



Department  
for Environment  
Food & Rural Affairs

# Marine Net Gain

## Consultation on the principles of marine net gain

Date: 07/06/2022.

Closing date: 30/08/2022.

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## Summary

In 2018, the UK government consulted on making biodiversity net gain (BNG) mandatory for new development on land<sup>1</sup>, and respondents suggested that net gain principles should be extended to marine developments. In its 2019 response<sup>2</sup>, the UK government noted that more work would be needed to define an approach to net gain that was appropriate to the marine environment.

This consultation takes forward this work and is designed to inform how to best introduce a net gain approach to infrastructure and projects in the marine environment.

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<sup>1</sup> [Consultation on Biodiversity Net Gain](#)

<sup>2</sup> [Government response to Biodiversity Net Gain consultation](#)

This consultation sets out the aims of net gain policy for the marine environment and development within it. An effective policy will ensure the responsible and sustainable growth of marine industries.

Net gain for marine development activities will be an important tool in helping meet our ambitious targets for net zero and the environment, contributing to ocean recovery.

The main part of this consultation sets out the proposed core principles of marine net gain. It seeks views on whether to mandate net gain for marine developments, the scope of marine net gain and how net gain could be applied.

We start to define the sorts of environmental improvements we expect marine net gain to deliver.

We propose a strategic approach to marine net gain, designed to be simple and clear for all stakeholders to use while delivering measurable gains for nature and facilitating collaborative opportunities for maximum impact, whilst maintaining flexibility for developers to deliver onsite enhancements where these are environmentally significant.

Marine net gain is being considered from first principles to ensure that it takes account of the unique features of the marine environment and the challenges it faces.

Marine net gain will operate alongside existing planning policy and practice to ensure that current environmental standards, including the conservation objectives for habitats, species and designated sites, are maintained and implemented. Marine net gain will be achieved by first applying the mitigation hierarchy. Net gain will be an additional tool to offset any impacts that cannot be avoided, minimised or mitigated. Any requirement to provide compensatory measures under relevant Marine Protected Areas regulations remains unaffected by the introduction of marine net gain. Marine net gain will be designed to enable faster and better development in line with government's wider infrastructure policy objectives.

Alongside our primary aim of protecting and restoring nature, we are also seeking views on taking a broader environmental net gain approach from the outset. This proposal would put biodiversity at its core but allows for the inclusion of wider environmental services where these would provide additional benefits.

We propose rules to ensure that net gain requirements reflect project impacts proportionately and equitably. Any future policy decision will be accompanied by a full impact assessment.

## Background

The UK government is committed to leaving the environment in a better state, delivering sustainable development and levelling up local communities. This commitment includes addressing the conservation and sustainable use of marine resources, recognising the many uses of the marine environment.

The 25 Year Environment Plan is driving the implementation of both terrestrial and marine net gain in England including a commitment to embed environmental net gain, together with other duties, tools and strategies, to help put us on the path to nature's recovery. For

the marine environment, it pledges to ‘reverse the loss of marine biodiversity and, where practicable, restore it’.

At the time of the first net gain consultation in 2018, many marine industry groups were taking opportunities, and continue to seek opportunities, to improve biodiversity and take ownership for outcomes.

The support for net gain in the marine environment was already gaining momentum, and we know that industry groups and others have since continued to respond positively to the signals provided by the Environment Act 2021. We are therefore putting forward our initial proposals on the high level principles for marine net gain and gathering views from stakeholders to help to define the overall framework for the policy.

## **What is Net Gain?**

Net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. This means protecting, restoring, or creating environmental features that are of greater ecological value to wildlife, habitats and people than any losses associated with the original project.

Net gain is not a new concept in UK planning policy. BNG is measured by comparing habitat losses and gains. Losses which cannot be avoided must be addressed through mitigation and compensation actions.

Environmental net gain takes a broader approach to net gain that seeks to include the social, environmental, and economic value of natural assets. This approach is underpinned by biodiversity, and these wider assets cannot be enhanced unless they are made resilient as part of functioning and healthy ecological networks.

## **How is marine net gain different to biodiversity net gain?**

Marine net gain is therefore being developed from first principles to ensure it is appropriate for the marine environment. The dynamic nature of the marine environment means that any biodiversity losses associated with a development, or benefits from an offsetting or compensatory measure, may not always fall within the boundary of the development<sup>3</sup>. Any account of biodiversity in the marine environment (and its interaction with infrastructure) may also need to take account of highly mobile species, such as certain fish, marine mammals and seabirds. The presence of a net gain regime does not change the fact that

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<sup>3</sup> This can also be true of terrestrial environments. The 2018 consultation on BNG contains useful discussion on the approach taken. [Consultation on Biodiversity net gain](#)

losses should be avoided as much as possible, which is a key part of adhering to the mitigation hierarchy.

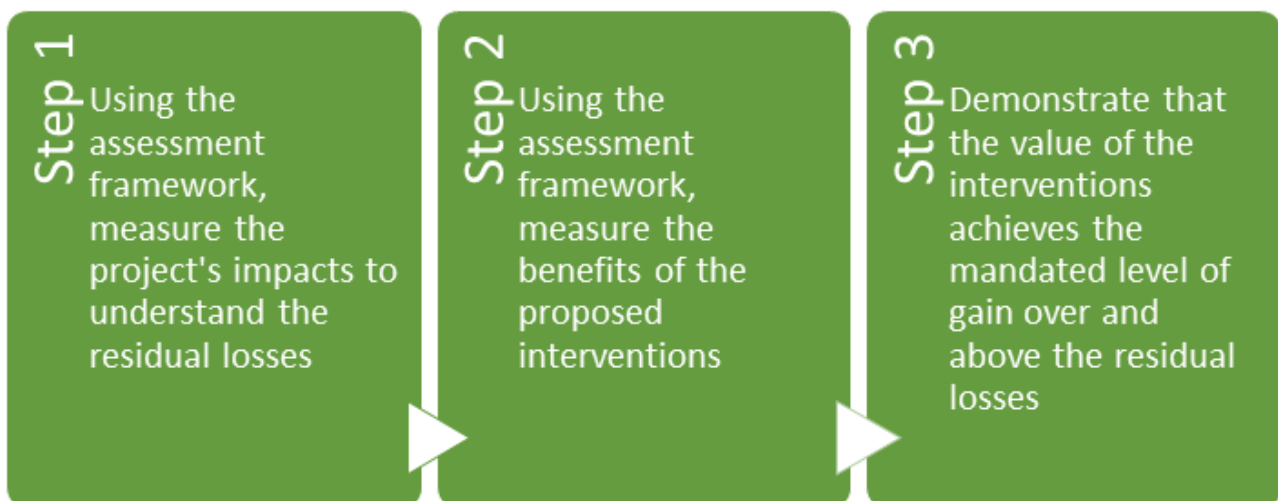
Marine net gain intends to specify a mandated level of overall gain that all in-scope developments must achieve<sup>4</sup>. The amount of gain each individual development would need to provide to attain the target level will be proportionate with the magnitude of residual losses associated with each project. The residual loss is measured in terms of the development's impacts on relevant environmental features.

Net gain interventions are the activities, projects, or contributions that the developer will undertake to deliver environmental benefits and thereby offset residual losses.

The value of proposed interventions is measured in terms of their benefits towards relevant environmental features. Interventions that provide benefits of equal value to the losses achieve No Net Loss. Where the overall benefits exceed the residual losses, then a net gain has been achieved.

The impacts of the development and the benefits of the proposed intervention will be valued within a single assessment framework, which will define the relevant environmental features and assign generic values to them.

Through the assessment framework, it will be possible to demonstrate that the proposed intervention delivers net gains up to the mandated level. This process is summarised in Figure 1.



**Figure 1: Process diagram for measuring and achieving net gain**

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<sup>4</sup> In the case of the BNG regimes to be introduced under the Environment Act 2021, the mandated level of gain will be at least 10%

## Marine net gain and compensatory measures

This consultation invites respondents to consider the implications of introducing a marine net gain approach in addition to the compensation and other requirements applicable to marine protected areas designated under the:

- Conservation of Habitats and Species Regulations 2017<sup>5</sup>
- Conservation of Offshore Marine Habitats and Species Regulations 2017<sup>6</sup> (together with the Habitats Regulations)
- Marine Conservation Zones (MCZs) designated under Marine and Coastal Access Act (MaCAA)

The term Marine Protected Areas (MPAs) is used to refer to all such sites<sup>7</sup>.

Marine net gain will require the delivery of activities that improve the state of the environment. A separate requirement to provide compensatory measures can be triggered when an adverse impact on an MPA cannot be ruled out but a development that has gained consent in line with the requirements of the Habitats Regulations or MaCAA (as appropriate).

Throughout this document, 'compensatory measure' is used to refer to both 'compensatory measures' under the Habitats Regulations and 'measures of equivalent environmental benefit' under MaCAA.

The compensatory measures requirements under the Habitats Regulations and MaCAA in respect of MPAs are legally separate from any future additional marine net gain requirements.

Marine net gain will be a new requirement for developers, it will not replace or supersede existing requirements relating to environmental protection and so is not intended to mitigate the impacts of a development.

The mitigation hierarchy is a crucial principle applicable to developments regulated by the Habitats Regulations and MaCAA and in the Environmental Impact Assessment (EIA) process. Developers will continue to apply the mitigation hierarchy in line with existing guidance or requirements.

Figure 2 demonstrates how the mitigation hierarchy may be applied in meeting a requirement for environmental gain, with reference to residual losses. Marine net gain

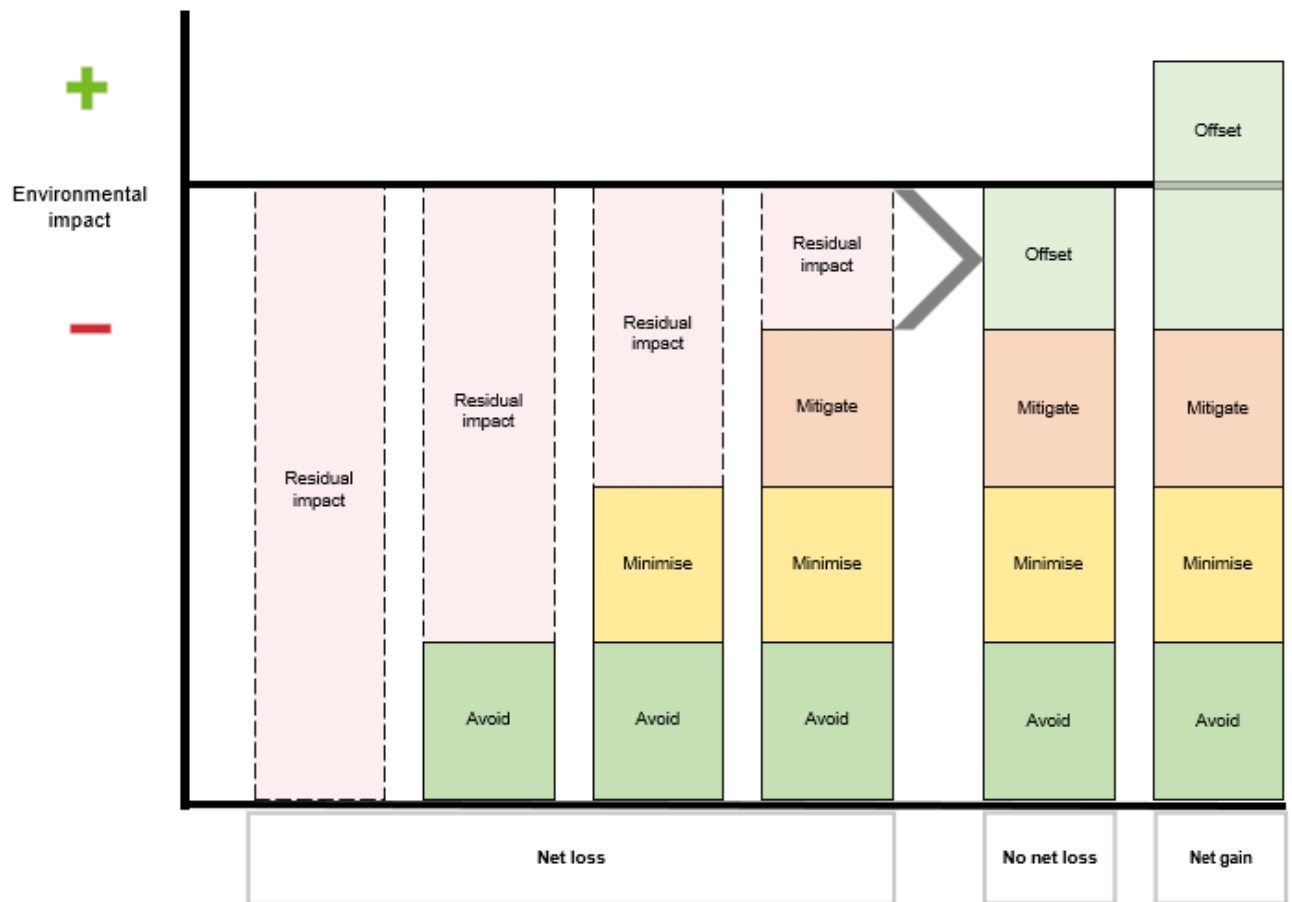
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<sup>5</sup> [The Conservation of Habitats and Species Regulations 2017](#)

<sup>6</sup> [The Conservation of Offshore Marine Habitats and Species Regulations 2017](#)

<sup>7</sup> There are different legislative frameworks for the different types of Marine Protected Area. For simplicity, this document covers MPAs as a single classification. 'compensation' and 'compensatory measures' should be taken to refer both to provision of compensatory measures in the Habitats Regulations and to the corresponding provision on measures of equivalent environmental benefit in MaCAA

introduces such a requirement and is therefore achieved by first applying the mitigation hierarchy.



Adapted from BBOP's adaptation from Rio Tinto and government of Australia

Figure 2: The mitigation hierarchy and net gain

## Marine net gain aims

Marine net gain will:

- secure positive outcomes for the environment by contributing to halting and reversing the longer-term trend of biodiversity decline through the restoration and creation of healthy and high-quality marine and coastal habitats, and protection of species
- deliver lasting improvements, contributing to ocean recovery, and supporting efforts in climate change mitigation, resilience, and adaptation
- enable the responsible and sustainable growth of marine industries and development activities, recognising their essential contribution to meeting the UK government's climate change commitments, whilst ensuring the protection of our marine environment



- define strategic objectives and goals, increasing the potential for relatively small interventions to make a more significant collective contribution to improvements in the overall status of the marine environment

## Section 1: Defining marine net gain

The environment comprises many different elements, including different species of plants, animals and other organisms, the habitats they inhabit, the areas they migrate through; and the different geological and ecological features that these areas are composed of.

Measuring the environmental impacts of a proposed development, and measuring the environmental benefits of proposed interventions, is a key component of net gain, so defining the types of environmental feature that we are concerned with is an important first step.

This section considers the types of environmental feature that marine net gain will measure for the purposes of establishing the residual impacts of a development and assessing the value of proposed interventions. These principles will come to define the extent of net gain requirements and the types of environmental improvements that net gain will drive.

The principles in this section will ultimately inform an assessment framework. This framework will enable developers and decision-makers to objectively measure the impacts of a development. The framework will also demonstrate that proposed interventions deliver the mandated level of gain.

For comparison, under the provisions of the Environment Act 2021, for developments subject to planning consents under the Town and Country Planning Act 1990 (TCPA) BNG will be measured through the biodiversity metric published pursuant to the Act<sup>8</sup>. The metric will provide a framework to measure the biodiversity losses associated with the proposed development and demonstrate whether the proposed habitat enhancements deliver the required net gain in biodiversity<sup>9</sup>.

Our proposal to measure the residual impact (losses) of a development and the value of proposed interventions (benefits) through a single assessment framework means that the following principles will generally apply to both.

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<sup>8</sup> For further information on the metric please refer to [The Biodiversity Net Gain Metric 3.0](#)

The metric may also be used in relation to Nationally Significant Infrastructure Projects

<sup>9</sup> Please refer to the [Consultation on Biodiversity Net Gain Regulations and Implementation](#) for more information

For simplicity, and unless stated otherwise, we frame the discussion primarily around ‘impacts’ but refer to ‘benefits’ where the principle applies only to interventions.

A full assessment framework for the marine environment is likely to take some time to develop. We will run proof of concept projects on the different approaches this year. This section of the consultation considers the principles that will inform the main features of the proof of concept projects.

## **Principle 1: Marine net gain will measure impacts on habitats and species**

The existing policy focus to date has been on biodiversity net gain in a terrestrial context. Under this approach, habitats are used as proxies for biodiversity.

Residual impacts are defined by the habitat losses directly associated with (that is, within the footprint of) the main development. The type and condition of habitat will partly determine the amount of residual loss. This means that losses are assessed to be greater when they involve distinctive habitats or those in a better condition. We intend to follow this principle as the core of marine net gain.

Our discussions with stakeholders to date, as well as the current literature, suggest that the approach of habitats as proxies for biodiversity may need to be adapted to suit the marine environment.

Marine habitats and the marine environment are highly dynamic and interconnected. The significance of fisheries, seabirds and mobile marine fauna means that focussing on habitat loss alone may not provide the most comprehensive means of characterising a development’s impacts, and so some account should be given of the impacts on individual species (or groups of species) (Hooper, 2021)<sup>10</sup>.

We propose that marine net gain assessments should therefore include impacts on both habitats and species.

The direct impacts of marine development may also not be limited to the site boundary of the development itself. For instance, sediment plumes arising from dredging activity can be transported long distances before being deposited (ABPMer, 2019). This dynamic, as well as having to take account of mobile species, means that marine net gain will therefore need to take account of such ‘off-site’ impacts in establishing the residual impact of a development.

Extending marine net gain assessments to species and beyond the footprint of the development may allow us to consider biodiversity impacts at the level of ecosystems,

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<sup>10</sup> [Developing policy and practice for Marine net gain](#)

including potential to incorporate not just the environmental features in question, but the services they provide.

We note the likely technical challenges associated with these proposals and intend to undertake proof of concepts projects to test the feasibility of this principle.

Question 1: Do you agree that marine net gain should assess impacts on species as well as habitats?

Answer: yes/no

Question 1a: please explain your answer

(Free text)

## **Principle 2: Marine net gain will seek to incorporate environmental benefits underpinned by biodiversity**

The aims of marine net gain relate primarily to nature recovery and biodiversity in the marine environment. In considering the approach to valuing marine net gain interventions<sup>11</sup>, we note that nature protection can yield a range of secondary benefits or ecosystem services which are underpinned by protecting and enhancing biodiversity.

The 25 Year Environment Plan<sup>12</sup> sets a high-level aspiration to introduce environmental net gain (ENG) within the lifetime of the Plan. ENG is an approach that seeks to capture a wider range of impacts, such as Blue Carbon sequestration or cultural ecosystem services, in assessing an intervention's benefits.

We are interested in exploring the opportunities to recognise these wider benefits in assessments of proposed interventions.

Our knowledge of the marine environment is limited when compared to the terrestrial and intertidal environments. Broadening the range of benefits that marine net gain recognises may also help allow for finer distinctions to be drawn when assessing the value of proposed interventions and thereby help overcome current gaps in our understanding of the marine environment.

We therefore propose that marine net gain should seek to expand on biodiversity net gain to incorporate a wider ENG approach, but only where these extra benefits are ultimately underpinned by biodiversity protection (see principle 3 below).

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<sup>11</sup> For clarity, this principle will only apply to assessing the benefits of interventions, not the residual losses.

<sup>12</sup> [The 25 year environment plan](#)

Net gain for biodiversity will remain the core requirement of ENG approaches as the social, environmental, and economic value of natural capital is underpinned by biodiversity. These assets cannot be enhanced unless they are made resilient as part of functioning and healthy ecological networks. Simply put, the loss of biodiversity places all the benefits we receive from nature at greater risk of decline or even collapse.

### **Principle 3: Marine net gain will take a ‘nature first’ approach whilst recognising wider environmental benefits**

In seeking to adopt an ENG approach to marine net gain, we will embed a ‘nature first’ principle into our treatment of non-biodiversity impacts. Marine net gain will not be designed as a tool to pursue wider environmental objectives as an alternative to biodiversity objectives.

Non-biodiversity impacts, however, will be accounted for when calculating the value of marine net gain interventions. Non-biodiversity impacts will be second-order considerations and will constitute a means of distinguishing between two interventions of broadly equivalent biodiversity value. This will be achieved by reflecting any differences in wider environmental benefits between them.

An ENG approach to marine net gain will give the flexibility to use the policy as a tool to pursue a wider range of policy ambitions relevant to the marine environment than biodiversity net gain alone, whilst maintaining the primary focus on marine nature recovery and enhancement.

The approach to ENG set out above would value the wider environmental benefits of proposed interventions. Residual impacts of the development would be measured solely in terms of the biodiversity losses associated with development.

This means that the positive benefits of low carbon power generation and the socio-economic benefits of marine development would therefore not be considered as (positive) impacts when assessing the residual impact of a project.

Question 2: Do you agree that marine net gain interventions should be assessed with reference to environmental benefits that biodiversity enhancement can yield?

Answer: yes/no

Question 2a: Please explain which extra environmental benefits and services should be included within marine net gain assessment

(Free text)

## **Principle 4: Marine net gain assessments will not include potentially positive incidental impacts whose benefits are subject to significant uncertainty**

Offshore wind farms, protected cables or other marine infrastructure can provide substructures for marine organisms to colonise and thereby lead to the creation of new habitats and ecosystems. This phenomenon is known as an 'artificial reef' effect.

The understanding of artificial reef effects remains relatively immature at this stage. Marine net gain assessments could include these potentially positive effects as benefits of the development. The consequence of including artificial reef effects, where these impacts are assessed as positive, would lessen the overall net gain requirement on the scheme. This is because the overall 'loss' would be lower than if such incidental impacts were scoped out of the assessment.

Similarly, the presence of certain types of marine infrastructure may lead to restrictions on, or exclusion, of other sea users. These restrictions may in turn assist in natural recovery by helping reduce pressures.

We are of the view that artificial reef and exclusionary effects are a by-product of development and do not always lead to positive environmental outcomes. For example, displaced sea-users may move their activities elsewhere, leading to no overall reduction in environmental impacts. Artificial reefs may encourage non-native species or new habitat types.

Marine net gain will leave room for nature-inclusive design to be considered as a benefit and there may be valuable forms of active and incidental artificial reef creation or exclusionary effects that could be considered benefits with sufficient confidence.

However, at the point at which marine net gain assessments are made, it may be too uncertain as to whether purely incidental effects would be positive or negative.

We therefore propose that marine net gain assessments scope out artificial reef and other relevant potentially positive incidental impacts, whose benefits are subject to significant uncertainty, where these are incidental to the development. We particularly welcome further evidence from industry on this matter as part of this consultation and in the future.

Question 3: Do you agree with our proposal to discount potentially positive incidental effects, whose benefits are subject to significant uncertainty, from marine net gain assessments?

Answer: yes/no

Question 3a: please explain your answer (free text)

## Principle 5: Marine net gain requirements will be proportionate and appropriate to the scale and type of development

We will ensure that any net requirements are proportionate to the physical scale of development in question and applicable to the different types of activity covered.

Alongside an assessment of the biodiversity value of the affected habitats and species, marine net gain requirements will reflect the scale of the main development and its associated impacts.

To help ensure proportionality, we will devise an objective and consistent means of measuring the main development's impacts which will scale with different types and sizes of development.

### How will residual impacts and proposed benefits be measured?

The discussion above introduces principles on the types of impacts that net gain will seek to assess ('the what?'). Our next task will be to consider the mechanisms for measuring and assessing these impacts ('the how?'). How these assessments will be carried out will be considered in more detail in future consultations and informed by proof of concept projects exploring different approaches to an assessment framework over the next year. The proof of concept projects will seek to reflect the principles that this consultation introduces.

The British Energy Security Strategy makes clear Government's commitment to accelerate offshore wind deployment in a way that continues to protect and enhance our marine environment. We are also mindful that there is significant interest among eNGOs, marine industries and other stakeholders in establishing a marine net gain regime as soon as practicable.

The technical challenges of delivering a fully comprehensive assessment framework could delay the establishment of a marine net gain regime.

We will therefore need to take a pragmatic approach to the impacts that we will consider within scope of marine net gain in the first instance, and build in more sophistication as our understanding, evidence-base and technical capability grows.

The assessment approach that we propose to prioritise is a **contributions-based approach**.

It would operate like a levy on marine development and would be a relatively quick and straightforward mechanism to introduce. Net gain requirements would take the form of financial contributions which would be used to fund priority environmental enhancement or

restoration projects<sup>13</sup>. The financial contributions would be managed through the Marine Recovery Fund (MRF) within the Offshore Wind Environmental Improvement Package of the British Energy Security Strategy.

The fund will be developed to deliver strategic MPA compensation and subsequently MNG. We will consider the interactions between the two regimes in detail as part of the development of the MRF.

There is a range of delivery options associated with levies and funds, including partnership models involving the private sector and civil society. The principles of this consultation would therefore be used to inform the levy charged to individual developments.

An alternative approach is the biodiversity **metric**<sup>14</sup> that has been produced by Natural England and can be used to assess the impacts of habitat change through development<sup>15</sup>. It provides a standardised means of measuring the biodiversity loss associated with a development, as well as the gains that proposed interventions will achieve. These tools have been produced to enable measurements of biodiversity (and associated ecosystem services) in terrestrial and intertidal habitats.

As discussed throughout this consultation, we are proposing principles that reflect the particular conditions of working in the marine environment. As such, the principles of marine net gain do not precisely correspond to the policy principles currently embedded in these tools. This is a more sophisticated approach to assessing habitat losses and gains, however we will need to undertake further work to understand the technical issues with applying these approaches to the marine environment.

We propose to continue work to adapt the biodiversity metric to be applicable to the marine environment, but to prioritise developing the contributions-based approach, which will be ready to implement in a far shorter time frame.

The government is encouraging a market-based approach to delivering off-site habitat for terrestrial biodiversity net gain, whereby third parties will be able to create and sell biodiversity units to developers who need them. The government likewise sees a key role for industry, civil society and other third parties in delivering MNG which will be explored further in future policy development.

The development of the contributions approach will inform the metric approach by helping to define and value the interventions that MNG can fund, and whether a multiplier/modifier

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<sup>13</sup> The Aggregates Levy operated a version of this model [Aggregates Levy](#)  
[Please see section 4 below for further discussion of the issue of onsite and off-site interventions](#)

<sup>14</sup> [The Biodiversity Metric 3.0](#)

<sup>15</sup> The metric uses habitats as a proxy and so should be used with reference to the user guidance which explains the limitations and appropriate applications of the approach

can be applied when determining the level of financial contribution to ensure that projects with more significant impacts are charged more and incentivised to be less harmful.

There may also be scope to combine elements of both approaches into a hybrid approach, for example, to use a metric-type tool to assess the environmental component of a contributions-based assessment.

We are interested in respondents' early views on these and other potential approaches on how to measure impacts for marine net gain.

Question 4: Do you agree that we should prioritise a contributions-style approach, whilst still exploring a metric-style approach? Yes/No. Please specify and explain your answer (free text)

Question 4a: Are there other approaches to measuring impacts that we should explore? Please specify and explain your answer (free text)

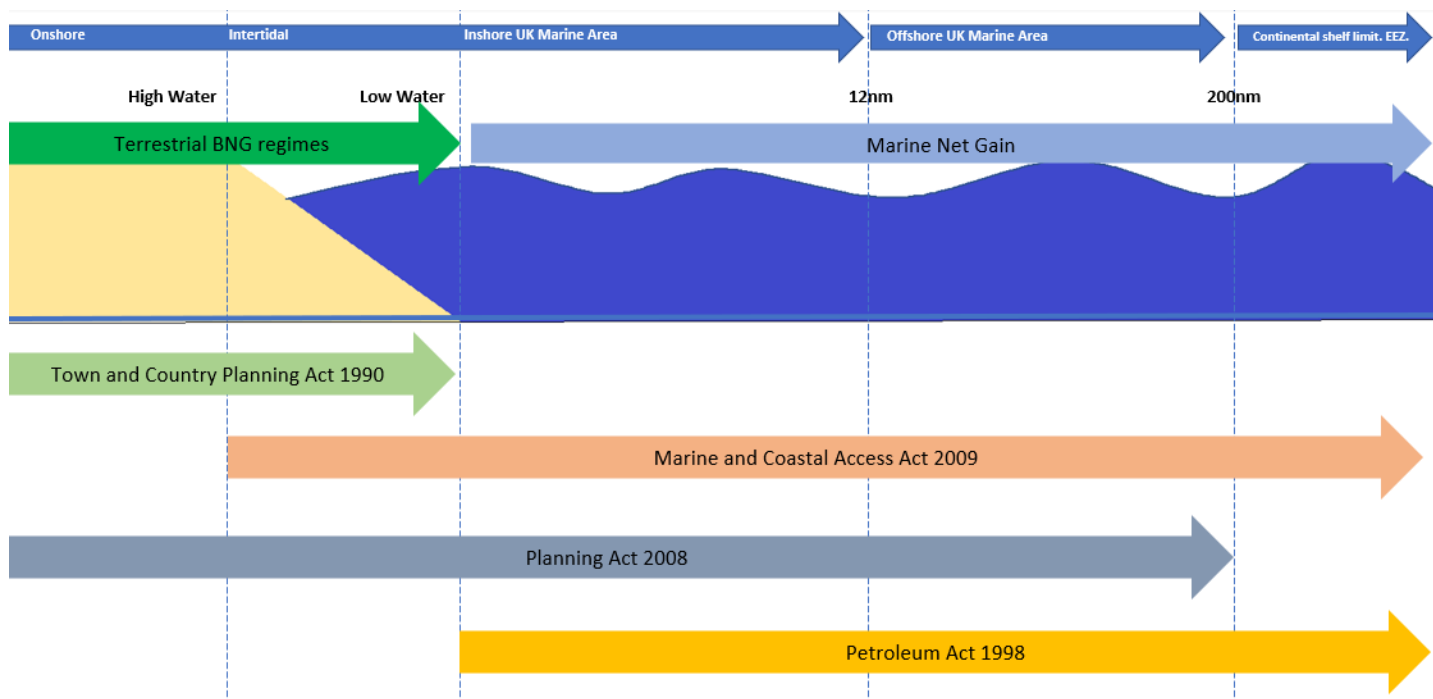
## **Section 2: Scope of marine net gain**

### **Where will marine net gain apply?**

Many marine developments ultimately land onshore and therefore also have terrestrial and intertidal elements. Planning, consenting, and licensing regimes, and their respective net gain regimes, may overlap in certain circumstances. We have committed to ensuring that marine net gain is as coherent and consistent with land-based Biodiversity Net Gain as possible, minimising the burden on developers.

Our intention is that only one net gain regime will apply to each element of a development, so there is no doubling-up of net gain requirements. As shown in Figure 3 below, marine net gain will only apply to developments, or infrastructure forming part of development, below the Low Water Mark and land-based Biodiversity Net Gain will only apply to onshore and intertidal developments, down to the Low Water Mark. The responses to this consultation will inform more detailed policy development and proof of concept projects to pilot different delivery approaches, including how marine net gain will align with net gain requirements in the intertidal area.





**Figure 3: Licensing and consenting regimes in relation to the development's location (adapted from Marine Management Organisation, 2019) <sup>16</sup>**

## **Principle 6: Marine net gain will be a mandatory requirement. It will apply to all marine development, subject to any minimal thresholds and other exemptions**

With the Environment Act 2021 providing for net gain by way of amendments to the Town and Country Planning Act 1990 (TCPA) and the Planning Act 2008 (in relation to Nationally Significant Infrastructure Projects (NSIPs) <sup>17</sup>, development on land and in intertidal locations will be required to deliver a mandatory BNG.

We propose that marine net gain should adopt the same approach in introducing a mandatory requirement covering nearly all new marine developments in English waters.

Development control and regulation in the marine environment can involve a number of different licensing and consenting regimes.

<sup>16</sup> [MMO's, Do I Need A Marine Licence?](#) Diagram for illustrative purposes only

<sup>17</sup> Biodiversity gain requirements for specific classes of development are introduced by means of 'biodiversity net gain statements', either as stand-alone documents or as part of National Policy Statements

Marine net gain can achieve near total coverage of marine development if applied to relevant activities under the following regimes:

- for large offshore wind farms and any other marine developments consented under the Planning Act 2008 (to the extent not covered by the BNG requirements introduced under the Environment Act 2021)
- for smaller-scale energy and other infrastructure assets, cables and dredging activity, marine licencing, and other consenting regimes under the MaCAA (to the extent not covered by the BNG requirements introduced under the Environment Act 2021)
- for offshore oil and gas infrastructure consented or licensed under the Petroleum Act 1998

The regimes listed above vary in their scope and operation. For example, there are licensable activities under the MaCAA or the Petroleum Act 1998 which we do not intend to apply net gain requirements to.

This consultation is seeking views on whether introducing marine net gain to the regimes listed above will achieve (near) total coverage of marine development activities. In addition, we are seeking respondents' initial views on which sectors and activities under these regimes should and shouldn't be subject to net gain requirements.

We will publish our initial list of in-scope sectors and activities in the UK government's response to this consultation. Future stakeholder engagement and consultations will be used to further test and refine these initial assessments.

Question 5: Do you agree that marine net gain should be a mandatory requirement for new development activities within the marine environment?

Answer: yes/no

Question 6: If you answered yes to question 6, do you agree with the list of consenting and licensing regimes that marine net gain requirements should be introduced within? Are there any others we should consider?

(Free text)

We propose that marine net gain will be restricted to economic activities that can be considered development. Namely those that involve construction and/or installation of new infrastructure (including significant extensions or improvements to existing infrastructure) or extraction (such as aggregates). This is likely to preclude activities such as scuttling or burial at sea, or some recreational activities under MaCAA such as the depositing of moorings<sup>18</sup>, and decommissioning, maintenance, or repairs under the Petroleum Act 2008.

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<sup>18</sup> However, some construction activities to enable recreational activities, such as construction of marinas, are likely to be in scope

We welcome stakeholder views on other categories of activity that should be excluded from net gain requirements.

We are also proposing to exclude minor development activities from marine net gain requirements. For example, developments that would result in negligible loss or degradation of habitat could fall out of scope. Respondents' views on relevant minimal thresholds under each regime (and sector and/or activity) are also sought.

Question 7: Are there activities and/or sectors that are regulated by these regimes which should not be covered by net gain requirements?

Answer: yes/no

Question 7a: If yes, please explain your answer, including any relevant de minimis thresholds for each activity or regime

(Free text)

## Section 3: Defining interventions

Marine net gain is seeking to drive meaningful and lasting improvements to the marine environment. It is important that we clarify the UK government's views on what sort of interventions would be considered valid for the purposes of marine net gain to help inform any future assessment framework.

This section reviews the standard types of interventions that marine net gain will seek to deliver and introduces the potential to include 'passive' and innovative interventions.

### **Principle 7: Marine net gain will incentivise both active interventions and appropriate pressure reduction measures**

The marine environment is subject to a wide range of pressures, both natural and anthropogenic. Active restoration, replacement, and enhancement projects (such as those which actively reinstate lost habitats or reintroduce species) can be an effective means of addressing biodiversity loss, whilst also providing wider environmental benefits.

We will encourage deployment of proven restoration or protection techniques to address priority issues in the first instance. This could include Nature Based Solutions and, where relevant, Nature Inclusive Design, where this goes beyond best practice and is directed towards the achievement of specific nature conservation outcomes.

Alongside better-established habitat restoration techniques, marine net gain also provides an opportunity to encourage innovation in environmental enhancement. Given the significant challenges and relative immaturity of subtidal habitat restoration in particular, we are keen to explore opportunities to trial novel types of interventions where these offer a promising new way to manage ecosystem recovery.

We therefore welcome evidence on emerging marine conservation measures, which might become the focus of marine net gain in the medium to longer-term.

Certain ecosystems may have a natural tendency towards recovery, where the pressures leading to their deterioration are removed. For example, recovering marine litter could help marine species thrive by removing the threat of entanglement. Pressure removal can therefore play an important role in achieving environmental outcomes and in principle we support the inclusion of pressure reduction measures as marine net gain interventions. This includes assisted recovery.

Any pressure removal must be in line with the 'polluter pays' principle, so we are seeking views through this consultation on what actions would constitute appropriate pressure reductions.

Marine net gain can work alongside existing statutory regimes and responsibilities but is not itself a vehicle to deliver regulatory outcomes or interventions.

Robust monitoring and evaluation will be crucial in securing positive policy outcomes. We note the significant uncertainties involved with both the active delivery of marine habitat restoration and assessing the benefits associated with any pressure removal. We will propose appropriate monitoring frameworks in future consultations and ensure that these are funded and delivered as a core component of the interventions themselves.

Question 8: Which types of pressure reduction measures can be delivered by industry through marine net gain?

Answer: please give examples where possible

Question 9: Are there any other types of intervention that should be encouraged, including innovative emerging techniques?

Tell us about any other types of interventions.

## Section 4: Taking a strategic approach

This section sets out how different types of interventions for marine net gain will relate to the main development. For example, marine net gain could be designed as a regime to incentivise the provision of like-for-like replacements of features directly lost to the development, near the main development ('site-based interventions')<sup>19</sup>.

Alternatively, marine net gain could be a means of delivering defined priority interventions ('strategic interventions'). Discussions with stakeholders to date suggest that there is widespread support for using marine net gain to achieve strategic outcomes for the marine environment.

There are also potentially significant gains for the marine environment from certain types of site-based interventions. This consultation is seeking views on how both a strategic approach and site-based interventions to marine net gain policy could be achieved.

### **Principle 8: Marine net gain will incentivise the delivery of strategic interventions in addition to meaningful site-based interventions.**

Developers will have the flexibility to propose meaningful site-based interventions or strategic interventions, with no respective penalty attached to either type of intervention.

- site-based interventions may seek to replace or restore features or services lost to development and typically, do so near the development
- strategic interventions are typically larger in scale and independently recognised as important priorities for marine recovery or protection

The distinction is not a rigid one: a site-based intervention for a large project may also be considered a strategic intervention.

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<sup>19</sup> As noted above, net gain is not intended to supersede the mitigation hierarchy. Offsetting is the last stage of the hierarchy, so where offsets are provided, over-delivery of these relative to losses could constitute net gains

## Limitations to site-based interventions

Given the many different scales and locations of development that marine net gain will ultimately apply to, and therefore the variety of environmental impacts it will cover, our preferred approach is to allow both site-based and strategic interventions. This recognises that site-based interventions may not always be technically or economically feasible, nor environmentally desirable relative to other options.

There may also be limited value in delivering site-based interventions for smaller developments with individually modest impacts. Cumulatively, however, many smaller developments could contribute towards larger strategic interventions.

We are seeking views on a marine net gain approach that recognises the potential value of certain types of site-based interventions but also enables delivery of (offsite) strategic interventions as an alternative when site-based interventions are not appropriate or desirable<sup>20</sup>.

This approach will ensure maximum flexibility for developers in proposing interventions that best suit their wider project plans and preferred operational models. It will also allow smaller developments to contribute collectively towards larger scale and higher priority interventions, helping ensure that marine net gain can deliver maximum environmental returns for the requirements it introduces.

Question 10: Do you agree with the principle of taking both a site-level and a strategic approach to marine net gain as set out above?

Answer: yes/no

Question 10a: please explain your answer

Question 11: what types of site-based interventions should be incentivised through marine net gain?

(Free text)

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<sup>20</sup> For very large projects, it may be possible to deliver both site-based interventions and contributions towards strategic interventions

## Identifying strategic interventions

Strategic interventions can be defined with reference to existing and emerging priorities in marine protection, such as indicators contained within the UK Marine Strategy<sup>21</sup> or policies in Marine Plans<sup>22</sup>. They could also incorporate non-statutory opportunities where these have been robustly examined and identified, such as the Environment Agency's Restoring Seagrass Meadows, Salt Marsh and Oyster Reef (ReMeMaRe) project<sup>23</sup>.

We are confident of having access to a strong evidence base when we come to consider strategic interventions for marine net gain in future workstreams.

Strategic interventions will need to be tightly defined and subject to bespoke rules for administration and delivery. These matters take us beyond the scope of the current consultation and will be considered in more detail in future consultations.

We anticipate that we will introduce a directory of interventions that the UK government designates as 'strategic interventions' for the purposes of the policy. The directory would be informed by the principles set out above to ensure that interventions meet the UK government's policy aims and deliver genuine improvements to the marine environment.

Question 12: What types of strategic interventions could be incentivised through marine net gain?

(Free text)

## Incentivising appropriate site-based interventions

We are keen to ensure that:

- strategic interventions are encouraged relative to low-value site-based interventions
- appropriate high-value site-based interventions are encouraged relative to strategic interventions

It is not our intention that strategic interventions would become a default option, particularly in cases where the development involves the loss of sensitive or distinctive but replaceable features (especially where these are not otherwise protected). We refer to such features as prescribed features and invite respondents' views on the types of features that should be prescribed.

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<sup>21</sup> [Marine strategy part one: UK updated assessment and Good Environmental Status](#)

<sup>22</sup> [Marine planning in England](#)

<sup>23</sup> [Restoring Estuarine and Coastal Habitats](#)



We propose that there should be a preference for site-based interventions where the development:

- involves residual losses of prescribed features
- the prescribed feature can be restored and/or created in the vicinity of the original loss in a cost-effective manner
- creation and/or restoration of that prescribed feature would contribute towards the wider aim of marine recovery to a similar extent as (contribution towards) a comparable strategic intervention

This approach would help incentivise the avoidance of impacts to prescribed features in the first place, in line with the mitigation hierarchy.

Under our proposed approach, where prescribed features are likely to be lost to a development, developers would be required to consider interventions that deliver a gain of those same features in the first instance (for example, direct replacement of a habitat type).

Where no such intervention is possible, developers can propose alternative interventions of equivalent value or access the strategic directory. Where the development has no residual impact on any prescribed features, then developers can access the directory directly.

Question 13: Should accessing strategic interventions be conditional in some cases?

Answer: yes/no

Question 13a: If yes, which site-based features should be considered priorities ('prescribed features') ahead of strategic interventions? Please explain your answer

(Free text)

## **Spatial relationship of developments and interventions**

A strategic approach to marine net gain means that the benefits delivered by net gain intervention can be different from the losses they are offsetting<sup>24</sup>. This decoupling has several implications that also informs this principle.

First, a strategic approach could mean that there be no spatial constraints attached to delivery of net gain requirements. In other words, there would not be any requirement to

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<sup>24</sup> Note that though the types of impact and benefit are different, the extent or value of those impacts remains a key determinant of the of the net gain requirement, so requirements are proportionate to project impacts

deliver strategic interventions within a defined spatial relationship to the original project (for example within or adjacent to the site boundary). This is because there is no guarantee that strategically defined interventions will be located in the vicinity of future developments.

Second, as we are seeking to encourage the pooling of net gain requirements from smaller projects, spatial constraints may create unnecessary limits on the interventions available to developers. By using this approach, developers will be able to access whichever projects are in the directory of strategic interventions.

Third, we are mindful that fully decoupling the interventions from the developments could lead to an unfair distribution of impacts and benefits. Our longer-term aspiration is to try to localise the benefits of marine net gain to the impacts where appropriate. As the marine net gain regime matures, there may be opportunities to start to incentivise the delivery of more localised interventions. There is a risk that such constraints may hinder the establishment of the marine net gain regime initially, so we propose not to introduce a preference for local interventions into marine net gain at this stage.

Question 14: Do you agree that marine net gain interventions should not initially be restricted to the 'locality' of the main development?

Answer: yes/no

Question 14a - Please explain your answer

(Free text)

## Section 5: Marine net gain and additionality in Marine Protected Areas

### Principle 9: Marine net gain will allow for improvements to designated and non-designated features of Marine Protected Areas to qualify as net gain interventions

'Additionality' is defined as 'a real increase in social value that would not have occurred in the absence of the intervention being appraised'<sup>25</sup>.

The current understanding of the additionality principle, as it would apply to MPA management, would not allow for improvements to designated features of MPAs, or improvements in MPAs generally, to qualify as net gain interventions. This is because the

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<sup>25</sup> Green Book (2018) [The Green Book 2020.pdf](#) [The Green Book](#) (2018)

relevant competent authorities are under an existing legal obligation to secure the necessary conservation measures to maintain or restore that feature in accordance with its objectives. We propose interpreting the additionality principle differently in the context of marine net gain.

A much greater percentage of intertidal and marine habitats are designated compared to terrestrial. Therefore, if MPAs, including their designated features, are not included as potential sites for net gain interventions, it could make it more difficult to identify locations in which to deliver net gain.

These risks create a barrier for delivering marine net gain and could constrain investment in enhancements in coastal and marine environments. Permitting net gain interventions within MPAs would allow for the consideration of net gain in MPAs if other opportunities wholly outside MPAs are not feasible.

The consultation on Biodiversity Net Gain Regulations and Implementation proposes interpreting the principle of additionality in a way that allows for improvements to designated and non-designated features of MPAs in the intertidal zone<sup>26</sup> to qualify as net gain interventions<sup>27</sup>.

We propose to follow this approach, allowing appropriate improvements to designated and non-designated features within subtidal MPAs to count as net gain interventions.

Any reinterpretation of the principle of additionality will be accompanied by additional safeguards as necessary to ensure the integrity of the MPA network. We therefore welcome evidence on the application of the additionality principle to subtidal MPAs.

Question 15: Do you agree that the enhancement of designated features within statutory MPAs should be allowed in the marine environment as defined above?

Answer: yes/no

Question 15a: Please provide evidence to support your view

(Free text)

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<sup>26</sup> Intertidal zone is the area between the mean high and low water marks. The consultation also proposes extending this principle to sites less than 2 km inshore of the mean high water mark

<sup>27</sup> Subject to agreement from any relevant consultee body (such as consultees on an associated marine licence application) and provided that the proposal does not risk harming designated species or features. Marine net gain would also seek to introduce these controls

## Annex: About this consultation

This consultation seeks views from all interested parties on the proposed principles of marine net gain. We are particularly keen to hear from marine industries, recreational marine users, non-governmental organisations (NGOs), conservationists, academics and coastal communities.

Marine conservation and planning functions are devolved, with different arrangements in relation to specific consenting regimes in each of the Devolved Administrations. This consultation document will apply only to development in England and the English inshore and offshore region.

We will work closely with colleagues in the Devolved Administrations to consider opportunities for joint working in developing marine net gain and associated regimes and how to address any transboundary issues that may arise and publish guidance where necessary.

We have been working with a wide range of stakeholders from across the UK government, marine industries and NGOs to start to understand the key issues and considerations relevant to a net gain regime in the marine environment. This consultation brings together the results of those discussions to explore how best to introduce net gain to the marine environment.

Responses to this consultation will shape the policy, legislation, guidance and delivery plans which will help to translate the aims into real gains for our environment, society and industry.

## How to respond

This is your opportunity to feed into the development of marine net gain policy and provide any additional evidence that might help improve the overall effectiveness and operability of the policy. Responses should be submitted online where possible using Citizen Space (our online consultation website) but can also be submitted by email or by post.

If you have additional information that you would like to submit as part of your consultation response:

- by email to: [offshorewind@defra.gov.uk](mailto:offshorewind@defra.gov.uk)
- by post to:  
Consultation on the principles of marine net gain  
Consultation Coordinator  
Second floor, Foss House  
Kings Pool  
1 to 2 Peasholme Green  
York  
YO1 7PX

# Confidentiality and data protection

A summary of responses to this consultation will be published on the UK government website at: [www.gov.uk/defra](http://www.gov.uk/defra). An annex to the consultation summary will list all organisations that responded but will not include personal names, addresses or other contact details.

Defra may publish the content of your response to this consultation to make it available to the public without your personal name and private contact details (for example your home address and email address).

If you click on 'Yes' in response to the question asking if you would like anything in your response to be kept confidential, you are asked to state clearly what information you would like to be kept as confidential and explain your reasons for confidentiality.

The reason for this is that information in responses to this consultation may be subject to release to the public or other parties in accordance with the access to information law (these are primarily the Environmental Information Regulations 2004 (EIRs), the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA)).

We have obligations, mainly under the EIRs, FOIA and DPA, to disclose information to particular recipients or to the public in certain circumstances. In view of this, your explanation of your reasons for requesting confidentiality for all or part of your response would help us balance these obligations for disclosure against any obligation of confidentiality.

If we receive a request for the information that you have provided in your response to this consultation, we will take full account of your reasons for requesting confidentiality of your response, but we cannot guarantee that confidentiality can be maintained in all circumstances.

If you click on 'No' in response to the question asking if you would like anything in your response to be kept confidential, we will be able to release the content of your response to the public, but we won't make your personal name and private contact details publicly available.

There may be occasions when Defra will share the information you provide in response to the consultation, including any personal data with external analysts. This is for the purposes of consultation response analysis and provision of a report of the summary of responses only.

This consultation is being conducted in line with the [Cabinet Office's Consultation Principles](#).

Please find our latest privacy notice uploaded as a related document alongside our consultation document.

If you have any comments or complaints about the consultation process, please address them to:

Consultation on the principles of marine net gain  
Consultation Coordinator, Defra  
Second Floor, Foss House, Kings Pool  
1 to 2 Peasholme Green  
York  
YO1 7PX

Or email: [consultation.coordinator@defra.gov.uk](mailto:consultation.coordinator@defra.gov.uk)

Question 16: Would you like your response to be confidential?

Answer:  
yes/no

Question 16a: If you answered yes to this question, please give your reason

(Free text)

## What happens next

At the end of the consultation period, we will summarise the responses and place the summary of responses on GOV.UK.

Information and comments submitted through the consultation will be used to inform and further develop the policy to ensure it is feasible for delivery in the marine environment.

The UK government will publish its response to this consultation in line with current guidance.

## Next steps

The principles in this consultation will define the broad parameters of the marine net gain regime.

Once we have considered the evidence provided in response to this consultation, we will publish our response and we will continue to work with stakeholders to define the detailed policy proposals necessary to establish marine net gain.

Key deliverables in the next phase of policy development include:

- we will work with stakeholders and delivery partners to develop and run proof of concept projects of the assessment framework
- we will develop detailed policy related to implementation and delivery of marine net gain and consult on proposals in 2022 (any future policy decision will be accompanied by a full impact assessment)
- we will seek any necessary legislative powers to introduce marine net gain requirements

## Consultee feedback on the online survey

Dear Consultee,

Thank you for taking your time to participate in this online survey. It would be appreciated, if you can provide us with an insight into how you view the tool and the areas you feel is in need of improvement, by completing our feedback questionnaire.

Question 17: Overall, how satisfied are you with our online consultation tool?

Answer: (single choice)

very satisfied

satisfied

neither satisfied nor dissatisfied

dissatisfied

very dissatisfied

do not know

Question 17a: Please give us any comments you have on the tool, including suggestions on how we could improve it.

Answer: comments



# Glossary

EIA - Environmental Impact Assessment

LWM –Low water mark

MaCAA - Marine and Coastal access Act 2009

MCZ - Marine Conservation Zone

MEEB - Measures of equivalent environmental benefit

MMO – Marine Management Organisation

MPA – Marine Protected Area

MRF – Marine Recovery Fund

NGOs – Non-governmental Organisations

NNL – No Net Loss

NSIP - Nationally Significant Infrastructure Projects

TCPA - Town and Country Planning Act

25YEP – 25 Year Environment Plan

## Definitions

**Additionality** – Best practice principle relevant to (inter alia) compensation delivered in compliance with legislative requirements applicable to MPAs. A real increase in social value that would not have occurred in the absence of the intervention being appraised.

**Artificial reef** – Artificial structures which resemble/display features of natural reefs.

**Assessment framework** – tool for calculating the residual impacts of a project and valuing proposed interventions. Used to demonstrate that proposals achieve an overall gain. The Biodiversity Net Gain Metric acts as the assessment framework for terrestrial BNG.

**Compensation** – compensatory measures as required under applicable legislation, to offset the negative environmental impacts of developments. Compensatory measures include relevant compensation under the Habitats Regulations and MEEB under MCAA.

**Environmental Impact Assessment** – Evaluating the likely environmental impacts of a proposed project or development, considering impacts, both beneficial and adverse in accordance with applicable regulations.

Intertidal zone – the area that falls between MHWS and LWM.

Low water mark (LWM) – The height of water levels reached by seawater at lowest tide.

Mitigation hierarchy – The principle that environmental harm resulting from a development should be avoided (through locating development where there will be less harmful impacts), adequately mitigated, or, as a last resort, compensated for.

Mean High Water Springs (MHWS) – The height of Mean High Water Springs is the average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest.

Nature-based Solutions – actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

Nature Inclusive Design – approaches to, or features of, infrastructure design that can increase habitats or help support species.

Net Gain – an approach to development that aims to leave the natural environment in a measurably better state than beforehand.

Polluter pays – principle that those who cause pollution or damage to the environment should be responsible for mitigation or compensation.

Sub-tidal – the marine area below the low water mark.