Subsidy Advice Unit Report on the British Industry Supercharger subsidy scheme

Referred by the Department for Business and Trade

22 December 2023

Subsidy Advice Unit

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1. Introduction

- 1.1 This report is an evaluation prepared by the Subsidy Advice Unit (SAU), part of the Competition and Markets Authority, under section 59 of the Subsidy Control Act 2022 (the Act).
- 1.2 The SAU has evaluated the Department for Business and Trade's (DBT) assessment of compliance of the British Industry Supercharger for Energy Intensive Industries' scheme (the 'Supercharger' scheme), with the requirements of Chapters 1 and 2 of Part 2 of the Act (the Assessment).¹
- 1.3 This report is based on the information provided to the SAU by DBT in its Assessment and evidence submitted relevant to that Assessment.
- 1.4 This report is provided as non-binding advice to DBT. The purpose of the SAU's report is not to make a recommendation on whether the scheme should be implemented, or directly assess whether it complies with the subsidy control requirements. DBT is ultimately responsible for making the scheme, based on its own assessment, having the benefit of the SAU's evaluation.
- 1.5 A summary of our observations is set out at section 22 of this report.

The referred scheme²

- 1.6 The Supercharger scheme is designed to reduce industrial electricity prices for eligible Energy Intensive Industries (EIIs) in Great Britain,³ which represent around 300 businesses⁴ in sectors such as steel, metals, chemicals and paper. DBT estimates that the annual value of the scheme may be between around £320 to £410 million per year based on current EIIs' electricity costs.
- 1.7 The scheme consists of a package of three measures designed to reduce electricity prices by £24 per megawatt-hour (MWh) by 2025:

¹ Chapter 1 of Part 2 of the Act requires a public authority to consider the subsidy control principles and energy and environment principles before deciding to give a subsidy. The public authority must not award the subsidy unless it is of the view that it is consistent with those principles. Chapter 2 of Part 2 of the Act prohibits the giving of certain kinds of subsidies and, in relation to certain other categories of subsidy creates a number of requirements with which public authorities must comply.

² Referral of the proposed subsidy scheme, the British Industry Supercharger, by the Department for Business and Trade (DBT) - GOV.UK (www.gov.uk)

³ The Supercharger scheme is limited to Great Britain, as the various policy costs that it targets are unique to the Great Britain electricity grid and cost structure.

⁴ Government action to supercharge competitiveness in key British industries and grow economy - GOV.UK (www.gov.uk)

- (a) An increase of the EII Exemption for eligible EIIs from the indirect costs of the Contracts for Difference,⁵ Renewables Obligation⁶ and Feed in Tariffs⁷ three measures which encourage low carbon electricity generation in Great Britain from the current 85% exemption to an 100% exemption.⁸ This increase would come into effect in April 2024 and is expected to amount to around a further £5 to £7 per MWh reduction in electricity costs.⁹
- (b) The introduction of a Capacity Market Exemption for EIIs, which provides an indirect 100% exemption from the costs of funding Capacity Market¹⁰ Charges, to be introduced in October 2024. The indirect exemption reduces costs for suppliers by deducting demand of EIIs from relevant calculations. DBT anticipates that suppliers will pass on this saving to the EIIs they supply. DBT estimates that this will amount to around a £5 per MWh reduction in electricity costs for eligible EIIs.
- (c) The introduction of an EII Network Charging Cost Compensation measure which will provide a partial refund for eligible EIIs of 60% of network charging costs, in the form of compensation for incurred network charges.¹¹ This compensation would be introduced in April 2025.¹² It is expected that this will amount to an average of a £14/MWh reduction in electricity costs.
- To be eligible, EII businesses will need to pass both a sector-level and business-level test. The sector level test checks whether some or all of the products the business manufactures fall within energy and trade intensive sectors. The business level test relates to the proportion of electricity costs the business faces. DBT intend to carry out a review of the analysis which underpins eligibility for the measures in 2026.

SAU referral process

1.9 On 6 November 2023 DBT requested a report from the SAU in relation to the Supercharger scheme.

⁵ The Contracts for Difference scheme is the government's main mechanism for supporting low carbon electricity generation.

⁶ The Renewables Obligation scheme was designed to encourage generation of electricity from eligible renewable sources in the UK. It closed to all new generating capacity in 2017.

⁷ The Feed-in-Tariffs scheme is the government's subsidy scheme for generation of renewable electricity from small-scale low-carbon installations.

⁸ The Assessment focuses on the 15% increase in the level of support, and does not appear to directly evaluate the current 85% exemption under the EII Exemption Scheme.

⁹ DBT set out that the existing EII Exemption provides a £27 to £37 per MWh reduction in eligible electricity costs for eligible EIIs. The 100% exemption measure is expected to provide a £32 to £44 per MWh reduction in eligible electricity costs.

¹⁰ The Capacity Market is the government's main tool for ensuring a secure and reliable electricity system.

Network charges are charges paid by users of the electricity network, such as electricity suppliers, to the electricity system operator. These include charges intended to cover the costs of building, maintaining and balancing the system.
DBT's Network Charging Compensation Scheme consultation response sets out that 'any network charging costs incurred in April 2024 onwards will be eligible for compensation in arrears from April 2025'.

- 1.10 DBT explained¹³ that the scheme is a Subsidy Scheme of Particular Interest because it is confident that a number of EIIs will receive more than £10 million within the applicable period.¹⁴
- 1.11 The SAU notified DBT on 10 November 2023 that it would prepare and publish a report within 30 working days (ie on or before 22 December 2023). 15 The SAU published details of the referral on 10 November 2023. 16

¹³ In the information provided under section 52(2) of the Act

¹⁴ Statutory Guidance, paragraph 10.5.

¹⁵ Sections 53(1) and 53(2) of the Act.

¹⁶ Referral of the proposed subsidy scheme, the British Industry Supercharger, by the Department for Business and Trade (DBT) - GOV.UK (www.gov.uk)

2. General observations and summary of the SAU's observations

- 2.1 The Assessment uses the four-step structure described in the Statutory Guidance for the United Kingdom Subsidy Control Regime (the <u>Statutory Guidance</u>) and as reflected in the SAU's Guidance on the operation of the subsidy control functions of the Subsidy Advice Unit (the <u>SAU Guidance</u>).
- 2.2 Overall, we consider that the Assessment would have benefited from greater analytical rigor, which could have made DBT's reasoning clearer and more consistent. To appropriately consider whether the Supercharger scheme complies with the subsidy control requirements, the Assessment should:
 - (a) Adopt a more consistent definition of 'carbon leakage', which is a central concept in the Assessment. This, in turn, would help align the policy objective, market failure and the counterfactual sections of the Assessment.
 - In the market failure section, carbon leakage is defined either as the movement of production and associated emissions from one country to another due to different levels of decarbonisation effort through carbon pricing and climate regulation, or when greater imports of energy intensive goods come from regions with lower carbon costs. However, in the policy objective section, it is described as being associated with higher electricity costs in GB, whether these costs are linked to carbon pricing and climate regulation or not. In the counterfactual and change of behaviour section, it appears to refer to production moving outside GB as a result of higher electricity prices, whether this movement would result in a global increase in carbon emissions or not.
 - Clarify the scope of the policy objective, ensure that it is presented (b) consistently throughout, and clearly identify the market failure that the scheme aims to remedy (Step 1, Principle A). This would have a significant impact on the rest of the Assessment. Notably, the Assessment sets out that financial support of £24/MWh aims to approximately cover the electricity price gap with European countries, without undercutting them. However, the Assessment does not explain why it has selected these countries as a benchmark. If the scheme aims to increase GB competitiveness or avert production moving overseas, it should be more clearly set out as the primary policy objective of the scheme. If, on the other hand, the scheme's key objective relates to avoiding carbon leakage to countries with lower levels of environmental protection, this should be reflected in the choice of more relevant comparators, or by explaining how the choice of France, Germany or the Netherlands remains relevant as a benchmark to mitigate against the risk of carbon leakage.

- (c) Set out more explicitly how exempting EIIs from capacity market costs and compensating them for network charging costs is appropriate to achieve the policy objective, which instead refers to policy costs arising from policies aimed at encouraging electricity generation from renewable and low carbon sources (Principle E).
- (d) Explain how the financial assistance arising from the scheme will create the expected change of behaviour, ie whether providing an electricity price discount of £24/MWh is enough to bring about the desired change in economic behaviour (whether it relates to an increase in production and investment for eligible EIIs or avoiding carbon leakage) (Principles C) and how this reduction is expected to avoid over-compensation (Principle B).
- (e) Include a systematic evaluation of the scheme's potential impact on competition and investment within the UK (Principle F).
- 2.3 Our report is advisory only and does not directly assess whether the Supercharger scheme complies with the subsidy control requirements. The report does not constitute a recommendation on whether the scheme should be implemented by DBT. We have not considered it necessary to provide any advice about how the proposed subsidy may be modified to ensure compliance with the subsidy control requirements.¹⁷

¹⁷ Section 59(3)(b) of the Act.

3. The SAU's Evaluation

3.1 This section sets out our evaluation of Assessment, following the four-step framework structure used by DBT.

Step 1: Identifying the policy objective, ensuring it addresses a market failure or equity concern, and determining whether a subsidy is the right tool to use

- 3.2 The first step involves an evaluation of the Assessment against:
 - (a) Principle A: Subsidies should pursue a specific policy objective in order to (a) remedy an identified market failure or (b) address an equity rationale (such as local or regional disadvantage, social difficulties or distributional concerns); and
 - (b) Principle E: Subsidies should be an appropriate policy instrument for achieving their specific policy objective and that objective cannot be achieved through other, less distortive, means.¹⁸

Policy objectives

- 3.3 The Statutory Guidance sets out that public authorities may only give subsidies to pursue a specific policy objective. The objective must be one which remedies a market failure or addresses an equity concern.¹⁹ There may be multiple policy objectives to be achieved by a single subsidy or scheme, provided that they all address a market failure, equity concern, or both.²⁰
- 3.4 The Assessment sets out that the policy objective is to provide sufficient support to the most electricity and trade intensive industries in Great Britain, which are most exposed to the risk of carbon leakage²¹ associated with high electricity costs as a result of costs arising from policies aimed at encouraging electricity generation from renewable and low carbon sources.
- 3.5 The Assessment further explains that sufficient support is 'a level of support which brings electricity costs for GB-based Ells in line with electricity costs in competitor countries to ensure GB-based Ells using electricity provided by the GB's relatively low-carbon electricity grid are not at a competitive disadvantage compared to businesses able to access cheaper electricity from higher-carbon grids.'

¹⁸ Further information about the Principles A and E can be found in the <u>Statutory Guidance</u> (paragraphs 3.32 to 3.56) and the <u>SAU Guidance</u> (paragraphs 4.7 to 4.11).

¹⁹ Statutory Guidance, paragraph 3.32.

²⁰ Statutory Guidance, paragraph 3.33.

²¹ As explained in paragraph 2.2(a), the Assessment does not define carbon leakage consistently.

- 3.6 The Assessment also indicates that the intended outcome of providing this support is to:
 - (a) Mitigate the risk of carbon leakage;
 - (b) Mitigate the risk of disinvestment and protect jobs in key industries; and
 - (c) Encourage decarbonisation and electrification longer term by lowering electricity costs.
- 3.7 The Assessment concludes that a 'reduction of around £24/MWh is expected to meet the needs of industry and supports the intended outcomes set out above, without seeking to undercut our nearest neighbours, given the interconnected nature of the energy systems across GB and Europe.'
- 3.8 Other considerations that could have a bearing on the policy objectives are mentioned throughout the Assessment, including suggestions that the Supercharger scheme can 'help encourage the retention of businesses' and that 'ensuring that domestic industries can remain profitable will mitigate the risk of carbon leakage'.
- 3.9 In our view, whilst the Assessment appears to set out a specific policy objective, as described in paragraph 3.4 above, it could be strengthened by:
 - (a) Clarifying whether the scheme's policy objective relates solely to mitigating the risk of carbon leakage (as the stated policy objective seems to imply) or more broadly aims to 'mitigate the risk of disinvestment and protect jobs in key industries', and to 'encourage decarbonisation and electrification' in the long-term (as other parts of the Assessment would suggest);²² and
 - (b) Ensuring that the policy objective is presented consistently throughout the Assessment.

Market failure and equity objective

- 3.10 The Statutory Guidance sets out that a market failure occurs where market forces alone do not produce an efficient outcome.²³
- 3.11 The Assessment summarises the market failure as follows:
 - (a) There is a negative externality from carbon emissions, stemming from the production activities of businesses, that these firms do not internalise.

²² In particular on Principles C (counterfactual), Principle E (alternative policies), Principle B (proportionality) or Principle G (balancing exercise)

²³ Statutory Guidance, paragraphs 3.35-3.46.

- (b) There is an international coordination failure with governments having different levels of net zero ambitions, with some jurisdictions having 'less stringent environmental regulations', 'lower carbon/policy costs' or more 'generous subsidies for existing policy costs than GB'.
- (c) 'GB EIIs are disproportionately impacted by high electricity prices' due to the volume of electricity they consume and their inability to pass these costs on to their customers 'as they operate in highly internationally traded sectors'. This risks GB EIIs being undercut by foreign competitors facing 'lower carbon prices and therefore lower electricity prices.'
- (d) Capital is mobile and will relocate to jurisdictions where it can earn the highest profits, potentially leading to greater imports of energy intensive goods or production relocating to regions with lower decarbonisation policy costs. This could lead to 'an increase in emissions intensive production and greater global emissions which is known as carbon leakage'.
- (e) 'The two market failures of negative externality of carbon emissions and the co-ordination failure of governments worldwide to agree a co-ordinated response to the social costs of carbon emissions through equalised carbon costs put GB-based Ells at an international competitive disadvantage on electricity prices.' According to the Assessment, if left unaddressed this could lead to increased global emissions through carbon leakage as production moves to more emissions-intensive jurisdictions.
- 3.12 The Assessment further discusses evidence of the electricity price gap and how it results in carbon leakage, including evidence of carbon leakage (mainly from academic literature), the international electricity price gap for Ells (based on a comparison between the UK and 14 EU countries), the price gap due to environmental regulations (mainly from academic literature), the price gap due to disparities in subsidies (based on comparison between GB and France, Germany and the Netherlands), and evidence from the 2022 EII Exemption Scheme consultation on the impacts of high electricity prices on certain GB Ells.
- 3.13 We consider that the Assessment should clearly identify a market failure that the scheme aims to remedy. In our view, the five-point summary in the Assessment (set out in paragraph 3.11 above) is not clear on what that market failure is. The Assessment only expressly characterises two 'market failures': a negative externality from carbon emissions, which the Supercharger scheme does not aim to remedy (rather, it exempts Ells from the policy costs that aim to remedy this market failure); and a 'co-ordination failure', which relates more to a lack of regulatory coordination rather than a market failure.
- 3.14 While the Assessment mentions some anecdotal evidence that some EII businesses considered relocation outside Europe as a result of high electricity

- prices, it would be improved by evidencing the scale of such relocations, or that electricity costs would be the main reason for them.
- 3.15 We also found that the Assessment does not clearly demonstrate how evidence of a price gap between UK and EU countries, and of a price gap due to a disparity of subsidies in France, Germany and the Netherlands, would result in carbon leakage. DBT could have also better linked the Supercharger scheme with policy choices made in other EU countries aimed to shield EIIs from certain costs.
- 3.16 The Assessment mentions that 'Ells are often critical employers within deprived regions through either direct employment or supply chains' and explains that the existing Ell Exemption measure supports many businesses in areas that are designated as Priority 1 on the levelling-up priority index.²⁴ Consequently, the Assessment could be improved by clarifying whether the scheme addresses an equity rationale. This could be, for example, protecting employment opportunities in disadvantaged areas of the country where Ells may otherwise be under threat of closing down.

Consideration of alternative policy options and why the scheme is the most appropriate and least distortive instrument

- 3.17 In order to comply with Principle E, public authorities should consider why the decision to give a subsidy is the most appropriate instrument for addressing the identified policy objective, and why other means are not appropriate for achieving the identified policy objective.²⁵
- 3.18 The Assessment sets out that the three measures and their associated delivery mechanisms are the most appropriate mechanisms for addressing the identified electricity price gap faced by EIIs.
- 3.19 The following alternatives were considered and rejected:
 - (a) Continuing with the existing support made up of a Compensation Scheme²⁶ and the existing EII Exemption Scheme. This alternative was rejected because DBT considered that the relief offered in EU countries is greater and, as a result, supported GB EIIs still face higher electricity prices than their key competitors in Germany, France, and the Netherlands.
 - (b) Utilising loans or equity investment on commercial terms instead of an exemption or compensation for each of the three measures. This was

The Department for Levelling Up, Communities and Housing maintains an Index of Priority Places for the Levelling Up
 Levelling Up Fund Round 2: updates to the Index of Priority Places - GOV.UK (www.gov.uk)
 Statutory Guidance, paragraphs 3.54-3.55.

²⁶ DBT set out that some eligible EIIs in GB have access to a Compensation Scheme which provides relief for the indirect costs of the Emissions Trading Scheme (ETS) and Carbon Price Support Mechanism (CPS) which are passed on by electricity suppliers.

- rejected because loans would not be targeted at specific policy costs or provide real time support to recipients and would be more resource intensive to manage.
- (c) Utilising grants instead of an exemption or compensation for each of the three measures. This was rejected because it does not provide a real time benefit and grants would require payments to be based on projected electricity consumption and so would require annual reconciliation. This would be more likely than an exemption to lead to a situation where subsidy would be clawed back.
- (d) Utilising a partial exemption instead of a full exemption for the Capacity Market Exemption measure. This was rejected because it was not considered to be sufficiently high in terms of support and would be more resource intensive to manage.
- (e) Utilising a compensation measure instead of an exemption for the Capacity Market Exemption measure. This was rejected because it would require significant resource and management and would be more likely to result in over and under payments and require reconciliation and clawback.
- (f) Utilising an exemption measure instead of a compensation measure for the Network Charging Costs measure. This was rejected because it would be complex to implement and likely to be very small.
- (g) Amending the network charging codes,²⁷ which was rejected on the grounds that there is a high risk it may not deliver the policy objective and would take a significant amount of time to be implemented.
- (h) Support for development of private wire networks or a sector level purchase power agreement²⁸ were discounted as they did not guarantee a certain level of cost reduction and would take at least five years to implement due to the complexity of the structure and negotiations with a large number of counterparties.
- 3.20 We consider that the Assessment explains why these alternatives would not be appropriate. However, it focusses on options which would deliver the narrowly defined objective of reducing electricity prices for eligible EIIs by £24/MWh beyond existing support. To be improved, the Assessment could:

²⁸ These are private arrangements between electricity generators or suppliers, and businesses which could be used to reduce electricity costs or provide more certainty on electricity costs for businesses.

²⁷ Network codes set out the contractual framework for connecting to and using the national transmission system and set out the methodology and principles which are used to set network charges.

- (a) Explain how the scheme is the most appropriate tool to address carbon leakage or the wider intended outcomes set out in paragraph 3.6;
- (b) Consider alternative, non-subsidy approaches that could potentially deliver these objectives;²⁹ and
- (c) Set out how exempting EIIs from capacity market costs and compensating them for network charging costs is appropriate to achieve the policy objective, which instead refers to costs arising from policies aimed at encouraging electricity generation from renewable and low carbon sources.

Step 2: Ensuring that the subsidy is designed to create the right incentives for the beneficiary and bring about a change

- 3.21 The second step involves an evaluation of the assessment against:
 - (a) Principle C: First, subsidies should be designed to bring about a change of economic behaviour of the beneficiary. Second, that change, in relation to a subsidy, should be conducive to achieving its specific policy objective, and something that would not happen without the subsidy; and
 - (b) Principle D: Subsidies should not normally compensate for the costs the beneficiary would have funded in the absence of any subsidy.³⁰

Counterfactual assessment

- 3.22 In assessing the counterfactual, the Statutory Guidance explains that public authorities should assess any change against a baseline of what would happen in the absence of the subsidy (the 'do nothing' scenario').³¹ This baseline would not necessarily be the current 'as is' situation (the 'status quo') but what would likely happen in the future over both the long and short term if no subsidy were awarded.
- 3.23 The Assessment sets out a 'do nothing scenario' in which there would be no further electricity price reduction for EIIs beyond the relief provided by the existing EII Exemption measure at the current subsidy intensity of 85%, such that firms would not receive the additional £24/MWh reduction in costs. The Assessment expects that 'due to the trade intensity of the EIIs involved, EIIs will not be able to pass through carbon policy costs and will be undercut by imports from competitors'.

²⁹ Including, for example, those discussed in the <u>Summary of consultation responses and government response on Addressing carbon leakage risk to support decarbonisation</u>

³⁰ Further information about the Principles C and D can be found in the <u>Statutory Guidance</u> (paragraphs 3.57 to 3.71) and the <u>SAU Guidance</u> (paragraphs 4.12 to 4.14).

³¹ Statutory Guidance, paragraphs 3.60-3.61.

- In the short term, DBT expects that 'the carbon leakage risk' will cause a reduction in investment, production, and jobs. In support of this, the Assessment refers to energy prices being at the forefront of the asks to government posed by companies making a number of recent strategic investment decisions in GB, and relies on some anecdotal evidence. In the longer term, the Assessment expects that this trend will continue and will create more negative effects, including an increased risk of firm closure arising from reduced liquidity as a result of higher electricity costs, meaning that some firms would no longer be able to compete internationally.
- 3.25 The description of the counterfactual relies on the assumption that, absent the subsidy, EII activities will decline in GB, investment in EIIs will reduce and production will move overseas. However, the Assessment could provide more evidence of the most likely future development to show, absent the subsidy:
 - (a) Whether firms are at risk of closing and production at risk of moving overseas because of electricity costs, and not because of other factors; and
 - (b) Where production is likely to relocate, and what impact the move would have on carbon leakage.

Change in behaviour and additionality assessment

- 3.26 According to the Statutory Guidance, 'additionality' means that subsidies should not be used to finance a project or activity that the beneficiary would have undertaken in a similar form, manner, and timeframe without the subsidy.³² For schemes, public authorities should also, where possible and reasonable, ensure the scheme's design can identify in advance and exclude those beneficiaries for which it can be reasonably determined would likely proceed without subsidy).³³ Further, the Statutory Guidance sets out that subsidies must bring about something that would not have occurred without the subsidy.³⁴ In demonstrating this, public authorities should consider the likely change or additional net benefit.
- 3.27 In its discussion of additionality, the Assessment sets out that the Supercharger will make GB a more attractive place to invest, decrease the risk of carbon leakage, increase production for eligible firms and incentivise EIIs to decarbonise where high electricity prices are a barrier to decarbonisation. More specifically, it identifies the following benefits arising from the Supercharger scheme, that would not otherwise arise in the counterfactual scenario:
 - (a) Increased GB competitiveness: The reduction in overall energy costs for GB Ells will bring costs further in line with international competitors, thereby

³² Statutory Guidance, paragraphs 3.63-3.67.

³³ Statutory Guidance, paragraph 3.69

³⁴ Statutory Guidance, paragraph 3.64

- helping ensure that GB Ells remain competitive and profitable, safeguarding existing jobs, and providing further opportunities for inward investment.
- (b) Increased production / investment for eligible EIIs: The main benefits derived from the reduction in electricity prices for eligible firms are: (i) increased production; (ii) increased investment; (iii) avoidance of firm closure; and (iv) reduced carbon leakage. The Assessment explains that the scheme reduces the electricity price that recipient firms face, which translates into a rise in firm electricity consumption. It notes that this leads to a rise in Gross Value Added.
- (c) Incentivisation of EIIs to decarbonise: The scheme satisfies the additionality principle in that investment in decarbonisation by EIIs such as steel would not happen in GB without lower electricity prices.
- 3.28 The Assessment notes that the value-for-money assessment estimates that over a 10-year appraisal period, the reduction in electricity prices for eligible firms would lead to sizeable additional investment. It highlights that while some firms are already paying high electricity prices, it is not clear that they would continue to do so in the longer term, creating the risk of disinvestment and moving to countries with cheaper operating costs which could result in carbon leakage. The Assessment explains that the proposed measures would help safeguard and create jobs in strategic sectors by reducing barriers for inward investment and increasing GB competitiveness, as well as encouraging decarbonisation in the longer-term through greater electrification made possible through lower electricity costs.
- 3.29 The Assessment should expressly set out the likely change in economic behaviour that the Supercharger scheme is designed to bring:
 - (a) If the scheme aims to increase GB competitiveness or increase investment and production for eligible Ells, the Assessment should clearly set this out when considering the policy objective under Step 1. The Assessment should also clearly identify why a reduction in electricity costs would be sufficient to resolve financial concerns leading to closure or exit of Ells from GB.
 - (b) If the scheme aims to avert carbon leakage by incentivising EIIs to remain in GB rather than moving to countries with lower decarbonisation policies, the Assessment should consider how the financial assistance arising from the scheme is appropriately targeted to create the expected change of behaviour, ie whether providing an electricity price discount of £24/MWh would be sufficient to create this incentive.
- 3.30 As the scheme provides a reduction in electricity costs (which firms would incur in the normal operation of business), the Assessment should also discuss whether

the scheme is compensating for business as usual costs, ie the costs businesses would have incurred or had to fund themselves in the absence of the subsidy. If so, it should explain why this is justified by the policy objective. 35

Step 3: Considering the distortive impacts that the subsidy may have and keeping them as low as possible

- 3.31 The third step involves an evaluation of the assessment against:
 - Principle B: Subsidies should be proportionate to their specific policy (a) objective and limited to what is necessary to achieve it; and
 - Principle F: Subsidies should be designed to achieve their specific policy (b) objective while minimising any negative effects on competition or investment within the United Kingdom.³⁶

Proportionality

- 3.32 The Assessment states that support is proportionate to achieve the policy objective as it targets an electricity price gap to an extent that reduces the risk of carbon leakage and incentivises electrification where applicable. Electricity prices will be reduced 'to a commensurate level in line with [the] nearest comparable neighbours without seeking to undercut them'.
- 3.33 The Assessment states that the combination of the sector-level and business-level tests ensures that aid is given to the most energy-intensive businesses in the most energy-intensive sectors that are facing high trade intensity. It further states that this ensures that the Supercharger scheme is targeted, correcting the distortion caused by the identified market failures whilst minimising the potential for distortive impacts. The Assessment clarifies that, where companies produce both eligible and ineligible products, they can only claim support for the former.
- The Assessment also mentions that the current indicative estimate shows an 3.34 annual value of the scheme of £320 to £410 million in 2025, which is based on 'current' EII electricity costs. It further states that a reduction in electricity cost of £24/MWh per eligible company is expected to 'meet the needs of industry and support the intended outcome set out without seeking to undercut our nearest neighbours, given the interconnected nature of the energy systems across GB and Europe'.
- 3.35 Overall, the Assessment considers a number of aspects relevant to proportionality such as Benefit Cost Ratio (BCR) and Net Present Value (NPV) calculations as

³⁵ Statutory Guidance, paragraphs 3.66 and 3.67.

³⁶ Further information about the Principles B and F can be found in the <u>Statutory Guidance</u> (paragraphs 3.72 to 3.108) and the SAU Guidance (paragraphs 4.15 to 4.19).

- well as its open and transparent selection process with pre-determined eligibility criteria. The ringfencing of support to eligible products also goes towards proportionality.
- 3.36 We however consider that the Assessment should explain more clearly how DBT concluded that the reduction of £24/MWh in electricity costs is expected to meet the needs of industry and avoid over-compensation:
 - (a) While the Assessment shows that it approximately covers the price gap with some of the UK's closest neighbours, the Netherlands, France and Germany, it is unclear why the focus lies on these countries, particularly if the main ambition of the Supercharger scheme is the attempt to avert carbon leakage.
 - (b) The Assessment mentions avoiding undercutting these countries as a consideration in setting the subsidy size. While electricity prices in the three aforementioned countries may act as a constraint on how much electricity prices can be reduced even when carbon leakage towards other countries with lower environmental protection is the concern, the Assessment should set this out more clearly.
- 3.37 Furthermore, DBT has used trade intensity as a measure of international competition and therefore as an indication of businesses' inability to pass on cost increases. However, we note that, in reality, different eligible markets (and potentially even eligible firms within these markets) will likely face differing levels of trade intensity and will therefore not be uniformly constrained in passing on costs. Granting a £24/MWh subsidy to all beneficiaries may lead to overcompensation in some cases, ie firms receiving more in terms of subsidy than would have been necessary to keep production located in GB. The Assessment could be improved by explicitly considering this aspect.
- 3.38 The Assessment would also have been improved by considering other subsidies given to the same recipients for similar purposes.³⁷

Design of subsidy to minimise negative effects on competition and investment

3.39 The Assessment lists most of the scheme characteristics identified in Chapter 3 of the Statutory Guidance as potentially relevant to the likelihood of distortive impact on competition or investment, including the nature of the instrument, the breadth of beneficiaries and selection process, the size of the subsidy, its timespan, the nature of costs being covered, the performance criteria, ringfencing and monitoring and evaluation. However, there is little explanation as to how these characteristics help to minimise distortions.

³⁷ Statutory Guidance, paragraphs 3.91 and 3.92.

- 3.40 On the nature of the instrument, the Assessment provides a high-level overview of the components of the proposed subsidy. Whilst helpful, it should address the main issue raised by the Statutory Guidance, which asks whether a less distortive form of instrument could be deployed whilst still meeting the identified policy objective.³⁸ The Assessment addresses this requirement at a high level under Principle E, but could be improved by addressing this in more detail.
- 3.41 For a business to be eligible for the scheme, it must pass a sector level test and a business level test to ensure that only the firms most at risk of carbon leakage are given energy price support. The Assessment indicates that the eligibility requirements for the proposed scheme are based on the current EII Exemption Scheme eligibility criteria. However, the Assessment should explain (1) how the thresholds applicable for these tests were chosen, and (2) the extent to which they contribute to minimising negative effects.

Assessment of effects on competition or investment

- 3.42 Whilst the Assessment briefly acknowledges that the scheme could impact 'domestic trade within the UK single market', as certain Ells will not be eligible for support, the Assessment should systematically review potential impacts of the Supercharger scheme on competition within the UK.
- 3.43 The Assessment should notably evaluate in further detail:
 - (a) The impact that the scheme may have on ineligible businesses. This includes potential impacts on ineligible businesses in GB, who not only will not benefit from the scheme but will pay increased policy costs and so might see an increase in portion of electricity costs used to pay for levies as a result of the scheme. It also includes any impacts on Ells based in Northern Ireland, which cannot benefit from the scheme as the various policy costs that it targets are unique to the GB electricity grid and cost structure.
 - (b) The impacts on competition from potentially supporting loss-making businesses.
 - (c) How the competitive landscape in eligible sectors could be impacted by supporting what appear to be large firms who may enjoy significant incumbency advantages and may benefit from high barriers to entry due to significant sunk costs of entry in their respective markets. The Assessment shows that, based on 2021 Companies House and Annual Business Survey data, eligible firms are a small proportion of overall firms in their respective markets yet make up a sizeable share of turnover in these markets. In our

³⁸ Statutory Guidance, paragraph 3.82.

view this indicates that support will focus on firms who may be major players in their respective markets.

- 3.44 While it may not be commensurate to expect a scheme covering a multitude of markets to provide an in-depth evaluation of the market characteristics as set out in the Statutory Guidance for every market, the Assessment should still engage to some extent with this aspect of the guidance. For instance, if certain sectors are likely to be more heavily represented in the sectors benefitting from the scheme, case studies in these sectors could be used to showcase characteristics of affected markets and could in turn help with the competitive impacts section of the Assessment.
- 3.45 Whilst investment impacts are not explicitly discussed under a competition and investment section within Step 3, the Assessment mentions that it seeks to mitigate the risk of disinvestment in GB and protect jobs in key industries. The Assessment outlines under Step 2 that the main benefits stemming from a fall in electricity prices are, *inter alia*, increased production, increased investment and avoidance of firm closure. DBT provided an estimate for the overall benefits for the scheme over a 10 year period.
- 3.46 Noting DBT's submissions, the Assessment could be improved by including a more comprehensive evaluation of the scheme's potential impact on international trade and investment.

Step 4: Carrying out the balancing exercise

- 3.47 The fourth step involves an evaluation of the assessment against subsidy control Principle G: subsidies' beneficial effects (in terms of achieving their specific policy objective) should outweigh any negative effects, including in particular negative effects on: (a) competition or investment within the United Kingdom; (b) international trade or investment.³⁹
- 3.48 DBT has conducted a cost-benefit analysis showing the BCR for the overall subsidy package and its NPV. The Assessment further notes that the BCR represents very high value for money. It provides an overview of the potential benefits that formed part of the value for money's analysis:
 - (a) Increased production leading to higher domestic profits and an expansion of employment. The analysis provides an estimated benefit over a 10 year period of additional wages due to the reduction in electricity prices;

³⁹ See Statutory Guidance (paragraphs 3.110 to 3.114) and SAU Guidance (paragraphs 4.20 to 4.22) for further detail.

- (b) Increased investment for existing businesses. The analysis calculates the benefits over a 10 year period of additional investment due to the reduction of electricity prices, using regression analysis; and
- (c) Prevention of firm closure.
- 3.49 The Assessment further states that EII's are often critical employers within deprived areas in the UK through either direct employment or indirectly through supply chains.
- 3.50 The Assessment lists the following costs:
 - (a) The environmental costs of increased production (due to increased consumption related to lower electricity prices).⁴⁰
 - (b) Additional costs in terms of electricity bills for households and non-eligible businesses, as the reduction in costs for eligible businesses would be transferred to non-eligible electricity businesses.
 - (c) Net zero impacts, as the scheme exempts Ells from costs relating to policies which contribute to net zero objectives, may lead to a rise in the level of emissions within GB, as it is assumed that businesses will consume more electricity as the price falls, and may lower the incentives to invest in energy efficiency for Ells in the short term. However, the Assessment also notes that these risks are mitigated by the facts that (1) businesses remaining in GB may consider strategic investment in electrification in the longer term, thereby reducing the impact of the scheme on emissions; (2) internal analysis shows that lowering electricity prices many enable future fuel switching and subsequently increase domestic decarbonisation; and (3) incentives to invest in energy efficiency will remain given the significant proportion of energy costs for Ells.
- 3.51 In our view, the Assessment helpfully lists some of the benefits and costs associated with the scheme. However, it should systematically identify and evaluate (quantitatively or qualitatively) relevant beneficial effects of the scheme and all potential negative effects of the scheme, in reference to the stated policy objective.
- 3.52 On the benefits, the Assessment should include benefits related to avoiding the risk of carbon leakage, as carbon leakage is set out as the main driver for the

⁴⁰ DBT relies on elasticity-price calculations, based on internal literature review, to show that a decrease in electricity prices would lead to an increase in consumption. However we consider that the price elasticities do not provide a strong argument that reducing electricity prices for Ells will lead to reduced costs and thus increase production. As both the price elasticity of investment and energy consumption/production are shown to be relatively inelastic meaning that businesses are not very responsive to price changes.

- scheme.⁴¹ The Assessment lists other benefits such as increased investment in GB or increased domestic profits or employment, which are not clearly included in the scheme's policy objectives.
- 3.53 In relation to negative effects, the Assessment lists some relevant costs. It should consider any wider impact on competition (eg between eligible recipients, and between eligible and non-eligible businesses), or on international trade or investment, as set out under Principle F. Furthermore, the Assessment could have provided evidence supporting the assertion that some of the negative effects of increasing carbon emissions are mitigated by long-term investment in electrification and increased incentive to switch away from fuel.

Energy and Environment Principles

- 3.54 This step involves an evaluation of the Assessment with regard to compliance with the energy and environment principles, where these are applicable to the scheme.⁴²
- 3.55 The Statutory Guidance summarises the scope of the different energy and environment principles that apply to different types of subsidies.⁴³ DBT has conducted an assessment of the scheme against Principles A, B, F and G. We are satisfied that the other energy and environment principles are not applicable to this scheme. In our view, to be improved, the Assessment could have made better use of aspects of the SAU and Statutory Guidance to satisfy itself that the scheme complies with the energy and environmental principles.

Principle A: Aim of subsidies in relation to energy and environment

3.56 The assessment against Principle A should show how the subsidy is consistent with delivering a secure, affordable and sustainable energy system and a well-functioning and competitive energy market, or increasing the level of environmental protection compared to the level that would be achieved in the absence of the subsidy. If a subsidy is in relation to both energy and environment, it should meet both of these limbs.⁴⁴

⁴¹ Carbon leakage is listed as one of the benefits in the value for money analysis provided by DBT in supplementary evidence, however the analysis stated that this benefit is difficult to quantity. Carbon leakage is not listed as one of the benefits in the Assessment itself.

⁴² See Schedule 2 to the Act.

⁴³ Principles A and B apply to all subsidies in relation to energy and environment. Principle C applies for subsidies for electricity generation adequacy, renewable energy or cogeneration. Principle D applies to subsidies for electricity generation only. Principle E applies to subsidies for renewable energy or cogeneration. Principle F applies to subsidies in the form of partial exemptions from energy related taxes and levies. Principle G applies to subsidies that compensate electricity intensive users for increases in electricity costs, Principle H relates to subsidies for decarbonisation of industrial emissions. Principle I relates to subsidies for improving energy efficiency of industrial activities.

- 3.57 The Assessment sets out that the scheme will provide relief to eligible EIIs to ensure that they can remain competitive by making electricity costs for those sectors more affordable and in line with costs in comparable EU countries. This will mitigate the risk of carbon leakage.
- 3.58 The Assessment further explains that the costs removed from the bills of eligible EIIs will be redistributed to all other energy users, including households and non-eligible businesses. DBT explains that impact on other electricity users will be limited to what is necessary to mitigate the risk of carbon leakage, safeguard jobs in strategic sectors and enable decarbonisation in the long term.
- 3.59 The Assessment considers that the scheme is consistent with both limbs of Principle A.
- 3.60 We consider that the Assessment should have more clearly explained:
 - (a) How an increase of the electricity bills of non-eligible businesses or household bills is compatible with offering an affordable energy system.
 Alternatively, if relevant explain how the objective balances the aims of the first limb of Principle A in line with paragraph 4.21 of the Statutory Guidance;
 - (b) How a scheme that is aimed at lowering electricity costs for Ells, and that is recognised to have the impact of increasing electricity consumption in the short term, is compatible with an increase in the level of environmental protection compared to what would have happened otherwise. Whilst the Assessment refers to the incentives on Ells to decarbonise their businesses in the long term, it would have benefited from providing supporting evidence.
 - (c) How the scheme will support a decrease in carbon emissions at a global level, for instance by providing evidence of the percentage of imports coming from countries with no environmental policy, and by showing how the reduction of carbon leakage associated with the scheme outweighs the increase of electricity consumption in the UK generated by lower electricity prices for eligible Ells.

Principle B: Subsidies not to relieve beneficiaries from liabilities as a polluter

- 3.61 The assessment against Principle B should explain clearly how the proposed subsidy or scheme does not relieve a polluter from having to bear the full costs of the pollution it caused.⁴⁵
- 3.62 The Assessment refers to evidence that there has been an increase in imports, predominantly from countries that do not impose environmental policy costs. It reiterates some of the previous assertions in relation to the scheme's objectives to

⁴⁵ Statutory Guidance, paragraphs 4.29-4.35.

reduce carbon leakage and to provide greater incentives and opportunity for Ells to carry out electrification. It also confirms that the policy costs that the measures exempt Ells from will still be met by other billpayers, so overall climate obligations will still be met.

3.63 However, in line with paragraph 4.33 of the Statutory Guidance, the Assessment would be strengthened with a clear statement that receipt of the subsidy does not relieve the recipient from its responsibilities as a polluter under the relevant laws.

Principle F: Subsidies in the form of partial exemptions from energy-related taxes and levies

- 3.64 Subsidies in the form of partial exemptions from energy-related taxes and levies in favour of energy-intensive users should be assessed against Principle F. The Assessment should clearly demonstrate that the value of any such exemption does not exceed the total value of the relevant tax or levy. If the exemption does exceed this, then the Assessment should ensure that it has accounted for this in the assessment of the scheme under the general subsidy control principles.⁴⁶
- 3.65 The Assessment states that it has not considered the EII Network Charging Costs compensation measure for the purpose of Principle F as it comprises a network charges levy.
- 3.66 The Assessment explains that the EII Exemption measure and the Capacity Market Exemption measure exempt eligible EIIs from 100% of their associated costs. As a result, the Supercharger scheme will not exceed the total amount of the policy costs concerned.
- 3.67 We are satisfied that the Assessment explains how this principle is met.

Principle G: Subsidies in the form of compensation for increases in electricity costs

- 3.68 Under Principle G, subsidies in the form of compensation for electricity-intensive users given in the event of an increase in electricity costs resulting from climate policy instruments shall be restricted to sectors at significant risk of carbon leakage due to the cost increase. The Assessment must demonstrate clearly the existence of carbon leakage.
- 3.69 The Assessment states that Principle G is only applicable to the EII Exemption measure because the two other measures do not relate to costs resulting from climate policy instruments.

⁴⁶ Statutory Guidance, paragraphs 4.53-4.56.

- 3.70 The Assessment describes how the eligibility criteria ensure that only sectors at the highest risk of carbon leakage due to electricity costs resulting from climate policy instruments will be eligible for support.
- 3.71 We refer back to our comments in relation to the eligibility criteria set out above at paragraph 3.41.

Other Requirements of the Act

3.72 This step in the evaluation relates to the requirements and prohibitions set out in Chapter 2 of Part 2 of the Act, where these are applicable.⁴⁷ DBT confirmed that none of these prohibitions or other requirements applied to the scheme.

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⁴⁷ Statutory Guidance, chapter 5.