



IEMA Webinar:

Considering Greenhouse Gas Emissions in EIA

25 08 2020

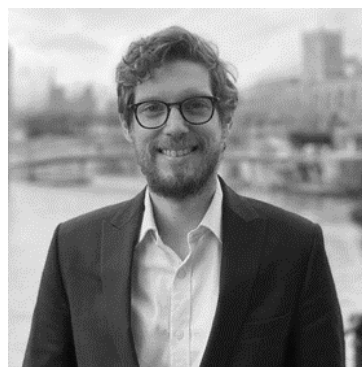
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James Peet (WSP) and George Vergoulas (Arup)



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Webinar slides and recording

This webinar is being recorded. The recording and presentations will be made available for IEMA members on [iema.net](https://www.iema.net) within 48 hours of the webinar.

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Q&A

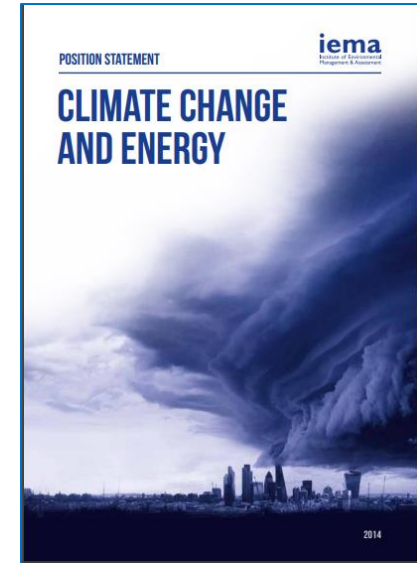
Send in your questions as we go through the session – we'll have plenty of time after the presentation.

iema.net



IEMA's Position Statement - 2014

1. Climate Leadership & professional urgency
2. Policy frameworks and strategic developments to support certainty and confidence
3. Recognition, integration and embedding Climate Change and Energy as central and mainstream business issues
4. Reporting, disclosure and increasing transparency on climate change and energy performance



THE GREENHOUSE GAS MANAGEMENT HIERARCHY

AVOID

- Within all major business decisions investigate options to eliminate GHG emissions
- Potential exists when organisations change, expand, rationalise or move business
- May lead to new business model, alternative operation or new product/service

REDUCE

- Efficient use of energy, vehicles, staff (e.g. energy and fleet management)
- Increased resource efficiency per unit
- Reduced costs and lower total/net energy demand

SUBSTITUTE

- Adopt renewables/low carbon technologies (on site or through vehicle fleet)
- Reduce carbon (GHG) intensity of energy use
- Through suppliers, purchase goods and services with lower embodied emissions

COMPENSATE

- Investigate 'green energy' tariffs and high quality carbon offsets
- Develop a strategy to compensate on residual or 'unavoidable' emissions
- Consider supporting community products (ie both carbon and CSR benefit)

2019 Emergency Declaration – rooted in science

- *“IEMA and its members have been working to transform the world to sustainability....*
- *The 2018 report from the IPCC and 2019 report from IPBES show that the current rate of transition places us on a trajectory that has catastrophic implications for global society and the environment.*
- *Systemic change is required within a very short timeframe.*
- *IEMA therefore declares that there is a climate and environmental emergency and calls upon all organisations to respond with urgency and action.”*

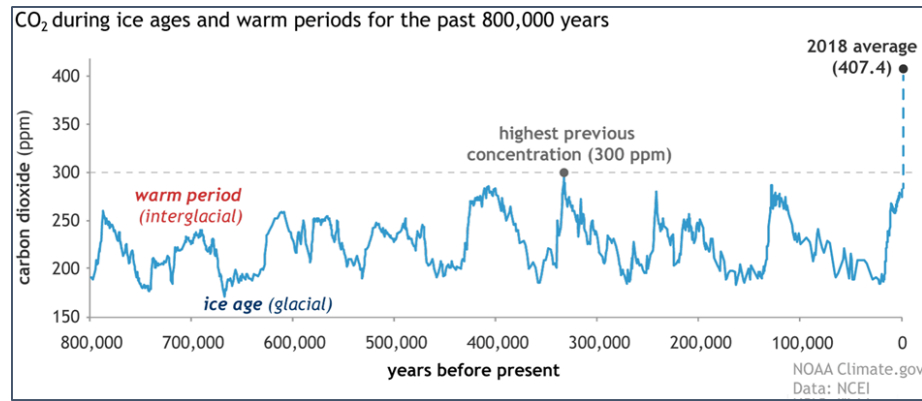


Why are GHG important?

Why are GHG emissions important?

“GHG emissions from all projects 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 EIA topics, e.g. land quality, biodiversity, water scarcity, air quality, etc.”



Why are GHG emissions important?

Public awareness of climate issues and appetite for action has increased significantly over the last few years:

- Youth Climate Strikes
- Extinction Rebellion
- Significant media attention

The Committee on Climate Change (CCC) advised the UK government to revise its 2008 Climate Change Act resulting in the first major economy to set a 'net zero' emissions target.

There is a lot of work to be done. For example, the infrastructure sector accounts for approximately 50% of UK GHG emissions and there's £600b earmarked for further growth and development.

Directive 2014/52/EU was transposed into UK as the 2017 EIA regs

Why are GHG emissions important?

Storms inflict £7.7bn worth of damage on a third of UK property

Here's what you need to know about claiming on your insurance

Kate Hughes Money Editor | @hughesthehack |
Wednesday 19 February 2020 00:00 |



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Climate change disaster is biggest threat to global economy in 2016, say experts

Global warming heads top economists' concerns for first time but large-scale forced migration seen as most likely risk to materialise



almost 900





IEMA Guidance

IEMA Guidance

IEMA Principles Series:

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 PPS1 (CLG 2007 and forthcoming 2010) indicates Government support in this area, stating:

¹Local 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:

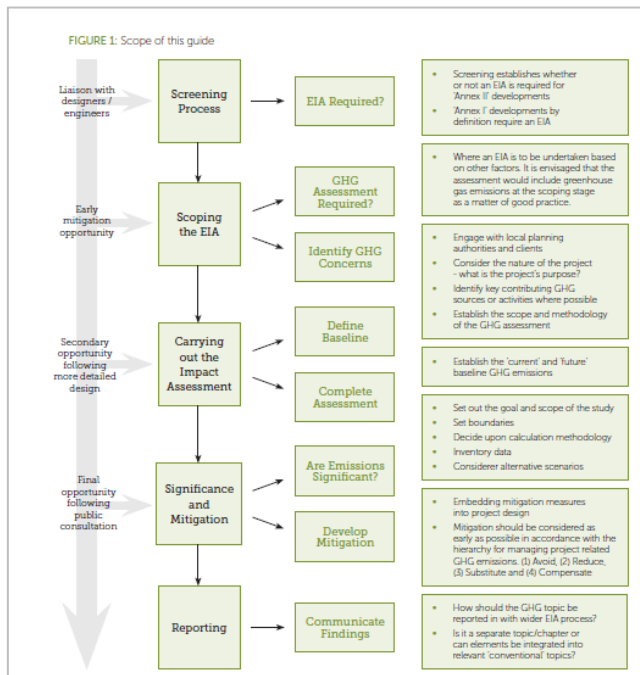
- The GHG emissions from all projects will contribute to climate change; the largest inter-related cumulative environmental effect.
- The consequences of a changing climate have the potential to lead to significant environmental effects on all topics in the EIA Directive – e.g. Population, Fauna, Soil, 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.

Environmental Impact
Assessment Guide to:

Assessing Greenhouse Gas Emissions and Evaluating their Significance



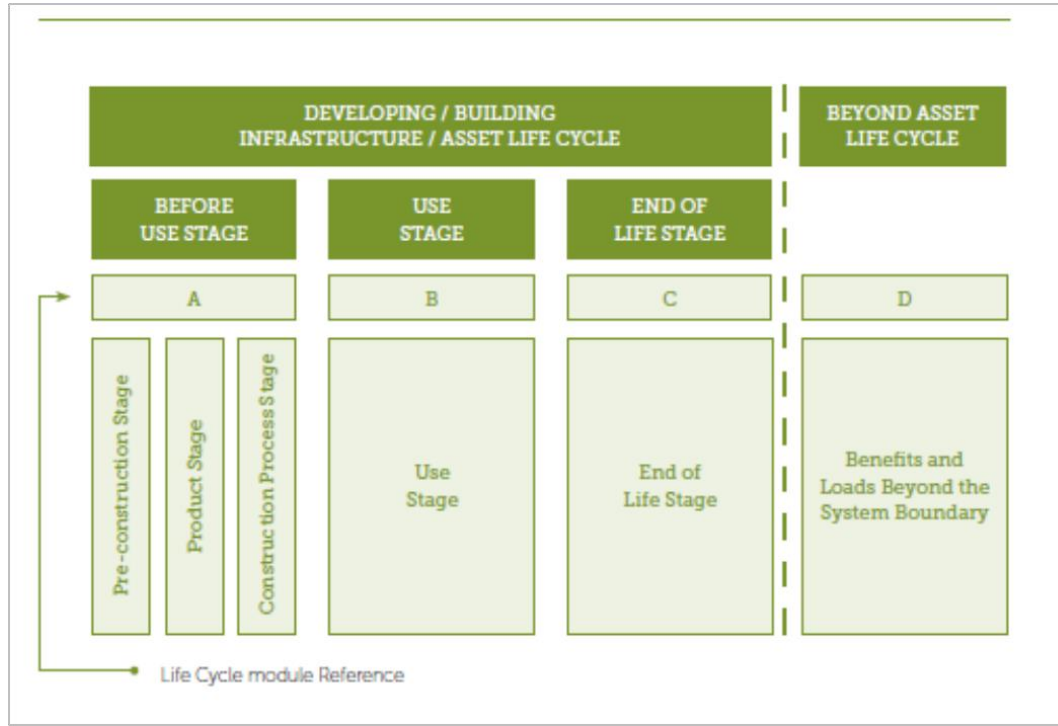
IEMA Guidance – the scope



IEMA Guidance – key points

- A ‘good practice’ approach is advocated where GHG emissions are always considered and reported but at varying degrees of detail depending on the EIA project
- A focus on proportionate assessment is also important in avoiding undue burden
- Mitigation ideally should be embedded throughout the project life

IEMA Guidance – LCA Approach



IEMA Guidance – significance

“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 significant”

Appendix C

Significance of GHG emissions

C1 Considering the significance of GHG emissions

GENERIC PROCESSES

1. Sacramento Metropolitan Air Quality Management District²⁸

Established a significance threshold of 1,100 metric tonnes (MTCO₂e) per year. This is based on capturing 90% of the development projects across the state, ensuring that small projects, which generally have low emission levels, would not be considered significant. The small projects will still be required to reduce their GHG emissions because they must comply with state and local regulations that require energy efficiency and transport infrastructure improvements.

2. California Air Pollution Control Officers Association²⁹

- GHG impacts are considered to be exclusively cumulative impacts because no single project makes a significant contribution to global climate change.
- Assessment of significance is based on whether a project's GHG emissions cumulatively represent a considerable contribution to the global atmosphere.

3. California Environmental Quality Act (CEQA) guidelines

According to Appendix G of the CEQA Guidelines, a project would have a significant effect associated with GHGs if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant and/or cumulative impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

4. IEMA principles on climate change mitigation and EA

The IEMA principles document provides a section on how to assess GHG emissions in EA and states:

- "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 impact, which may be positive or negative."
- "Where GHG emissions cannot be avoided, the EA should aim to reduce the residual significance of a project's emissions at all stages."
- "Where GHG emissions remain significant, but cannot be further reduced, approaches to compensate the project's remaining emissions should be considered."

²⁸ Sacramento Metropolitan Air Quality Management District, 2014, Justification for Greenhouse Gas Emissions Threshold of Significance.
²⁹ CDFG 2008 CEQA and Climate Change: Issuance and Adjudicatory Guidelines for Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.



The Current Situation

Current Situation

Progress has been made since 2017 resulting in a more consistent approach to GHG assessment for EIA because:

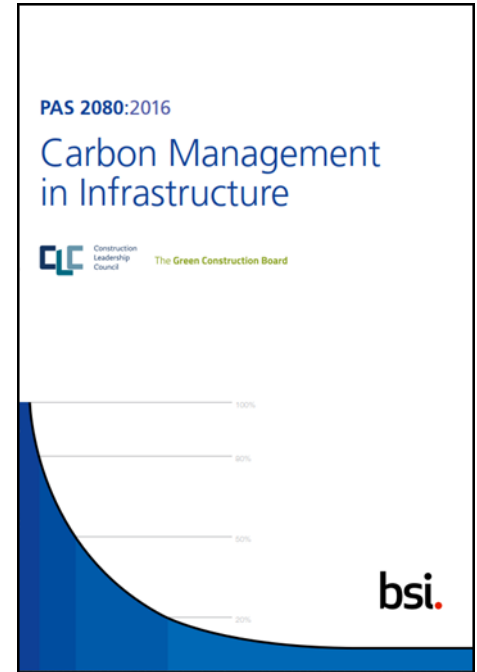
1. Improved Guidance (IEMA etc)
2. Increased awareness of best practice GHG assessment methods by Developers, EIA practitioners and specialists.
3. Increased scrutiny of the climate change element of the planning process

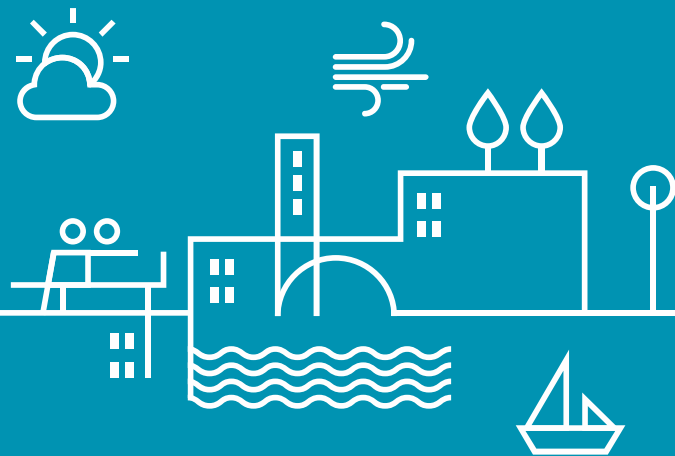


Current Situation

However there are some outstanding areas that could be improved:

- Is a GHG assessment always needed?
- Tailoring the GHG assessment to the project scale / impact
- Missed opportunities for mitigation – is EIA the right ‘vehicle’?
- Assigning significance is still mainly based on professional judgement
- There is no right answer when applying the net zero test
- Is EIA is not providing a clear steer on what a good project looks like
- Inconsistent application of guidance and methodologies





Q&A Session

20 mins with panel



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Closing remarks

