

# Guidance

## Impact Assessment Guidance

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This document is an update to our previous impact assessment (IA) guidance, published in October 2016. The main updates pertain to our approach to sustainability and distributional assessments.<sup>1</sup> We have developed frameworks that provide additional detail for analysts so that we can improve transparency and consistency in how we account for decarbonisation and impacts of our policies on consumers. **We will periodically review this guidance to ensure that it remains fit for purpose. As such, we welcome comments you may have on it, including the distributional and decarbonisation frameworks.**

When we make decisions, we must do so in a way that best protects the interests of existing and future consumers. This includes balancing the benefits of any action we take against the costs that may arise because of those requirements. IAs play an important role in Ofgem’s decision-making process by providing a clear and structured way to set out and assess the impacts of important policy proposals on consumers, industry participants, society and the environment. This document sets out our criteria for deciding when to undertake an IA and the approach that we will

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<sup>1</sup> Ofgem (July 2019) ‘Strategic Narrative 2019-23’  
<https://www.ofgem.gov.uk/system/files/docs/2019/07/our-strategic-narrative-2019-23.pdf>

typically use. It reflects best practice and ensures that our approach to compiling the evidence that underpins our decisions is proportionate, consistent and transparent.

We recognise we need to be ambitious to deliver against our objectives and priorities. This updated guidance will help us meet that aim in a considered and evidence-based way, allowing timely decision-making and avoiding undue delays to changes that may benefit consumers. In terms of application, it does not impact on decisions we have previously taken, or any decisions that we are required to make in order to implement decisions already taken (e.g. linked decisions on code modifications being raised by industry following a direction by Ofgem).

Where we have reached a minded to decision, where proportionate and practical, we will endeavour to take account of any material changes that would arise from the application of this updated guidance as appropriate to ensure our final decision is robust. In any future IAs that are not based on this updated guidance, we will explain why.

The guidance relates to our general duty to undertake IAs for proposals that we consider “important” within the meaning of section 5A (s.5A) of the Utilities Act 2000, and those we choose to undertake as good practice. It does not apply to specific assessment requirements (legislative or otherwise) which may occasionally arise as a result of Ofgem’s work.

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## Executive Summary

As a regulator making long-term decisions that affect consumers across Great Britain, we have to assess the trade-offs between different groups when making policy decisions. We are also faced with policy trade-offs, such as how to support decarbonisation in a way that is fair in terms of benefits and costs incurred by both current and future customers. Our impact assessments (IAs) help us to identify what is best to do in different situations.

Our guidance on our approach to conducting IAs addresses those matters to which the Authority<sup>2</sup> must have regard in reaching its decisions. It reflects best practice and ensures that our approach to developing the evidence underpinning our decision-making continues to be proportionate, consistent and transparent.

Since December 2003, we have had a duty to either carry out IAs for proposals that we consider important within the meaning of s.5A of the Utilities Act 2000, or to publish a statement setting out our reasons for not doing one. Even when we are not required to carry out an IA, we will endeavour to do so as a matter of good practice where appropriate and proportionate. This guidance takes effect from 1 May 2020. It will replace the previous guidance published in October 2016 and will be applied from the date it takes effect unless specifically provided for in an impact assessment. The guidance will be kept under review and we will amend from time to time as appropriate.

This document explains how we use an IA to support decisions with robust evidence and analysis. It follows closely the recommended approach to policy making from the Better Regulation Executive and Her Majesty's Treasury's Green Book.<sup>3</sup> This version contains updates to the way in which we assess the impacts of our proposals on net zero pathways and on different groups of consumers. The purpose of the updates is to help us better understand the available options and ensure that our policy and analytical processes are fully aligned with our strategic priorities, which are to:

- enable competition and innovation, which drive down prices and result in new products and services;

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<sup>2</sup> References to the "Authority", "Ofgem", "us", "we", "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day activities.

<sup>3</sup> See appendix for links to relevant documents

- protect consumers, especially the vulnerable, by stamping out sharp practice and ensuring fair treatment; and
- facilitate decarbonisation efforts to deliver a net zero economy at the lowest costs to consumers.

As we are committed to help meet the more ambitious Net Zero Emissions Target adopted by government, and given the increased scale of the challenge, our policies are likely to have a significant focus on decarbonisation.<sup>4</sup> In line with our objectives, we will assess the costs of decarbonisation for consumers, via their energy bills. We also need to ensure that consumers in vulnerable situations are protected and that the costs do not fall disproportionately on them. To better explain how we will meet our objectives, we have brought together our existing approaches to assessing distributional and decarbonisation impacts into clearer frameworks.

These frameworks will improve transparency in how we make decisions by guiding policymakers, consumers and analysts in identifying and presenting the impacts of policy decisions on various groups of consumers and on net zero greenhouse gas emissions pathways. We will also be able to see the cumulative effects of our policies on different groups of consumers, over a period, and check that no one is unduly disadvantaged.

We will, where and as appropriate, publish our IAs with our decisions. However, although it is important to have a clear structure and process for considering impacts, the nature of our decision-making often involves producing a wide range of documents. IAs will often form part of the documentation supporting our decisions and we may choose to publish them as a stand-alone document or embed them within another document.

**We invite comments from you on the guidance, including on the consolidated and more structured approach that we will now use, as appropriate, to assess decarbonisation and distributional impacts.** In respect of assessing decarbonisation impacts, we will ensure that our approach remains consistent with Government policy, for example taking account of the Committee on Climate Change's (CCC) 6th Carbon Budget in

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<sup>4</sup> In June 2019, the UK Parliament made a commitment to achieve net zero greenhouse gas emissions by 2050. Reflecting the different circumstances of different parts of GB, in September 2019 the Scottish Parliament legislated to set a net zero target for 2045, and the Welsh government intends to introduce legislation to amend its existing target to achieve net zero no later than 2050.

September 2020, or any revised government guidance and policies on how the Net Zero target will be met.

This guidance is not legally binding. It is not a substitute for any regulation or law and should not be taken as legal advice. We will consider each case on its merits and will apply the guidance where it is appropriate to do so. In the event that we decide to depart from the guidance in any material respects, we will normally set out our reasons for doing so.

## Introduction

### Context and scope

1. Ofgem’s principal objective is to protect the interests of existing and future electricity and gas consumers. This includes the interests of those who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas. We consider whether any regulatory requirement we are proposing to introduce is the best way to protect consumers, including having regard to their interests in the reduction of greenhouse gases and security of the supply of gas and electricity to them.
2. Ofgem is required to carry out its functions in the manner it considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with:
  - the shipping, transportation or supply of gas conveyed through pipes;
  - the generation, transmission, distribution or supply of electricity; and
  - the provision or use of electricity interconnectors.
3. One of the ways we understand the impact of our policy decisions is to consider the potential impacts that may arise from our policies through a structured assessment – an impact assessment (IA). Since December 2003, Ofgem has had a duty to carry out IAs for proposals that we consider to be “important” within the meaning of section 5A of the Utilities Act 2000, or to publish a statement setting out our reasons for not undertaking an IA. In determining the matters that an IA should cover, Ofgem must have regard to such general guidance, which relates to carrying out IAs, as it considers appropriate. Appendix 1 shows other guidance we might consider when carrying out an IA.
4. We consider the development of an IA, where one is undertaken, to be an important factor into our decision-making processes. However IAs are not necessarily determinative of the final decision, as our decision-making process often involves the consideration of a range of factors. Some of our IAs are published alongside consultations or decision documents and some are embedded within or cross-referenced to the main document in question, depending on which option would provide more accessibility and clarity. Therefore, it is important that the assessment of impacts is not read in isolation of the supporting documentation.

5. Our guidance follows closely the guidance set out by HM Treasury in the Green Book<sup>5</sup> It contains guidance on how to appraise policies, programmes and projects. In addition, the Better Regulation Framework<sup>6</sup> sets the principles of better regulation, providing a useful toolkit for measuring and improving the quality of regulation.

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<sup>5</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/685903/The\\_Green\\_Book.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf)

<sup>6</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/872342/better-regulation-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872342/better-regulation-guidance.pdf).

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## When Ofgem will do an IA

### Section summary

This chapter explains the criteria Ofgem uses to decide whether to carry out an IA. This includes IAs required under our statutory duties, non-statutory IAs such as those we undertake in line with best practice where appropriate, and IAs that are required to help the Authority consider issues relating to modification proposals for industry codes or charging methodologies.

6. When we carry out our activities, the Gas Act 1986 and the Electricity Act 1989 require us to have regard to (1) the principles under which regulatory activities should be: transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, and (2) any other principles that to us appear to represent best regulatory practice. This means that where it is not a statutory obligation to carry out an IA, we may still choose to do so. Therefore, in deciding whether to carry out an IA, we will undertake a screening process.

## Screening

7. The screening decision will determine whether:
- an IA is required under our statutory duties (s.5A IA);
  - an IA would be beneficial to the development of the proposal or in line with good practice where appropriate (non-s.5A IA);
  - an IA is required to help the Authority consider the wider issues associated with an industry code<sup>7</sup> and/or charging methodology modification proposal (Modification IA)<sup>8</sup>; and
  - it is necessary or proportionate to produce an IA.<sup>9</sup>

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<sup>7</sup> Industry codes are led by industry. See paragraph 13 for more details.

<sup>8</sup> This may be an s.5A IA or a non-s.5A IA, depending on the nature of the proposal.

<sup>9</sup> Although we may choose not to carry out an IA in particular circumstances, it is likely that we will still communicate our activities and planned intentions through open letters, workshops and more formal public consultations (see chapter 4). In this way, anyone with an interest in our policy development will still have an opportunity to share their views on the impacts of our proposed activity.

## Section 5A IAs and determining “importance”

8. S.5A of the Utilities Act 2000 places a duty on the Authority to undertake an IA if:
- It is proposing to do anything for the purpose of, or in connection with, the carrying out of any function exercisable by it under or by virtue of Part 1 of the Gas Act 1986 or Part 1 of the Electricity Act 1989.
  - It appears to the Authority that the proposal is “**important**” within the meaning of s.5A.
9. The s.5A duty does not apply if we believe a matter is so urgent that complying with the duty is impractical or inappropriate.<sup>10</sup> Where the s.5A duty applies, the Authority must carry out and publish an IA, or publish a statement setting out the reasons that it considers it unnecessary to carry out an IA on a particular matter.
10. As noted in Figure 1 (page 18), assessment of impacts will normally begin at an early stage of proposal development. This may include producing a draft IA.<sup>11</sup>

### Criteria for determining importance

11. Table 1 below has some examples of those proposals that may, for the criteria set out in s.5A, indicate that a proposal is “important”. This is not an exhaustive list and we will consider each proposal on the facts.

**Table 1 Examples of Important Proposals**

<i>Criteria in s5A</i>	Examples
<i>Major change in the activities carried out by the Authority</i>	Proposals that involve a major change in the activities the Authority carries out could include those where Ofgem exercises a significant new power or function for the first time, or where Ofgem proposes important changes to the way it discharges a duty.
<i>Significant impact on persons engaged in the shipping, transportation or supply of gas, the generation, transmission, distribution or</i>	Proposals likely to result in “significant impacts” may include those where implementing the proposal would: <ul style="list-style-type: none"> <li>• have significant costs for industry participants and/or people involved in connected commercial activities.</li> </ul>

<i>Criteria in s5A</i>	Examples
<i>supply of electricity, the provision of smart meter communication services or in certain connected commercial activities<sup>12</sup></i>	<ul style="list-style-type: none"> <li>• affect industry participants’ ability to choose the price, quality, range or location of their gas and/or electricity or associated services.</li> </ul>
<i>Significant impact on the general public in Great Britain or part of Great Britain</i>	<p>“Significant impacts” may be likely, for example, where implementing a proposal significantly affects:</p> <ul style="list-style-type: none"> <li>• security and/or diversity of energy supplies;</li> <li>• health and safety;</li> <li>• gas or electricity prices;</li> <li>• competition in British markets;</li> <li>• sustainable economic growth and productivity;</li> <li>• a sustainable energy system;</li> <li>• energy efficiency;</li> <li>• quality of service; or</li> <li>• social impacts including effects on fuel poverty, people with disabilities and/or with protected characteristics.<sup>13</sup></li> </ul>
<i>Significant effects on the environment</i>	<p>Significant effects may be likely where, for example, a proposal is likely to:</p> <ul style="list-style-type: none"> <li>• result in an appreciable increase or decrease in emissions of carbon dioxide or other greenhouse gases.</li> <li>• materially affect government targets and objectives described in the Social and Environmental Guidance to Ofgem and any successor to it (e.g. relating to emission reductions, energy efficiency, distributed energy and innovation).</li> <li>• have a significant impact on visual or other amenity issues, especially in environmentally sensitive areas such as National Parks, Areas of Outstanding Natural Beauty or Sites of Special Scientific Interest, or a significant effect on biodiversity.</li> </ul>

<sup>12</sup> Commercial activities connected with the shipping, transportation or supply of gas conveyed through pipes or with the generation, transmission, distribution or supply of electricity (s.5A(2)(c) of the Utilities Act 2000).

<sup>13</sup> For more detail see chapter 3.

## **Impact assessments produced outside the scope of s.5A**

12. We may, where appropriate or in line with good practice, carry out an IA even though we are not required to do so by our statutory duties (a non-s.5A IA). For example, we may wish to publish an IA if we are beginning to develop proposals in an area where, in due course, we may ultimately be making proposals that are “important” within the meaning of s.5A. We will consider, as appropriate, representations from interested parties on whether an IA is required or valuable. IAs outside the scope of s.5A will generally follow the approach in this guidance. We will take a proportionate approach to the analysis in each case (see Approach to an Impact Assessment Chapter).

### **Impact assessments of industry code modifications<sup>14</sup>**

13. We have duties relating to the governance of the gas and electricity industry codes. These codes are the contractual arrangements that underpin the electricity and gas wholesale and retail markets and use of networks. Licensees must maintain, become party to, or comply with the industry codes according to the conditions of their licence. The code modification process is a mechanism available to industry to propose changes to a range of policy areas covered within the codes. Information about maintaining and modifying industry codes is available on our website.<sup>15</sup>

14. We cannot make or amend code modification proposals except in very limited circumstances. When there is a proposed new industry code or changes, we consider their merit against the relevant code objectives and our principal objective and statutory duties. To make informed decisions, it is helpful to us if industry bodies conduct appropriate consultations and IAs before concluding their proposals as appropriate.

15. We will take note of industry consultations and IAs when considering the merits of modification proposals. Once we receive a modification for a decision, we may carry out an IA to consider the impact of accepting or rejecting it. We will consider this impact against the existing regulatory arrangements (the current code baseline) and in the context of our principal objective and statutory duties. We will tailor the level of analysis in these IAs to the particular circumstances of the code modification.

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<sup>14</sup> Reference to ‘modification’ includes industry code processes where alternative descriptions are used, eg Change Proposals raised under the Distribution Connection and Use of System Agreement.

<sup>15</sup> <https://www.ofgem.gov.uk/licences-codes-and-standards/codes>

16. For some modification proposals, we might consider it unnecessary to publish an IA. For example, in cases where the impacts of a modification would be limited to a specific issue, it would be proportionate for us to seek views only on that issue. In addition, if we consider that the industry has conducted a suitable consultation (or assessment of impacts) and that a further IA by us would not add value, we are unlikely to repeat this exercise and carry out an IA ourselves. By 'suitable consultation', we mean one that would take into account the same considerations as we would as part of an IA, where proportionate to the issue at hand.

17. It is for the code governing bodies and industry to monitor the effects of proposals that have been implemented and to conduct a post-implementation review, as they think necessary. This could be, for example, to inform further modification proposals.

18. There may be circumstances in which our decision to accept or reject a modification proposal could be considered "important" within the meaning of s.5A of the Utilities Act 2000. We will judge whether each proposal is "important" within this meaning, in accordance with our guidance, and carry out a s.5A IA if we need to.

### **Multi-stage Impact Assessments**

19. The IA process should run alongside policy development. We will normally assess proposal options from the early stages of identifying a case for change, through the development stage and public consultation, and then to final decision-making and implementation.

20. To inform and strengthen the proposal development process, we may produce and publish a number of IAs, whether or not they are carried out under s.5A. In some cases, this will mean:

- a draft IA produced at an early stage in the proposal development, which represents initial thinking about the impact of a proposal.
- a final IA, which is the culmination of the process of consultation and proposal development. The final IA will integrate the results of consultation with other strands of proposal development. If the proposal is important within the meaning of s.5A, this final IA may constitute the statutory IA.

21. This approach complements our established consultation process.<sup>16</sup> Assessing impacts will typically evolve through the stages of a project, particularly as consultation feedback becomes available. In multi-stage IAs, we will present a summary of consultation responses and set out the resulting changes to the final IA. As we develop proposals, we will continue to consider how best to explain their impacts and capture views from stakeholders without putting unnecessary burden on stakeholders.

## **When we won't do an Impact Assessment**

22. We may decide that even though a matter meets the criteria under s.5A, it is impractical or inappropriate to do an IA.<sup>17</sup> Where this is the case, we will clearly state our reasons. Circumstances where we would not expect to produce IAs include:

- the urgency of the matter makes it impractical or inappropriate;
- carrying out formal enforcement action (the Gas and Electricity Acts set out specific procedural steps for our enforcement functions);
- using our formal powers to resolve complaints or disputes;
- implementing primary or secondary legislation which has been approved by Parliament and already subject to IAs by the sponsoring government department, except where we have significant discretion about how to implement the statutory requirement;
- publishing proposals which draw together a range of options which have been subject to separate IAs;
- where government has already undertaken an IA for a programme we have been asked to deliver;
- when resources required to do an IA would be disproportionate to the expected impact of the proposal; and
- decisions that do not need an IA because they implement previously agreed policy.<sup>18</sup>

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<sup>16</sup> <https://www.ofgem.gov.uk/consultations/consultations-policy>

<sup>17</sup> See footnote 9

<sup>18</sup> For guidance on the policy cycle, see HM Treasury Green Book, Appendix 1

## Approach to an Impact Assessment

### Section summary

This chapter sets out the analytical steps that we will typically follow when doing an IA, whether this is pursuant to s.5A or a non-statutory IA. It summarises the policy and analytical processes, and the interactions between them.

23. Draft or initial Impact Assessments will where appropriate accompany a consultation document setting out a policy proposal. We will typically aim to cover all analysis within the IA document, and analytical sections in the main document will cross-refer to relevant parts of the IA. Government departments generally consider this best practice and we will follow this approach unless there are strong reasons to do otherwise. We will endeavour to cross-reference complex analysis and calculations in the IA directly to specific questions in a consultation document to make it easy for stakeholders to join the two documents.

24. We will give regard to the principles of better regulation, which advise that an IA should:

- concisely summarise the impacts, including the qualitative and quantitative costs and benefits;
- maintain a transparent process;
- be comparable to other assessments, without unnecessary detail or duplication;
- be consistent so we can compare impacts across proposals; and
- follow best practice.

25. We will also follow the Green Book closely, as appropriate. It recommends that an IA should cover the following:

- problem under consideration;
- rationale for intervention;
- policy objective;
- description of options considered (including status quo);

- monetised and non-monetised costs and benefits of each option including distributional impacts, administrative burdens and strategic and sustainability issues;<sup>19</sup>
- justification of analysis used in the IA (proportionality approach);
- risks and assumptions;
- direct costs and benefits to business calculations (following the Business Impact Target methodology);<sup>20</sup>
- any other impacts; and
- summary and preferred option with brief implementation plan.

## Analytical process

26. When doing an IA, we will generally follow the policy processes that take place alongside key analytical tasks. We describe six stages for an IA below, which correspond to the key stages of an IA, and cover all activities that take place, from considering the case for a regulatory intervention to publishing the IA. In each stage, policy processes and analytical tasks will usually run in parallel to each other.

### Approach to Impact Assessment – indicative stages

**Pre-concept work stage:** Justifying action, developing and articulating the regulatory policy objectives, with reference to our duties and objectives. This should also be consistent with the Strategic Outline in the policy’s business case.

After this, there will be a screening process to determine whether an IA is required and the scope of any analysis.

**Concept work:** Developing options and proposals, informed by the original objectives, with reference to risks, wider implications and unintended consequences. The concept work stage is key to setting up the baseline of the policy. To do this, we would normally describe and collect information about how things work before making any changes. We set out

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<sup>19</sup> This is where the expected costs and benefits of a policy intervention are estimated and the trade-off between costs and benefits is considered. This is referred to as Social Cost Benefit Analysis (CBA) or, where appropriate, Social Cost-Effectiveness Analysis (CEA), which compares the costs of alternative ways of producing the same or similar outputs. Where competition is important, CMA guidance can be used to create an appropriate framework.

<sup>20</sup> See <https://www.gov.uk/government/publications/better-regulation-framework>



what the counterfactual scenario would be (i.e. what we will assess the impacts of our proposals against). We will also set the analytical methods, resources and timetable, reflecting the importance of the issues at stake.

**IA development:** This stage is where most of the analytical and policy development tasks take place. It can be long, depending on the importance of the decision and the complexity of the analysis. For example, some proposals may require that we commission external consultancy services and do an initial consultation. At this stage, we will need to develop and refine a more detailed set of options, with impacts, costs and benefits assessed across:

- monetised, aggregate cost-benefit analysis;
- distributional impacts;
- sustainability considerations; and
- hard to monetise impacts (this could apply to any of the three categories above).

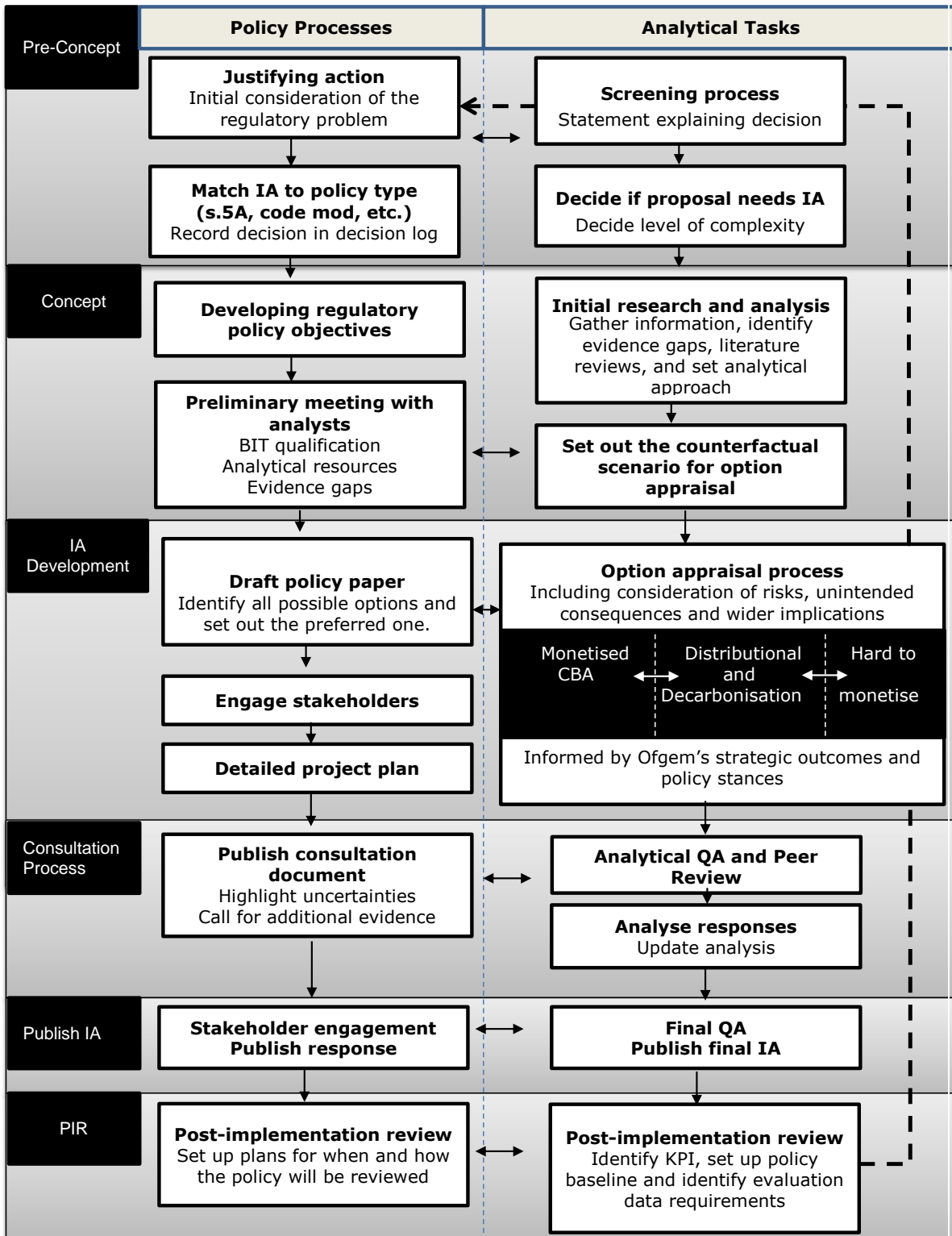
**Consultation process:** Consultations make the decision-making process more transparent and give affected groups an opportunity to raise their concerns or challenge the proposals. They also provide an opportunity to check analytical assumptions and to fill evidence gaps. Consultation and stakeholder engagement may take place formally and informally. In most cases, should there be a legal requirement for a consultation, an IA should accompany that consultation. If we are undertaking a s.5A IA, then the Authority is legally required to consult on that IA.

**Publish final decision:** Explaining which option(s) we have decided on and why (by reference to the preceding stages of assessment and analysis).

**Post-Implementation Review:** During appraisal, we will aim to consider how and when we will evaluate the policy. As such, we may describe post-implementation monitoring arrangements. Where possible and feasible, we will plan how to evaluate a proposal ahead of publishing the final IA.

27. The IA and policy process are linked and will take place alongside each other. This will support evidence-based decision-making.

**Figure 1. A summary of an indicative IA process**



**Proportionality**

28. The need to support policy decisions with proportionate analysis is especially relevant to Ofgem. As an economic regulator, many of our decisions have a limited implementation time. In many cases, the analytical approach is affected by real constraints (for example, the

requirement to respond to a code modification proposal within a fixed period). The need to make decisions without unnecessarily affecting the performance of the regulated industries means that the approach to proportionality is an important part of the IA process.

29. Impact Assessments carried out under s.5A will, as a minimum, include an assessment of the likely significant impact of implementing the proposal on the environment, the vulnerable, current and future consumers, and will relate to other matters as the Authority considers appropriate.

30. Some of the factors we consider when deciding how much analysis is appropriate to undertake are: the scale of the expected impact, stage of the policy, and the ability and cost of doing further analysis relative to the benefits this analysis may yield. We will use these in making decisions about proportionality.

31. As a minimum standard, our IAs will describe which groups of energy consumers (and other affected parties) the proposals are likely to affect. The main groups we will consider include business, public sector and domestic consumers. We will include a description of the impacts (i.e. positive or negative impacts on any group) and the order of their magnitude (e.g. low, medium, high). For each option, we will consider, as appropriate, distributional impacts (see paragraphs 52-58) as well as trade-offs between groups of energy customers.

## **Main analysis**

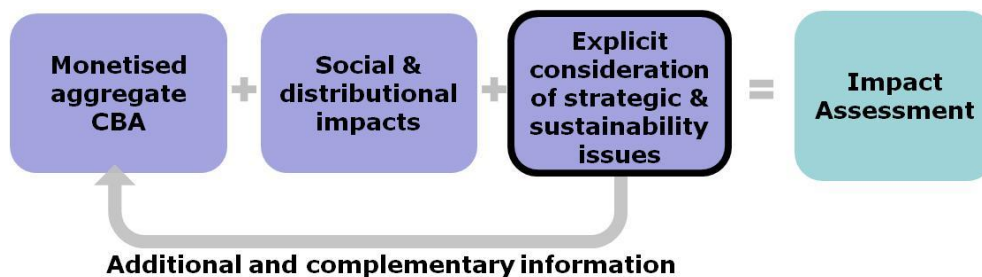
32. The bulk of the IA work usually takes place before the consultation stage. Identifying the direct and indirect impacts of all relevant options requires careful consideration. We will not rely purely on monetisation of direct costs and benefits. Our considerations will include, as appropriate, distributional and sustainability issues as well as hard to monetise impacts.

33. The options identified during the concept work stage will be further refined, with the full range of impacts, costs and benefits being iteratively assessed within the broad domains of:

- monetised, aggregate cost-benefit analysis (CBA) (including the costs of carbon emissions);
- distributional effects; and
- sustainability and decarbonisation.

34. Figure 2 below helps to illustrate this by grouping the main components of an IA.

**Figure 2. IA components**



35. Consistent with HM Treasury Green Book guidance, we will identify the range of options that would effectively deliver the policy objective(s). This will include a base case (or counterfactual) against which other options will be compared.

### **Monetised cost-benefit analysis (CBA)**

36. To enable consistency in how options are compared we will find their monetised values using cost benefit analysis (CBA). In order to ensure that net benefits are comparable, we express all results for different options in net present values (NPV). NPV is a generic term for the sum of a stream of future values (that are already in real prices) that have been discounted (in the Green Book by the social time preference rate) to bring them to today's value.

37. In developing options for a policy, we may need to make assumptions about a variety of factors and we may undertake sensitivity analysis to reveal how options vary under certain scenarios. When calculating the net benefit or cost of options, we will try to compare fully monetised options where possible. In doing so, we will set out:

- the base case;
- the methods used for valuing a cost or benefit, e.g. market prices;
- the base year (start point for assessment of options), price year (for nominal prices) or a constant price base where constant prices are being used, and the time horizon considered (e.g. default 45-year asset replacement rate);
- the discount rate (e.g. Social Time Preference Rate for public benefits or the Weighted Average Cost of Capital for private benefits). The appropriate discount rate will vary to reflect the project in question;
- greenhouse gas (GHG) and energy efficiency values (eg BEIS carbon valuation guidance, including sensitivity analysis); and
- other non-market priced impacts (e.g. fatalities and injuries).

38. Using this information, we will seek to quantify costs and benefits where possible. However, there are several areas in which quantification is likely to be particularly complex. In the case of opening up markets to competition, for example, it is inherently difficult to accurately predict the potential efficiency benefits. It is also difficult to quantify in a meaningful way the dynamic benefits of competition such as the scope for increased innovation and the introduction of new products, services and technologies. We will seek to identify the nature and assess the extent of these benefits where possible, including the circumstances that would give rise to them.

39. Where quantitative assessments are included, they will often be presented as ranges (which may be broad) in order to illustrate the plausible margin of error or uncertainties of any forecast costs and benefits. At times, while we may be able to identify the costs of implementing a proposal, the benefits may be harder to quantify or monetise. In these cases, we may analyse what the level of benefits would have to be, given the identified range of costs, to justify the proposal and whether achieving these benefits is plausible.

40. We may therefore include a mix of qualitative and quantitative analysis, e.g. using costs and benefits as well as a number of non-monetised impacts. We will present this together with a discussion of how pivotal the qualitative or non-monetised costs and benefits are in the cost-benefit analysis assessment.

41. In formulating options, we expect to consider aggregate monetised costs and benefits, distributional effects and hard-to-monetise, strategic and sustainability issues. There may be a process of iteration across these areas to avoid duplication or double-counting. To promote transparency and consistency in the way in which we assess distributional and sustainability impacts, we are providing teams with clearer and more detailed frameworks. These are set out below in paragraphs 42-59.

## **Measuring policy effects on the pathways to Net Zero**

42. Ofgem's principal objective is to protect the interests of existing and future consumers, which includes their interests in the reduction of emissions of greenhouse gases. In relation to our IAs, s.5A requires that an IA includes an assessment of the likely environmental effects from implementing the proposal, and it should cover other matters the Authority considers appropriate.

43. In June 2019, the UK Parliament made a commitment to achieve net zero greenhouse gas emissions by 2050. Reflecting the different circumstances of different parts of GB, in

September 2019 the Scottish Parliament legislated to set a net zero target for 2045, and the Welsh government intends to introduce legislation to amend its existing target to achieve net zero no later than 2050.<sup>21</sup> In our Strategic Narrative for 2019 to 2023, published in July 2019, we made clear that decarbonising the energy system at lowest cost to consumers is one of our three priorities over the coming years, alongside protecting consumers and enabling competition and innovation.<sup>22</sup>

44. It is important that we consider the impact of our decisions under different possible future pathways and options to achieving net zero. For example, the Future Energy Scenarios (FES) produced by the Electricity System Operator (ESO) set out options for how the Net Zero target will be met, or in some cases not met or exceeded. In making a decision, we could assess a proposed change under several of these scenarios, in order to assess the consistency and implications of the proposal for meeting the Net Zero target.

### **Monetising greenhouse gas emissions**

45. We aim to use the same approach and carbon values that are set out in the Green Book to derive CO<sub>2</sub> emissions values (in £). In addition, following the government's announcement of the Net Zero 2050 target, our appraisals will, where appropriate and possible, incorporate sensitivity analysis for higher carbon values. This will be in place until revised CO<sub>2</sub> values consistent with the new target of Net Zero in 2050 become available.

46. In our appraisals, we will also, where relevant and feasible, give due consideration to the effects of other 'targeted greenhouse gases', as defined in the Climate Change Act, to address interactions of the energy system with harmful gases other than CO<sub>2</sub>.<sup>23</sup>

47. The diagram below summarises the typical process for valuing changes in GHG emissions:

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<sup>21</sup> Ofgem (February 2020) 'Decarbonisation Action Plan' <https://www.ofgem.gov.uk/publications-and-updates/ofgem-s-decarbonisation-action-plan>

<sup>22</sup> Ofgem (July 2019) 'Strategic Narrative' <https://www.ofgem.gov.uk/publications-and-updates/ofgem-strategic-narrative-2019-23>

<sup>23</sup> Guidance provided according to the [Valuation of Energy Use and Greenhouse Gas - Supplementary guidance to the HM Treasury Green Book on Appraisal and Evaluation in Central Government](#).



48. Our approach to quantifying changes in GHG emissions, consistent with Green Book guidance is as follows:

- Identify the drivers of GHG emissions that the policy under consideration directly (or indirectly, where possible) has an impact on.
- Where emissions occur due to fossil fuel use, quantify energy use or change in energy use, measured in megawatt hours (MWh). Changes should be expressed per fuel, where the policy impacts on more than one fuel, and could be distinguished by the sector in which they incur, i.e. residential, commercial, industry. Where emissions occur in the residential and non-aviation transport sector (excluding electricity), they are deemed non-traded, hence non-traded carbon values data tables should be consulted for the modelling process. Where emissions occur in the traded sector, defined as those activities covered by the EU Emissions Trading System (EU ETS) such as power generation, many energy-intensive industries, and intra-EU aviation, traded carbon values data tables should be consulted for the modelling process.<sup>24</sup>
- Convert energy use or change in energy use (MWh) to carbon dioxide emissions (kg CO<sub>2</sub>e) using marginal conversion factors.<sup>25</sup>
- Where emission occur due to 'other GHG', (i.e. Methane, Nitrous Oxide, HFC, Sulphur hexafluoride), convert GHG emissions to equivalent tonnes of carbon dioxide (tCO<sub>2</sub>e) using global warming potential factors.<sup>26</sup>
- To estimate the value of GHG emissions, multiply GHG emissions (or changes in GHG emissions) obtained previously, by carbon values for policy appraisals (£/tCO<sub>2</sub>e).<sup>27</sup>

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<sup>24</sup> [Data Tables, supporting the toolkit and the guidance.](#)

<sup>25</sup> [Government emissions conversion factors.](#)

<sup>26</sup> Global Warming Potential Factors are found in [Valuation of energy use and greenhouse gas](#), Supplementary guidance to the HM Treasury Green Book on Appraisal and Evaluation in Central Government.

<sup>27</sup> Use BEIS latest (currently 2018) [short-term traded sector carbon values](#) for policy appraisals.

## Other measurable effects

49. Where it is not possible to estimate GHG emissions, we may consider other measurable effects such as changes in energy demand reduction or renewable energy generated, where possible. For example, the uptake of electric vehicles may be expressed in terms of the number of additional electric vehicles. We could use this to calculate the change in demand for electricity.

50. Additionally, we might consider expressing measurable effects in relation to medium or long-term goals, as these are agreed with government and other stakeholders. For example, if a policy enables new energy service business models, we could consider how this contributes to Ofgem’s Decarbonisation Action Plan aim of opening up retail innovation.<sup>28</sup>

51. Burning of fuels can have significant negative impacts on human and environmental health through Nitrous Oxide (NO<sub>x</sub>), Sulphur Oxide (SO<sub>x</sub>) and other emissions. Given our principal objective and general duties, we may have regard to indirect policy and environmental effects such as the effects of air quality on consumer health where it does not duplicate other Government action.<sup>[1]</sup> Where the policy under consideration would have material impacts on air quality, and we can quantify the impact, we may report the monetised costs and benefits of air quality changes as part of the IA.

## Hard-to-monetise costs and benefits

52. We will consider the overall monetised costs of achieving policy outcomes under consideration, and the options that do so at lowest cost to consumers. We will also consider instances where policy effects cannot be quantified. Where this is the case, we may consider and include the following, as part of the IA, as appropriate:

- How uncertainty affects our policy options, whether looking at different options can mitigate future uncertainty, and how future markets and consumers are affected by our current policy decisions. We discuss these in detail in paragraphs 71-74.

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<sup>28</sup> Ofgem (February 2020) ‘Decarbonisation Action Plan’ <https://www.ofgem.gov.uk/publications-and-updates/ofgem-s-decarbonisation-action-plan>

<sup>[1]</sup> The Green Book guidance in valuing impacts on air quality uses DEFRA’s estimates of the societal costs of changes in emissions in different pollutants. Effects on Air Quality – [The Green Book, Central Government Guidance on Appraisal and Evaluation](#)

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- Use of systemic thinking to discuss how policy options enable one or more pathways to Net Zero. In doing so, we aim to identify and discuss interactions with other Ofgem work streams or external stakeholders that are working on the same or linked pathways.
- If the policy does not have a direct effect on any of the pathways to Net Zero, we may consider enabling and indirect effects. We consider enabling effects to be those that arise as secondary impacts following a decision on a policy. For example, a decision in one policy area may not in itself lead to a reduction in greenhouse gases. However, it may enable a future increase in low carbon generation, or the scaling up of a demonstrator technology to commercial viability. For that reason, we will aim to assess potential costs and benefits of future developments that the direct policy decision might enable.
- Policies might result in changes to consumer behaviour. Even if it is not possible to isolate the impact of the policy change on consumer behaviour we will aim to highlight what mechanisms could, in principle, lead to a change in the way consumers behave. For example, reformed network charging may lead to a change in where and how electric vehicles are charged. Whilst it may be possible to measure adoption rates before and after the subsidy was introduced, it may not be possible to say with certainty that any change in adoption rates is due to the subsidy rather than other factors. Nevertheless, a theoretical model could be used to make assumptions about the impact that subsidies might have on demand for renewable heating.

## **Assessing the distributional impacts of policy options**

53. We will aim to assess, as appropriate, the impact of our policies on different groups of consumers, particularly those that are in vulnerable circumstances. Our analysis will use two broad approaches – impact on consumers’ energy spend and disposable income and impact based on consumer archetypes.

### **Impact on consumers’ energy spend and disposable income**

54. Where we can quantify the average energy bill impact of a policy in £, we will aim to calculate the knock-on impact on disposable income using data from the Office for National

Statistics Living Costs and Food Survey.<sup>29</sup> The data provide information on household energy expenditure and income by disposable income decile, and for various socio-economic characteristics.

55. We will, where appropriate, adjust the disposable income to reflect differences in household size and composition. This 'equivalisation' is important because larger households require a higher household income to achieve a comparable standard of living compared to a smaller household. Therefore, any changes to energy bills will have a bigger comparable impact on larger households than smaller ones, because it will change the amount of income they have to spend comparatively more. Equivalising income means we can better compare the impact on households of different sizes.

56. We will also, where appropriate, apply distributional weights to the results. This reflects the economic principle of decreasing marginal utility of income: i.e., an additional pound of income for a low-income recipient is worth more to them than for a high-income recipient. We have calculated distributional weights from guidance in HM Treasury's Green Book and recent worked examples from BEIS.<sup>30</sup>

57. GEMA's duties require it to have regard to consumers on low incomes, that are of pensionable age, that have a disability or chronic illness, and that live in rural areas. Our aim is to present results at a minimum for these four categories.<sup>31</sup> As Ofgem's view of vulnerability is wider than these four groups, we may consider producing results for more (but because of data limitations, not all) of the vulnerable characteristics and risk factors set out in Ofgem's Consumer Vulnerability Strategy.<sup>32</sup> Using this approach, we will aim to assess the average impact across all the consumer income deciles, and check if there are any concerning negative or disproportionate distributional impacts. Figure 4 below shows how we might present this analysis.

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<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/methodologies/livingcostsandfoodsurvey>

<sup>30</sup> BEIS (2018) "[Warm home discount scheme 2018/19: Final Stage Impact Assessment](#)", pp. 21-22

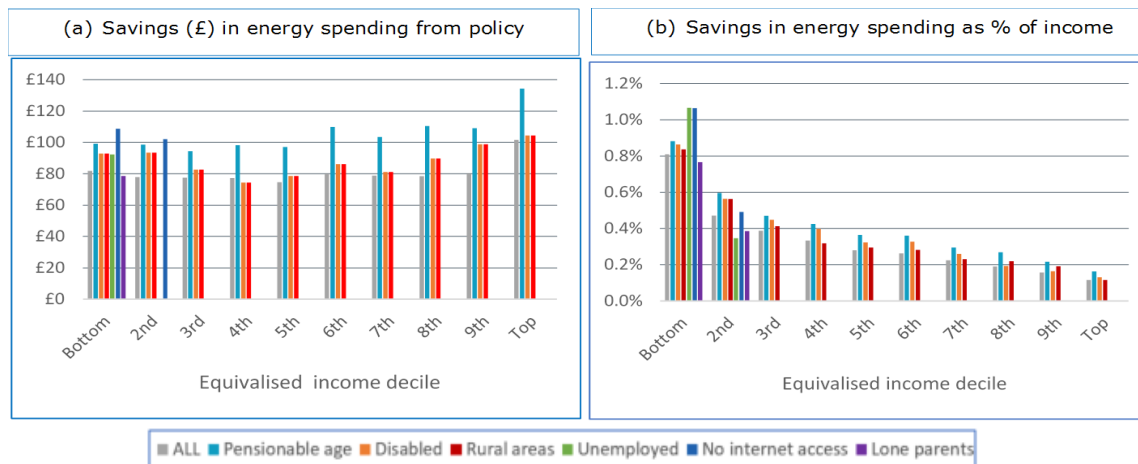
<sup>31</sup> The groups that Ofgem are to have regard to when performing its duties under the Electricity Act 1989 and the Gas Act 1986 are consumers on low incomes, of pensionable age, with a disability, or living in a rural area.

<sup>32</sup> Ofgem (Oct 2019) "Consumer Vulnerability Strategy", p.59 – 60

<https://www.ofgem.gov.uk/publications-and-updates/consumer-vulnerability-strategy-2025>

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**Figure 4: Illustrative distributional analysis**



### Impact by Consumer Archetypes

58. Ofgem has a set of energy consumer archetypes, each representing a typical GB household. The archetypes were developed by the Centre for Sustainable Energy in 2014 and are being updated for 2020.<sup>33</sup> They group consumers together based on common characteristics and socio-economic data and are more representative of GB consumers than an artificial average consumer. The characteristics include age, disability status, employment status, number of dependents, income, and energy consumption. The data comes from several sources including the ONS Living Costs and Food Survey.

59. Our goal is to assess the impact of a policy using the energy spend and income data in each archetype, and supplement it with a more qualitative assessment using the information on vulnerability in each of the archetypes. We will consider the number of households in each archetype to show how big the impact would be in absolute terms and will endeavour, where possible, to determine the degree to which a policy option would have a positive or negative impact on that archetype.<sup>34</sup> This may consist of:

- assessment of magnitude of change in energy bill and disposable income where known; and

<sup>33</sup> <https://www.ofgem.gov.uk/sites/default/files/docs/2013/07/beyond-average-consumption.pdf>

<sup>34</sup> We will consider the archetypes in any analysis of distributional impact. However, they may not be able to provide all the information we need in some cases. For example, comprehensive information on consumers' behavioural response to policy is not yet readily available. It should be noted therefore that other qualitative analysis may be required.

- assessment of prevalence of vulnerability in the archetype, for example whether it contains a higher percentage than the GB average of the four groups to which we must have regard, or other vulnerable groups. Table 2 below shows how this would look.

**Table 2: impacts for three archetypes, illustrative analysis only**

Archetype <sup>35</sup>	No. House holds	Energy bill and income impact		Consumer characteristics above GB average	Commentary
		Average	Total		
1: Low-income Electrically-heated	0.8m	£40 bill decrease 0.7% income increase	£32m bill decrease/ income increase	<ul style="list-style-type: none"> <li>Low income</li> <li>Disability/long term illness</li> <li>Pensionable age</li> </ul>	Policy option will benefit those on low incomes most. Electric heating costs more than gas and so the impact will be more keenly felt in this group. Given high propensity of people with long term health condition, there may be benefits in terms of comfort levels if it positively affects this group's ability to heat their home. This group is likely to consume more electricity than GB average.
5: Low-income, out-of-work single adults in small 1-bed social rented flats (London)	0.9m	£20 bill decrease 0.3% income increase	£18m bill decrease/ income increase	<ul style="list-style-type: none"> <li>Low income</li> <li>Disability/long term illness</li> </ul>	Policy option will benefit those on low incomes most. Given high propensity of people with long term health condition, there may be benefits in terms of comfort levels if it positively affects this group's ability to heat their home.
12: Wealthy working families in larger detached houses in less urban areas	1.5m	£30 bill decrease 0.04% income increase	£45m bill decrease/ income increase	<ul style="list-style-type: none"> <li>Rural area</li> </ul>	This group uses more electricity as they have more electrical devices and children using devices connected to the internet. They will see a decrease in their electricity bill but is a very small % income impact. They may be able to purchase (or may already have) smart devices to shift their load to cheaper times of day as well.

<sup>35</sup> Note that these are examples of the 2014 archetypes. They are expected to change over time and we will update them this year. They are also designed to evolve so that we can include relevant data and information as it becomes available. This may include, for example, how consumers may respond to particular types of policy.

## Other impacts

60. In addition to producing monetised aggregate CBA and assessing the distributional and decarbonisation impacts, our IAs will endeavour to assess other impacts and other analytical issues that may be important for some regulatory policies but not for others. This includes:

- security of supply;
- consideration of competition and consumers;
- burdens on business;
- switching costs; and
- Public Sector Equality Duty.

### Security of supply

61. Energy security is about making sure that consumers can get the energy they need (physical security) at prices that are not excessively high or volatile (price security). Volatile retail prices, especially if they are persistent, affect consumers' financial security and are most likely to impact vulnerable consumers. Things that can improve the system security include adequate capacity, diversity, reliability and demand side responsiveness.

62. There are different regulatory and policy developments that can help maintain the UK's energy security.<sup>36</sup> These include:

- action to maximise production in the North Sea;
- the development of the Capacity Market under the Electricity Market Reforms;
- increased interconnection between the UK and Europe; and
- policies to increase energy efficiency and demand-side response.

63. We may consider the following questions when assessing the impact of energy security:

- a) Will the policy option have significant effects on UK energy demand or supply?  
These effects may impact capacity margins either in the short-term or over the

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<sup>36</sup> See eg Ofgem (July 2019) 'Report on our Five Year Review of the Capacity Market Rules and Forward Work Plan'  
[https://www.ofgem.gov.uk/system/files/docs/2019/07/capacity\\_market\\_five\\_year\\_review\\_report.pdf](https://www.ofgem.gov.uk/system/files/docs/2019/07/capacity_market_five_year_review_report.pdf)

longer terms e.g. by changing incentives to invest in UK energy infrastructure. There may also be interactions or interdependencies between different fuel types (gas/electricity) or different uses (e.g. heating/power/lighting) that we will consider.

- b) Are there possible mitigating effects? If the policy option is likely to affect UK energy security, there may still be other factors that could reduce these effects. Perhaps existing policies (such as the development of the capacity market) or market developments (such as future increases in interconnection) may help to maintain energy security. If so, we will look to take these into account in the overall assessment.

### Consideration of competition

64. Considering competition is a core part of our purpose as the energy market regulator and protector of consumer interests. It is relevant to all our IAs, proportionate to the proposal under consideration. In our IAs, we aim to cross-refer to other sections of the IA that deal with competition impacts. This will help ensure and demonstrate that neither costs nor benefits are double-counted.

65. Our assessment will include consideration of whether an option will contribute to effective competition, including whether a proposal would have substantially different effects on different sized suppliers or the choices made by different types of consumers. This will include considering the impact on new entrants and the impact of real or perceived switching costs that consumers believe they will incur when changing supplier.

66. Capturing the impact of switching costs may be, at times, an important part of an IA, especially when assessing retail market policies and other measures that may have a direct or indirect impact on consumer behaviour. Where switching costs are present, consumers may display weak responses to price signals. In some cases, this means they are locked into disadvantageous contracts. Consumers may face different switching costs depending on their ability to navigate the market (for example, some consumers could lack the necessary skills to use the internet, knowledge how to read meters, they could have health issues or disabilities, negative experience of previous switches, etc). Therefore, our IAs will, as appropriate, pay attention to the policy's target group and the possible impact of switching costs.

67. Our IAs may also assess competition issues relating to:

- promoting market opening for all customers and suppliers and ensuring the conditions are right for the networks to operate effectively and reliably;
- facilitating access to the network for new generation capacity; and
- ensuring that system operators and users are granted the right incentives to make system performance more efficient.

68. In addition, there may be broader, indirect or long-term consequences of an option on competition. These consequences may:

- restrict or facilitate the use of existing technologies, systems or institutional structures;
- facilitate niche markets or encourage new hybrid technologies to emerge; and
- create or reinforce dependency on existing infrastructure. By definition, existing infrastructure accommodates incumbent technologies most closely, which can lead to high switching costs to use alternatives. For example, use of alternative technologies may better protect the interests of future consumers, but at a current cost.

69. Our IAs will, where and to the extent appropriate, aim to consider these impacts. In some areas, our decisions may exert very long-term influences on the evolution of the UK energy system, and on its competitiveness. In this instance, the hard-to-monetise assessment may refer to assessments of competition and resilience impacts to consider more enduring implications for the long-run trajectory of the UK system (if reasonably ascertainable). The assessment may consider whether these impacts indicate a more or a less sustainable direction.

#### Burdens on businesses

70. We will consider costs of the proposed regulation on business. Section 22 of the Small Business, Enterprise and Employment Act 2015 established a Business Impact Target (BIT) for government departments and regulators. These commit future governments to publish, and then report on, their performance against the BIT.

71. Although a significant proportion of our work may be out of the scope of the BIT, for a limited number of IAs the costs of regulation on business will have to be assessed using the Equivalent Annual Net Direct Cost to Business (EANDCB). The EANDCB is the Better Regulation Executive's methodology, published under the legislation, for calculating the BIT.

We will include, as appropriate, an assessment of the cost of our proposed intervention in the form of a BIT score in our IAs.

#### Public Sector Equality Duty.

72. Finally, in addition to distributional impacts on consumers, we will have regard to the Public Sector Equality Duty set out in section 149 of the Equality Act 2010 when making a decision. The elements likely to be most relevant to Ofgem’s proposals are eliminating discrimination and advancing equality of opportunity, particularly in relation to disability and age.

## **Risk and uncertainty**

73. Having set out more detailed options, where appropriate the IA process will again consider in more depth the range of risks (including external drivers and possible unexpected events ‘shocks’), unintended consequences and wider implications of the options.

74. Limited knowledge about the past, present or future creates risks and uncertainty. As the energy system regulator we deal with a complex system and limited information. Moreover, in appraisals, there is always likely to be some difference between what is expected, and what eventually happens, because of biases that are unwittingly inherent in the appraisal, and risks and uncertainties that materialise. As a result, risk management strategies will be adopted for the appraisal and implementation of large policies, programmes or projects. However, the principles can be applied to smaller proposals.

75. Risk management will seek to identify the most significant risks and uncertainties to gauge their effect on the preferred option. It will also acknowledge where the preferred option might have knock-on effects or wider implications.

76. There are a number of approaches to use to deal with uncertainty. We will, as appropriate, follow the steps below to ensure a structured approach to account for uncertainty:

- **Identification:** the first step is understanding the source and extent of the uncertainty.
- **Risk:** after identification, we will decide if and how to quantify the uncertainty. If we are able to estimate probabilities for each outcome, then we could quantify and transform uncertainty into risk.



- **Applying methods to deal with uncertainty:** if it is not possible to quantify the risk, we will use alternative methods to assess the effect of uncertainty on our policy proposals. We may test how our policy outcome fares in a range of different scenarios (eg does the outcome change in extremes of gas prices), or look at solutions that will be effective no matter what the future looks like.
- **Governance:** in completing the uncertainty analysis, we will assign ownership and responsibility for setting up how the regulatory decision or project will be monitored.

### **Risk and uncertainty in the context of Net Zero**

77. Uncertainty in assessing the impact of Ofgem’s policies on Net Zero could affect the inputs and the assumptions we use to develop IAs. It could also increase the margin for error in estimating policy effectiveness. Uncertainty, in this context, can for example stem from the cost to consumers of different policy options, rapid developments in wider government policies, innovation and uptake rates of technologies that enable decarbonisation, and uncertainty about consumer or system response.

78. A further challenge is balancing the way policy affects current and future consumers. While we will consider how policies would affect current consumers, it is challenging to account for longer-term policy implications, given the uncertainty involved, alongside the number of market participants and decision-makers.

79. There are several approaches that we may use, where appropriate, to deal with uncertainty that relates to Net Zero:

- We propose to use systemic thinking to identify interactions between policy options and the pathways adapted from CCC.<sup>37</sup> We would adopt this approach at the pre-concept and concept stages of the policy development process. Systemic thinking outputs are useful, inform hard-to-monetise effects and highlight evidence gaps in preparation for the IA.
- Where appropriate, we would consider potential risks and seek clarity as part of the policy development process in terms of: the overall cost to consumers (including how

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<sup>37</sup> Committee on Climate Change (May 2019), ‘Net Zero: The UK’s contribution to stopping global warming’. <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/> We are aware that alternative pathways are currently being developed on achieving Net Zero. We will keep the position under review when these approaches become available.

to achieve policy outcomes at lowest cost); changing macro-environment; balancing and subsequently prioritising trade-offs; avoiding duplication in operations; technological advancements altering consumer behaviour; decarbonisation-enabling technology uptake rates; delivery of planned changes interacting with existing or future systems; fast-paced innovation; lack of data.

- When monetising the effects of GHG emissions, we propose to carry out sensitivity analysis to account for future higher carbon prices and limit the margin for estimation error.
- We may consider optionality, when deciding the right time to implement a decision. In practice, this may lead to comparing short vs. longer-term risks and benefits. Where circumstances allow, we may consider and account for the effects of postponing implementation or investing in infrastructure, while exploring whether the combination of existing policies or infrastructure could result in the same effect. Alternatively, we may consider whether a staggered approach would allow for learning – technological and regulatory - to be part of the policy-making process. These strategic timing interactions will be accounted for when discussing the range of proposed options in the IA.
- We may also use medium-term objectives to mitigate future uncertainty for shorter periods with increased level of foreseeability. For example, we may inform our work with the shorter-term, five-year Carbon Budgets.

## Consultation

### Section summary

Our approach to consulting on IAs is in line with our broader consultation policy. Consultation periods will last for a proportionate amount of time depending on the degree of urgency, complexity, impact and likely interest in the proposal, and the approach will vary depending on the type of IA in question.

80. Consultation is a vital part of the process of robustly assessing impacts. It ensures that proposal development is open to new information and ideas from outside interests. The quality of our analysis is greatly assisted by the quality of the input received. We welcome input from those affected by or with an interest in our proposals, through the consultation process.

81. We aim to consult on our proposed decisions in a way that is easily accessible to those with an interest in our proposals, be they large or small companies, consumer groups or individuals. So when we consider impacts associated with a proposal, we strive to do so consistently against the approach in chapter 3.

82. The nature of our decision-making often involves producing a lot of documents (e.g. initial proposals, open letters, discussion documents, consultations). It is important that the IA is not conducted in isolation from these. Assessing the impact of policies is a continuous process that requires external engagement. Impact assessment and consultation documents are some of the key tools for facilitating engagement and providing transparency.

83. We make every effort to provide documents in alternative formats so they are accessible. IAs will ordinarily accompany a main consultation document setting out a policy proposal. Ideally, all analysis will be covered within the IA document, and analytical sections in the main consultation document will cross-refer to relevant parts of the IA. When a different approach may be required we will consider the audience as well as the objectives of different documents in order to maximise readability and transparency.

84. Documents are published on our website and interested parties can request electronic notification of new publications. We may, and in certain cases will, directly inform those parties who may be affected or who have a particular interest in the proposal. Stakeholders

may also use the consultation pages on our website to plan their engagement. We will be as transparent as possible, which may include publishing background information.

### **Formal consultation**

85. In specific cases we will, in discharging a function under Part 1 of the Gas Act 1986 or Part 1 of the Electricity Act 1989, be required to consult as part of a separate statutory duty. Where this is a requirement, for example when proposing the modification of licence conditions, we will normally seek to publish the IA both in the earlier stages of proposal development and informal consultation, and in addition to any statutory consultation. Our guidance on consultation timescales<sup>38</sup> is not intended to displace any statutory, regulatory or licence-based consultation period.

86. We will also issue a consultation where we conduct a s.5A IA as required by s.5A (7) of the Utilities Act 2000. We will not implement a proposal that is being considered by the s.5A IA until the time limit for the receipt of representations has expired and we have considered representations made during that time.

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<sup>38</sup> For more information on our consultation lengths and general approach, See <https://www.ofgem.gov.uk/consultations/our-consultation-policy>

## Appendix - Links to Resources

**BEIS, Valuation of energy use and greenhouse gas (GHG) emissions. Supplementary guidance to the HM Treasury Green Book on Appraisal and Evaluation in Central Government (2019)**

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/243940/2013\\_Appraisal\\_Guidance\\_-\\_Main\\_Guidance\\_Document\\_-\\_FINAL2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/243940/2013_Appraisal_Guidance_-_Main_Guidance_Document_-_FINAL2.pdf)

**BEIS, Better Regulation Framework Interim Guidance (2020)**

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/872342/better-regulation-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872342/better-regulation-guidance.pdf)

**BEIS Impact Assessment Calculator (for calculating Equivalent Annual Net Cost to Business (EANCB))**

<https://www.gov.uk/government/publications/impact-assessment-calculator--3>

**HM Treasury, The Green Book: Appraisal and Evaluation in Central Government (2018)**

<https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

**Ofgem, Guidance on the treatment of carbon costs in relation to the code objectives (July 2010)**

<https://www.ofgem.gov.uk/publications-and-updates/guidance-treatment-carbon-costs-under-current-industry-code-objectives>

**Ofgem, Real Options and Investment Decision-making (March 2012):**

<https://www.ofgem.gov.uk/publications-and-updates/real-options-and-investment-decision-making>

**Ofgem, Consumer Vulnerability Strategy (October 2019):**

<https://www.ofgem.gov.uk/publications-and-updates/consumer-vulnerability-strategy-2025>