

Energy Security Bill Summary Impact Assessment

Lead department	Department for Business, Energy and Industrial Strategy
Summary of proposal	The Department is introducing a range of measures through the Bill aimed at enabling the UK to move towards a clean, affordable and resilient energy system.
Submission type	Impact assessment (IA) – 24 March 2022
Legislation type	Primary legislation
Implementation date	2023
Policy stage	Final
RPC reference	RPC-BEIS-5173(1)
Opinion type	Formal
Date of issue	30 May 2022

RPC opinion

Rating¹	RPC opinion
Fit for purpose	<p>The Department has identified a range of impacts across both the primary and expected secondary legislation. For measures with direct impacts to business from the primary legislation, EANDCBs have been provided and are supported by appropriate evidence. The Department has provided an acceptable qualitative assessment, supported by indicative analysis of the impacts that may arise due to secondary legislation. The IA considers the impacts upon small and micro businesses (SMBs), both as suppliers and consumers. The Department provides a clear set of overarching objectives for the Bill overall, although individual measures could be improved through making stronger arguments for intervention. A wider range of options and the process through which the preferred option was chosen, should be included for all measures. The consideration of the wider impacts of the Bill should be strengthened, in particular the consideration of competition and innovation impacts. Monitoring and evaluation (M&E) plans have been developed for some measures, however the IA would be improved through</p>

¹ The RPC opinion rating is based only on the robustness of the EANDCB and quality of the SaMBA, as set out in the [Better Regulation Framework](#). The RPC rating is fit for purpose or not fit for purpose.

monitoring the success of the overall. On first submission the IA received an initial review notice (IRN) – see below for details.

Business impact target assessment

	Department assessment	RPC validated
Classification	Qualifying regulatory provision	Qualifying regulatory provision
Equivalent annual net direct cost to business (EANDCB)	£8.3 million (initial IA estimate) £8.3 million (final IA estimate)	£8.3 million (2019 prices, 2020 pv) Further IAs to be submitted at secondary legislation stages for validation of EANDCB figures
Business impact target (BIT) score	£41.5 million	£41.5 million
Business net present value	£-64.1 million	
Overall net present value	£266.2 million	

RPC summary

Category	Quality²	RPC comments
EANDCB	Green	The IA provides a suitably robust assessment of the quantified impacts to business, arising directly from primary legislation. For the expected secondary legislation, the Department has provided an acceptable consideration of the potential areas of impact and supports this with indicative analysis where possible.
Small and micro business assessment (SaMBA)	Green	The IA considers the impacts to SMBs across all of the measures, as energy suppliers, key affected businesses and as consumers of energy. It would be improved through greater discussion of what mitigating actions could be taken to support SMBs who are disproportionately affected.
Rationale and options	Weak	The Department provides a clear set of overarching objectives for the Bill and individual measures discuss a range of market failures, and other barriers, limiting their respective markets. A range of options are included across the measures covered in the Bill, however some measures only consider the preferred option.
Cost-benefit analysis	Satisfactory	The IA makes use of a range of evidence sources to support the analysis of impacts, both for validation and indicative. The Department provides a sufficient description of the approach taken and the key assumptions are appropriately justified. However, the IA could be strengthened through providing greater clarity on the actions taken to source the most appropriate evidence.
Wider impacts	Satisfactory	A broad range of wider impacts are considered across the full suite of measures in the IA. Some measures have environmental, competition or public sector impacts included implicitly in the policy design and main analysis of impacts. However, the IA would benefit from considering the impacts to innovation, trade and investment further, as well as adding to the consideration of non-domestic consumer impacts.
Monitoring and evaluation plan	Weak	The Department has sought to produce proportionate M&E plans for the individual measures being introduced. The Department needs to use the more developed plans, to inform those which are still to be fully considered. In addition, the IA should have considered whether

² The RPC quality ratings are used to indicate the quality and robustness of the evidence used to support different analytical areas. Please find the definitions of the RPC quality ratings [here](#).

an overarching M&E framework for the Bill in
aggregate could have been developed.

Response to initial review

As originally submitted, the IA was not fit for purpose due to shortcomings across multiple measures, as well as in the consideration of the collective impact of the measures covered by the Bill. The primary areas of concern that the RPC noted in the initial review were:

- an insufficient explanation of the baseline position and supporting evidence;
- a lack of consideration and appropriate quantification of the full impacts of the Bill (in line with what is set out in RPC guidance for primary legislation IAs³);
- the use of assumptions that were unjustified or unsupported by appropriate evidence;
- a lack of sufficient clarity or detail to explain the approach to analysis; and
- an insufficient identification of the full impacts on SMBs and insufficient consideration of potential mitigating actions or, where possible, exemptions.

The Department has now considered the full range of impacts (of both primary and expected secondary legislation) of the measures included in the Bill, and provides an appropriate level of indicative quantification of the likely impacts of potential secondary legislation. In addition, the IA includes a clearer presentation of the analysis, cites appropriate evidence to support key assumptions, and considers the specific impacts facing SMBs (including whether these would be disproportionate).

These amendments by the Department, has resulted in the overall net present value of the IA rising from £243.8 million to £266.2 million. The EANDCB and business net present value for the IA remain unchanged from those provided on first submission.

A complete breakdown of the issues raised by the RPC in the initial review notice and the Departments actions to correct these can be found in Annex A.

Summary of proposal

The Department is introducing a range of measures through the Bill aimed at enabling the UK to move towards a clean, affordable and resilient energy system. The Bill is comprised of the four pillars, as explained below.

1. **Facilitating investment in new technologies** to support the orderly transition away from unabated fossil fuels, whilst ensuring efficient and cost-effective decarbonisation.
2. **Reform of critical system enablers** to ensure market frameworks and governance arrangements are fit for net zero.
3. **Consumer protection and affordability**, keeping the cost of living down and empowering consumers to manage their bills through improved energy performance.
4. **Safety and security** of the civil nuclear and offshore energy sectors.

³ <https://www.gov.uk/government/publications/rpc-case-histories-primary-legislation-ias-august-2019>

The 35 measures included in the Summary IA are split across these four areas, with individual IAs supporting these as appropriate. Only nine of these measures are expected to have a direct impact, arising as a result of primary legislation⁴. A list of all of the measures included in the IA, as well as the RPCs assessment of the impacts of these measures, can be found in Annex B.

The overarching Bill IA estimates these impacts to have an EANDCB⁵ of £8.3 million, a business net present value (BNPV) of -£64.1 million and a societal net present value (NPV) of £266.2million.

EANDCB

Identification of impact(s)

The IA includes nine measures which have direct impacts arising from the introduction of the Bill and have undertaken a suitably robust assessment of the full expected impact of these measures, in line with scenario 1 of the RPC guidance⁶ on primary legislation IAs. For the remaining measures covered in the summary IA, the Department has provided an acceptable consideration of the impacts of both the primary and expected secondary legislation, in line with RPC guidance on primary legislation IAs, providing a scenario 2 assessment at this time for those measures without a direct impact via primary legislation.

Direct and indirect impact(s)

The IA states that only nine of the measures will introduce direct regulatory requirements through primary legislation. For these measures, the Department have appropriately identified the direct impacts both to business and to public sector bodies.

Un-monetised impact(s)

The Department has provided a proportionate assessment of the impacts at this stage. However, for some measures the expected impacts are discussed in qualitative terms only, with supporting evidence on the industry/sector used to support this assessment. The IA would benefit from an initial attempt at quantification of these impacts, which can be refined as appropriate when introducing secondary legislation.

Future assessment

The Department stated that further IAs will be produced, as appropriate, for any related secondary legislation. The RPC would expect to see much more detailed

⁴ While these are the only figures quantified at this stage, the RPC scrutinises the Departments assessment of the expected impacts of both Primary and Secondary legislation, for all policies introduced in the Bill.

⁵ The EANDCB, BNPV and NPV figures included here are taken from the IA calculator that was submitted alongside the Bill IA, which, for BIT accounting purposes, are presented in 2019 prices and has a base year of 2020.

⁶ <https://www.gov.uk/government/collections/rpc-case-histories>

qualitative and quantitative cost-benefit analyses in the IAs accompanying the relevant secondary legislation enabled by the Bill. The RPC would welcome any discussion with the Department prior to the submission of IAs produced to accompany future secondary legislation.

SaMBA

Scope

In the IA's summary of the collective impacts upon SMBs, the measures are classified into those that have a quantified impact upon SMBs as a result of primary legislation, those which may have a disproportionate impact due to expected secondary legislation, those expected to not disproportionately impact upon SMBs and those that there is no expected impact.

Where possible, the Department identifies the potential number of SMBs that will be impacted by a given measure. The IA discusses the impacts to SMBs and provides an acceptable consideration of the specific impacts and issues that SMBs face, compared to their larger business counterparts. It would benefit from greater discussion of the evidence that is included to support the views that costs to SMBs are not disproportionate. The IA would further benefit from improved clarity of how it determines whether impacts are disproportionate upon SMBs.

Mitigation and exemption

Where appropriate the Department has discussed whether SMBs could be exempt from any new regulatory requirements, while still achieving the stated policy objectives. For example, in *Heat networks market framework* (2.10) a partial exemption for SMBs is being considered as part of secondary legislation. However, in general, many of the measures do not include an exemption for SMBs. In addition, only a few of the measures included in the Bill, *Energy Smart Appliances* (2.12), provide a detailed consideration of mitigation. The IA would benefit from greater discussion of potential mitigating actions that could be taken, to support SMBs who are disproportionately impacted by the measures brought forth in the Bill, to help deliver the policy objectives.

Rationale and options

Rationale

The Department establishes a clear set of objectives that the Bill aims to deliver. Individual measures similarly include clear objectives which support the broader themes as set out in the Summary IA. While some measures, such as *Heat network market framework* (2.10), provide a good discussion of the market failures to justify government intervention in addition to other barriers, other measures, such as *Clean heat market mechanism* (1.6) fail to provide a compelling case for intervention. All measures should provide evidence to support the market failures and other barriers

identified, as well as clearly explain how the industry/market has not acted to rectify the issue already.

Options

The Department has considered a range of options across many of the measures included in the Bill. While some, such as *Heat networks market framework* (2.10), provide details of the initial long list of options, including the consideration of non-regulatory options, and their process for developing the preferred option being introduced via the Bill, a number of measures do not. For measures that simply present the do-nothing and the preferred option, the IA would be improved by, clearly establishing what other options have been considered. This should include the discussion of non-regulatory alternatives that have been considered, or why a non-regulatory option is not seen as suitable in delivering the stated policy objectives.

Cost-benefit analysis

Evidence

The Department draw upon a range of sources to inform the assessment of impacts and the quantification of costs. Several measures discuss previous consultations that have been used to both gather evidence, as well as help shape and refine the preferred policy option. The IA also speaks of on-going engagement with industry, which has been important in understanding the areas and likely scale of impact. It would benefit from providing more discussion of how the evidence gathered is the most appropriate and reflective of those impacted by respective measures.

Analysis

The Department provides an acceptable explanation of the analysis that has been undertaken, however some measures rely on additional documents to explain the methodological approach. The IA would benefit from ensuring that as much explanatory text as is necessary, is included to aid the reader in easily understanding the process through which the impacts have been determined.

Assumptions, risks and sensitivity

The Department make use of a number of assumptions in the analysis to support the quantification of the EANDCB at this stage. The IA includes sufficient discussion of the appropriateness of these assumptions and provides evidence to support their inclusion. The Department, for *OTNR Multi-purpose interconnectors* (2.3) and *Defining electricity storage* (2.4), use document length and reading time assumptions to estimate the relevant familiarisation costs. While this would reflect of the respective changes in legislation, the IA should have considered the additional aspects of familiarisation that businesses would likely need to undertake.

The Department also make use of further assumptions within its indicative analysis of potential secondary impacts, which should be thoroughly tested and similarly justified/supported by evidence for use in further assessments.

Wider impacts

Consumer impacts

In addition to having consumer protection being one of the core pillars of the Bill, the Department has considered the potential impacts upon households. The Department highlight the measures which are intending to provide benefits to households. Where appropriate the Department note the potential for costs incurred by businesses to be passed on to consumers. The IA includes an indicative change to household bills based on the collective impact of the Bill, which provides good additional consideration to consumers in light of current cost of living pressures. It would benefit by including greater discussion of the impact of consumer affordability on the success of some measures, as is the case for *Clean heat market mechanism* (1.6).

Innovation

While the Department claims in some instances that measures will lead to a boost in innovation, this is not discussed consistently enough across all measures. In addition, when innovation is mentioned, there is not a clear explanation of the process through which innovation will be fostered. The IA would benefit from considering the impact to innovation across more measures and the pathways through which it may be delivered.

Competition

While some measures have competition impacts intrinsically considered in the policy design, such as *Smart secure energy systems* (2.7) and *Extension of the default energy tariff price cap* (3.6), many others lack a consideration of the competition impacts. Some measures discuss the expected impacts on prices that businesses may charge, however most do not include a specific consideration of the impact to competition and market dynamics. This is problematic when regulatory solutions crowd-out unregulated provision, such as in *CO2 Transport and Storage Networks* (1.2), where the proposal is to create a new monopoly, regulated by Ofgem.

International trade and investment

Some measures discuss the potential trade implications, for instance where there may be a reliance on foreign imports. Investment, both in terms of that needed to ensure that measures are successful and that which may be incentivised in the future, is only briefly mentioned. The IA would greatly benefit from more discussion of the likely investment requirements, as well as potential investment opportunities that may arise.

Environment

The environmental impacts are considered throughout various measures, with an indication of the potential carbon savings included for measures where this is appropriate. The IA makes clear what measures will directly seek to help deliver net-zero. The IA would benefit from including discussion on the potential increase in

waste and scrappage, that may occur due to the upgrading of buildings/machinery in a move towards more energy efficient practices.

Public sector

A number of the measures covered in the Bill relate to public sector bodies directly, such as *Pensions reform for the Nuclear Decommissioning Authority* (4.1) and *Civil nuclear constabulary* (4.8), meanwhile others which may not place new regulatory requirements directly upon public sector bodies, do have expected impacts upon them. The Department has provided an acceptable level of discussion of the costs to regulators where appropriate and included quantification where possible. The IA includes public sector bodies in its discussion of non-domestic consumer impacts, however the IA would benefit from considering the specific impacts that affect public sector bodies and their energy usage, that may differ to businesses.

Security of supply

In addition to the typical areas of wider impacts, the Department discusses the impacts on energy security. The IA highlights the specific measures that will help to facilitate a more secure energy supply in the UK, however, it would benefit from providing more detailed descriptions of specific mechanisms, through which these measures will provide such supply safeguards.

Monitoring and evaluation plan

There is no plan to conduct a PIR for the Energy Bill Summary IA to assess the collective impact of the measures and whether they achieve the overarching policy objectives. The Department has indicated that M&E will be undertaken on a measure-by-measure basis, due to the range in scope of the policies in question, and by extension their aims and objectives.

The IA focuses on the M&E plans that each individual policy will undertake. The M&E plans discussed for the individual policies vary in level of detail and quality, however the level of detail, and consideration of M&E, is generally proportionate to the expected scale of the impact of the measure. Therefore, those with larger impacts typically have more developed M&E plans. For those measures that are rather small in scope, a PIR is not seen as proportionate, but the Department does note that on-going engagement will take place, to ensure the policy is working. Some policies have included well developed M&E plans for this stage of the policy. Those, such as *Energy Smart Appliances* (2.12), have included elements like a theory of change, key evaluation questions, proposed metrics to monitor progress and how success will be determined. The Department needs to consider whether those with less developed frameworks for M&E, could follow the example set by those with an established M&E plan.

The IA would be improved by considering what M&E activities could be put in place, to assess whether the collective efforts of all of the measures included in the Bill, are successful in delivering the stated policy objectives. This should look to follow the example of the standout M&E plans already mentioned.

Other comments

The IA could have been improved by including some discussion of the various current geopolitical factors that are affecting the global energy market, energy supply to UK consumers and the current energy price spike. This could touch on whether these nascent factors should lead to a slowing of the implementation of some policies, or whether in some instances act as a further catalyst to change.

Regulatory Policy Committee

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Annex A: Summary of responses to initial review

Measure	Potential red-rateable issue	Actions taken by the Department to address these issues
1.1 Closure of coal plants by 2024	<i>Identification and quantification of impacts</i> The IA had not considered the full range of impacts arising due to the measure.	The IA now discusses a wider range of impacts to UK coal mining, including the consideration of what administrative or potential conversion costs may occur.
	<i>Unjustified assumptions</i> The IA included assumptions that were not appropriately justified, through the inclusion of supporting evidence.	The IA has now included sufficient explanation, and evidence to support it, of why the residual value of coal plants that have already closed, has not been considered.
	<i>Insufficient explanation of analysis</i> The IA lacked a clear explanation of the methodological approach, for producing the cost and benefit estimates included.	The Department has now included further material, explaining how the Dynamic Dispatch Model (DDM), through which the impacts have been assessed, works.
1.2: CO ₂ Transport and Storage Networks	<i>Unjustified assumptions</i> The IA included assumptions that were not appropriately justified, through the inclusion of supporting evidence.	The Department has sufficiently clarified why the evidence used to support the analysis is appropriate, and has updated the key assumptions relating to familiarisation accordingly.
1.6: Clean heat market mechanism	<i>Identification and quantification of impacts</i> The IA had not considered the full range of impacts arising due to the measure. It was missing a discussion of the range of different businesses who would be impacted by the whole policy, and indicative quantification of the impact of expected secondary legislation was absent.	The IA has now included sufficient discussion of the affected industry and businesses. It now also provides figures for the expected number of affected businesses, as well as indicative estimates of the likely scale of impact, arising from secondary legislation.
	<i>SaMBA</i>	The Department has clarified that they do not expect any SMBs to currently manufacture boilers that would fall under the remit of the measure. The IA now

	The IA had not provided sufficient information on the number of SMBs likely to be impacted. In addition, it had not adequately considered whether any impacts upon SMBs would be disproportionate and if mitigating actions were possible.	acknowledges the likelihood that SMBs who are impacted, may face disproportionate costs. The IA discusses potential mitigation measures, such as a possible market share <i>de minimis</i> threshold, with decisions to be taken at secondary legislation stage.
2.3: OTNR – Multi-Purpose Interconnectors	<i>Insufficient evidence to support analysis</i> The IA made use of estimates that were based on Departmental intelligence, without providing any further information on the origin, or applicability, of the estimates.	The IA now provides sufficient clarification of the evidence used to support the cost estimates.
	<i>Unjustified assumptions</i> The IA included assumptions that were not appropriately justified, through the inclusion of supporting evidence.	The Department has now updated the assumptions relating to familiarisation costs in the IA and included sufficient discussion of how these are appropriate to estimate these costs.
	<i>SaMBA</i> The IA had not provided a sufficient assessment of the full range of impacts to SMBs. In addition, the IA claimed that some costs faced by SMBs were not disproportionate without providing a clear justification.	The IA now clarifies that the new requirements will not introduce additional barriers to entry for SMBs. It provides further discussion on the benefits, of legal clarity, for SMBs. The Department acknowledge the likely disproportionate impact of familiarisation costs for SMBs, however provides additional discussion of how this may be offset and why exemption is not appropriate.
2.4: Defining electricity storage	<i>Identification of impacts</i> The IA had not considered the full range of impacts arising due to the measure and had not provided enough detail on the specifics of the policy.	The IA now provides clarification of the expected impacts, noting that there should not be any reclassification of current assets in the respective markets.
	<i>Unjustified assumptions</i> The IA included assumptions that were not appropriately justified, through the inclusion of supporting evidence.	The Department has now updated the assumptions relating to familiarisation costs in the IA and included sufficient discussion of how these are appropriate to estimate these costs.
	<i>SaMBA</i>	The IA has now sufficiently acknowledged that the impact of familiarisation will be proportionately larger for SMBs,

	The IA claimed that costs faced by SMBs were not disproportionate, without providing a clear justification. In addition, assumptions relating to SMBs needed evidence to support their use.	compared to their turnover. It also now includes discussion, explaining why exemption for SMBs and forms of support to such businesses, were deemed not appropriate.
2.7: Smart secure energy systems (SSES)	<p><i>Identification and quantification of impacts</i></p> <p>The IA had only provided a qualitative discussion of the cost to business. No illustrative quantification of the likely scale of the impacts had been included.</p>	The IA now includes greater detail across all areas of impact covered in the Department's discussion of expected impacts of secondary legislation. It now also includes, where possible, figures to provide an illustration of the potential scale of the costs arising from these impacts.
2.14: Smart charge points	<p><i>Identification of impacts</i></p> <p>The IA had not sufficiently explained how the impacts would affect different key groups. In addition, the IA had not considered all areas of potential impact.</p>	The Department has clarified the impact of the measure on the different economic operators in the market. In addition, the Department has provided further clarity, by similarly breaking down the respective indicative costs and benefits to different groups.
3.8: Energy saving opportunity scheme (ESOS)	<p><i>SaMBA</i></p> <p>The IA had not considered the full range of SMBs that could potentially be impacted by the measure.</p>	The IA has now included a more detailed discussion of the impacts to SMBs. This includes providing more information on the potential SMBs who could be impacted from the measure, as well as clarifying the engagement that the Department undertook to better understand the impact to SMBs.
4.2 Final stage of Nuclear Decommissioning	<p><i>Appraisal periods</i></p> <p>The IA had used an incorrect appraisal period for the measure, resulting in an artificial suppression of impacts.</p>	The Department has now adjusted the appraisal period of its indicative analysis, to correctly reflect the year of introduction of the Bill.
	<p><i>Unjustified assumptions</i></p> <p>The IA included assumptions that were not appropriately justified, through the inclusion of supporting evidence.</p>	The IA has now included sufficient evidence, and discussion of why this evidence is the most appropriate, for the key assumptions that are made.
	<p><i>SaMBA</i></p>	The IA has included evidence, to provide additional context on the scale of the impact to the hauliers industry

	<i>The IA had not included sufficient discussion of whether impacts to SMBs identified, would be disproportionate or not.</i>	overall, and support the position that the costs will not be disproportionate to SMBs.
<i>4.3 Downstream oil resilience</i>	<i>Identification of impacts</i> The IA had not considered the additionality and potential compounding of impacts.	The IA has now included some consideration of the action's consumers may take, due to impacts of the measure. While the IA does now acknowledge this may exacerbate impacts, it notes that this cannot currently be quantified.
<i>4.6 Offshore oil & gas environment protection</i>	<i>SaMBA</i> The IA had not included sufficient discussion of whether impacts to SMBs identified, would be disproportionate or not.	The Department has provided further discussion of the impacts on SMBs participating in the offshore oil & gas industry. This includes the explanation that this participation would most likely be as one of several parties, thereby spreading any burden.
<i>RPC-BEIS-5173(1): Energy Bill Summary Impact Assessment</i>	<i>Identification of impacts</i> The IA had not considered the impact to non-domestic energy consumers, arising due to all of the measures covered by the Bill collectively.	The IA now includes a sufficient consideration of the impacts to non-domestic (i.e., business, as well as voluntary and public sectors) consumers. In addition, it now expands upon its consideration of impacts to households, to take into account the effect that affordability for lower-income households may have on the realisation of benefits.
	<i>Clarification of regulatory measures</i> There was a lack of clarity, of whether some measures covered in the IA included regulatory requirements on business (through primary and/or secondary legislation).	The Department has now sought to ensure that a consistent approach has been taken, to identifying the regulatory status of individual policy measures.
	<i>SaMBA</i> The IA had not considered the collective impact of all the measures covered in the Bill. In addition, the IA had not considered the impact on SMB energy consumers.	The Department now discusses the aggregated impacts of all 40 measures that comprise the Bill. This includes stratification of measures by when impacts are expected to occur, as well as scale.

Annex B: Summary of impacts from measures included in the Bill

Measure	Description of measure	Main impacts identified by the Department	RPC opinion on quality of assessment and areas for improvement
Those in bold have direct impacts as a result of primary legislation			
Pillar 1: Facilitating investment in new technologies			
1.1 Closure of coal plants by 2024	This measure will ensure the closure of any remaining coal-fired power plants, as well as ensuring that these plants cannot be re-opened at a later date.	<p>Costs</p> Decrease in producer surplus Capital costs Unserved energy costs Interconnector costs Administration costs	<p>The Department provides a sufficient assessment of the impacts of the policy, including appropriate evidence to support the quantification of the potential impact.</p> <p>Options</p> A non-regulatory option has not been considered. Only the do-nothing and the closure of coal-plants options are banned. Given the discussion relating to the rate of decline, the IA should have explored what non-regulatory options may have acted as an accelerant. <p>Wider impacts</p> The impact on supply chain industries, such as coal transportation, with its related employment impact was not considered or quantified.
1.2 CO₂ transport and storage regulatory investment (TRI)	This measure will introduce a regulatory and licensing regime for businesses that wish to operate CO ₂	<p>Costs</p> Familiarisation & legal costs to T&S companies Ofgem costs Implementation costs	The Department provides a sufficient assessment of the impacts of the policy, including appropriate evidence to support the EANDCB being put forth for validation.

		<p>Benefits Enables deployment of a CO2 T&S network Emissions savings Reduced costs for energy intensive industries Protection of jobs and output</p>	<p>Rationale The IA discusses several market failures and barriers to entry, however, the it could provide evidence to support this discussion. It would further benefit from discussing whether there were any lessons that could be learned from the Thames Tideway, which included a competitive bidding process ran by Ofwat.</p> <p>Evidence The IA estimates the costs to Ofgem to be in the region of £3 million per annum. The Department should consider whether the evidence used to support this assessment is appropriate, given the scale of Ofgem’s total expenditure in 2020 of only £20.9 million (which covered several areas of regulation).</p> <p>Wider impacts The consideration should have considered the impacts on innovation within CCUS. In addition, while the IA highlights some risks to the CCUS industry given its relative infancy, it should discuss the competition effects of licensing and the role of creating a natural monopoly further.</p>
<p>1.3 Hydrogen heating village grid conversion trial</p>	<p>This measure will enable the delivery of a hydrogen heating village grid conversion trial.</p>	<p>Costs Potential disruption where extended gas network powers are invoked Small potential increased consumer engagement costs for gas networks</p> <p>Benefits Increased certainty for gas networks</p>	<p>The Department provides a good assessment of the full impacts of the policy and includes an appropriate degree of quantification.</p> <p>Wider impacts The IA would be improved through greater discussion of the environmental impacts, as well as the potential impacts to consumers.</p>

		<p>Increased likelihood the trial will take place and the conversion process will be timely, efficient, and safe</p> <p>Time off gas minimised for consumers taking part in the trial</p> <p>Consumers protected</p>	
<p>1.4 Hydrogen and industrial carbon capture (ICC) business models</p>	<p>This measure will enable financial assistance and counterparty powers to support the hydrogen and ICC business models.</p>	<p>Costs</p> <p>Levy costs to businesses and consumers</p> <p>Administration and familiarisation costs to business and the delivery body</p> <p>Benefits</p> <p>Emissions savings</p> <p>Air quality improvements</p> <p>Cost savings from fuel switching</p> <p>Jobs supported</p>	<p>As this measure relates to legislating for financial assistance, the Department has provided an appropriate level of discussion of the impacts for inclusion in the IA.</p>
<p>1.5 Hydrogen levy powers</p>	<p>This measure enables the creation of a dedicated hydrogen levy as set out in the Net Zero Strategy.</p>	<p>Costs</p> <p>Levy costs to businesses and consumers</p> <p>Administration and familiarisation costs to business and the delivery body</p> <p>Benefits</p> <p>Emissions savings</p> <p>Air quality improvements</p> <p>Cost savings from fuel switching</p> <p>Jobs supported</p>	<p>While this measure relates to a levy funding mechanism for the hydrogen sector, the Department has undertaken a brief assessment of the impacts to support its inclusion in the Bill.</p>

<p>1.6 Clean heat market mechanism</p>	<p>This measure enables, a requirement for businesses, such as heating appliance manufacturers, to increase the sales of low-carbon versions.</p>	<p>Costs Familiarisation costs Higher capital costs for low-carbon heating Change in energy demand costs Compliance costs</p> <p>Benefits Increased low-carbon heating installations Emissions savings Air quality improvements Innovation benefits</p>	<p>The Department provides a sufficient assessment of the full impacts of the policy.</p> <p>Options The IA should discuss more fully the regulatory alternatives mentioned, e.g. potential additional subsidy-based measures, and demonstrate consideration of non-regulatory options.</p> <p>Wider impacts It would benefit from greater consideration of consumer affordability, in terms of the initial capital outlay of heat pumps compared to gas boilers, and the extent to which this would influence the delivery of the market obligation.</p> <p>Monitoring and evaluation The Department only includes a brief consideration of M&E for this measure. The IA should consider what metrics and evidence would be necessary to understand whether the policy is successful.</p>
<p>1.7 Fusion regulation</p>	<p>This measure will amend the Nuclear Installations Act 1965 to exclude fusion energy facilities from being considered nuclear installations.</p>	<p>No expected impacts</p>	<p>The Department includes a clear explanation of the relevant amendment, providing justification to the assessment of impact.</p>

Pillar 2: Reform of critical system enablers			
2.1 Special merger regime for energy networks	This measure will strengthen Ofgem's regulatory ability and protect consumers by providing the Competition and Markets Authority (CMA) with further powers when considering energy network company mergers.	<p>Costs Administration and familiarisation costs Foregone efficiency gains to network companies Potential increase in emissions from the gas/electricity sector Reduced revenue for network companies</p> <p>Benefits Lower network charges for consumers – estimated £2 reduction in the average annual dual fuel energy bill Avoided deadweight loss</p>	<p>SaMBA The IA would benefit from noting that SMBs that consume energy, may indirectly benefit as lower electricity and gas prices could result.</p> <p>Wider impact The Department does well to discuss the potential cost-pass through to consumers, but the IA would benefit from an explicit competition assessment, as well as one covering innovation.</p>
2.2 Energy industry code reform	This policy will: a) create a body that provides strategic direction across energy codes; and b) create an empowered code manager function.	<p>Costs Increased Ofgem costs Learning and familiarisation costs</p> <p>Benefits Cost savings to industry due to fewer consultations Reduced delays to code modifications Reduced entry barriers for smaller firms</p>	A separate IA was submitted for this measure prior to this IA. The RPC determined that IA to be fit-for-purpose and the relevant opinion will be published separately.
2.3 Multi-purpose interconnectors	This measure introduces a new licensable activity for multi-purpose interconnectors (MPIs) under the existing regulatory regime, enabling MPI developers to obtain	<p>Costs Familiarisation costs for existing non-MPI electricity licence holders</p> <p>Benefits Increased legal clarity for MPI developers Potential for increased interconnection capacity</p>	<p>The Department provides a sufficient assessment of the impacts of the policy, including appropriate evidence to support the EANDCB being put forth for validation.</p> <p>Monitoring and evaluation The Department is not considering undertaking any formal M&E at this time, however, does state that there will be</p>

	MPI-specific licenses from Ofgem.	Potential for lower capital and operating costs for interconnection capacity Facilitate coordination of offshore infrastructure	continued stakeholder engagement. The IA should consider what metrics and evidence would be necessary to understand whether the policy is successful.
2.4 Defining electricity storage	This measure will define electricity storage, as a distinct subset of generation, in the Electricity Act 1989.	<p>Costs Familiarisation costs</p> <p>Benefits Increased investor confidence Reduced risk of legal challenge Cost savings for industry – legal advice no longer required to clarify the position of storage Increased number of electricity storage projects</p>	<p>The Department provides a sufficient assessment of the impacts of the policy, including appropriate evidence to support the EANDCB being put forth for validation.</p> <p>Rationale The IA states that in the absence of legislation, the Government has taken steps to provide clarity on this definition. However, it does not say whether this action has not been successful and whether the limitations of not having a definition are significant enough to require the change.</p> <p>Counterfactual The Department should have included consideration of the expected growth of the industry and the impact upon this due to the policy.</p>
2.5 Smart metering rollout	This measure extends powers to make licence and industry code modifications for the smart meter rollout from a current expiry of 1 November 2023 to a new expiry of 1 November 2028.	<p>Costs Costs for energy suppliers to purchase of metering assets Installation costs Operation, maintenance, and IT costs to suppliers</p> <p>Benefits Energy savings for consumers Lower consumer bills</p>	<p>The Department provides a sufficient assessment of the impacts of the policy.</p> <p>Wider impacts The IA would be improved through greater discussion of wider impacts, such as innovation and investment, of the measure, as currently it only makes reference to (and includes the findings from) a public sector equalities duty (PSED).</p>

		<p>Emissions savings Lower customer service costs for energy suppliers Maintains flexibility in the energy system</p>	
<p>2.6 Future system operator (FSO)</p>	<p>This measure creates a new independent FSO, who will be able to drive progress towards net zero, while maintaining energy security and minimising costs for consumers.</p>	<p>Costs Cost to purchase assets Implementation costs Potential loss of synergies between the gas system operator function and transmission assets</p> <p>Benefits Enhanced roles and responsibilities of the FSO Greater ‘whole-system’ co-ordination and decision making</p>	<p>A separate IA was submitted for this measure prior to this IA. The RPC determined that IA to be fit-for-purpose and the relevant opinion will be published separately.</p>
<p>2.7 Smart secure energy systems (SSES)</p>	<p>This measure will require organisations undertaking relevant “load control” activities to obtain a licence from Ofgem and comply with any licence conditions and codes attached to that licence.</p>	<p>Costs Compliance costs for licensees Ofgem costs to enforce licenses Technical infrastructure costs</p> <p>Benefits Increased uptake of demand side response (DSR) Reduced costs of maintaining energy system stability Protection against unfair treatment of consumers</p>	<p>The Department provides a sufficient assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.</p> <p>Monitoring and evaluation The IA includes a high-level discussion of the M&E activities; however the IA would benefit from considering what actions specific to the proposal can support this.</p>
<p>2.8 Smart heat pumps</p>	<p>This measure seeks powers, to mandate that all electric space heating appliances (e.g., heat pumps,</p>	<p>Costs Familiarisation and transition costs Manufacturing costs Potential reduction in consumer choice</p>	<p>The Department provides a sufficient assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.</p>

	storage heaters and heat batteries) sold in GB have smart functionality.	<p>Increased customer service requirement Enforcement and infrastructure costs</p> <p>Benefits Electricity system benefits from increased flexibility Lower consumer bills Emissions savings Accelerated innovation and investment</p>	<p>Wider impacts The IA includes either very limited or no discussion of the wider impacts of the measure. The consideration of the trade impacts is missing, despite the IA noting that the majority of appliance manufacturers selling the in the UK market are overseas firms.</p>
2.9 Heat network zoning	This measure will see heat networks deployed in areas in England where they are the lowest cost, low carbon heating solution.	<p>Costs Capital costs to deploy heat networks Costs to designate heat network zones Compliance costs Disruption costs</p> <p>Benefits Net energy savings as heat networks are more efficient Supply chain development Jobs and GVA benefits Increase in the deployment of low carbon heat networks Emissions savings Lower system costs</p>	The Department provides a good assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.
2.10 Heat network market framework	This measure will: a) specify a heat network regulator and their powers, b) define heat network consumer protection measures; and	<p>Costs Compliance costs for heat network businesses Ofgem costs to be the regulator</p> <p>Benefits Improved consumer protection Improved technical standards</p>	<p>The Department provides a good assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.</p> <p>Counterfactual The indicative impacts of this measure appear to be dependent upon the linked</p>

	c) define heat network statutory powers.	Support in meeting decarbonisation targets Extra rights and powers to heat network owners/operators	‘Heat network zoning’ measure. The Department should ensure that the impacts of these are appropriately separated to avoid double counting. Monitoring and evaluation While the IA includes a list of questions to be addresses in a future PIR, this is high-level and the IA would benefit from considered what metrics will be needed to answer these questions.
2.11 Energy company obligation 4 (ECO4) buyout mechanism	This measure will remove current size-based supplier thresholds for ECO and will introduce a buy-out mechanism to ensure smaller suppliers can meet their ECO obligations, without facing disproportionately high costs.	Costs Costs for newly obligated suppliers Potential reduction in ECO4 benefits if buy-out results in less energy efficiency measures delivered, which may have bill impacts Benefits Lower obligation on average for existing ECO4 suppliers Reduced delivery costs for existing obligated suppliers Improved competition as current market distortions are removed	The Department provides a sufficient assessment of the impacts of the policy. Wider impacts The IA would be improved through greater discussion of both the competition impacts and the distributional effects of the measure. Particularly given the nature of the measure and how central these aspects are.
2.12 Energy smart appliances	This measure will set requirements for energy smart appliances.	Costs Familiarisation and transition costs Manufacturing costs Benefits Increased flexibility from energy smart appliances Reduced cyber-risk and increased safety and interoperability	The Department provides a good assessment of the impacts of the policy.

		Reduced electricity system costs Emissions savings	
2.13 Onshore electricity network competition	This measure will extend the competitive regime to the onshore electricity network.	<p>Costs Setup costs Cost of running tenders Bidding costs</p> <p>Benefits Reduced construction and operating costs of future competition-eligible onshore network infrastructure through increased competition Lower costs for energy consumers – estimated £1 reduction in the average annual dual fuel energy bill Increased levels of innovation resulting in more efficient network build</p>	A separate IA was submitted for this measure prior to this IA. The RPC determined that IA to be fit-for-purpose and the relevant opinion will be published separately. The Department provided an updated indicative EANDCB to account for more recent input data, and the RPC were content with this amendment.
2.14 Smart charge points	This measure will extend powers to set device level requirements around smart functionality, grid stability, interoperability, cyber, data security and safety to electric vehicle smart charge points.	<p>Costs Familiarisation costs Increased costs to non-compliant business Cost to enforcement officer associated with issuing new guidance</p> <p>Benefits Greater clarity for business on roles and responsibilities Reduced incidence and duration of non-compliance, reducing the risk of grid instability Reduced costs for enforcement officer</p>	<p>The Department provides a sufficient assessment of the impacts of the policy.</p> <p>Wider impacts The IA does not sufficiently consider the wider impacts, such as innovation, investment, competition and trade, of this measure.</p>

Pillar 3: Consumer protection and affordability			
3.5 Energy performance of buildings	This measure will recover powers from the European Communities Act 1972 (ECA) which was lost when the EU Transition Period ended on 31 December 2020.	No expected impacts	Separate IAs were submitted for this measure prior to this IA, by the Department for Levelling Up, Housing and Communities (DLUHC). The RPC determined these to be fit-for-purpose and the relevant opinions will be published separately. The description of this measure in the Summary IA for the Bill is sufficient.
3.6 Extension of the default energy tariff price cap	This measure will provide Ofgem with powers to extend the temporary price cap on default energy tariffs beyond the end of 2023.	<p>Costs Potential cost to non-SVT consumers</p> <p>Benefits Lower costs for standard variable tariff (SVT) consumers Potential efficiency improvements for suppliers Reduced fuel poverty Reduced revenue for energy suppliers</p>	The Department provides a sufficient assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.
3.8 Energy saving opportunity scheme (ESOS)	This measure will strengthen the requirements of the ESOS, which includes improving the quality of ESOS audits, mandating public disclosure of high level recommendations, and introducing a net zero element.	<p>Costs Capital and installation costs Familiarisation and compliance costs</p> <p>Benefits Energy savings Emissions savings Air quality improvements Improved quality of ESOS audits Alignment of ESOS recommendations with net zero Supported jobs</p>	The Department provides a good assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.

<p>3.9 Operational energy rating scheme for large commercial and industrial buildings</p>	<p>This measure will enable the operational energy rating scheme to be created, allowing large offices to acquire a rating that measures the operational performance of their building.</p>	<p>Costs Compliance costs to business Costs to business to upgrade energy efficiency</p> <p>Benefits Energy savings Emission savings Lower costs to energy consumers</p>	<p>The Department provides a sufficient assessment of the full range of expected impacts. Appropriate quantification and indicative analysis is included.</p> <p>Wider impacts While the main analysis of the IA covers environmental impacts of the measure, the IA has not considered other impacts such as innovation, competition and those to the public sector. The latter of which were included at consultation stage.</p> <p>Interlinkage with other measures The IA would benefit from further consideration of the links to, and potential overlap with, other similar policies (such as ESOS).</p>
<p>3.10 Public sector emissions targets and reporting</p>	<p>This measure will enable the introduction of mandatory greenhouse gas emissions reporting and target setting for UK public sector organisations.</p>	<p>Costs Familiarisation and compliance costs</p> <p>Benefits Emissions savings from the public sector Green jobs supported Strengthened UK low-carbon supply chain Air quality improvements</p>	<p>The Department provides a good assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.</p>

Pillar 4: Safety and security			
<p>4.1 Pension reform for the Nuclear Decommissioning Authority (NDA) estate</p>	<p>This measure will reform the final salary defined benefit NDA pension schemes.</p>	<p>Costs Cost of implementing the bespoke revised Career Averaged Revalued Earnings (CARE) schemes</p> <p>Benefits Savings to the Exchequer Consistency with existing wider public sector pension reforms Increased equity</p>	<p>The expected impacts of this measure are upon the NDA, who are a public body. The Department has provided a proportionate assessment of the impact arising from this measure on the NDA and more widely.</p> <p>Wider impacts The Department have undertaken an equalities assessment for this measure; however, the IA would benefit from considering further wider impacts.</p>
<p>4.2 Final stages of nuclear decommissioning</p>	<p>This measure will streamline the regulatory requirements applied to UK nuclear sites in the final stages of decommissioning and clean-up.</p>	<p>Costs Familiarisation costs On-going monitoring costs</p> <p>Benefits Cost savings associated with the excavation and transport/disposal of waste Lower GHG emissions Nuclear liability savings</p>	<p>The Department provides a sufficient assessment of the full range of expected impacts. Appropriate quantification and indicative analysis are included.</p> <p>SaMBA The IA would have been improved by considering the specific impact to the four small hauliers, who are currently contracted by the industry. In particular, by considering what proportion of their annual haulage revenue is derived from this work.</p> <p>Monitoring and evaluation The IA makes some reference to M&E, however, would benefit from discussing what will be done to assess the impact and success of the policy more clearly.</p>

<p>4.3 Down-stream oil resilience</p>	<p>This measure will enable BEIS to collect data on oil product stocks and provides for a power of direction, which would enable BEIS to direct downstream oil companies to take certain actions to bring reduce fuel supply risks.</p>	<p>Costs Compliance costs to downstream oil businesses</p> <p>Benefits Reduced disruption to fuel supplies Reduced knock-on effects on the wider economy</p>	<p>The Department has provided a proportionate assessment of the impact arising from this measure.</p> <p>Non-monetised impacts The RPC note that the main cost element is not quantified – the impact of panic buying, as a multiplier effect on scarcity resulting from an initial operational failure.</p> <p>Monitoring and evaluation The IA does not include a formal M&E plan for this measure. It does note that the measure will allow BEIS to introduce powers to request monitoring data, however, does not discuss the further. The IA would have benefited from considering how these powers would be used to support potential M&E.</p>
<p>4.4 Oil and Gas Authority (OGA) ex ante powers</p>	<p>This measure will improve the OGA’s ability to ensure that the governance, technical and financial capability of a carbon storage or petroleum licensee is preserved following a change of its parent company.</p>	<p>Costs Administration and familiarisation costs</p> <p>Benefits Improved business environment for quality mergers and acquisitions Reduced risk of harms created by an undesirable change of control Reduction in legal costs to the OGA and industry</p>	<p>The Department provides a sufficient and proportionate assessment of the full range of expected impacts.</p>

<p>4.5 Licensing geological disposal facilities (GDF)</p>	<p>This measure will clarify that nuclear sites, which are in or under the territorial sea adjacent to the UK, can be licensed and regulated.</p>	<p>No expected impacts</p>	<p>The Department includes a clear explanation of the relevant amendment, providing justification to the assessment of impact.</p>
<p>4.6 Offshore oil & gas environment protection</p>	<p>This measure will allow the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to ensure the regulatory regime remains fit for purpose.</p>	<p>Impacts would be dependent upon the area of future regulatory amendments by OPRED. These could occur to:</p> <ul style="list-style-type: none"> • The Offshore Safety Directive 2013/30/EU • The Habitats Directive 92/43/EEC and Wild Birds Directive 2009/147/EC • The Environmental Impact Assessment Directive 2014/52/EU (amending Directive 2011/92/EU) 	<p>The Department provides a sufficient and proportionate assessment of the full range of expected impacts.</p> <p>Options The Department should have explained why these regulatory powers could not have been conducted by an existing regulator, thereby reducing overhead costs.</p>
<p>4.7 Offshore oil & gas decommissioning cost recovery</p>	<p>This measure will ensure OPRED can fully recover the cost of providing its services from industry and will increase operators' decommissioning efficiency.</p>	<ul style="list-style-type: none"> • No impacts as the total running costs are the same in every case • No net financial loss or gain as the savings to the taxpayer are equal to the additional costs to duty holders 	<p>The Department includes a clear explanation, and consideration of impact, of the changes to the cost recovery regime.</p>
<p>4.8 Civil nuclear constabulary (CNC)</p>	<p>This measure will expand the CNC's services and clarify support mechanisms and cross-border enforcement powers.</p>	<p>Costs Adaption of CNC's policing model Administration costs for new bidding processes</p> <p>Benefits Lower recruitment and training costs</p>	<p>The expected impacts of this measure are upon the CNC, who are a public body. The Department has provided a proportionate assessment of the impact arising from this measure.</p>

		<p>Potentially reduced costs for other critical infrastructure sites from increased competition</p> <p>Faster emergency response</p> <p>Improved quality of service through streamlining</p> <p>More efficient and effective enforcement of offences across UK</p> <p>Reduced administration costs over long-term by streamlining administrative barriers</p>	
<p>4.9 Accession to the Convention on Supplementary Compensation (CSC) for nuclear damage</p>	<p>This measure will enable the UK to accede to the CSC, an international treaty, which will expand the number of countries that are covered by the UK's nuclear third-party liability regime.</p>	<p>Costs A contingent liability on HMG (around £7.5m based on current conditions) and therefore the taxpayer, only affected in the event of an incident in a contracting party after exceeding the operator liability limit</p> <p>Benefits Ability for the UK to draw on the c.£120m international fund if a nuclear accident occurred in the UK which exceeded operator liability</p>	<p>This measure discusses the changes to the liability faced by HMG. The Department has provided a proportionate assessment of the impacts of this measure.</p>