

# What's new in the 2020 update to the Green Book?

30 November 2020

## 1 Executive summary

Her Majesty's Treasury (HMT) has reviewed the Green Book,<sup>1</sup> which was last updated in 2018, to assess whether any changes need to be made. This note provides a high-level summary of HMT's findings from this review, as well as any changes that it caused.

The most interesting and material changes are the higher emphasis on the strategic case in the business case (relative to the benefit-to-cost ratio (BCR)); the increased importance of place-based analysis to help drive the 'levelling-up' agenda; and the announcement that HMT will commission a review into whether a new environmental social discount rate should be introduced.

The implications for proposed schemes are:

1. applicants will need to place greater effort on creating sound strategic cases;
2. applicants will potentially need to be less concerned about the precise value of the BCR when there is a strong strategic case to support the intervention they are trying to secure funding for;
3. applicants have been provided with some additional 'off-the-shelf' methods such as employment multipliers to make their impact assessments more location-specific, although there may be a need to adapt these to allow for local circumstances;
4. organisations concerned with decarbonisation may want to consider engaging with the upcoming government review into a new environmental social discount rate, because if this is lower than the current social discount rate, it will be easier for environmental interventions to secure government approval.

<sup>1</sup> HMT (2020), 'Green Book Review 2020: Findings and response'. Available from:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/937700/Green\\_Book\\_Review\\_final\\_report\\_241120v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937700/Green_Book_Review_final_report_241120v2.pdf)

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The remainder of this note is structured as follows:

- section 2 explains how HMT has increased the focus on the strategic elements of the economic case;
- section 3 provides more details on place-based analysis;
- section 4 explains how the update has addressed environmental projects;
- section 5 describes the new content in the Green Book on so-called 'transformational' interventions;
- section 6 explains the changes that the government is planning to make internally to the business case appraisals process.

## 2 Increased focus on the strategic aspects of the economic case

HMT found that appraisal was often heavily focused on the BCR, with many applicants for government funding believing that the government (and HMT in particular) puts excessive weight on the BCR in driving decision making. HMT explained that this was often the result of applicants performing low-quality strategic cases, which meant that appraisers could only make decisions based on the BCR. To remedy this, the new edition of the Green Book places greater emphasis on making a strong strategic case that logically ties the shortlisted and longlisted options to government objectives. This is important because stronger strategic cases will allow appraisers to assess business cases on the basis of factors other than the BCR.

All strategic cases will now have to explain which government strategic objectives are supported by an intervention, which ones conflict with it, and whether the intervention could be constrained by any legal limits on government action.

When establishing the strategic objectives that are relevant to a particular intervention, applicants will have to first explain where they fit in a four-tier intervention hierarchy. The lowest level of this hierarchy contains individual projects. Each project is part of a wider programme of projects which in turn are part of a strategic portfolio. The strategic portfolios then feed into a wider strategic objective. Table 2.1 provides an example of such a hierarchy, in the case of interventions aimed at meeting net zero carbon emissions by 2050.

**Table 2.1 Illustrative hierarchy of objectives for interventions to meet net zero carbon emissions by 2050**

Element in hierarchy	Example
Strategic objective	Net zero greenhouse gas emissions in 2050
Strategic portfolio	Reducing the emissions intensity of the UK power sector
Programme	Increasing offshore wind capacity
Project	A new offshore wind farm to deliver X GW of capacity by 2030

Source: HMT (2020), 'Green Book Review 2020: Findings and response', p. 12. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/937700/Green\\_Book\\_Review\\_final\\_report\\_241120v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937700/Green_Book_Review_final_report_241120v2.pdf)

The purpose of establishing where a particular intervention fits in such a hierarchy is to help identify objectives that are relevant to the intervention at hand. For example, if the intervention is an individual project then the objectives are likely to be more limited than if the intervention is a strategic

portfolio. To facilitate the setting of clear objectives, HMT will issue a project scorecard in 2021, with trials of this scorecard starting in 2020.

The commitment to emphasising the strategic element of the business case is made very clear in the following quote from HMT, which states that reviewers:<sup>2</sup>

should reject any business case that does not include a clear set of objectives for the intervention and an objectively based logical process of change setting out how these objectives will be delivered. Conversely, reviewers should be open to a business cases for projects with a low BCR if, compared to options that have been appraised, that option is the best value for money way of delivering an intervention that is necessary for the achievement of the intervention's objectives.

### 3 Place-based analysis

The importance of including locational effects is something that has, again, been emphasised by many practitioners, including Oxera. The government has been increasingly focused on the regional impacts of policy-making, in particular under the 'levelling-up' agenda, which aims to help poorer regions in the UK 'catch up' with the rest of the country.

The new edition of the Green Book contains new guidance on locational effects, which it calls 'place-based analysis'.<sup>3</sup> This advice is more detailed than that which was provided in the previous edition of the Green Book. It explains that if an intervention is located primarily in a particular area, the benefits of the intervention should by default be made specific to that area, with analysis for the UK presented separately. Even if place-based effects are not a primary aim of the intervention, the appraisal should either quantify them or explain why they are not relevant.

The Green Book also introduces a new method for calculating regionally differentiated employment impacts of interventions.<sup>4</sup> It does so through the introduction of employment multipliers that are to be used when assessing the employment effects of interventions that are focused on one location, and therefore have potential (positive or negative) effects on employment in other regions.

The new edition of the Green Book also encourages the application of distributional weights (i.e. to increase the impact of benefits that accrue to poorer people and reduce the impact of those that accrue to wealthier people). However, these should only be used **both** when a policy has significant distributional effects **and** where there is high confidence about the types of groups that will be affected.

Proposals must also either assess the impact on equality (in accordance with the Equality Act 2010) or on families, or explain why the proposal in question is not relevant to these areas.

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<sup>2</sup> HMT (2020), 'Green Book Review 2020: Findings and response', p. 11. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/937700/Green\\_Book\\_Review\\_final\\_report\\_241120v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937700/Green_Book_Review_final_report_241120v2.pdf)

<sup>3</sup> HMT (2020), 'The Green Book', Annex 2. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/938046/The\\_Green\\_Book\\_2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf)

<sup>4</sup> HMT (2020), 'The Green Book', pp. 94–6. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/938046/The\\_Green\\_Book\\_2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf)

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## 4 Appraisal of environmental impacts

Environmental impacts have long been a part of the appraisal process, but have become increasingly important in recent years: particularly the extent of carbon emissions. Where policy development does not take adequate account of environmental policy, it risks being ruled illegal—for example, the Court of Appeal overturning the Airports National Policy Statement on the basis that it was unlawful on environmental grounds.<sup>5</sup>

The new version of the Green Book highlights and clarifies some of the tools used for environmental impact assessment. It does this by building on the environmental content of the 2018 edition of the Green Book and Defra's guidance on the natural capital approach.<sup>6</sup>

Where environmental issues are not the core of a project, the economic case should consider whether the project is helpful from an environmental perspective, and also whether environmental issues constrain it in any way (e.g. if the project has a high carbon footprint, this would need to be reported).

Relatively little has changed thus far from a methodological perspective, but HMT has said it will review whether the social discount rate, which is currently set in line with the level suggested in a 2002 report by Oxera,<sup>7</sup> could be adjusted in instances where projects have significant environmental effects.<sup>8</sup> It has therefore committed to an expert review into the application of the social discount rate for environmental projects. While at this stage it is unclear what form this expert review will take, it is likely to be a report by academics who specialise in discounting.

For those who are not familiar with social discount rates, Oxera explained the underlying logic behind them in a recent article.<sup>9</sup>

## 5 Assessing transformational impacts

HMT has issued new guidance for assessing transformational impacts because the old Green Book methodology was potentially understating the benefits associated with transformational projects. This is an issue that has been widely raised by practitioners, including by Oxera.

The new edition of the Green Book contains a new annex specifically dedicated to transformational interventions. It defines these interventions as ones where there is:<sup>10</sup>

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<sup>5</sup> Oxera (2020), 'The Heathrow judgment: implications for new infrastructure schemes', March. Available from: <https://www.oxera.com/wp-content/uploads/2020/03/The-Heathrow-judgment.pdf>

<sup>6</sup> For more details, see Department for Environment, Food and Rural Affairs (2020), 'Enabling a Natural Capital Approach: Guidance', March. Available from: <https://www.gov.uk/guidance/enabling-a-natural-capital-approach-enca>

<sup>7</sup> For the original report, see Oxera (2002), 'A social time preference rate for use in long-term discounting', December. Available from: <https://www.oxera.com/wp-content/uploads/2018/03/Social-time-preference-rate-for-use-in-long-term-discounting.pdf>

<sup>8</sup> HMT (2020), 'Green Book Review 2020: Findings and response', p. 6. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/937700/Green\\_Book\\_Review\\_final\\_report\\_241120v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937700/Green_Book_Review_final_report_241120v2.pdf)

<sup>9</sup> See Oxera (2020), 'A formula for success: reviewing the social discount rate', *Agenda in focus*, September. Available from: <https://www.oxera.com/agenda/a-formula-for-success-reviewing-the-social-discount-rate/>

<sup>10</sup> HMT (2020), 'The Green Book', p. 127. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/938046/The\\_Green\\_Book\\_2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf)

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a radical permanent qualitative change in the subject being transformed, so that the subject when transformed has very different properties and behaves or operates in a different way.

Relatively few interventions will meet the above definition, and the Green Book explicitly talks about portfolios rather than programmes and projects as being at the right scale to be classed as transformational.

The guidance does not provide much detail on how transformational changes should be appraised, other than stating that real options analysis and scenario analysis could be used. It also provides a link to an academic paper in the *European Journal of Public Health* that adopted real options and scenario analysis,<sup>11</sup> implying that it approves of the approach adopted therein.

## **6 Changes in government appraisal**

HMT has accepted that, in order to implement the findings of the review, it will need to adjust the internal government process for business case development. It has therefore committed to the following changes.

- Senior Responsible Officers (SROs) will now be supported in the appraisal of interventions by individuals with a strong understanding of policy aims in a particular area in order to allow for greater focus to be placed on the strategic case. This will help reduce any bias towards overt focus on the BCRs of different interventions.
- New training will be introduced for government reviewers in order to implement the findings of this review of the Green Book (summarised above). In particular, this will help appraisers focus more on the strategic case and less on the BCR.
- Government reviewers of business cases will provide feedback to those (inside or outside government) who are producing business cases on the business case that they have submitted.
- All government departments and agencies will have to publish the costs and benefits of large infrastructure projects. There will be new requirements for business case publication and greater transparency in the National Infrastructure Strategy.

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<sup>11</sup> HMT (2020), 'The Green Book', p. 127. Available from:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/938046/The\\_Green\\_Book\\_2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf)

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