CONSULTATION
Response Document

Biodiversity Offsetting in England Green Paper
(Defra)

7 November 2013
Introduction

The Chartered Institute of Ecology and Environmental Management (CIEEM), as the leading membership organisation supporting professional ecologists and environmental managers, welcomes the opportunity to comment on this consultation.

CIEEM was established in 1991 and has 5,000 members drawn from local authorities, government agencies, industry, environmental consultancy, teaching/research, and voluntary environmental organisations. The Chartered Institute has led the way in defining and raising the standards of ecological and environmental management practice with regard to biodiversity protection and enhancement. It promotes knowledge sharing through events and publications, skills development through its comprehensive training and development programme and best practice through the dissemination of technical guidance for the profession and related disciplines.

CIEEM is a member of:

- All Party Parliamentary Group on Biodiversity
- Environmental Policy Forum
- Europarc Federation
- European Network of Environmental Professionals
- IUCN – The World Conservation Union
- Professional Associations Research Network
- Society for the Environment
- United Nations Decade on Biodiversity 2011-2020 Network
5. Applying biodiversity offsetting in England

*Question 1: Do you think the Government should introduce a biodiversity offsetting system in England?*

Having collectively failed to meet the 2010 target to halt the loss of biodiversity, CIEEM welcomes robust initiatives from Government to reverse this trend. Biodiversity offsetting has the potential to be part of a package of mechanisms that will help in our fight to halt and reverse this loss, but it has to be implemented appropriately and responsibly. In particular, it must not be used as a means of reducing the Government’s spend on other initiatives to support sustainable biodiversity management and conservation.

We are concerned at the overall tone of the document, which seems to be aimed at enabling faster, cheaper ways to evaluate impacts of development and gain planning approval. Biodiversity offsetting will fail if it is not primed and maintained with the appropriate resources, and charged with a measure of impartiality by close involvement of ecologists within the public sector. Additionally, any offsetting measures need to be supported by rigorous ecological assessments, backed up with a precautionary approach. Implementing biodiversity offsetting is going to cost money. It is not a panacea for Government, nor developers, to overcome the current economic situation. The Government should be clear from the outset about where these costs lie and who will pay them so that stakeholders can realistically consider the costs and benefits of the proposals.

*Question 2: Do you think the Government’s objectives for the system and the characteristics the Government thinks a system would display are right?*

In the current economic climate we understand the Government’s push for clarity for developers. However we are concerned that the wording within the objectives appears to favour economics over the environment, and fails to include any social considerations. This contradicts the principles of sustainable development laid out in the National Planning Policy Framework.

Bullet point two of the objectives refers to achieving a net gain for biodiversity and enhancing ecological connectivity, which we fully support. However the objective must go beyond replacing an equal number of biodiversity units and state that there must be like-for-like or better replacement in terms of biodiversity units (i.e. high distinctiveness habitat must be replaced by more high distinctiveness habitat rather than a larger expanse of low distinctiveness habitat).

It is highly unlikely that any system will be perfect or even near-perfect when first introduced. The Government should therefore make a commitment to ongoing monitoring and review of any offsetting system and a willingness to learn from evidence generated here and abroad. This will require investment in adequate evidence gathering and analysis from the outset.

*5.1 The offsetting metric*

*Question 3: Do you think it is appropriate to base an offsetting system on the pilot metric? If not is there an alternative metric that should be used?*

Placing a monetary value on biodiversity can be useful, particularly for developers and planners, but
some of the ‘ecosystem services’ that biodiversity provides are very difficult to quantify and are not properly provided for in the metric.

It is clear that the metric takes something – biodiversity and habitats – that are inherently very complex and tries to simplify them for easier decision-making. This creates an inherent, but perhaps unavoidable, risk of oversimplification.

For example, there is a danger that if the metric is not a reflection of the true biodiversity resource, habitats will be undervalued resulting in a continued loss of biodiversity. Any metric must be based on sound science and evidence. The risks of such an approach need to be acknowledged and mitigated.

The metric assumes a rather simplistic approach to how habitats are established and sustained – the reality is complex and challenging, especially when one considers the development of soil and hydrological regimes. The Government might like to consider acknowledging that the current metric is a simplistic approach to a complex system and demonstrate a policy and financial commitment to ongoing research to refine and improve the metric – research that can be informed by experience as the current metric is applied more widely than at present. Thus the metric needs to evolve over time and in the light of experience and knowledge.

CIEEM members who have practical experience of using the current metric have commented that it is difficult to use. Added to this there are varying interpretations of the metric with at least three different calculation tools that CIEEM is aware of. There is certainly a need for guidance on implementation and use of the metric and CIEEM would be pleased to be involved in producing this. CIEEM would also be able to offer training on the implementation of biodiversity offsetting and we will be looking into means of providing this once Government has finalised its policy on offsetting.

**Question 4: If you think the pilot metric is the right basis for an offsetting system:**

*a. Are there any other factors which should be considered when quantifying biodiversity loss and gain?*

CIEEM considers that broadly the right combination of factors have been included in the metric for habitats with the one exception being a factor concerning the mosaic of habitats. However, the metric’s key weakness is that it does not take account of social, cultural or landscape values.

There are other ecosystem services consideration that should be considered but this is probably too complex at this stage and might be an area for the further research mentioned above.

*b. Are the weights given to the different factors appropriate?*

To our knowledge the metric multipliers are “best guess” estimates and are not based on scientific evidence. CIEEM strongly recommends that further research is undertaken on the impact of the multipliers on the metric outcomes. This is one of the areas of greatest risk in the proposals.

The metric assumes a proportional relationship, for example with habitat size, however this is not always the case. As a hypothetical example, 10ha of a particular habitat may sustain a population of say 100 individuals of a particular species, but 1ha may be too small to functionally support 10 individuals.

*c. Are there any other changes you think should be taken into account?*

In particular we would be keen to see the metric take account of:
- mosaic habitats that are valuable because of the heterogeneity that they provide;
- habitat connectivity; and
- ecosystem services including the social and cultural aspects referred to previously.

5.2 Fit with planning process

**Question 5: Do you think offsetting assessment should be used when preparing a planning application for a project?**

CIEEM strongly supports adherence to the mitigation hierarchy, which requires local authorities to have access to appropriate ecological expertise. Offsetting assessment should be considered as part of preparing a planning application but only in the context of its place within the mitigation hierarchy and not as an alternative to it. This is a fundamental principle which must underpin the introduction of any offsetting scheme.

**Question 6: Do you agree that it should be the responsibility of planning authorities to ensure the mitigation hierarchy is observed and decide what offset is required to compensate for any residual loss? If not, why, and how do you think offsetting should be approached in the planning system?**

Yes, supported by appropriate government policy and rhetoric. However local authorities need to be adequately resourced and have access to appropriate ecological expertise in order to discharge this responsibility. There is strong evidence to suggest that this is not the case and this is another significant area of risk to successful implementation of an offsetting tool. Without access to ecological expertise local planning authorities may not be able to make sound decisions, identify opportunities for enhancement and may be risk adverse.

Planning authorities should be required to produce plans, or additions to their current local plans, in consultation with neighbouring authorities identifying priority areas for biodiversity offsetting receptor sites and minimum thresholds of habitats that should be retained within the local authority planning area. Such inform will help to inform sound decision-making. This will require ‘up-front’ investment in plan-making. Given the financial constraints under which planning authorities are currently working we suggest that the Government considers financing this plan production with the monies being subsequently repaid through offsetting income.

5.3 Affected development consent regimes

**Question 7: Do you think biodiversity offsetting should have a role in all development consent regimes?**

Yes, but only as a possible option under the mitigation hierarchy.

5.4 Choice on use of offsetting and offset location

**Question 8: Do you think developers should be able to choose whether to use offsetting? If so what steps could Government take to encourage developers to use offsetting?**

This is another key area of risk. CIEEM believes that if biodiversity offsetting is to work and have a positive environmental and economic impact – noting that the pilots have been voluntary and have
shown very little take-up – it must be mandatory. A mandatory scheme would provide greater certainty to potential receptor site providers and give clarity to developers and planners. A voluntary system will lead to more negotiation, uncertainty and delay for developers. Offsetting will only be attractive to developers if there is a market to drive the costs down and the market will only exist effectively if offsetting consideration is mandatory.

We also believe that if the biodiversity offsetting market becomes established then the cost of implementation will come down and further take up should occur.

**Question 9: If you think developers should be required to use offsetting do you think this requirement should only apply above a threshold based on the size of the development? What level should the threshold be?**

There should not be a threshold. Biodiversity offsetting should be applied in adherence with the mitigation hierarchy. With a threshold we would continue to lose small sites and the result would be a slow attrition (i.e. death by a thousand cuts) of biodiversity.

**Question 10: Do you think there should be constraints on where offsets can be located? If so what constraints do you think should be put in place?**

CIEEM believes that there should be constraints on the location of offsets, based on a hierarchy of sitting linked to ecological, social and community function. There are thus different answers to the question depending on whether you are coming from an ecological or social perspective. We will confine our thoughts to the ecological perspective but wish to recognise the importance of the social perspective.

The first step of the hierarchy is to place the offset within the site or adjacent so that the habitat loss is made up within the same ecological area. This would benefit the people using the development and their neighbours and maintain or add value to the property values.

If evidence is provided to conclude that ‘on site’ or adjacent is not possible then step two is to have the offset as close as possible. We recommend that this must be on the same type of soil, and be of a similar habitat or better and must fulfil the Lawtonian principle of “more, bigger, better and joined up”.

If not close, then the third step is that the offset be on the closest available previously identified suitable receptor site (i.e. a site with apparent appropriate environmental functionality including soils, hydrology, aspect, etc.). A fourth step would be within the same National Character Area – but on the same geology/soils so that the new or translocated habitat would be nearest to equivalent.

We recommend that each step further away should have a unit penalty to increase the habitat units required and to deter inappropriate offsetting.

CIEEM believes that it is essential that planning authorities have a clear strategy in relation to biodiversity offsetting as referred to previously. This will support their decision-making as to suitable receptor sites.

CIEEM also recognises that there are potential benefits to be gained from a national strategic overview to enable local authorities to cooperate on the delivery of offsetting sites.

CIEEM recommends that guidance will be need to be provided on the location of offsets, which must
be based on sound ecological principles. CIEEM would like to offer to help produce this, perhaps in collaboration with other ecological bodies.

**Question 11: Do you have any comments on the analysis set out in the impact assessment?**

No comment.

**Question 12: Do you have evidence that would help refine the Government’s analysis of the costs and benefits of the options considered in this paper? In particular, evidence relating to:**

*a. The amount of compensation already occurring where there is residual biodiversity loss which cannot be avoided or adequately mitigated*

No comment.

*b. The method for estimating costs and their magnitude*

No comment.

*c. The method for estimating benefits and savings and their magnitude*

No comment.

*d. How to capture the wider social and environmental benefits of maintaining England’s stock of biodiversity and delivering a coherent ecological network*

No comment.

*e. Likely take up of offsetting under a permissive approach*

Anecdotal evidence from CIEEM members who work in the consultancy sector comment that their clients would be unlikely to take up offsetting on a voluntary basis as their clients are not currently equipped to deal with biodiversity offsetting and so would have initial set up costs, nor do they necessarily fully understand biodiversity offsetting as a process.

Further input from members indicates that some development sectors may expect more leniency and flexibility if doing something voluntarily.

**5.5 A national approach**

**Question 13: Do you think offsetting should be a single consistent national system without scope for local variation?**

A national framework is needed, which is linked to local biodiversity strategies. In addition Local Authorities will need to have a clear plan for potential development and receptor sites.
There is also a linked issue in relation to a recommended minimum stock of each habitat at any point in time. This is a temporal issue relating to the time required for habitats to mature as there would be a “net deficit” during the maturation period. This could be applicable to the metric.

### 5.6 Restrictions on the offsetting system

**Question 14: Do you agree with the proposed exceptions to the routine use of biodiversity offsetting? If not, why not? If you suggest additional restriction, why are they needed?**

CIEEM is very concerned at the inclusion of irreplaceable habitats, SSSIs and Natura 2000 sites within the proposed exceptions under certain conditions and strongly recommends that a legally protected site should remain as such. CIEEM also strongly recommends that locally designated sites are not included as possible development sites that can be offset. CIEEM can see no argument for, or benefit from, including irreplaceable habitats, locally designated sites, SSSIs or Natura 2000 sites in biodiversity offsetting.

**Question 15: Which habitats do you think should be considered irreplaceable?**

Some irreplaceable habitats (irreplaceable in a meaningful timescale), such as ancient woodland, are easy to identify but others are more complicated and open to debate. CIEEM strongly recommends that Defra should compile a list, through consultation, of irreplaceable habitats. This would provide clarity and consistency for Government (central, local and its agencies), conservation organisations and developers. The list should be based on sound science including consideration of hydrological, geomorphological, soil and geological features. CIEEM’s members would wish to contribute to such a list. We suggest that the critical feature of sites lying above mean high water should be the degree to which soils have been maintained in an undamaged form.

### 5.7 Protected species and offsetting

**Question 16: Do you think offsetting should in principle be applied to protected species?**

CIEEM does not agree that protected species should be considered as part of biodiversity offsetting. We recommend that biodiversity offsetting and species consideration must run in conjunction, but as separate processes. Instead we recommend a revision of the survey/mitigation guidelines used for protected species.

We agree that having appropriate baseline data would be a major benefit to both conservation and development, and fully supporting a network of biological record centres is imperative in this regard. CIEEM supports Government investing in underlying data collection, data management and data analysis to allow advanced identification of potential issues as outlined in the third and fourth bullet points of paragraph 34. However, making planning decisions based solely on this data outside of survey seasons endangers the proper planning process which must be based on the best available information – i.e. the current situation.

We must also point out that protected species, in accordance with the mitigation hierarchy, should be considered before the offsetting stage is reached.
**Question 17: Has the Government identified the right constraints and features that need to be addressed when applying offsetting to protected species?**

We do not agree that protected species should be included in the offsetting process. This is especially the case for those species that cannot be moved or are less likely to move of their own accord (e.g. bats, otters, badgers).

**Question 18: Do you agree that great crested newts should be the first area of focus?**

CIEEM does not agree that protected species should be included in the offsetting process. With regard to great crested newts it should also be noted that their habitat comprises the terrestrial realm as well as the aquatic. So whilst the eDNA test will cover one aspect of the animal’s habitat, it fails to consider the whole life cycle, which is covered in its entirety under the legislation.

**Question 19: Do you have any comments on the Government’s thinking on how to apply offsetting to great crested newts?**

CIEEM does not agree that protected species should be included in the offsetting process.

**Question 20: Should offsetting be considered for any other species in the near future taking account of the constraints on species offsetting?**

CIEEM does not agree that protected species should be included in the offsetting process.

5.8 Covenants, management agreements and an offset register

**Question 21: Do you think conservation covenants should be put in place as part of an offsetting system? If they are required, who do you think should be responsible for agreeing conservation covenants? If not, how else do you think offsets could be secured for the long-term?**

CIEEM agrees that conservation covenants should be put in place as part of a biodiversity offsetting system. We suggest that they should be agreed by local authorities, which will need to be resourced to undertake this task. We also recommend that conservation covenants need to be underpinned by legislation, probably as an extension of English property law.

**Question 22: Do you think management agreements should be put in place as part of an offsetting system? If they are required, who do you think should be responsible for agreeing management agreements?**

Management agreements will be an essential part of a biodiversity offsetting system. However, we recognise that these agreements will need to be flexible to allow for changes in the environment (e.g. climate change and invasive species), but should adhere to an overall goal of biodiversity conservation.

Responsibility for agreeing management agreements should rest with the local authority, which will need to adequately resourced with staff who can undertake this work. As previously pointed out, this is not the case in many local planning authorities.
Question 23: Do you think an offset register should be put in place as part of an offsetting system? If so, who do you think should be responsible for maintaining an offset register?

CIEEM believes that a national offset register will be essential for collating and recording offsets. It will also have the benefit of avoiding double counting. We recommend that Natural England should maintain the offset register for biodiversity offset sites in England although we recognise that this does have resource implications which will need to be addressed.

At a local level we believe that local planning authorities should keep a register of offsetting sites within their local areas.

Question 24: How long should offsets be secured for?

CIEEM believes it is unacceptable to consider offsetting land to be short-term. It must effectively be for perpetuity. For example, it takes 200-300 years for a woodland to become established. Even for those habitats that may superficially appear to mature quickly, it takes 12-15 years at least for the phosphorus to leach out of eutrophicated soils, many years for species to arrive (if ever for some), and soil structure and hydrological functioning takes hundreds (if not thousands) of years to fully mature. Short-term offsets would not provide any real benefits for the loss of habitats that might be long established themselves. A failure to put in place a system for ensuring the longevity of offsets would undermine trust and confidence in any offsetting system and could lead to some stakeholders approaching offsetting with a negative mindset. This is another area of significant risk. A robust approach to long-term habitat management and monitoring is required to deliver the biodiversity benefits of offsetting.

We are acutely aware of the potential disparity between a covenant in perpetuity and, for example, only 25 years of funding for site management. However, if the site is delivering its objectives then it should become a site of high nature conservation value and in due course become designated. It might even be appropriate to consider designating successful receptor sites as ‘Sites of Experimental Conservation Value’ in order to afford them longer-term protection and ensure that they are used for scientific monitoring purposes.

Question 25: Are there any long-term factors, besides climate change, that should be taken into account when securing offsets?

CIEEM suggests that the potential for invasive non-native species invasion and their control, including the possibility of disease affecting key species, should be a consideration.

As part of a global community, England is also affected by global human population growth and the increasing rate of consumption.

5.9 Avoiding adverse effects on planning applications

Question 26: Do you think biodiversity offsetting should be “backdated” so it can apply in relation to any planning applications under consideration at the point it is introduced?

No, this would be difficult to do retrospectively and is an unfair burden on development.
6. Detailed considerations

6.1 Deciding whether harm is significant

Question 27: Do you think an offsetting system should take a national approach to the question of significant harm and if so how?

Significance must be determined on a case by case basis by a competent ecologists within (or on behalf of) the local authority. If a planning condition is imposed then we believe that the impact is significant.

6.2 Securing offsets against provider failure

Question 28: Do you think any additional mechanisms need to be put in place to secure offsets beyond conservation covenants? If so why and what are they? If this includes measures not listed above, please explain what they are.

Biodiversity offsetting, if it is to be successful, will require robust long-term habitat management and monitoring that can provide both a measure of success against objectives and an evidence base for future interventions. As suggested above, the Government might wish to consider a new type of statutory protection for successful receptor sites, that of ‘Site of Experimental Conservation Value’ to provide long-term protection.

6.3 What kind of habitat can be provided as an offset

Question 29: Do you think there should be constraints on what habitat can be provided as an offset? If so what constraints do you think should be put in place, and how should they work in practice?

CIEEM feels that all habitats which are distinctive – i.e. not low, but anything above this (and criteria need to be set to determine this) – should be replaced with equivalent habitats (of better quality preferably) and that translocation of parts or all the habitat plus species as far as possible should be used wherever suitable to achieve this on the right soils in the right place. Effectively this means that there should be “like-for-like or better” replacement of habitats and no “down-trading” should be allowed. This has the best chance of developing an equivalent habitat. If not done, it will result in the situation where have an abundance of the easy-to-create habitats and none of the difficult ones, with a general loss of richness and diversity. Any habitats less than medium distinctiveness can be replaced with whatever is needed.

6.4 Creating net ecological gain

Question 30: Do you agree an offsetting system should apply a strategic approach to generate net ecological gain in line with Making Space for Nature? If so, at what level should the strategy be set and who by? How should the system ensure compliance with the strategy?

CIEEM recommends that a strategy should be set locally but within some generic overall guidelines
(e.g. Lawton’s principles plus BAP 2020). The strategy should be National Character Area (NCA) based since the needs of each are different, with local authorities working together to meet NCA targets and more. Applying Lawton is essential to combat habitat loss and fragmentation plus climate change.

Compliance with the strategy should be part of regular monitoring and assessment of the scheme undertaken by Defra.

6.5 Ensuring environmental benefits are additional

*Question 31: Do you think habitat banking should be allowed? Do you think a provider must show intent to create a habitat bank to be allowed to sell it as an offset? Do you think habitat banks should be “retired” if they are not used to provide an offset? If so, after how long?*

CIEEM recommends that as this is a complex issue that this is not attempted at this time. We suggest implementing biodiversity offsetting first to ensure that it is workable before going down the habitat banking route.

*Question 32: Do you think maintaining an environmental gain that might otherwise be lost should count as an offset? If so, how should a value be attached to the offset?*

Funding is certainly needed to maintain environmental gains, however we do not see this as counting as an offset. There should be more habitat creation rather than recycling of existing ones for different reasons. Maintaining an environmental gain for another development is effectively an environmental loss and would mean that no new funding is being put into reaching our 2020 biodiversity targets.

*Question 33: Do you think it is acceptable or not to use biodiversity gain created for other purposes as an offset? If you do, how should it be decided what is allowed to be used as an offset?*

CIEEM does not believe that a biodiversity gain created for another purpose can be used as a biodiversity offset for the reasons set out in the previous answer.

6.6 Ensuring consistent application of the metric

*Question 34: How do you think the quality of assessments should be assured and who by?*

Not all practitioners are familiar with the practicalities of habitat restoration, translocation and creation and most practitioners will only claim experience in specific habitats. The design of offsetting proposals, and their subsequent assessment, by inexperienced or incompetent individuals is another area of risk.

Assessors need to be competent ecological practitioners familiar with the local and regional context, habitats and environmental functionality. CIEEM has significant experience in assessment of ecological competence through its membership and chartered ecologist assessment processes. Additionally CIEEM’s competency framework for the profession provides an established mechanism to set standards. Should the Government decide to use “accredited assessors” to ensure robust and consistent application of the metric, CIEEM would be happy to discuss how we could be involved. As
a first step we would suggest using the competency framework to identify a statement of professional competences required to deliver offsetting from both the assessor and proposer perspectives.

Consistency of application of the metric can best be achieved by good quality guidance. CIEEM would propose coordinating the production of such guidance but would wish to draw not only on the collective experience of its members but also expertise from other organisations across the statutory, private and NGO sector. Thus whilst primary guidance on offsetting must come from Defra supported by Natural England we suggest that supplementary guidance, produced through broad stakeholder engagement, should come from the sector.

We recognise that there is a cost to producing such supplementary guidance but CIEEM would be willing to bear much of the cost involved in coordinating the scoping and writing of the guidance if other stakeholders are willing to contribute their time and expertise to developing it.

**Question 35: How should differences of opinion over assessments be addressed?**

CIEEM would be happy to discuss using the Code of Professional Conduct and its complaints and disciplinary procedures for members and Chartered Ecologists as a model for addressing differences of opinion.

The final word on an assessment should rest with a body with no vested financial interest in the outcome of an assessment. As well as being independent, the local authority ecologist is likely to be a member of CIEEM, and therefore bound by its code of professional conduct. Ultimately, any difference which proves difficult to resolve may be put before a planning inspector, like any other material consideration.

**6.7 Including hedgerows in the metric**

**Question 36: Do you think the metric should take account of hedgerows? If so do you think the current approach is the right one or should it be adjusted?**

CIEEM believes it is important to maintain hedgerows as they provide a valuable component of habitat connectivity for many species. The criteria given in the Hedgerow Regulations may form an adequate basis to ascertain whether a particular hedgerow falls into that category of a habitat that is ‘irreplaceable’.

**Question 37: Do you think it should be possible to offset the loss of hedgerows by creating or restoring another form of habitat?**

CIEEM believes that hedgerows should be replaced by more hedgerows such that the overall connectivity of the landscape is not compromised.

**7. Implementing biodiversity offsetting**

**Question 38: If conservation covenants are put in place, do you think providing for offsetting through planning guidance will be sufficient to achieve national consistency? If not, what legislative provision may be necessary?**
No comment.