

**Probes** for flashcard exercise:

- To what extent does the Scottish marine environment currently meet your needs?
- Are there any examples of this?

- What, if anything, could be improved in terms of facilities/accessibility/safety? What are the priority areas for you (**Probe** differences by life stage)?
- How do you tend to find out news and information about the Scottish marine environment? **Probe:** online, TV, radio, print, other
  - Do the things you hear about the Scottish marine environment tend to be more positive/negative/neutral?
  - Can you give any examples?

### **Concerns and future considerations (40 mins)**

*Now I'd like to talk about your concerns related to the Scottish marine environment. Please remember – Scottish marine environment refers to the beaches and cliffs, seas and marine areas in Scotland.*

- Thinking back over the past 5-10 years, do you believe the health of the Scottish marine environment has changed at all? (e.g. better/worse/same)
  - If so, how? Any areas in particular – e.g. beach vs. cliffs vs. sea?

**Paired groups task:** *Now I'd like you to pair up with the person next to you. Please briefly decide on, and make a note of:*

- Your top 3 worries/concerns for the Scottish marine environment at this time. Please think about all elements of the marine environment (i.e. beaches/cliffs/sea)
- Have these concerns changed over time at all, or have they stayed the same?

**Moderator:** *Once you have decided these in your pairs, we will come back together to discuss as a group, and I'll flipchart your responses on the board*

- **Probes for group:** Why did you choose these as your top concerns?
- What/who, if anything, has influenced your awareness and understanding of these concerns (e.g. media/campaigns/personal experience/friends)?
- What impact, if any, do these concerns have on your/your family's interaction with the Scottish marine environment?
- What/who contributes to these issues?
- Do you think these issues are likely to change over the next 5 years or stay the same? If change – for better or worse?
- **Probe:** Raw sewage into the sea, nuclear waste, over fishing, plastics
- Who should be responsible for looking after the health of Scotland's Scottish marine environment? (e.g. residents/businesses/government)
  - **Probe:** What should individuals/businesses/government be doing?
  - What if anything, do you personally do to care for the Scottish marine environment (e.g. reduce use of plastic, sustainable seafood, beach tidy-up, recycle etc.)?

*Now we are going to take a look at some of the things that the Scottish government is trying to achieve in several areas in order to maintain the health of Scotland's marine environment.*

**Scottish Government activity task:** *show whiteboards in turn (each with a different action on it), and explore respondents perceptions of each one, using the prompts below.*

- What is your initial reaction to this? (e.g. positive/negative/neutral)
  - Is this in line with what you expect the government to be doing?
  - To what extent, if at all, is this issue a priority for you?
- 
- **Aquaculture** (farming of fish / seafood) – aims to support an environmentally sustainable way to increase the aquaculture industry (double in size) by 2030, to the benefit of local communities. In 2016 Scotland's aquaculture industry contributed £216 million to the economy and it employed 2,300 people.
  - **Fishing** – aims to deliver an environmentally sustainable fishing industry by ensuring fish stocks aren't reduced to a level that inhibits growth, and to ensure Scotland's communities benefits our fisheries resources. Scotland's fishing industry contributed £296 million to the economy and employed 4,800 in 2016.
  - **Marine Environment Protection** – seeks to safeguard for the future Scotland's aquatic environment for the benefit of the industries and communities that depend on it. The Scottish aquatic environment is among the most diverse in the world – supporting over 46,500 plant and animal organisms on the coastline alone. Scotland also has a network of marine protected areas introduced by the Scottish Government for nature conservation etc. that covers 22% of our seas.
  - **Marine Renewable Energy** – aims to develop successful offshore wind / other marine renewable energy industries in Scotland to deliver clean energy. The sea around Scotland has the largest wind energy resource in Europe.
  - What else, if anything, do you think the Scottish Government should be focusing on in order to protect the Scottish marine environment?

### **Conclusion (5 mins)**

- Our client this evening is the Scottish government. The present piece of research aims to understand how and why the public use the Scottish marine environment, as well as how it could be improved. With this in mind, what are the three most important points for the Scottish government to take away from this discussion?

**Thanks and close**