It can be unclear if significant effects are likely to result from the impact of greenhouse gas (GHG) emissions, particularly when considering the full life cycle of a development. In this article Paul Stephenson (Technical Director for Environment at ECUS) explores the challenges of considering GHG emissions when making a request for a screening opinion.

Directive 2014/52/EU, amending the Environmental Impact Assessment (EIA) Directive, includes the requirement to consider the impact of projects on climate. IEMA’s overarching principles on Climate Change Mitigation & EIA make the case for greenhouse gas (GHG) emissions to be considered when undertaking both statutory and non-statutory EIA. At the same time, the IEMA Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance recognises that EIA should focus on a project’s significant effects, and advocates that GHG emissions are always considered and reported, but at varying degrees of detail depending on the EIA project.

For “Schedule 1 development” GHG emissions will first be considered during the scoping stage. However, for “Schedule 2 development” the screening process will be the first opportunity for EIA practitioners to give consideration to GHG emissions.

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<th>Developers may request the relevant planning authority to adopt a screening opinion to determine if a development is EIA development. When requesting a screening opinion the person making the request must supply, amongst other information:</th>
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<td>• “a description of the aspects of the environment likely to be significantly affected by the development;”</td>
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<td>• to the extent the information is available, a description of any likely significant effects of the proposed development on the environment...; and</td>
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<td>• such other information or representations as the person making the request may wish to provide or make, including any features of the proposed development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment.”</td>
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As part of the request for a screening opinion it is good practice to always consider if the net GHG impact is likely to result in a significant effect. However, there is relatively little guidance on how to do this during screening. The first challenge is how to determine the likely GHG impact magnitude.
It is unlikely that a quantitative GHG assessment would have been undertaken at screening stage, and there may be limited historic project examples to benchmark against. In addition, past practitioner experience of life-cycle considerations (covering before use and end of life as well as use stage) may be limited. It is ECUS’ experience that the net GHG impact of developments is often unknown at screening stage. Even if the net impact can be qualitatively or quantitatively assessed there are no definitive significance criteria or screening thresholds to compare emissions increases or reductions against.

Given the above, perhaps the most useful starting point is to assume all GHG emissions are significant. This is based in reasoning that although the contribution of any single project’s emissions to climate change may be negligible, the combined GHG emissions from all human activity have been found to be significantly affecting the global climate. This then leads to a focus on minimisation of GHG emissions, rather than quantification and assessment.

At screening stage EIA practitioners at ECUS have been undertaking high level identification of potential GHG sources. Once potential sources are understood we highlight the envisaged mitigation and management measures that could be implemented to minimise impacts. Generally, GHG management measures are developed following an established hierarchy of minimisation actions that include:

1. **Avoid** GHG intensive activities or features, where practicable;
2. **Reduce** embedded GHGs in construction materials and GHG emissions from construction activities;
3. **Reduce** energy requirements and maximise energy efficiencies;
4. **Reduce** the need for unsustainable travel and promote sustainable travel, where applicable;
5. **Replace** carbon intensive energy generation with low carbon energy, if possible; and
6. **Sequester** carbon, if practicable.

The screening of Schedule 2 development can provide the opportunity to get an early design commitment to GHG mitigation and management measures and by including these within the request for a screening opinion, a developer can demonstrate that steps will be taken to minimise, as far as is reasonably practicable, any adverse impacts on GHG emissions. This helps provide the necessary information for the relevant planning authority to determine whether residual significant adverse effects are likely, and ultimately whether Schedule 2 development is EIA development.

We feel the approach of considering GHG emissions during screening, through a focus on minimisation actions (rather than quantification and assessment), helps avoid undue burden. At the same time it encourages GHG consideration at the early planning stages when opportunities for GHG reductions are greatest. As concluded by the Infrastructure Carbon Review ([https://www.gov.uk/government/publications/infrastructure-carbon-review](https://www.gov.uk/government/publications/infrastructure-carbon-review)) – tackling GHG early can reduce cost, drive innovation and contribute to climate change mitigation.

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