Assessing Greenhouse Gas Emissions and Evaluating their Significance

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Background and driver

• On 16 May 2014 the amended EU EIA directive became law in the UK (2014/52/EU)
• Statutory Instrument 2017 No. 571 The Town and Country Planning: Environmental Impact Assessment Regulations
Content

- EIA structure
- 30 pages
- Not overly technical
- Reference rich
- Diagrams
- Case studies
- Advisory tone

it’s a guidance paper
The EIA and project relationship

- Ability to influence whole life cycle carbon
- Accuracy of assessment

Work Stages of Infrastructure Delivery:
- Strategy
- Brief
- Concept
- Definition
- Design
- Construction and Commissioning
- Handover and Closeout
- Operation
- End of Life

Procurement
Maintenance
Use of the asset
The EIA and project relationship
Scoping – key points

• A ‘good practice’ approach is advocated where GHG emissions are always considered and reported but at varying degrees of detail of approach depending on the project

• A focus on proportionate assessment is important in avoiding undue burden

• Mitigation should be embedded as a principle throughout the project life
GHG emissions assessment method

- Defining study goal and scope
- Study boundaries
- Study period
- Inclusions and cut off rules
- Quantification methodology
- Uncertainty
- Data quality

Define goal, scope and assumptions → Set study boundary → Select calculation methodology/s → Collect and access data → Calculate GHG emissions inventories
Adopting a life cycle approach
Significance

• The GHG emissions from all projects will contribute to climate change; the largest inter-related cumulative environmental effect

• 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

“An EIA should ensure the project addresses GHG emissions occurrence by taking mitigating action”

Summary thoughts

- All GHG emissions contribute to climate change
- Always scope in GHG emissions as good practice
- Flexibility: a detailed assessment may not always be necessary
- Early stakeholder engagement is encouraged to maximise mitigation

Why carbon emissions are relevant to the selection, design, procurement, and operation of built environment:
- Cut cost
- Win financing
- Co-benefits:
  - efficiency (e.g. less materials)
  - resilience (e.g. energy security)
  - environment (e.g. air quality)
  - + more…. 
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