

Climate Change Mitigation & EIA

Reducing greenhouse gas (GHG) emissions is and will continue to be one of the main policy drivers in the coming decades. Action to manage GHG emissions from existing activities in all sectors of the economy is essential, but action is also needed related when planning future actions. The EIA Directive¹ requires the consideration of the effects of projects on *climate* (Article 3) and *climatic factors* (Annex IV).

In a 2009 IEMA survey of EIA practitioners, 88% felt that where relevant, carbon emissions should be considered in the assessment and reported in the Environmental Statement (ES). The supplement to PPSI (CLG 2007 and forthcoming 2010) indicates Government support in this area, stating:

'Local planning authorities should not require specific and standalone assessments [of climate change] where the requisite information can be provided through... environmental impact assessment.'

Whilst Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA) can present a broader opportunity to manage GHG emissions this, does not absolve EIA from consideration of climate change mitigation. The principles below focus on climate change mitigation, but EIA practitioners must also consider adaptation, which will be covered in a forthcoming set of IEMA principles to be consulted upon during summer 2010.

Over-arching Principles:

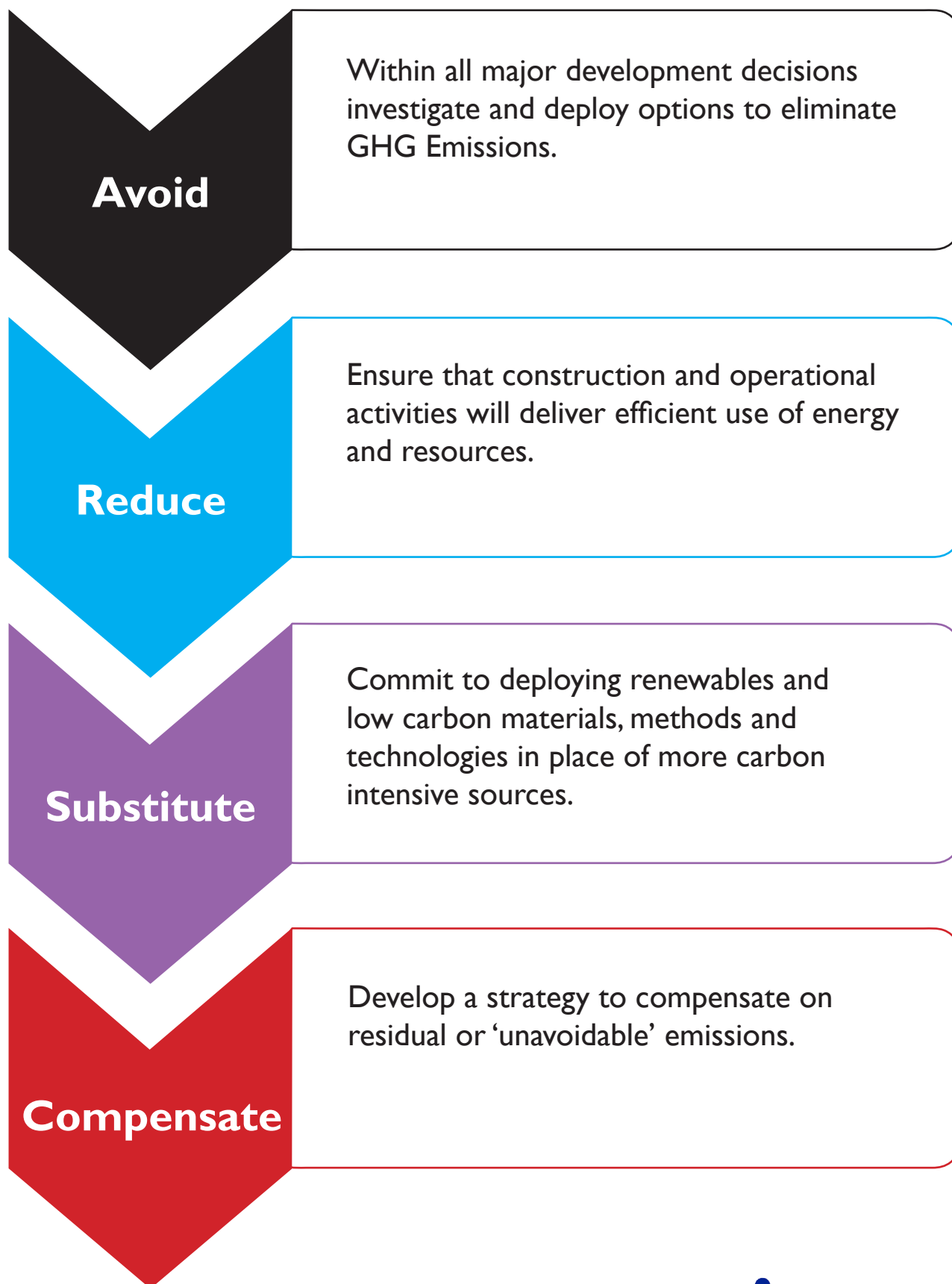
- The GHG emissions from all projects will contribute to climate change; the largest inter-related cumulative environmental effect.
- The consequences of a changing climate have the potential to lead to significant environmental effects on all topics in the EIA Directive – e.g. Population, Fauna, Soil, etc.
- The UK has legally binding GHG reduction targets - EIA must therefore give due consideration to how a project will contribute to the achievement of these targets.
- GHG emissions have a combined environmental effect that is approaching a scientifically defined environmental limit, as such any GHG emissions or reductions from a project might be considered to be significant.
- The EIA process should, at an early stage, influence the location and design of projects to optimise GHG performance and limit likely contribution to GHG emissions.

¹85/337/EEC as amended by 97/11/EC, 03/35/EC, and 09/31/EC

Assessment Principles:

- During scoping, climate change mitigation and adaptation issues and opportunities should be considered alongside each other to ensure integration in project design.
- The scope of GHG emissions must consider the relevant policy framework (local to global) and should also review the relevant findings in any associated SEA / SA.
- When assessing alternatives, consideration of the relative GHG emissions performance of each option should be considered alongside a range of other environmental criteria.
- Baseline considerations related to GHG emissions should refer to the policy framework and also include the current situation and, where possible, take account of the likely future baseline situation.
- Quantification of GHG emissions (e.g. carbon calculators) will not always be necessary within EIA; however, where qualitative assessment is used (e.g. emissions trends related to construction practices) it must be robust, transparent and justifiable.
- The assessment should aim to consider whole life effects including, but not limited to:
 - Embodied energy in the manufacture of materials used for the development
 - Emissions related to construction - from materials delivery to on-site machinery
 - Operational emissions related to the functioning of the development-including appropriate off-site emissions.
 - Decommissioning, where relevant.
- When evaluating significance, all new GHG emissions contribute to a significant negative environmental effect; however, some projects will replace existing development that have higher GHG profiles. The significance of a project's emissions should therefore be based on its net GHG impact, which may be positive or negative.
- Where GHG emissions cannot be avoided, the EIA should aim to reduce the residual significance of a project's emissions at all stages - design, construction, operation, etc.
- Where GHG emissions remain significant, but cannot be further reduced - having considered: financial, programme, operational, political and societal constraints - approaches to compensate the project's remaining emissions should be considered.

EIA hierarchy for managing project related GHG Emissions¹



¹Adapted from Practitioner Volume 14 - Mitigating climate change: a guide for organisations (IEMA, 2009)

Reporting and follow-up Principles:

- Where GHG emissions are being considered in EIA they must be discussed in the ES, this could be in a climate change section, or within a specific section (e.g. air quality & emissions), or across a number of different parts of the document.
- Any modelling or detailed quantification of a project's GHG emissions should be presented, as relevant, within an appendix, which should be cross-referenced from a description of its findings that is presented in the main ES.
- Where the consenting authority requires an Energy Statement, covering the project's GHG emissions, it should be included within the ES to be considered good practice; as a minimum the ES must effectively summarise and cross reference its findings.
- Any mitigation, compensation or monitoring related to a project's GHG emissions should be included in a draft Environmental Management Plan (EMP), within the ES.
- Measures to reduce a project's GHG emissions or, where considered necessary, compensate for remaining GHG emissions, should be presented in the ES in a manner that provides confidence that they will be delivered. If appropriate, the measures should be written to allow the consenting authority to condition the activity specified.
- Following approval, GHG emissions should continue to be considered during detailed design, contractor negotiations and construction via the implementation of the EMP.
- Additional or new actions that could be taken to minimise emissions should be factored into the project post-consent as appropriate, with the newly operational site considering implementing an Environmental Management System (EMS) to effectively manage its GHG emissions.

For all the latest information on climate change in EIA visit IEMA's dedicated web-pages:

www.iema.net/eia-cc

where you will find:

- ✓ Information on how to get involved by developing case studies and advice notes on the consideration of specific aspects of climate change in EIA.
 - ✓ Regular updates on EIA & Climate Change events.
 - ✓ Links to other guidance on environmental assessment (EIA, SEA, SA) and climate change.
 - ✓ Advice on other aspects of the Principles; e.g. information on Environmental Management Plans / case study on using EMS to manage operational GHG emissions.
- **Coming soon...** IEMA's Principles on Climate Change Adaptation in EIA

Principles: CCM&EIA - Version 1.1 (1st June 2010) – Noticed something that needs updating?

Contact: technical@iema.net or call: 01522 540069