

# ICE policy position statement: Reforming the Green Book to achieve better outcomes from infrastructure investment

## Executive summary

In October, ICE published a discussion paper to ask our members and other interested stakeholders their views around Green Book reform.<sup>1</sup> The consultation questions focused on how to better reflect strategic national objectives in the Green Book, such as the 2050 net-zero greenhouse gas emissions target; what the most effective methodological approach would be to ensure such objectives are considered; and how to achieve greater consistency in Green Book application across government.

The consultation was comprised of a range of evidence-gathering activities, including interviews and written submissions, as well as a roundtable with senior infrastructure stakeholders and HM Treasury officials. In total, evidence was received from 42 stakeholders.

This policy position draws on the evidence received, alongside existing ICE policy, to make recommendations on Green Book reform around the areas of application, reflecting strategic national objectives, improving local capability, and better incorporating net zero into project appraisal and evaluation. This policy position has also incorporated the views and ongoing work of the Carbon Project, an ICE-led, industry-wide response that brings together leaders and experts across the infrastructure sector to tackle the challenges that are slowing progress towards net zero.<sup>2</sup>

In overview, ICE believes that the Green Book itself provides the correct tools to address strategic national objectives, but requires better application, as well as guidance and clarity on the detailed policy context that it operates in from the government.

### Recommendations

- 1. Focus on improving the application of the existing appraisal model, not revolutionary change:** Reform of the Green Book should relate to improving the application of the Five Case Model rather than drastically changing the appraisal process and practice. ICE has previously called for a standardised scorecard to be developed to prioritise, identify and weight non-financial outcomes for major projects. We would welcome such an approach in the Green Book project appraisal.
- 2. Government departments can use the Green Book best when targeted outcomes are clear – clarity is needed on the hard targets that sit behind national objectives:** In order for strategic objectives to be better addressed through the Green Book, additional clarity and detail are required from the government on specific interim targets towards net zero, both over time and at a spatial level, alongside a definition of 'levelling up' and its specific goals.
- 3. Regional investment should be judged on both national *and* regional priorities – reform should strengthen the capability for developing subnational evidence bases:** It is important for the Green Book's strategic narrative to align with specific regional requirements and not rely on a single set of national objectives.

<sup>1</sup> ICE (2020) [Reforming the Green Book to Achieve Better Outcomes from Infrastructure Investment: ICE Discussion Paper](#)

<sup>2</sup> ICE (2020) [The Carbon Project: Towards Net Zero for Infrastructure](#)

This can allow for balanced decisions and trade-offs to be made regionally, including on social value. We suggest that this is backed up with greater devolution of decision-making and funding regarding infrastructure in order to improve capability and pace, encouraging more developed evidence bases at regional levels.

- 4. Achieving the net-zero target to avert a climate emergency is vital and should be the bright green thread woven through any refresh of the Green Book:** ICE believes net zero should be appraised through the existing Five Case Model, providing the net-zero target is explicitly and clearly stated as a key objective and subsequently reinforced in the methodologies and guidance in the Five Case Model. In this way, net-zero thinking is woven as a bright green thread throughout each of the case models, rather than as a separate model entirely.

## Improving application of the Green Book

There is little wrong with the Green Book as a tool to allocate resource on the basis of scheme performance. It provides a robust means to adequately take account of major policy issues, while the significant strides in developing the Five Case Model to allow the quantification of policy issues such as decarbonisation, the environment and social value are to be commended.

The success of the Green Book has been in its ability to provide guidance and a framework to draw out the relevant evidence in a transparent, objective and adaptable manner. However, while the Green Book is technically adequate, it is not behaviourally so and is therefore not always used to deliver the right outcomes from infrastructure investment.

In a number of instances, there is a gap between what stakeholders and those outside the appraisal process want infrastructure to do and what the current appraisal process generates as an output.

Reform of the Green Book should relate to improving the application of the Five Case Model rather than drastically changing the appraisal process and practice.

One Green Book principle (Para 1.6) is that '*guidance should be applied proportionately. The resources and effort employed should be related to the scale of the proposals under consideration.*'<sup>3</sup>

Direct financial outlays may – at least sometimes – be relatively easy to assess. More difficult elements to assess include the distributional, environmental and social effects. Under the current advice that 'guidance should be applied proportionately', these elements may not be interrogated in the necessary detail, even for larger projects. These potentially important benefits or costs should not be ignored simply because they are disproportionately difficult to assess. A better approach would be to develop simplified, standard methods of assessment applicable to all projects under a certain expenditure threshold. This would entail some sacrifice of accuracy but would ensure a more comprehensive assessment.

ICE has previously called for a standardised scorecard to be developed to prioritise, identify and weight non-financial outcomes for major projects.<sup>4</sup> We would welcome such an approach in the Green Book to assist those writing business cases, notably as it would support a strategic case and not just a financial evaluation. It is also important for the application of the Five Case Model to be aligned with Project Speed, the renewed agenda by the current government to deliver infrastructure better, faster and greener.

## Clarity of strategic national objectives

The Green Book is designed to appraise projects and programmes based on clear, measurable and quantifiable metrics. However, the success of strategic national objectives, such as 'levelling up' and net zero, is challenging to measure as successful outcomes have not been defined and overarching strategies remain undeveloped.

<sup>3</sup> HM Treasury (2018) [The Green Book](#)

<sup>4</sup> ICE (2020) [Covid-19 and the New Normal for Infrastructure Systems – Next Steps](#)

Nascent policy areas must be distilled into clear policies that allow the strategic cases to be prioritised properly. The government must decide what its priorities are in terms of infrastructure spend and the environment and what levers it is willing to pull to secure these priorities. The forthcoming National Infrastructure Strategy should provide clarity in this regard, while it is evident that a net-zero infrastructure plan must also be developed.<sup>5</sup>

In order for those strategic objectives to be better addressed through the Green Book, additional clarity and detail is required from the government on specific interim targets towards net zero, both over time and at a spatial level, alongside a definition of 'levelling up' and its specific goals.

## Improving capability at a local level

A reliance on a single set of national objectives will favour infrastructure that benefits the fastest growing areas and their connections at the expense of more local spend, or spend targeted at generating value in less well-performing areas.

It is therefore important for the Green Book's strategic narrative to align with specific regional requirements, including on social value. This allows for projects to be appraised against strategic national or regional environmental objectives, but also allows for balanced decisions and trade-offs to be made with other factors.

The relatively limited devolution of powers means that decisions on infrastructure investment cannot be taken locally all the time, or may involve weaknesses in preparing the strategic case due to a lack of appropriate resourcing and training. For example, the decision on which large project to pursue in the north of the country could be made by Whitehall-based ministers under the broad Green Book framework, rather than by more locally based decision-makers. We suggest that the updated Green Book should facilitate greater devolution of decision-making and funding regarding infrastructure in order to improve capability and pace, encouraging more developed evidence bases at regional levels.<sup>6</sup>

## Net zero and the climate emergency

The UK Government has legislated to cut greenhouse gas emissions to net zero by 2050, a response to the report by the Intergovernmental Panel on Climate Change (IPCC) on limiting global warming to 1.5°C to avoid catastrophic climate change.<sup>7</sup> The Green Book was most recently updated in early 2018, before the net-zero target was legislated.

As outlined in ICE's *State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target* report, net zero must have greater prominence in the Green Book and appraisal process if the 2050 target is to be met and a climate emergency averted.<sup>8</sup>

ICE's initial Green Book discussion paper<sup>9</sup> raised the possibility of a separate, sixth net-zero case being added to the existing Five Case Model to ensure net zero is considered as a core part of project appraisal.

A separate case could be considered for the following reasons:

- The urgency and the technical and accounting requirements of greenhouse gas emission control mean a traditional pricing approach to carbon in the economic case will not achieve strategic transformation quickly or strongly enough.
- A separate case would force practitioners to consider net zero at the outset (i.e. instigate behavioural change).

<sup>5</sup> ICE (2020) [State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target](#)

<sup>6</sup> ICE (2020) [ICE Submission to Budget 2020](#)

<sup>7</sup> Department for Business, Energy and Industrial Strategy (2019) [UK Becomes First Major Economy to Pass Net Zero Emissions Law](#)

<sup>8</sup> ICE (2020) [State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target](#)

<sup>9</sup> ICE (2020) [Reforming the Green Book to Achieve Better Outcomes from Infrastructure Investment: ICE Discussion Paper](#)

- The net-zero challenge has a very different timeframe to that of infrastructure projects and programmes; although action is required in the short term, the benefits of emissions reduction could be measured in millennia.

However, the existing Five Case Model is capable of effectively appraising projects against the 2050 net-zero target. Introducing a separate case could introduce additional risks and challenges:

- Having a separate case risks considering greenhouse gas emissions in isolation.
- A separate case could lead to duplication of costs and benefits and reduce clarity, with net-zero challenges and benefits appearing in multiple locations.
- Steps have been made in developing the Five Case Model to allow the quantification of carbon emissions.
- The strategic case assumes that, on top of existing legislation, there are other levels of strategic objectives that projects and programmes will align to. While at present there is a vacuum in terms of the detail on reaching net zero, once in place, it can be more effectively appraised against.

ICE believes the balance of advantage is to consider net zero through the existing Five Case Model, and that it is not necessary to introduce a separate case focusing solely on net zero – providing the net-zero target and need to avoid a climate emergency are explicitly and clearly stated as key objectives and subsequently reinforced in the methodologies and guidance in the Five Case Model. In this way, net-zero thinking is woven as a bright green thread throughout each of the case models, rather than as a separate model entirely.

In order to promote behavioural change, a clearer narrative in the Green Book is required up front so that every step has a strong driver towards carbon reduction, environmental net gain and climate resilience. It is more important than ever that investments demonstrably align with delivering net zero or explain very clearly why they do not.

## About ICE

Established in 1818 and with over 95,000 members worldwide, the Institution of Civil Engineers exists to deliver insights on infrastructure for societal benefit, using the professional engineering knowledge of our global membership.

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