Title: Hydrogen Levy Powers **IA No:** BEIS050(F)-22-HICCD **RPC Reference No:** RPC-BEIS-5173(1) **Lead department or agency:** Department for Energy Security and Net Zero **Other departments or agencies:** N/A	Impact Assessment (IA) **Date:** 16/05/2023 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** EnergyBill2021@beis.gov.uk
Summary: Intervention and Options	**RPC Opinion:** Green

Cost of Preferred (or more likely) Option (in 2020 prices)			
Total Net Present Social Value	**Business Net Present Value**	**Net cost to business per year**	**Business Impact Target Status** Not a regulatory provision
£0m	£0m	£0m	

What is the problem under consideration? Why is government action or intervention necessary?

The deployment of low carbon hydrogen (referred to throughout as 'hydrogen') production, hydrogen transport and hydrogen storage infrastructure (referred to as 'transport' and 'storage') will be essential in decarbonising the UK economy. However, due to a range of barriers and market failures including high costs of hydrogen production relative to fossil fuels, high upfront costs of transport and storage infrastructure, first mover disadvantage, uncertainties about future demand, technology readiness and regulatory environment, this won't be realised without government intervention. To realise the contribution hydrogen can make to achieving the Government's statutory carbon emissions reduction targets, the Government has announced a number of measures aiming to accelerate hydrogen deployment, including a hydrogen production business model to bring forward private sector capital investment in hydrogen production plants and a hydrogen transport business model and hydrogen storage business model to enable deployment of hydrogen infrastructure. The production business model will be delivered within the framework of the new Industrial Decarbonisation and Hydrogen Revenue Support (IDHRS) scheme. As set out in the Net Zero Growth Plan[1], Hydrogen Production Business Model payments will be funded by government until the hydrogen levy comes into effect.

These powers also provide the option for transport and storage to be levy funded, potentially through the IDHRS scheme. No decision has yet been taken with regards to how the hydrogen transport and storage business models will be funded. At this stage of policy design, it is anticipated that the hydrogen transport and storage business models may need to be funded beyond direct users of the infrastructure in the near term – this may include via exchequer funding or via a levy. We expect that the potential benefits of hydrogen production will only be fully realised if transport and storage infrastructure is developed alongside production capacity. Hydrogen production, transport and storage all service the same decarbonisation and energy security objectives and provide benefits across energy users. This may mean that a consistent funding approach is taken across the hydrogen production and hydrogen transport and storage business models. As we gather more evidence on spend requirements over time for transport and storage projects, we will make more detailed decisions on the revenue source for any subsidy support provided through the hydrogen transport and storage business models. This Impact Assessment evaluates both tax-payer and levy funding options for the hydrogen business models and focuses on new primary powers to enable the creation of a dedicated hydrogen levy as set out in the Net Zero Strategy.

[1] https://www.gov.uk/government/publications/powering-up-britain

What are the policy objectives of the action or intervention and the intended effects?

The IDHRS scheme (irrespective of funding source) aims to provide funding for long-term revenue support which is delivered via a hydrogen production business model. These powers also provide the option for transport and storage business models to be levy funded, potentially through the IDHRS scheme. This will enable the private sector (and Government) to take Final Investment Decisions (FIDs) on a pipeline of decarbonisation projects, playing an important role in putting the UK on a pathway to: a) Meet the hydrogen deployment ambitions set out in the Net Zero Strategy by 2030; b) Ensure the required emission reductions for Carbon Budget 6; and c) Reach Net Zero by 2050.

Securing a stable funding source for the hydrogen business models is instrumental in meeting those objectives. The preferred funding route will have to be sustainable over the long term, protect public finances, consider affordability and fairness for payers, and be adaptable to changes in the energy market. The powers under consideration relate to funding hydrogen production, hydrogen transport and hydrogen storage projects (referred to throughout as 'hydrogen projects').

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The options considered for meeting the objectives with regard to the hydrogen business models are:

Option 1 (counterfactual): Do nothing. Under this option there is no funding for the hydrogen business models.

Option 2: Tax-payer funding as the funding source for hydrogen business models.

Option 3: Expand existing levy frameworks to provide the funding source for hydrogen business models.

Option 4 (preferred option): Obtain new powers to establish a levy funding mechanism to provide the funding source the hydrogen business models.

Will the policy be reviewed? It will not be reviewed. **If applicable, set review date:** n/a

Is this measure likely to impact on international trade and investment?		No		
Are any of these organisations in scope?	**Micro**: Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:** n/a	**Non-traded:** n/a	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible:  Date: 16/05/2023

Summary: Analysis & Evidence

Policy Option 4

Description: Obtain new powers to provide the option of establishing a dedicated hydrogen levy to fund the hydrogen business model

FULL ECONOMIC ASSESSMENT

Price Base Year 2020	PV Base Year 2020	Time Period Years 2021 - 2050	Net Benefit (Present Value (PV)) (£m)		
			Low: £0m	**High:** £0m	**Best Estimate:** £0m

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	n/a		n/a	**n/a**
High	n/a		n/a	**n/a**
Best Estimate	n/a		n/a	**n/a**

Description and scale of key monetised costs by 'main affected groups'

The estimated cost of this primary legislation, by itself, is zero. Costs may be incurred when secondary legislation is passed at a later date which introduces a levy and final investment decisions on specific projects are made. Funding is only delivered via the hydrogen business models when a project becomes operational. This Impact Assessment presents a set of illustrative estimates highlighting the potential distributional impacts and the trade-offs associated with future levy design, without providing full costings of secondary legislation decisions.

Any attempt to monetise future costs and benefits of the proposed levy in full would require making assumptions about funding policy design decisions and, by implication, would be subject to significant uncertainty. We are, therefore, unable to monetise the expected size of the funding scheme for hydrogen projects, its net overall impacts, and by implication the full costs and benefits of the preferred funding route. The total costs to support hydrogen projects depends on policy decisions that go beyond levy design considerations. Therefore, this IA focuses on impacts flowing directly from competing levy choices, that is predominantly on their cost distribution implications.

Other key non-monetised costs by 'main affected groups'

When implemented at secondary legislation stage the levy would create administrative costs which have not been monetised in this Impact Assessment. These are likely to include familiarisation costs, updating systems and engagement to notify customers of the new levy, and the costs of managing levy payments.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	n/a		n/a	**n/a**
High	n/a		n/a	**n/a**

Description and scale of key monetised benefits by 'main affected groups'

The estimated benefit of this primary legislation, by itself, is zero. Benefits would be unlocked if secondary legislation is agreed at a later date resulting in the deployment of hydrogen production and transport and storage infrastructure. These could include reduction in carbon emissions, potential cost savings to end users of displacing fossil fuel use, air quality improvements, and wider economic benefits such as in the UK supply chain and jobs. These are not monetised in this IA for reasons outlined above.

Other key non-monetised benefits by 'main affected groups'

When secondary legislation is agreed at a later date, there may also be additional non-monetised benefits. These might include long term strategic benefits of cost reductions and the option value to use new technologies to further increase carbon savings beyond 2030. Further, having transport and storage infrastructure in place will reduce the risks to producers, lowering production costs. Therefore, some additional transport and storage costs may be offset by lower production costs.

Key assumptions/sensitivities/risks	**Discount rate (%)**	
This Impact Assessment assumes this primary legislation by itself will have no impact on businesses and consumers. When a new levy is implemented, its impact will depend on policy decisions about hydrogen business model design, and these will have a significant impact on the estimates of the total cost of funding and the revenue required to be raised through the levy, all of which are highly uncertain. To avoid this policy uncertainty, this IA uses a hypothetical example of an £1/MWh increase in electricity and gas prices to illustrate potential distribution of levy costs. The analysis uses the Department for Energy Security & Net Zero's (referred to throughout as 'the Department') internal assumptions about the future trajectory of the gas and electricity market.		

BUSINESS ASSESSMENT (Option 4)

Direct impact on business (Equivalent Annual) £m:			**Score for Business Impact Target (qualifying provisions only) £m:**
Costs: 0	**Benefits:** 0	**Net:** 0	n/a

1. Problem under consideration and rationale for intervention

1.1 Low carbon hydrogen (referred to throughout as 'hydrogen') production and transport and storage infrastructure is critical for the UK's transition to net zero as hydrogen is a versatile replacement for high carbon fuels used today. Hydrogen has the potential to help decarbonise vital UK industrial sectors and provide a source of low carbon energy across heat, power and transport. The Net Zero Strategy[1] and the Hydrogen Strategy[2], published in 2021, set out how the UK can drive progress in the 2020s to deliver the ambition of 5GW of hydrogen production by 2030 and put the UK on a pathway to meeting the legally binding Sixth Carbon Budget and Net Zero by 2050. The British Energy Security Strategy (BESS)[3] also committed government to "designing, by 2025, new business models for hydrogen transport and storage infrastructure, which will be essential to grow the hydrogen economy". BESS also doubled the 5GW ambition to 10GW of low carbon hydrogen production by 2030, subject to affordability and value for money.

1.2 There are a number of market failures and barriers inhibiting growth of the hydrogen economy. The main barriers for production include:

- The **cost of hydrogen** is higher than most high-carbon counterfactual fuel alternatives. The lack of a fully developed market, imperfect investor information and the presence of a negative externality linked to carbon all contribute to this lack of cost competitiveness.
- Hydrogen technologies are risky for investors as they have not been proven at commercial scale in the UK. While some technology is already in use, many applications need to be proven at scale before they can be widely deployed. There is a **first mover disadvantage**, where project developers for the first at-scale hydrogen projects bear significant learning costs and risks but may not capture the full benefits of the investment, as market competitors capture their know-how.
- The **lack of a market structure** also means that coordination failures might lead to suboptimal market outcomes such as undersupply where the lack of investment in one section of the market deters investment elsewhere. Uncertainty about secure future supplies of hydrogen might deter end users from switching to hydrogen, which in turn lowers the incentives for new producers to enter the market. Similarly for producers they might still face uncertain demand for the hydrogen they produce as a result of the market's immaturity. Currently there is limited use of hydrogen in the UK and producers face some uncertainty over whether their supply will be matched by market demand. This could lead to the producers having to sell their hydrogen below cost or build-up stocks and could pose a risk to the economic viability of the project. The growth of the hydrogen economy is an example of a suboptimal equilibrium where market growth requires enough participants to enter at the same time (coordination) but where the risks (e.g., technological, and commercial) deter new entrants. This barrier also affects the deployment of hydrogen production plants and transport and storage infrastructure.

1.3 The main barriers for transport include:

- The **up-front costs** for larger transport infrastructure will be very high and these costs cannot be passed onto hydrogen users while there are **no or few hydrogen consumers**. Natural gas is the main counterfactual to hydrogen and natural gas costs are passed onto a very large consumer base. Currently there are no hydrogen consumers to pass hydrogen transport costs onto and there will be very few hydrogen consumers while the hydrogen economy is growing.
- Uncertainty around **hydrogen supply and demand** and **imperfect information**, means it is hard to predict when there will be sufficient hydrogen production to necessitate larger-scale transport infrastructure. Similarly, with demand, there is uncertainty on the scale and pace of hydrogen fuel switching and low carbon hydrogen uptake. Further, uncertainty around the

[1] https://www.gov.uk/government/publications/net-zero-strategy

[2] https://www.gov.uk/government/publications/uk-hydrogen-strategy

[3] https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy#hydrogen

locations of where supply and demand will develop make it hard to plan fixed transport infrastructure, e.g., pipelines. **Long lead times** for pipeline infrastructure exacerbates this barrier.

- If a hydrogen network is built (or repurposed), this could be a **natural monopoly** where producers and consumers are only able to use one network, like the gas network now. Owners and operators could block potential users or reduce access for users of the network, which is likely if a producer or consumer owns and operates the network (a vertical risk). Further, owners and operators could charge excessive prices for using the networks if there are no or few alternatives (a horizontal risk).

1.4 The main barriers for storage include:

- **Demand uncertainty** is a barrier for hydrogen storage growth. It is hard to predict when and how much storage will be needed by users. Similar to hydrogen transport, uncertainty around the locations of where supply and demand will develop make it hard to plan fixed hydrogen storage infrastructure, e.g., salt cavern storage. The volume of storage required depends on the patterns and types of hydrogen production and demand, not just total production and demand. Because storage is tied to the types of production and demand, this increases the uncertainty around hydrogen storage requirements. Underground storage projects have long lead times due to planning procedures, environmental impact assessments and geological engineering work. Evidence indicates that underground storage facilities, in salt caverns for example, have longer lead times that hydrogen production plants, further exacerbating this barrier[4].
- Evidence suggests that on-going storage costs could be relatively low but the **up-front costs**, for both new and repurposed sites, will be very **high**[5]. This combined with long lead times and revenue uncertainty impacts investor confidence.
- The lack of a clear and consistent long-term **policy and regulatory framework** for hydrogen storage deters investors as it adds risk to the investment process. Investors may not have the information available to fully consider the implications of the 2050 net zero target when making investment decisions and may also perceive a high risk of stranded assets if subsequent policy and regulatory decisions markedly change the operating environment for hydrogen storage. For example, the decision on the use of hydrogen in heating will impact the volumes of storage required to manage daily and seasonal fluctuations in demand.

1.5 The government has been working with industry to develop a hydrogen production business model to incentivise the production of hydrogen by overcoming these barriers and giving investors the long-term revenue certainty they require to invest. This business model was consulted on from August to October in 2021[6], and a government response was published on 1 April 2022. In addition, the government has been working with industry to develop a hydrogen transport business model and a hydrogen storage business model to enable the deployment of transport and storage infrastructure. A consultation on proposals for hydrogen transport and storage business models was published on 31 August 2022[7]. This sought views on high level business model design options to provide revenue support for hydrogen transport and storage, which these primary powers will enable. The consultation gathered feedback on stakeholders preferred business model design options and a government response to the consultation will be published in Q2 2023.

1.6 The government's Net Zero Strategy also announced the establishment of the Industrial Decarbonisation and Hydrogen Revenue Support (IDHRS) scheme to fund the hydrogen production and Industrial Carbon Capture business models[8]. The Net Zero Growth Plan, published on 30 March 2023, set out that Hydrogen Production Business Model payments will be funded by government until

[4] It is estimated that salt caverns purpose built for storage build time of 5-10 years and converted salt caverns have a build time between 3-5 years; the Hydrogen Production costs report assumes a three-year build time for hydrogen production plants, source: https://www.gov.uk/government/publications/hydrogen-production-costs-2021.

[5] For example, Figure 21 in the report Supply chains to support a UK hydrogen economy estimates the cost of developing salt caverns to provide the storage capacity requirements estimated for 2030 in National Grid's FES scenarios is between £1.2bn and £2.3bn: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1092371/supply-chains-to-support-uk-hydrogen-economy-wood-template.pdf (Viewed on 22 August 2022).

[6] https://www.gov.uk/government/consultations/design-of-a-business-model-for-low-carbon-hydrogen

[7] https://www.gov.uk/government/consultations/proposals-for-hydrogen-transport-and-storage-business-models.

[8] This impact assessment considers options for funding the hydrogen business model only.

the hydrogen levy comes into effect. These powers also provide the option for transport and storage to be levy funded, however, unlike for the hydrogen production business model, no decision has yet been taken with regards to how the hydrogen transport and storage business models will be funded. At this stage of policy design, it is anticipated that the hydrogen transport and storage business models may need to be funded beyond direct users of the infrastructure in the near term – this may include via exchequer funding or via a levy. We expect that the potential benefits of hydrogen production will only be fully realised if transport and storage infrastructure is developed alongside production capacity. Hydrogen production, transport and storage all service the same decarbonisation and energy security objectives and provide benefits across energy users. This may mean that a consistent funding approach is taken across the hydrogen production and hydrogen transport and storage business models is appropriate, reflecting hydrogen's system-wide role in energy security, power, and decarbonisation. As we gather more evidence on spend requirements over time for transport and storage projects, we will make more detailed decisions on the revenue source for any subsidy support provided through the hydrogen transport and storage business models. Providing legislation for a levy to include transport and storage now does not tie us to using a levy for the transport and storage business models later. It simply provides the option to use this revenue stream.

1.7 This Impact Assessment considers options for securing a sustainable long-term funding stream for the hydrogen business models, building on the views expressed through the hydrogen business model consultation last year, and the strategic approach to net zero funding set out in HM Treasury's Net Zero Review[9].

2. Policy objective

2.1. The IDHRS scheme has been established to provide the framework for funding the hydrogen production business model. The primary objective of the IDHRS scheme is to **provide a sustainable, long-term funding stream for the hydrogen business model, sufficient to deliver on the government's ambition for 10GW of low carbon hydrogen production by 2030.**

2.2. The duration of hydrogen production business model contracts is 15 years, as confirmed in the Heads of Terms published in December 2022[10]. The duration of hydrogen transport and hydrogen storage business model contracts is still under consideration and there is no minded-to position as yet.

2.3. Revenue support provided through the hydrogen production business model will, for some projects, be complemented by up-front capital co-funding through the Net Zero Hydrogen Fund (NZHF). This 'one-off' capital co-funding can be beneficial to encourage and accelerate hydrogen deployment and uptake. Capital support is, however, unlikely on its own to incentivise supply and use of hydrogen without support to overcome the relatively higher ongoing costs of producing and using hydrogen compared to counterfactual fuels, with some exceptions[11]. Cost-effective scaling up of hydrogen deployment requires concerted action across the entire hydrogen value chain. Providing long-term revenue support to hydrogen producers as part of a range of actions across the hydrogen value chain is important to ensure that the full benefits of hydrogen deployment are realised and also minimises the risk of stranded assets.

2.4. In the absence of transport and storage business models the only capital funding available is for limited transport and storage infrastructure costs associated with eligible hydrogen production projects. Some funding may be available through the NZHF and production business model for transport and storage infrastructure that is deemed necessary, affordable and value for money to enable the deployment of production projects. There is currently no capital funding available for larger-scale transport and storage projects not associated with one specific production plant, for example. For transport and storage, stand-alone capital funding is not likely to overcome volume risk stemming from the key market barrier of supply and demand uncertainty. Market intelligence indicates that companies pursuing transport and storage projects do have the capital to fund their

[9] https://www.gov.uk/government/publications/net-zero-review-final-report

[10] https://www.gov.uk/government/publications/hydrogen-production-business-model

[11] For example, there might be cases in which end users are prepared and able to pay a price premium to switch to low carbon hydrogen, or cases where low carbon hydrogen may be cost-competitive with high-cost fuels (e.g. diesel) and where switching costs are minimal.

projects. Insufficient revenue certainty is the barrier, which stand-alone capital grants would not overcome.

2.5. This impact assessment considers options for providing long-term funding for the hydrogen business models. In assessing these options, the following principles have been considered and applied:

2.5.1. **Considers affordability and fairness for energy users and taxpayers**. There are several potential end-uses for hydrogen, meaning the impacts of any chosen funding mechanism must be considered across a range of different sectors and consumers. Whether funding via energy users or taxpayers, consideration needs to be given to compatibility with the wider policy landscape, fairness across the economy, and impacts on those least able to bear the costs.

2.5.2. **Protects public finances and is consistent with fiscal sustainability**. Funding the transition to a net zero economy has material fiscal consequences. These arise alongside wider pressures on public finances and will need to be managed to maintain fiscal sustainability.

2.5.3. **Provides flexibility and future proofs the approach to future changes in the energy system**. The exact technology and energy mix in 2050 cannot be known now, and the path to net zero will respond to the innovation and adoption of new technologies over time. However, in all pathways and scenarios, the transition to net zero will transform our energy system by 2050. The approach established now needs to be robust to future changes to the energy system and the future scale of demand across potential end-use sectors for hydrogen.

3. Description of options considered

3.1 This Impact Assessment considers the following options for funding revenue support for hydrogen production, transport, and storage deployment in the hydrogen business models:

3.1.1. **Policy option 1: Do nothing.** Under this option there is no funding for the hydrogen business models. Capital co-funding for hydrogen production projects and some limited transport and storage costs may still be available through the NZHF and hydrogen producers, transporters and storage entities would rely on market revenue once operational, if they could make final investment decisions in the absence of revenue support. There is a mix of market failures, set out in more detail in paragraph 1.2-1.4, which means that without revenue support through the business model to complement other interventions, it is likely that private investors would delay investment decisions, move investment abroad[12], or decide not to invest altogether, meaning there would be no at-scale hydrogen deployment in the UK in the 2020s. Consequently, this option does not support the objective to provide a sustainable, long-term funding stream for hydrogen business models, sufficient to deliver on the government's ambition for 10GW of low carbon hydrogen production by 2030 and is highly unlikely to deliver the hydrogen deployment to put the UK on a pathway to meet the government's legally binding Carbon Budgets and Net Zero target. Therefore, this option has not been taken forward.

3.1.2. **Policy option 2: Taxpayer funding.** Under this option, the funding source for hydrogen projects would be the taxpayers. As set out in the Net Zero Growth Plan, the IDHRS scheme will initially be tax-payer funded, until the funding will switch to a levy. For the purpose of this impact assessment the Department has considered the option of ongoing tax-payer funding. Ongoing tax-payer funding for hydrogen business model payments would provide investors and projects with the confidence they need to invest their upfront capital into a project. This option therefore has the potential to deliver on the government's ambition for 10GW of low carbon hydrogen production by 2030. This option would not involve passing costs on to energy users and could therefore minimise affordability impacts as a result of increased energy prices on energy consumers and industry. However, depending on the source of taxpayer funding, there may be corresponding affordability impacts for households and businesses. Provision of a sustainable, long term funding stream would be

[12] Other countries are putting mechanisms in place to support early deployment of hydrogen. For example, the Dutch SDE++ energy subsidy scheme, worth €30 billion (until 2025), covers low carbon hydrogen production projects. While Germany, which has committed to invest €9 billion in its hydrogen plans, will be launching a Carbon Contracts for Difference pilot programme to support the use of hydrogen in the steel and chemical industries.

contingent on the future state of public finances and on agreeing successive funding envelopes through fiscal events, and is therefore not consistent with a principle of fiscal sustainability. This option provides flexibility and would be future proofed to future changes in the energy system as the availability of funding would not be contingent on future energy mixes or end uses of hydrogen across different sectors or consumer bases. As set out in the Net Zero Strategy, this is not the Government's preferred option in the long term for hydrogen production. Unlike for the hydrogen production business model, no decision has yet been taken with regards to the long-term funding streams for the hydrogen transport and storage business models. At this stage of policy design, it is anticipated that the hydrogen transport and storage business models may need to be funded beyond direct users of the infrastructure in the near term – this may include via exchequer funding or via a levy.

3.1.3. **Policy option 3: Expand existing levy frameworks.** The Department has considered expanding existing levy frameworks to provide the funding source for the IDHRS scheme to fund hydrogen business models. The Department does not consider that existing levy frameworks can be made to fit with government's policy objectives for providing funding for the low carbon hydrogen production business model through the IDHRS scheme. This option does not support the objective to provide a sustainable, long-term funding stream for hydrogen business models, sufficient to deliver on the government's ambition for 10GW of low carbon hydrogen production by 2030. Therefore, this option has not been taken forward. As discussed in option 2, unlike for the hydrogen production business model, no decision has yet been taken with regards to the long-term funding streams for the hydrogen transport and storage business models. We believe that there may be a strong argument for a consistent approach to be taken across the funding of all hydrogen business models, and therefore the preferred approach for any future levy is to align with hydrogen production funding, rather than expand existing levy frameworks for the hydrogen transport and storage business models.

3.1.4. **Policy option 4: Obtain new powers to establish a levy funding mechanism.** Under this option new enabling powers would facilitate the creation of a levy funding mechanism through secondary legislation. The details of the new levy mechanism will be consulted on and set out in secondary legislation. A new levy mechanism is likely to operate in a similar way to existing levy schemes. For example, revenue support for clean electricity has been funded by passing on costs indirectly, through supplier obligations and suppliers passing costs onto energy bills. This approach has been used in the electricity sector to support the deployment of renewables through Contracts for Difference, Renewables Obligation and Feed in Tariffs, and in the gas sector through the Green Gas Support Scheme via the Green Gas Levy. These funding mechanisms are well understood by investors and projects, and establishing a similar new levy funding mechanism through secondary legislation will provide investors and projects with the confidence they need to invest. There are also other options for how a future levy may be designed, which include placing an obligation to pay the levy at a different point in the supply chain, for example on producers or importers. This option is therefore likely to deliver on the government's ambition for 10GW of low carbon hydrogen production by 2030. Through the design of the levy funding mechanism, consideration will be given to affordability and fairness, for both consumers and industry. Passing the costs of funding the hydrogen business model through to energy users through a levy funding mechanism protects public finances and is therefore consistent with a principle of fiscal sustainability. While some initial taxpayer funding has been committed to enable the deployment of the first electrolytic hydrogen production projects, the Government's strong preference is to transition to levy funding for hydrogen production in the future. As discussed in option 2, unlike for the hydrogen production business model, no decision has yet been taken with regards to the long-term funding streams for the hydrogen transport and storage business models. At this stage of policy design, it is anticipated that the hydrogen transport and storage business models may need to be funded beyond direct users of the infrastructure in the near term – this may include via exchequer funding or via a levy. The preferred option also provides optionality to fund hydrogen transport and storage projects via a new levy in the future is desirable as it allows for a consistent funding approach to be taken across the hydrogen production and hydrogen transport and storage business models if appropriate.

4. Preferred option

4.1. As set out in the Net Zero Growth Plan, Hydrogen Production Business Model payments will be funded by government until the hydrogen levy comes into effect. The preferred way forward also ensures optionality for transport and storage funding, to ensure this can also be levy funded. The preferred option is therefore to introduce primary legislation which will enable the Department to establish a dedicated levy funding mechanism to provide a revenue stream for the hydrogen business models in the future (policy option 4). The Department believes that this will help to achieve the policy objective of deploying hydrogen at scale sufficient to meet ambition for 10GW of low carbon hydrogen production capacity by 2030, in a fiscally sustainable way and to deploy transport and storage infrastructure necessary to connect producers and users and grow the hydrogen economy. This will contribute to putting the UK on a pathway to achieving the legally-binding Carbon Budgets and Net Zero targets.

4.2. The proposed powers will enable SoS to make regulations specifying the levy design and to appoint a levy administrator.

4.3. The establishment of a levy will be given effect through secondary legislation following consultation. The Hydrogen Business Model Consultation[13] and Hydrogen Transport and Storage infrastructure consultation[14] sought stakeholder views on how the hydrogen business models should be funded. The Department published a government response to the production business model consultation on 8 April 2022. The government response to the transport and storage consultation will be published later this year. The Department intends to consult on detailed levy design ahead of secondary legislation being brought forward.

[13] https://www.gov.uk/government/consultations/design-of-a-business-model-for-low-carbon-hydrogen

[14] https://www.gov.uk/government/consultations/proposals-for-hydrogen-transport-and-storage-business-models

5. Rationale and evidence to justify the level of analysis used in the IA (proportionality approach)

5.1. Sections 2 and 3 assessed the relative merits of introducing primary legislation to obtain new powers to establish a levy funding mechanism (our preferred option) against our policy objectives and principles.

5.2. The following analysis considers the potential impacts of the preferred option on households and businesses that would materialise when the secondary legislation stage is implemented.

5.3. At this stage, the Government is only seeking to establish the powers to introduce a levy when required. The primary legislation will have no impact until relevant secondary legislation is introduced. Thus, the estimated impact of this primary legislation, by itself, is zero.

5.4. This IA sets out some of the potential secondary stage impacts to inform future decisions about the levy and to illustrate the key trade-offs to be considered when designing it.

5.5. When introduced, the impacts of the levy will be driven by four broad groups of factors:

- Deployment path: decisions about the exact scale and timing of hydrogen deployment to be supported by Government.
- Ongoing hydrogen business model and funding regime design (e.g. the commercial design of the business model incorporating levels of price support, risk allocation and contract length).
- Wider conditions: future trajectory of key hydrogen market characteristics (e.g. energy and ETS prices; technology cost decreases, etc.).
- Levy design decisions (e.g. composition of the levy base)

5.6. While policy choices around deployment and hydrogen business model design will have a significant impact on the estimates of the total cost of the IDHRS scheme, and in turn the revenue required to be raised by the levy, there are currently significant uncertainties around these factors which limit the scope of the analysis that can be presented in this IA.

5.7. The exact trajectory of hydrogen deployment, which will shape the revenue raising profile of a new levy is still to be decided. Additionally, the full detail of eligibility and assessment criteria for future hydrogen business model allocation rounds have not been announced and there is uncertainty around the pipeline of projects that could apply for support.

5.8 Final business model design is also subject to uncertainty, the drafting of the hydrogen production business model contract is still ongoing and the transport and storage business models are still in the design-phase.

Although the production business model design is more certain than transport and storage, there also is uncertainty around wider market conditions such as energy and ETS prices. This uncertainty will affect the levy through the interaction with the deployment profile, business model characteristics and the total cost of the scheme. As such, it cannot be analysed in isolation.

5.1. Therefore, as the relevant details of the IDHRS scheme are still in development, the Department is unable to monetise the expected size of the scheme (that the levy would fund) and the costs and benefits of the levy.

5.2. Instead, this IA focuses on impacts flowing directly from levy design choices. It presents an illustrative analysis of the trade-offs involved in different levy characteristics and presents a qualitative assessment of the potential cost of the future levy. By itself, levy design will only impact cost distribution and not the total cost and spend profile and, therefore, this IA focuses on the former.

5.3. A more detailed assessment of levy options will be presented at secondary legislation stage, subject to more information about the key policy design choices being available at that point.

6. Illustrative monetised impacts of the preferred option

6.1. This section considers what choices the Department will have at secondary legislation stage in how the levy is designed, and what the potential impacts of these may be.

6.2. As mentioned above, given the uncertainties around the total cost of the IDHRS scheme, this analysis focuses on how levy design might impact consumers and businesses and the distribution of these. It does not attempt to estimate the precise level of these impacts.

6.3. The key levy design decisions which will determine how consumers and business will be affected include:

- the size and the composition of the levy base (gas vs electricity; domestic vs non-domestic consumers),
- how much revenue to raise from different payer groups.

Levy choices: composition of the levy base

6.4. The first factor to consider when designing a levy is who should be included in the levy base. The composition of the levy base will determine its size and how much revenue can be raised. This will be the key driver of individual price and bills impacts.

6.5. While final decisions are yet to be determined, it is likely that all three major energy user groups (households, commercial users and industry) will contribute to the cost of hydrogen support.

6.6. Similarly, no decisions have yet been made regarding the energy sources in scope of the levy. Levy funding could come from electricity or gas consumers, or a combination of the two.

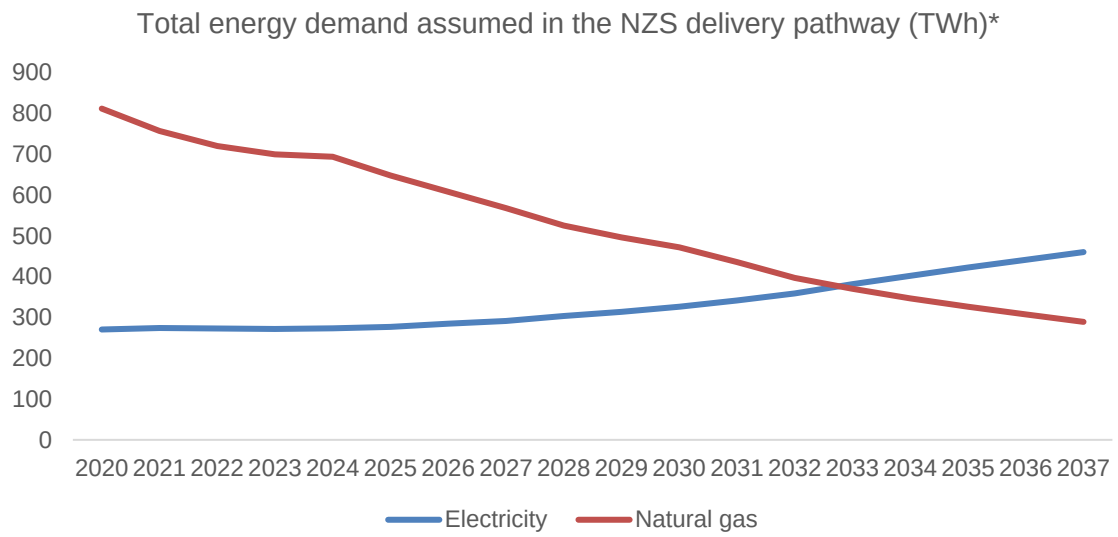
6.7. The trajectory of gas and electricity consumption in the UK will determine consumer and business impacts. In addition, the levy might have a second order effect on energy consumption as consumers react by switching fuels but it is not possible to estimate this effect at this stage.

6.8. In terms of volumes sold, the UK gas market is currently much larger than the electricity market. In 2020, total demand for natural gas was approximately 810TWh, of which 490TWh comprised consumption by households, commercial and industrial users (i.e. excluding gas for energy industries and generators). By contrast, electricity demand was only 270TWh.

6.9. Energy demand modelling up to 2037 consistent with the pathways published in the Net Zero Strategy shows gas consumption decreasing, and electricity consumption increasing over time (e.g. as households switch from gas boilers to heat pumps and industrial processes switch from natural gas to hydrogen). In these pathway scenarios total gas demand (including gas for the energy sector) in 2030 is estimated to fall to 470TWh and the demand for electricity to increase to 330TWh.[15]

[15] This energy consumption pathway is based on a set of assumption about future policy and market conditions and should not be interpreted as forecast Source: Net Zero Strategy: Build Back Greener, https://www.gov.uk/government/publications/net-zero-strategy

Figure 1. Modelled future total electricity and gas demand in the UK[16]



*Includes gas demand from the electricity sector.

6.10. These potential long-term trends will have to be considered when designing a new levy as they will determine its total long-term revenue raising potential.

6.11. For example, assuming the levy is applied on volumetric basis, and excluding gas for electricity generation, £1 charged per MWh of natural gas sold would raise approx. £490m in 2020, but only £280m in 2030[17]. Conversely, revenue from electricity consumers would be approximately £270m in 2020 and £330m in 2030. By implication, a levy targeting natural gas consumers is likely to see a decreasing revenue stream (other things equal), and a levy on electricity consumers would see a gradual increase in revenue raised (other things equal).

6.12. Limiting the scope of the levy to specific payer groups, as opposed to including all consumers, will predictably have an impact on the cost for individual consumers – holding total cost constant, a smaller levy base will lead to higher costs for individual consumers. For example, if only gas industrial users were in scope of the levy, the revenue raised by charging £1 per MWh gas sold would be approximately a fifth of the sum raised from the full gas consumer base (£95m).[18]

6.13. However, revenue raising potential of different configurations of the levy base, and ultimately the consumer and business impacts, will also depend on how the cost of the levy is distributed across payer groups.

Levy choices: cost distribution

6.14. Deciding how to distribute the cost of the levy is the second key choice determining consumer and business impacts. As different payer groups will have different energy consumption patterns and pay different prices, the same nominal per unit increase in energy prices might have varying consequences on different payers.

6.15. To illustrate consumer impact trade-offs involved in levy design choices, Table 1 presents estimates of price increases required to raise £490m per year – i.e. the sum equivalent to charging every household, commercial and industrial gas consumer an extra £1/MWh of gas

[16] Ibid.

[17] Assuming non-energy sector gas demand in 2030 is the same proportion of total gas demand as in 2020.

[18] Based on the current industrial gas consumption share. Source: Department for Energy Security & Net Zero Digest of Energy Statistics (DUKES) natural gas, December 2021

consumed in 2020 as described above. The table also shows the resulting relative increases in energy prices and bills.

Table 1. Consumer group size comparison. Per unit price increase required to raise the same about of money across chosen consumer groups (constant prices) [19]

Consumer group		Equivalent price increase/MWh (2020)	Equivalent price increase/MWh (2030)	Equivalent price increase (percentage change) (2020)	Equivalent price increase (percentage change) (2030)
Gas consumption	Total (non-energy)	£1 (Baseline)	£1.7	Household: 2% Small Business: 4%	N/A (2030 price data not available)
	Domestic	£1.7	£2.9	Household: 4%	
	Non-domestic	£2.5	£4.3	Small Business: 10%	
Electricity consumption	Total	£1.8	£1.5	Household: 1% Small Business: 1%	
	Domestic	£5.4	£4.4	Household: 3%	
	Non-domestic (small business)	£2.7	£2.2	Small Business: 2%	

6.16. Table 1 shows how much one would need to charge each group separately to raise the same revenue (equivalent to charging £1/MWh on all non-energy gas consumers in 2020). The variation in equivalent price increases presented in the table is driven by differences in their respective total energy consumption (in MWh terms). For example, all electricity consumers would need to pay £1.8/MWh in order to raise the same revenue as by charging all gas consumers £1/MWh reflecting lower electricity consumption (in MWh terms).

6.17. While differences might appear significant in absolute terms, as when comparing equivalent increases between domestic gas and electricity, they may not be as stark relative to baseline energy prices. In the case of domestic gas and electricity, a much larger absolute increase for electricity results in still lower percentage price change relative to the baseline price.

Energy price and bill impacts

6.18. As mentioned above, the baseline level of energy prices will determine the relative impact of the levy. Currently, the per unit price of electricity is much higher than that for gas: domestic consumers paid ~£196/MWh for electricity and ~£41/MWh for gas in 2020. Consequently, comparable per unit increases in prices of gas and electricity would have a larger relative impact on gas consumers (other things equal).

6.19. Consumer impacts will also depend on the amount of energy consumed by individual users as this will determine how energy price increases translate into bill impacts. Average household consumption of gas is much higher than electricity consumption – domestic consumers used on average 3.5MWh of electricity and 13.6MWh of gas in 2020.[20] Consequently, comparable gas and electricity price increases will have a much stronger overall bill impact on gas consumers.

6.20. For the purposes of this IA, we have made a simplifying assumption that the average energy consumption will not change radically by 2030. However, there is uncertainty over future consumption patterns and it is possible that average individual electricity and gas consumption might diverge from the current levels, for example as a result of mass adoption of heat pumps for domestic heating. This would in turn affect the relative differences in bill impacts across gas

[19] Price increase required to raise revenue equivalent to charging £1/MWh on all non-energy gas consumers in 2020.

[20] Source: Department for Energy Security & Net Zero Annual Domestic Energy Bills 2021 (QEP 2.2.5 and 2.3.5)

and electricity consumers. Possible future shifts in energy consumption will have to be considered when designing the new levy.

6.21. To give an indication of how a levy would affect individual consumers the effects of a hypothetical increase in electricity and gas prices by £1/MWh relative to current prices and bills is presented below. These estimates are not meant to reflect the full impact of the future levy but serve as a reference point for future levy design and bill impact considerations.

6.22. £1/MWh charged on all electricity sales in the UK in 2020 would increase the annual average domestic electricity bill from £707 to £711 (0.5%). The equivalent increase for gas would be £557 to £571 (2.4%).

Exemptions or other protections

6.23. The Department will consider if the new levy risks disproportionately affecting certain consumer groups and will test how potential adverse impacts can be mitigated through exemptions or other measures before the levy is introduced. This will involve looking into the impacts of the new measures on those groups that may be least able to bear the costs, including energy intensive industries and fuel poor households.

Administrative costs

6.24. In addition to the direct cost to consumers and businesses in the form of levy payments, the new measures will impose administrative costs on businesses directly responsible for collecting the levy (e.g. energy suppliers).

6.25. Parties responsible for collecting the levy (e.g. energy suppliers) will incur initial administrative costs through familiarising themselves with the policy, updating systems and engagement to notify customers of the levy. Once the policy is in place, suppliers will also face recurring costs from managing levy payments (including collecting and making payments, interacting with the counterparty to the hydrogen business model revenue support contracts).

6.26. There will also be a cost to government of collecting the levy.

Illustrative impact on small and micro businesses

6.27. The proposed new primary legislation is expected to have no impact by itself. Therefore, the estimated impact on small and micro businesses is zero.

6.28. However, if a levy is implemented through secondary legislation, small and micro business may be affected.

6.29. As mentioned above, while the composition of the levy base is still to be determined, it is likely that all three major energy user groups (households, commercial users, and industry) will contribute to the cost of hydrogen support, and this will include small and micro businesses.

6.30. The factors determining levy impacts presented in the preceding section in relation to households will also play a role with respect to small businesses. While final decisions will be made at secondary legislation stage, it is expected the levy will have the same per unit impacts on small businesses as on individual consumers.

6.31. Small and micro businesses are likely to face different baseline energy prices to individual consumers. Table 2 presents the impact of £1/MWh increase in energy prices relative to baseline prices in 2020 for businesses of different sizes.

6.32. The overall bill impact will be driven by energy consumption of individual businesses. Unlike in the case of households, there is likely to be greater heterogeneity in energy consumption across businesses. By implication, levy impacts, when applied on volumetric basis, will vary significantly across businesses.

6.33. If the new levy is implemented, in addition to the additional cost of the levy payment itself, it would impact small and micro businesses through an increased administrative burden on parties responsible for collecting the levy (e.g. small energy suppliers) – these costs are expected to be passed through to consumers.

Table 2. Relative impact of £1/MWh increase in gas and electricity prices by business size

Business size	Baseline price (2020) (£/MWh)	Baseline + £1/MWh	Percentage change
Electricity: Very Small	166	167	0.6%
Electricity: Small	147	148	0.7%
Electricity: Small/Medium	136	137	0.7%
Gas: Very Small	46	47	2%
Gas: Small	25	26	4%
Gas: Medium	21	22	5%

Regional impacts

6.34. The deployment of hydrogen can play a vital role in levelling up the economy throughout the UK. The funding is UK wide but will particularly benefit industrial regions which are primarily located in Scotland, South Wales, and the North of England.

6.35. There are industrial clusters in England, Scotland and Wales where significant investment into CCUS-enabled hydrogen will help to secure existing jobs whilst creating new jobs. Electrolytic hydrogen will often be co-located in areas of high renewable potential such as Scotland and coastal areas. The proposed industrial clusters and the known project pipeline for production, transport and storage projects is likely to see major projects delivered across the UK in England, Scotland, and Wales, with potential for plans for Northern Ireland in the future.

7. Risks and assumptions

7.1. The main sources of consumer and business impact uncertainty discussed in this section relate to non-policy driven factors. As mentioned in section 5, there is significant uncertainty about the key cost drivers of the IDHRS scheme viz. deployment ambition and design of the hydrogen business models. The Department expects to have more clarity on these drivers later in the levy development process.

7.2. Key non-policy risk factors affecting levy impacts include:

- Gas and energy market dynamics and short/long-term variations in predicted gas and electricity consumption. Short term gas consumption is subject to significant uncertainty, due to factors including weather effects, housing development and external shocks, such as those seen from COVID-19. Year-on-year changes between 2009 and 2018 varied between -8.1% and +3.7%. More broadly, modelled energy consumption underpinning the illustrative analysis in this IA is itself based on a set of assumptions about policies, consumption behaviours and wider market trends. Over a longer time period, there may be significant changes to these across the system. As such, the projections used to inform the levy design will need to be updated over time to reflect any changes to the underlying energy market trends.
- Impacts on individual users. By necessity, this analysis relies on average energy consumption estimates and does not fully consider variations in consumption patterns. The impact of any proposed future levy design might in practice vary significantly, especially for businesses in energy intensive industries. During the design work of the levy, the Department will undertake additional analysis to identify those users and will consider measures to mitigate impacts where they could be disproportionate.
- There is a range of additional risks potentially affecting implementation and operation of the levy, including interactions with other decarbonisation policies, the impact of the energy market conditions on the viability of the levy, unintended consequences especially around consumer incentives, as well as risk to stability of the revenue stream (e.g. shortfall in levy payments). These factors will also be considered at later stages of levy development.

8. Equalities Impact Assessment

8.1. A Public Sector Equality Duty (PSED) assessment has been completed for IDHRS.

8.2. This primary legislation is not expected to have any impact, by itself, on protected characteristic groups (PCGs). However, if secondary legislation is passed, there may be some impacts on PCGs. Those impacts are discussed below.

8.3. While the expected impacts on PCGs are likely to be small, three characteristics might potentially be affected: race/ethnicity[21], disability (long-term illness)[22], and age (measured as the age of the oldest household member).

8.4. The remaining characteristics are either less relevant at a household level and/or there is limited energy consumption data available at this level of granularity; these characteristics are sex, gender reassignment, sexual orientation, marriage and civil partnership, religion or belief, and pregnancy and maternity.

8.5. The analysis below uses a hypothetical example of a volumetric gas levy charged on all gas consumers across the economy and leading to an increase in gas prices of £1/MWh. The presented estimates below are used for illustrative purposes only and do not reflect the Government's position on the final design of the levy and the amount of revenue to be raised. This analysis focuses on relative differences in bill impacts across groups with different characteristics and, as such, won't be affected by changes in the absolute bill impact values.

8.6. For age, 16–24-year-olds and over 75s would be most impacted by the levy relative to income – this is driven primarily by lower median annual income of those two groups.

8.7. For disability/long-term illness, there is a small difference in the direct impact of the levy for groups with and without a long-term illness as their annual gas consumption is similar. However, as people in the former category tend to have much lower incomes, the levy would impact them disproportionately more.

8.8. For race/ethnicity, there is a small difference in relative bill impacts, once again, driven by differences in incomes.

8.9. Data on electricity consumption of the three PCGs analysed below is not currently available but it is likely the relative differences in electricity use between relevant groups will follow a similar pattern to that presented for natural gas.

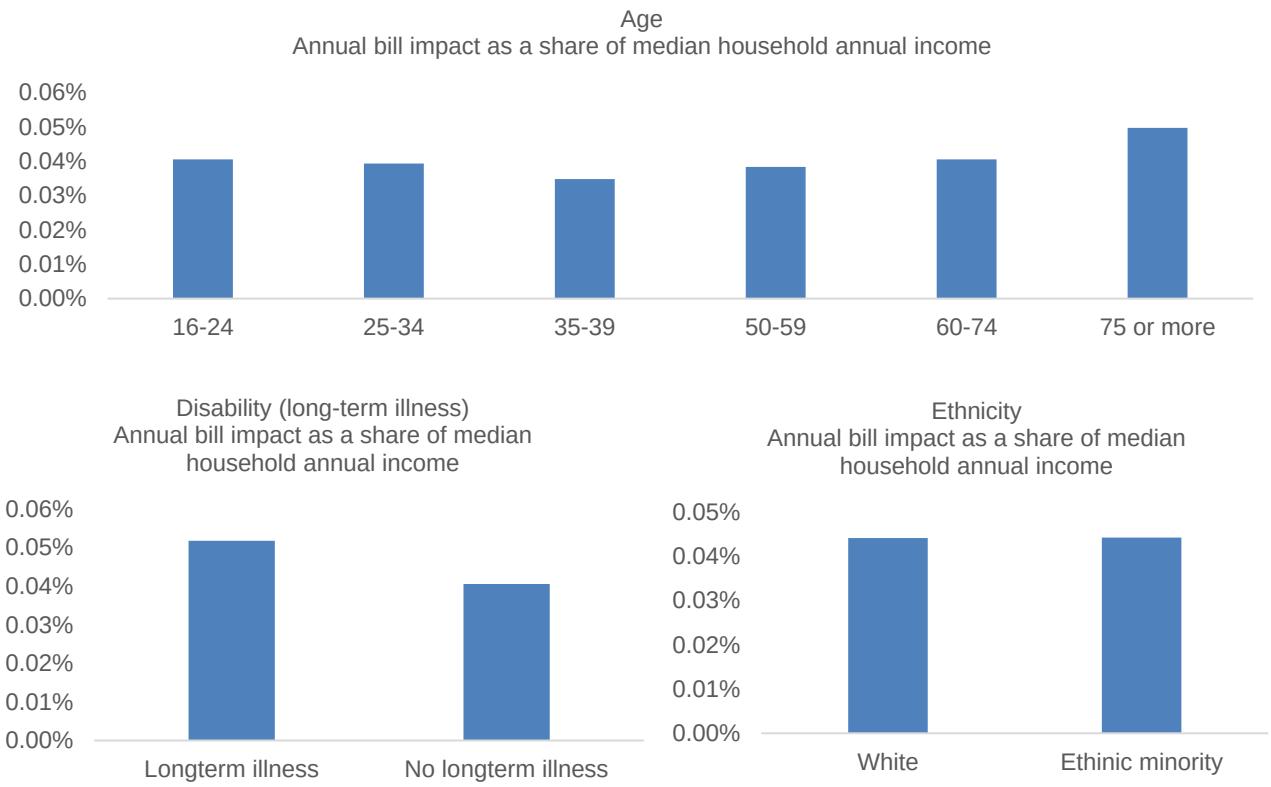
8.10. In summary, at this early stage of policy design, the Department can identify that a levy where the costs are passed through to consumers has the potential to have a negative impact on certain groups with protected characteristics. We are likely to see small variations in direct bill impacts across domestic households with and without protected characteristics, but expect income differences to exacerbate these differences. Although analysis of protected characteristics can provide an indication of likely levy distribution, and impact on various groups, ultimately the levy bill impact will depend on individual household consumption which is heterogenous and may be influenced by a variety of factors.

8.11. This assessment will be kept under review. An updated PSED assessment will be conducted in the run-up to secondary legislation.

[21] Source data is available for 2 ethnic groups only: White – White ethnic groups (including White British and White ethnic minorities); Other (all other ethnic minorities). This is because the number of people surveyed was too small to make any reliable conclusions about any of the 18 ethnic groups or 5 aggregated groups. Source: Department for Energy Security & Net Zero Fuel Poverty Statistics 2021

[22] A household that contains someone with a long-term illness/disability that states their condition reduces their ability to carry out day-to-day activities. Examples of long-term illnesses/disabilities include, but are not limited to, conditions which affect vision, hearing, mobility and/or mental health.

Figure 2. Impact of £1/MWh increase in gas prices across three Protected Characteristic Groups: Age, Disability/Long-term illness, Ethnicity/Race



Fuel poverty

8.12. A household is considered to be fuel poor in England[23] if: a) they are living in a property with a fuel poverty energy efficiency rating of band D or below[24]; and b) when they spend the required amount to heat their home[25], they are left with a residual income below the official poverty line.[26] [27]

8.13. There are 3 important elements in determining whether a household is fuel poor: household income, household energy requirements, fuel prices.

8.14. There were 3,176,000 households in fuel poverty in England in 2019, which corresponds to 13.42% of all households.[28]

8.15. For illustration, a hypothetical increase in natural gas price of £1/MWh would increase the number of fuel poor households in England by under 6000.

[23] Under Low Income Low Energy Efficiency (LILEE) methodology

[24] Energy efficiency rating is measured using the Fuel Poverty Energy Efficiency Rating (FPEER) Methodology, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332236/fpeer_methodology.pdf

[25] Fuel costs required to have a warm, well-lit home, with hot water and the running of appliances. An equivalisation factor is applied to reflect that households require different levels of energy depending on who lives in the property. Further information on how fuel costs are calculated can be found in Section 5 of the Methodology Handbook: https://www.gov.uk/government/publications/fuel-poverty-statistics-methodology-handbook

[26] Residual income is defined as equivalised income after housing costs, tax and National Insurance. Equivalisation reflects that households have different spending requirements depending on who lives in the property. We note that sources of income counted has changed to remove some disability benefits. Further information on how income is modelled can be found in Section 3 of the Methodology Handbook (https://www.gov.uk/government/publications/fuel-poverty-statistics-methodology-handbook)

[27] The poverty line (income poverty) is defined as an equivalised disposable income of less than 60% of the national median in a given year: (see Section 2 in: https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/articles/persistentpovertyintheukandeu/2015)

[28] Fuel Poverty 2019 data published in April 2021 Annual Fuel Poverty Report

9. Potential Trade Implications of the Measure

9.1. The impacts from these measures are not considered to impact international trade and investment.

10. Monitoring and Evaluation

10.1. The monitoring and evaluation (M&E) plan will be developed in more detail at secondary legislation stage when a levy funding mechanism would be introduced, and when more detailed decisions on transport and storage funding have been made. However, this section sets out our initial consideration of what an appropriate monitoring and evaluation framework for a levy could look like for this later stage.

10.2. The evaluation could focus on three broad themes:

- Impact evaluation, which would assess the impacts of the levy design, including how it affects consumers, businesses, hydrogen producers and wider stakeholders.
- Outcome evaluation, which would focus on whether the levy meets the objective of providing sustainable long-term funding for the hydrogen business models, building on the Theory of Change that the Department will develop in more detail at secondary legislation stage. This might involve testing the interactions between the chosen levy base, the energy market and revenue raised.
- Process evaluation, which could also examine the administrative operation of the scheme, assess the efficiency of levy collection, scheme compliance and enforcement.

10.3. For each of these the Department would need to define SMART objectives and outline specific research questions the evaluation would need to address. We expect the policy principles identified earlier in this IA (for instance, the importance of maintaining affordability and fairness for energy users) would form the basis of these objectives.

10.4. The methods used to undertake the evaluation would be informed by the Theory of Change to be developed at later stages of levy development, taking into consideration key uncertainties involved in the operation of the levy. The Department would consult key stakeholders on the proposed evaluation methods. Given the likely nature of the policy, it is expected a combination of methods and a range of data sources would be applied, for instance:

- data collection during the funding application process
- data shared by projects in receipt of production support
- market data analysis
- stakeholder engagement
- surveys

10.5. The M&E methodology will aim to be as robust and thorough as possible given the high-profile character of the policy but will also be proportionate to ensure methods are used appropriately and to address potential data limitation issues.

10.6. The Department is currently developing a detailed monitoring & evaluation plan and cost controls framework for the IDHRS scheme, which will focus more on the impacts and outcomes of how the funding is used and process by which it is allocated (rather than how the funding is raised). We will consider how the levy M&E plan sits alongside it or whether it is considered as part of this wider IDHRS M&E plan. This is to ensure efficient use of resources devoted to the process by identifying synergies between both programmes of work. For example, we would aim for data relevant to both workstreams to be collected once and shared between them.