

EIA's Role in Net Zero and Nature-
Based Solutions

Review of Greenhouse Gas Emissions in EIA Processes

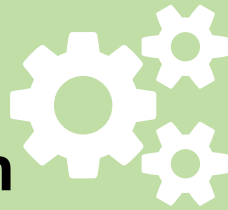
Prepared by LUC

Joanna Wright MA MSc FIEMA
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Review of Greenhouse Gas Emissions in EIA

Content

Background to research



Methodology



Research aims



Key research findings



The **Climate Change (Emissions Reduction Targets) (Scotland) Bill 2019** set a target for reducing Scotland's emissions to net-zero by 2045

Targets must be credible and **evidence based**, which requires a sound understanding of likely GHG emissions arising from national, strategic and project level decision-making

Proposed amendment requiring any Bill or SI laid before Parliament to be accompanied by **a document estimating annual GHG emissions and contribution to meeting reduction targets**

....SEA? EIA?

Research Aims

To review the current practice of assessing GHG emissions as part of the SEA and EIA processes, focusing on:

- methodologies used to assess GHG emissions impacts
- the level of detail included in these assessments
- how these emissions are reported and communicated

<https://www.climateexchange.org.uk/>



Review of Greenhouse Gas Emissions in EIA

Methodology

Review of relevant guidance

Stakeholder engagement

Review and analysis of ten EIA case studies

Reporting



Review of Greenhouse Gas Emissions in EIA

Guidance and Engagement

IEMA guidance

Research steering group

UK-wide EIA practitioners

IEMA and IAIA

...lot of interest in research findings

IEMA Transforming the world
to sustainability

ARUP

**Environmental Impact
Assessment Guide to:**

Assessing Greenhouse
Gas Emissions and
Evaluating their
Significance



Case Study Examples

Range of consenting regimes and development types common in Scotland

- Two wind farms
- Three road construction projects
- One mining project
- One forestry development
- One marine infrastructure development
- One mixed use development
- One recreational development

Key Findings: Quantification of Emissions

Two quantified baseline GHG emissions (at a national level)

Seven included a quantified assessment of construction phase emissions

Six included some degree of quantification of operational emissions

Two quantified emissions during the decommissioning phase

...and qualitative approaches



Key Findings: Use of Supporting Tools

Majority used a standard tool to calculate emissions

Quality of the output is reliant on original data and any assumptions

Assumptions may be considerable due to availability of data at early stages

....no evidence of assumptions being queried



Key Findings: Reporting and Communication

Typically presented in one of two ways:

- within another EIA topic area, e.g. direct/indirect emissions included in the air quality chapter and/or embodied emissions in a materials chapter
- within a separate standalone climate change chapter or technical appendix

Relevant data may be reported outside the EIA documents



Policy and Practice: Reasons to be 'Cheerful'

Consideration of GHG emissions only became a formal requirement in 2017, there is evidence of good practice and, importantly, there are supporting tools with the potential for wider applicability

The declaration of climate emergencies/ commitments to achieving net zero emissions, including through local authority level actions should lead to an increase in the collection of relevant data to inform assessment processes

Policy and Practice: Additional Challenges

Can you make a direct connection between Bills/SIs and individual projects?

Could the relationship between SEA and EIA result in overlap/double-counting?

EIA only intentionally applies to a small proportion of planning applications (or similar) so need to capture the rest...

Thank you!

joanna.wright@landuse.co.uk