The UK’s framework for green policy appraisal

Edward Hadley, HM Treasury
1. The UK’s framework for decarbonisation
A robust legal and institutional framework
That takes into account the costs and benefits of a shift to a clean economy.
2. The Green Book: the UK’s framework for policy appraisal and evaluation
The Green Book

- The Green Book is a flexible tool that can account for the costs and benefits of all policies – adaptation and mitigation

- Pioneering in its incorporation of environmental impacts

- Allows us to meet set objectives most cost effectively
Used to inform impact assessments

### Summary: Analysis & Evidence
Policy Option 3

**Description:** A "CCC recommended" budget (1,725 MtCO₂e), reflecting 2015 advice, current accounting basis

**FULL ECONOMIC ASSESSMENT**

<table>
<thead>
<tr>
<th>Price Base Year 2015</th>
<th>PV Base Year 2016</th>
<th>Time Period Years 5</th>
<th>Cost Benefit (Present Value (PV) (£m))</th>
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<tr>
<td></td>
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<td>Low: -£14,500</td>
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<td>High: £28,800</td>
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<td>Best Estimate: £5,500</td>
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#### COSTS (£m)

- **Total Transition (Constant Price)**
  - Low: £0
  - High: £0
  - Best Estimate: £0

- **Average Annual (excl. Transition) (Constant Price)**
  - Low: £7,400
  - High: £16,300
  - Best Estimate: £11,700

- **Total Cost (Present Value)**
  - Low: £22,600
  - High: £50,000
  - Best Estimate: £35,900

**Description and scale of key monetised costs by ‘main affected groups’**

Costs captured are the illustrative static amortised capital, finance, and hidden costs; together with in-year increases in operating and maintenance costs over 2028-2032 of delivering the required non-traded sector emissions reductions (£31.2bn). There are additional costs associated with rebound effects in transport, increased congestion (£4.7bn).

**Other key non-monetised costs by ‘main affected groups’**

Policy costs, including administrative costs and additional costs of overcoming barriers to delivery of measures, are not captured as the portfolio of policies to deliver this budget level is unknown at this stage. Impacts on the overall cost of meeting the UK’s 2050 target are also not captured. Costs attributable outside the fifth carbon budget period are not included.

#### BENEFITS (£m)

- **Total Transition (Constant Price)**
  - Low: £0
  - High: £0
  - Best Estimate: £0

- **Average Annual (excl. Transition) (Constant Price)**
  - Low: £11,200
  - High: £16,400
  - Best Estimate: £13,300

- **Total Benefit (Present Value)**
  - Low: £35,500
  - High: £51,400
  - Best Estimate: £41,400

**Description and scale of key monetised benefits by ‘main affected groups’**

There are benefits from a reduction in the cost of energy consumption, additional space heating in the domestic buildings sector (£23.6bn), and GHG impacts (£15.5bn). Smaller benefits include impacts on air and noise quality, as well as improvements in natural capital primarily from the amenity value of afforestation (£2.3bn).

**Other key non-monetised benefits by ‘main affected groups’**

Impacts on natural capital are only included where evidence is available. Benefits outside the fifth carbon budget period are not included.
And includes a (‘target consistent’) price on carbon
3. Putting theory into practice
Embedding good practice across government

All business cases need to be green book compliant

Assessment of climate impacts when setting budgets

Regular scrutiny by parliamentary committees, National Audit Office etc.
The five case model

- Strategic case
- Economic case
- Financial case
- Management case
- Commercial case

Five case model
Do CBAs give the ‘right’ answer?

Good value for money?
Conclusions on the UK framework

1. Combines clarity in its objectives with flexibility of implementation

2. The Green Book is about informed policy making, rather than political choices

3. Informs rather than dictates policy
Annexes
Annex

Views on existence, causes and consequences of climate change, by age

- Proportion saying climate change is definitely/probably happening
- Proportion saying climate change is entirely/mainly caused by human activity
- Proportion extremely/very worried about climate change
Emissions reductions in the Central Scenario and to 2050

Source: CCC analysis.
Annex