



Department for
Energy Security
& Net Zero

Developing an energy smart data scheme

A call for evidence

Closing date: 10 March 2025



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Any enquiries regarding this publication should be sent to us at: digitalisation@energysecurity.gov.uk

Ministerial foreword

We are on a mission to speed up the transition away from fossil fuels and deliver clean power by 2030 and net zero by 2050. The challenge ahead of us is significant, but we are committed to being a government that tackles big challenges head on with long-term solutions.

Clean power by 2030 represents a huge offer to this country, laying the foundation for clean, secure, domestic power for generations to come. However, to achieve this we need to pull all of the levers at our disposal to make it a reality.

Data and digitalisation of our grid are both crucial to delivering a zero-carbon electricity system by 2030. 2024 marked the end of coal-fired generation, part of the transition from an analogue system to a decentralised, smart, digital system.

While large scale changes are underway, we must never forget that homes and businesses need greater control and visibility of their supply. We want customers to have more choice when it comes to energy, as well as being able to make informed decisions in an increasingly complex energy market.

That's why we recognise the importance of Smart Data. It has the potential to give customers more control over their own data which will help them better understand their energy usage, as well as accessing more personalised services that help them save money.

Smart data has transformed Open Banking in the UK, giving customers 24/7 access to their own data, as well as new products and services. It has driven huge innovation and economic growth in the banking sector and our ambition is to achieve similar success in the energy market.

An energy smart data scheme could provide the catalyst to unlock innovation, with the creation of new business models and firms offering creative products and services that makes customers' lives easier or their bills cheaper.

In this call for evidence, we want to hear from stakeholders how a Smart Data scheme could serve the best interests of energy customers and help solve the real-life problems they face on a daily basis.



Michael Shanks MP

Minister for Energy

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General information

Why we are publishing this call for evidence

This call for evidence seeks to understand the potential for a Smart Data scheme in the energy sector. The government is seeking views from interested stakeholders on the current energy landscape, the potential customer issues that could be solved through a Smart Data scheme, and the challenges and risks to developing an energy smart data scheme.

Call for evidence details

Issued: 13 January 2025

Respond by: 10 March 2025

Enquiries to:

Smart Data
Smart Energy team
Department for Energy Security and Net Zero
7th floor
3-8 Whitehall Place
London
SW1A 2EG

Email: digitalisation@energysecurity.gov.uk

Call for evidence reference: Developing an energy smart data scheme

Audiences:

This call for evidence will be of particular interest to energy market participants (including energy suppliers, network and transmission operators, and any other holders of energy data), consumer groups, potential third party providers (including app and software designers), trade bodies and industry groups. We would also welcome views from organisations or individuals with experience in data sharing, in the energy sector, Open Banking and beyond.

The call for evidence is not limited to these stakeholders - any organisation or individual is welcome to respond.

Territorial extent:

The territorial scope of this publication is GB wide, while recognising that certain energy policy areas are devolved in some jurisdictions.

This call for evidence will inform future policy development by government in areas where it is responsible for energy policy and related matters, and engagement with devolved governments in relation to devolved policy.

How to respond

We encourage respondents to use the online e-consultation platform wherever possible as this is government's preferred method of receiving responses.

However, responses in writing or by email will also be accepted. If you wish to submit your main response on the e-consultation platform, but provide supporting information by hard copy or email, please be clear that this is part of the same response.

Respond online at: <https://energygovuk.citizenspace.com/clean-electricity/energy-smart-data-scheme/>

or

Email to: digitalisation@energysecurity.gov.uk

Write to:

Smart Data
Smart Energy team
Department for Energy Security and Net Zero
7th floor
3-8 Whitehall Place
London
SW1A 2EG

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, with supporting evidence wherever possible. Further comments and wider evidence are also welcome.

Confidentiality and data protection

Information you provide in response to this call for evidence, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on [GOV.UK](#). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This call for evidence has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this call for evidence has been conducted, please email: bru@energysecurity.gov.uk.

Executive summary

Increased data sharing has the potential to help meet the real-life needs that energy customers face on a daily basis. For example, it could help customers find the best tariff based on actual consumption, providing personalised solutions, better services and greater choice while saving them money. Alongside providing real value to customers, data sharing can also deliver significant environmental and economic benefits.

Achieving clean power by 2030 and net zero by 2050 will require a rapid shift away from fossil fuels to cleaner, renewable forms of energy generation to balance the grid and provide flexibility, coupled with the electrification of much of our heat and transport demand. Using energy more flexibly has huge benefits for customers by giving them more choice and reducing overall costs.

Smart Data is the process of sharing customer data - at the customer's request - with authorised third parties (ATPs) in a secure way. Smart Data is a subset of wider data sharing. The key difference with Smart Data is that the data subject gives consent for their data to be used in a way that provides the customer with some value. The ATP will often enhance the customer's data with broader contextual data, which may be open access or accessed through a commercial licence.

The central objective of Smart Data is to give customers control over the use of their own data, so they can access useful, innovative and personalised products and services from third party providers that cater to their needs.

A Smart Data scheme is the overarching trust framework and structure that provides the rules, standards and agreements that governs data sharing between customers, third parties and data holders.

This call for evidence seeks to understand the potential for introducing a Smart Data scheme in the energy sector. We want to support customers to make informed choices about their energy needs in an increasingly complex market. An energy smart data scheme could be one route to delivering this aim.

We are seeking stakeholder views on the current energy landscape and the potential scope, opportunities, barriers and risks to developing an energy smart data scheme. This includes seeking views on:

- What we can learn from existing Smart Data schemes in the UK and abroad
- How to foster customer trust, ensure customers are protected and encourage industry participation
- How to define the scope of a scheme - for example, the customer groups, potential use cases and datasets that should be included
- How to design a scheme that is suitable for the specific needs of the energy sector, while also supporting interoperability and cross-sector alignment
- How to implement and deliver a scheme in the wider context of other industry initiatives to support the transition to clean power

1. Introduction

1.1 About this call for evidence

This call for evidence seeks views on the opportunities for developing a Smart Data scheme in the energy sector.

Smart Data is the secure sharing of customer data - upon the customer's request - with authorised third party providers (ATPs). These ATPs can use customer data to provide innovative products and services that save customers time or money. In an increasingly digitalised energy sector, enhanced data sharing is also necessary for the shift to a low carbon economy and enabling clean power by 2030.

The government's vision is for a world-leading Smart Data economy - an interoperable ecosystem underpinned by data portability and openness, which will empower consumers and businesses, and turbocharge competition, innovation and growth. Open Banking is the only active example of a regime that is comparable to a live Smart Data scheme. We want to explore opportunities to replicate and extend the success of Open Banking in other sectors across the economy.

To deliver this vision, in the King's Speech 2024 the government announced its intention to create new Smart Data powers across the economy. The Data (Use and Access) Bill - introduced in October 2024 - will establish regulation-making powers to allow government to set up Smart Data schemes across the economy. This will pave the way for the Smart Data model to be expanded into sectors beyond banking.¹

The government will consider stakeholder responses to this call for evidence and the actions required to deliver positive outcomes in this area.

This call for evidence refers throughout to 'customers'. This refers to domestic consumers and businesses of all sizes (from Small and Medium Enterprises to large industrial and commercial businesses). By 'energy', we mean both electricity and gas. The geographical scope of this call for evidence is GB only. For further information on other key terms used throughout this call for evidence, please see the glossary at the end of this document.

1.2 Who should respond to this call for evidence?

The government would like to hear the views of energy market participants (including energy suppliers, network and transmission operators, and any other holders of energy data), consumer groups, potential third party providers (including app and software designers), trade bodies and industry groups in this call for evidence. We would also welcome views from organisations or individuals with experience in data sharing, in the energy sector, Open Banking and beyond. We encourage respondents to engage with all questions where they have views, but given the breadth of issues covered, we do not expect full responses to every question.

¹ [Data \(Use and Access\) Bill](#)

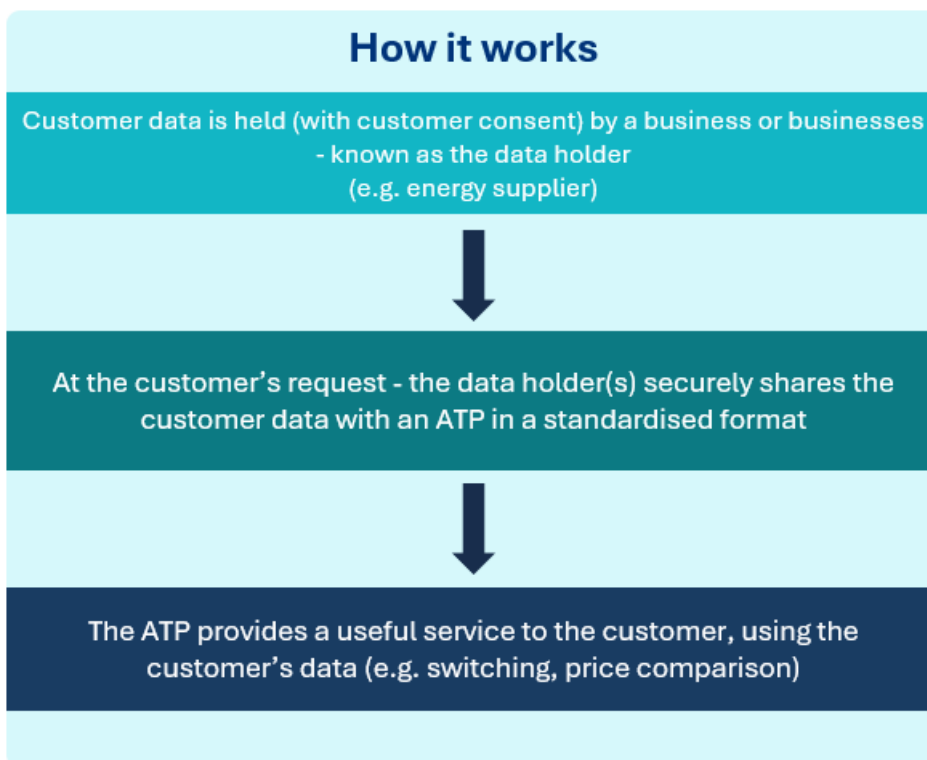
1.3 What is Smart Data?

To support a common understanding throughout this call for evidence, we are clarifying the terminology used to describe Smart Data.

Smart Data is the process of sharing customer data, upon a customer's request, with authorised third parties in a secure way. The term 'Smart Data' is often used interchangeably with 'open X', where X is banking, finance or any other sector. This should not be confused with the widely accepted term 'open data', as championed by the Open Data Institute, where non-sensitive data is made available for anyone to access, use or share.²

Smart Data is a subset of wider data sharing and is a type of data portability. The key difference with Smart Data is the data subject (e.g. customers) gives consent for their data to be used in a way that provides the customer with some value. The ATP will often enhance the customer's data with broader contextual data, which may be open access or commercially available. The central objective is to give customers control over the use of their own data, so they can access useful products and services that cater to their needs.

Figure 1: Summary of the customer journey in Smart Data sharing



² [Open Data Institute](#)

1.4 What is a Smart Data scheme?

A Smart Data scheme is the set of rules that govern how Smart Data works in a specific sector. It provides an overarching trust framework and structure under which data sharing operates, alongside the roles and responsibilities of different scheme participants.

This includes:

- The process for customers to give consent for data sharing
- Which third parties can access customer data and how they become authorised
- What data is shared between the data holder and the third party
- The specification of data standards to ensure data is shared in a consistent format
- The technical process for secure sharing and customer protections

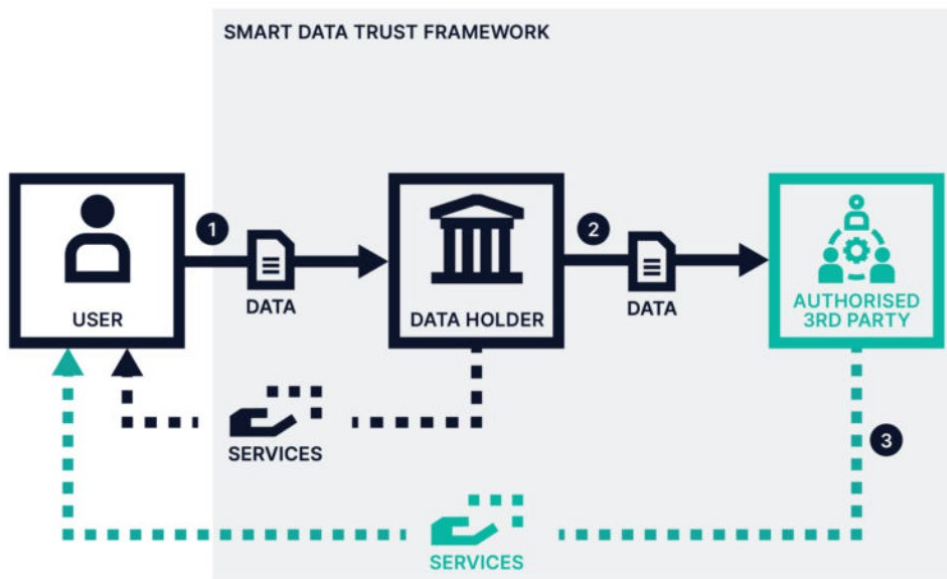
A trust framework applies the rules within which data sharing happens. Data holders and ATPs need to identify themselves and confirm they are authorised to share the requested data. Data standards are developed to ensure data is shared in a common format.³

A multitude of use cases can operate under a single Smart Data scheme. Most use cases would combine Smart Data with supporting datasets to deliver an outcome for the customer. By combining data obtained from multiple sectors (cross-sector), there is the potential for a very wide range of possible use cases - for example, energy consumption insights, electric vehicle (EV) charging flexibility, home retrofitting, carbon reporting, and holistic financial insights and management.

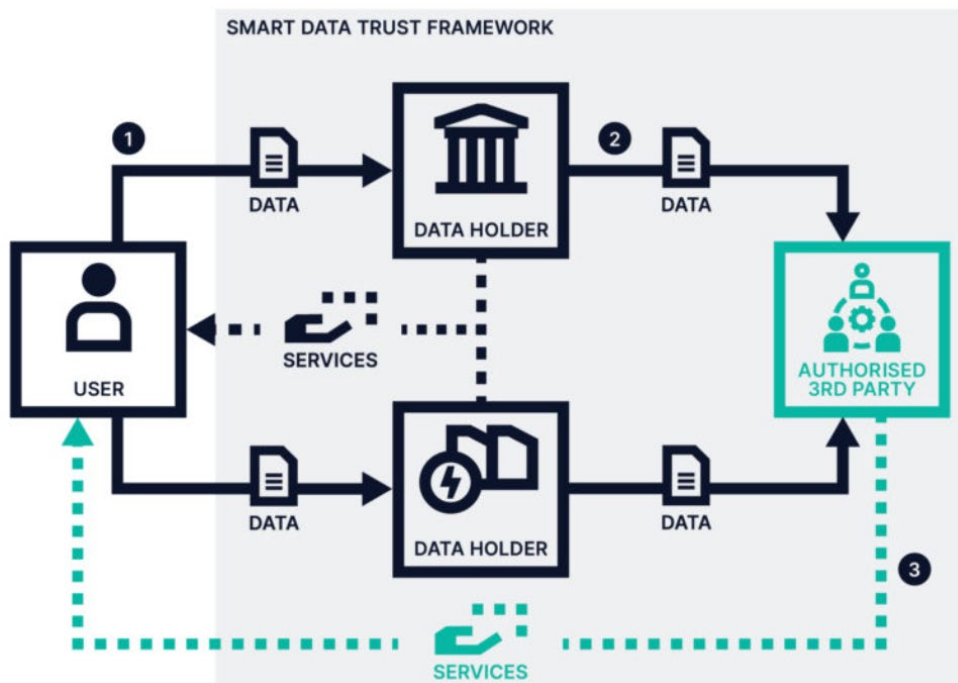
³ Further information on trust frameworks can also be found here: <https://www.which.co.uk/policy-and-insight/article/building-consumer-trust-in-smart-data-aLpql3q6tEdM>

Figure 2: How single and cross-sector Smart Data schemes work within a trust framework⁴

SMART DATA SINGLE SECTOR



SMART DATA CROSS SECTOR



⁴ [Smart Data Discovery Challenge](#)

2. The Smart Data landscape

In this section, we review the landscape in which a Smart Data scheme would operate. We start by looking at the potential benefits of a scheme. We then look at what can be learnt from existing UK and international Smart Data schemes, before considering how Smart Data could be integrated into the wider range of data and digitalisation initiatives that already exist in the energy sector.

2.1 Benefits of Smart Data

The UK is an international leader in data and digitalisation across the economy, and the digital sector is a strong contributor to economic growth. The energy sector is undergoing a period of considerable change to deliver clean power by 2030 and net zero by 2050. This will require a rapid shift away from fossil fuels to cleaner, renewable forms of energy generation to balance the grid and provide flexibility, coupled with the electrification of much of our heat and transport demand.

Low carbon technologies allow customers to generate, store and use energy more flexibly, using tariffs tailored to their needs. Using energy more flexibly has huge benefits for customers by giving them greater choice and reducing overall costs. It is also a key way to cut carbon emissions as part of a more efficient, less wasteful, clean energy system.

This modern energy system will be underpinned by the digitalised exchange of data. The National Energy System Operator's (NESO) recent advice to government identifies enhanced data sharing as a key driver to meet our clean power 2030 target.⁵ Access to high quality real-time information will make the system more flexible, efficient and less costly. Increased data sharing also has the potential to solve real-life problems that customers face on a daily basis, as well as delivering significant environmental and economic benefits:

- **A better deal for customers:** Giving customers more power over their own data could unlock innovative products and services that simplify their lives and help them save money.
- **Decarbonisation:** Data sharing can help customers to engage with their energy usage, allowing them to install low carbon solutions in their homes and offices, or opt into flexible or green tariffs.
- **Competition and customer engagement:** Empowering customers to use their data to make informed choices can improve customer engagement and stimulate market competition. Competitive markets are a crucial driver of growth, productivity and innovation. Competition drives positive outcomes for customers by keeping prices down and providing greater choice across markets.
- **Innovation:** An energy smart data scheme can drive innovation by giving customers real control over their data, creating opportunities for innovative firms to offer creative new services that use a wide range of energy data for the customer's benefit. As well as smart meter data (provided with customer consent), there are many other data sources that could be considered (see chapter 4 below). Innovative solutions that simplify and

⁵ [NESO Clean Power 2030 report](#)

automate a customer's engagement with their smart, flexible energy systems will ensure we support customers on the journey to net zero.

- **Economic growth:** New ways of using data can accelerate innovation, investment and productivity - with new jobs, business, products and services. The OECD estimates the data economy drives investments worth 3.0-6.7% of UK economic activity,⁶ and it is estimated that wider data mobility across the economy could increase GDP by £27.8 billion.⁷ By 2050, the domestic market for smart systems and flexibility could be worth up to £1.3 billion to the economy and around 10,000 jobs.⁸

Our vision for a potential energy smart data scheme is to empower customers to use their own data to access new, innovative products and services that make their lives easier and their bills cheaper. We want to support customers to make informed choices about their energy needs in an increasingly complex market. We are therefore interested in your views on the potential benefits of an energy smart data scheme.

1. **What are your views on the benefits of an energy smart data scheme? This might include (but is not limited to) benefits to customers, decarbonisation, the economy and wider society.**

2.2 Open Banking

Open Banking is the only active example of a regime that is comparable to a Smart Data scheme in the UK. As a world-leading initiative, Open Banking has shone a light on the opportunities available when customers are put in control of their own data, and has paved the way for the development of future Smart Data schemes in the UK.

Launched in 2017, Open Banking now has over 300 authorised providers, with 11 million consumers and small businesses regularly using the scheme.⁹ The ability to share financial data between banks and ATPs ('fintechs') or initiate payments, allows customers to simply and securely move, manage and make the most of their money using mobile apps.

Open Banking has driven significant innovation and economic growth. UK Open Banking firms have raised over £2 billion of private funding since 2018, and created over 4,800 skilled jobs.¹⁰ With the right environment and tools, the energy sector could build on this success.

Improved data access has given firms the toolkit to innovate and disrupt traditional markets through a huge variety of use cases. Many of these use cases are tailored to specific customer needs which were not envisioned when Open Banking was launched. Open Banking services include switching, making payments, and financial advice to improve decision-making. There are also some energy sector use cases which use Open Banking to support customers with bill payments, and it is also used for identity verification to support a wider range of digital services.

⁶ As measured by Gross Value Added: ['What is the role of data in jobs in the United Kingdom, Canada, and the United States?' OECD \(2023\)](#)

⁷ [Data Mobility: The personal data portability growth opportunity for the UK economy, Ctrl-Shift \(2018\)](#)

⁸ Gross Value Added estimates per year: [Energy Innovation Needs Assessment, Sub-theme report: Smart Systems, BEIS \(2019\)](#)

⁹ [Open Banking](#)

¹⁰ [Startup Coalition \(2023\)](#)

HM Treasury recently published its plans to scale Open Banking to help deliver more competition and innovation in the market, and transition to a sustainable long-term regulatory framework.¹¹

We are interested in your views on how the experience of developing of Open Banking could help inform the development of an energy smart data scheme. We would like to understand what lessons can be learnt that would be applicable to the energy sector.

- 2. What can we learn from Open Banking that would be helpful to consider when developing an energy smart data scheme? This might include (but is not limited to): phasing, structure, funding, participation, growth, implementation or governance.**

2.3 International examples

A number of countries are developing or have implemented Smart Data schemes. Many countries, such as Australia, started with banking and are now looking to the energy sector. The European Union is also taking steps to consider the energy sector.

International example: Australia

Australia has developed a centralised economy-wide data sharing approach called the [Consumer Data Right](#) (CDR). After starting with the banking sector, they moved on to the energy sector as the second priority. Read-only access to energy data went live in October 2022, with legislation recently passed for write-access to the data.

The list of registered data providers is managed centrally by the Australian Government with the data standards developed and managed for all sectors by the [Data Standards Body](#) (DSB) who [publish the standards openly](#).

The data currently available includes: customer account details, billing data, meter usage data, meter identifier data, generic and tailored tariff and product data, and distributed energy resource data (e.g. batteries and solar panel installations).

International example: The European Union

The European Union established a data sharing framework as part of its Digitalisation Action Plan, creating Data Spaces for a number of strategic sectors including energy. A data space is a shared digital environment where different organisations can share and access data in a secure and controlled way, ensuring privacy and trust for one or more use cases.

A blueprint for a [Common European Energy Data Space](#) (CEEDS) identifies five high-level energy use cases covering differing scopes, data exchange and actors. This includes residential and commercial energy use optimisation, flexibility in home energy management, forecasting of network load and generation, EV charging forecasting and

¹¹ [HM Treasury National Payments Vision \(2024\)](#)

asset fault detection and maintenance. Aside from the network use case, all of these would fall within the UK government's definition of a Smart Data scheme.

We are interested in your views on how we might learn from the experiences of other countries to develop an energy smart data scheme. We would like to understand where we might align or diverge in our approach. Responses should not be restricted to only the international examples mentioned above. Where an international comparison is not specific to energy, please identify the relevant lessons for us in considering data portability in the energy sector.

3. What can we learn from international examples of Smart Data schemes for our approach in the energy sector?

2.4 Wider GB data sharing

There are a number of current GB energy data and digitalisation initiatives that complement and intersect with a potential energy smart data scheme. Since Smart Data provides an overall framework for data sharing, some existing initiatives may be able to use this framework to accelerate delivery or enable consistency of approach. Other initiatives may not be appropriate to include in a Smart Data scheme because they are already further along in development or at implementation stage.

DESNZ's **call for evidence on innovation in the energy retail market** set out how a more innovative retail market will bring with it the opportunity to make better use of consumer data and digital tools, with most responses highlighting better use of data (particularly half-hourly consumption data) and the importance of a consistent approach to data sharing across suppliers as key enablers of retail market innovation. The government response setting out next steps for retail reform was published in February 2024.¹² To build on this work, Ofgem recently consulted to collect further evidence on the barriers and enablers of innovation in the retail market. This included exploring options to improve regulatory routes to market for innovators.¹³

DESNZ also recently published the **government response to the road fuels consultation** and confirmed its intention to implement a statutory open data scheme for fuel prices - called Fuel Finder - by the end of 2025, subject to parliamentary timings.¹⁴ This will increase price transparency and help drivers to compare prices easily and make more informed decisions on where to buy petrol and diesel. It will in turn increase pressure on petrol filling stations to compete strongly to attract customers by lowering their prices or improving their services at the forecourt.

DESNZ consulted on **delivering a smart and secure electricity system** looking at the technical and regulatory frameworks required to enable the untapped flexibility from small scale devices such as heat pumps and domestic EV charging points. This includes looking at how flexibility can be delivered through wider sharing of tariff data and energy smart appliances data.¹⁵

¹² [Government response to call for evidence on towards a more innovative energy retail market \(2024\)](#)

¹³ [Ofgem consultation on innovation in the energy retail market \(2024\)](#)

¹⁴ [Government response to consultation on open data scheme and ongoing monitoring function for road fuel prices \(2024\)](#)

¹⁵ [Delivering a smart and secure electricity system: implementation \(2024\)](#)

Many organisations integral to decarbonising the energy system would benefit from better visibility of data from small-scale assets such as EV charging points, heat pumps and batteries. DESNZ funded innovation in this area through the **Automatic Asset Registration programme**,¹⁶ and Ofgem recently closed its consultation on asset registration for flexibility markets,¹⁷ which aims to support demand side flexibility by reducing barriers to organisations seeking to participate. Customers could benefit from increased flexibility and a new range of valuable services. A Smart Data scheme could provide a mechanism for sharing data.

Ofgem has committed to developing the pathway to delivery of a **data sharing infrastructure (DSI)** to support sharing of data in a standardised and secure format, and recently consulted on an interim governance framework.¹⁸ In the government's response to the digital spine feasibility study, the NESO committed to delivering a DSI minimum viable product in 2025.¹⁹ This is focused on sharing data for strategic planning, which is largely network and system data. Any future expansion to customer data could then intersect with an energy smart data scheme.

Ofgem has also consulted on a **consumer consent solution** designed to be data-source agnostic but support the consumer to clearly manage their consent across multiple data sources. This solution would encompass both a standardised mechanism to verify when consent has been provided, and a dashboard where consumers can identify who has access to their data (and revoke access where appropriate). The aim is to work towards a minimum viable product in late 2026.²⁰ Obtaining customer consent is fundamental to Smart Data, so this could provide a foundation for a Smart Data consent approach.

More widely, the Department of Business and Trade (DBT) is investigating a multisector approach to managing the **Priority Services Register (PSR)** to enable data sharing between energy, water and telecoms companies using a 'tell us once' approach - known as a share once support register - with the aim of reducing harm and improving wellbeing during incidents while maximising the eligible households that can access tailored services.²¹ This could potentially become a use case for a cross-sector Smart Data scheme.

In addition to the initiatives above, **Ofgem's Data Best Practice Guidance**²² has driven the culture of data sharing across the energy sector over the last few years. Its aim is to increase the volume of accessible data and drive common behaviours. A consultation on expanding the scope to code administrators and central service delivery bodies is due in Q1 2025. Ofgem plans to expand coverage to all data held by licensed entities.

A number of **industry-led data sharing initiatives** also exist, targeted at specific customer benefits. Here are two illustrative examples:

- Organisations which are a Smart Energy Code party and Data Communications Company (DCC) Other User can access smart meter data with consent of the bill payer.²³ An example of an organisation using this data sharing initiative is [Loop](#) (launched in 2017), an energy saving app that helps customers with smart meters to

¹⁶ [Automatic Asset Registration Programme](#)

¹⁷ [Ofgem Flexibility Market Asset Registration \(2024\)](#)

¹⁸ [Ofgem Governance of the Data Sharing Infrastructure consultation \(2024\)](#)

¹⁹ [Government response to the digital spine feasibility study \(2024\)](#)

²⁰ [Ofgem Consumer Consent Solution consultation \(2024\)](#)

²¹ [Smarter regulation: delivering a regulatory environment for innovation, investment and growth \(2024\)](#)

²² [Ofgem Decision on definition of Energy System Data in data best practice guidance \(2024\)](#)

²³ [Data Communications Company \(DCC\)](#)

monitor their energy consumption and track costs more easily. This was developed by accessing smart meter data from DCC through authorised user [n3rgy](#).

- [Open Energy](#) is a not-for-profit organisation aimed at opening up the energy data market. It has developed a trust framework to support enhanced data discovery and sharing for commercial energy data. It is currently leading [Project Perseus](#) which automates emissions reporting for SMEs to unlock green finance.

This is not an exhaustive list of data and digitalisation initiatives, either in the energy sector or more widely, that could impact an energy smart data scheme, but there is a clear breadth of activity in this space. We don't want to reinvent the wheel. An energy smart data scheme shouldn't duplicate efforts elsewhere but provide additional benefits to customers where gaps exist.

We are therefore interested in your views on where an energy smart data scheme could address any gaps in the current energy data landscape or add value where data sharing and digitalisation initiatives already exist in the energy sector.

- 4. What additional value could an energy smart data scheme deliver alongside existing data sharing initiatives? Please include your views on how an energy smart data scheme might support or hinder existing data sharing and digitalisation initiatives.**

3. Building trust

Existing examples of successful Smart Data schemes demonstrate the importance of the participation of all key actors involved in the scheme. This includes customers, industry and third party providers. In this section we look at how to improve outcomes for customers, facilitate participation and build trust.

3.1 Improving customer outcomes

A successful Smart Data scheme must provide solutions to the real-life needs that customers face when engaging with the energy market - for example understanding their consumption, identifying the best value tariff for their situation or using low carbon solutions more efficiently.

As well as systemic challenges that are ripe for an innovative solution, we are interested in issues that affect specific customer groups, such as homeowners, renters, business customers, or vulnerable customers. We would also like to understand the specific barriers to participation that affect particular customer groups. For example, those who are digitally excluded, vulnerable or without a smart meter.

We are interested in your views on what these challenges might be, and how an energy smart data scheme might help give customers the right information and tools to navigate an increasingly complex market and make informed choices.

- 5. What energy customer needs could potentially be addressed by an energy smart data scheme?**
- 6. Which customer groups might benefit most from an energy smart data scheme and why?**
- 7. What specific challenges or barriers to participation might be faced by particular customer groups?**

3.2 Protecting customers

Customers will only participate in a Smart Data scheme if they trust it.²⁴ Research suggests that customers have mixed feelings on whether the benefits of Smart Data outweigh the potential risks perceived by customers (for example, privacy concerns), with the risks feeling much more tangible to customers than the benefits. Informed users with more clearly defined uses for their data are more likely to trust a Smart Data scheme.²⁵

Alongside trust, customers must also be protected from harm. Harms could include lack of meaningful consent, risks to customer safety, or insufficient protections for vulnerable customers.²⁶ In the energy sector, Ofgem's principal duty is to protect the interests of existing

²⁴ [Which? Building consumer trust in Smart Data \(2024\)](#)

²⁵ [Examining public attitudes towards Smart Data schemes \(2022\)](#)

²⁶ [Which? Building consumer trust in Smart Data \(2024\)](#)

and future customers. It works to ensure the fair treatment of customers and to try and prevent harm before it happens. It can also take action to enforce consumer protection law.

In a Smart Data scheme, customer data will only be shared with consent from the customer. Customer protection involves ensuring that all identified risks are properly mitigated, there are clear consent and authentication guidelines to ensure customers have control over their data, and they have clear rights and access to redress.²⁷ This is not an exhaustive list of customer protection issues, and we would welcome views on what should be considered.

8. How can we build and maintain customer trust in an energy smart data scheme?

9. What measures should be considered to ensure customers are protected?

3.3 Incentives and barriers to participation

We believe a government-led approach is required to ensure participation and uphold high security standards. This also underpins the government's priority to build an interoperable landscape of Smart Data schemes across sectors. However, the case studies below illustrate schemes that have been successful in taking both government-led and market-led approaches. The key in both cases has been to ensure available incentives to encourage participation and usage. We are interested in understanding the incentives in the GB energy market that would enable success. This could be for existing data holders or ATPs.

Government led incentives: India

The Indian government led the creation of a banking coalition to create a successful payments infrastructure. The banks were subsidised to deliver the scheme. In its first 3 years of operation, the scheme went from 9% to 73% of all digital payments. Merchants were incentivised to participate in the scheme by waiving transaction fees and users were heavily encouraged to use it by the demonetisation of R500 and R1000 notes.

Market led incentives: United States of America

The USA has created a very successful fintech industry through a market-led approach. The industry is expected to grow to around \$36 billion by 2031 and include 46% of all global fintechs. In this case, a non-profit organisation, [Financial Data Exchange](#) (FDX) created the technical and data standards.

The USA has an extensive history of using screen scraping applications. The implementation of standardised data sharing through APIs has allowed banks to reduce both operational and risk costs by migrating users to a more secure method of data sharing.

We want to ensure a level playing field for new and existing ATPs to stimulate innovation. Open Banking lowered the barriers to entry for new market entrants, through the creation of standardised APIs to remove technological complexity. With the correct credentials, an API

²⁷ [Design principles for inclusive smart data schemes research \(2023\)](#)

works by delivering a request to a provider and responding back in a standardised manner. This makes integrating with multiple providers simple as the same information is returned by all the providers. In addition, the existence of platform providers, such as [Truelayer](#), [Stripe](#) or [Plaid](#), makes the technology integration even easier for application developers, as they provide a further level of standardisation. This has fostered innovation and inclusion through the ability to rapidly deliver apps and services catering to specific customer groups, empowering customers with increased choice and transparency.

10. What are the potential incentives and barriers for established energy market actors to provide access to customer data (e.g. operational, commercial, legal)? What interventions might be necessary?

11. What are the barriers currently faced by third parties in accessing customer data? What potential barriers might be faced by authorised third parties in offering increased or improved services to customers through a Smart Data scheme?

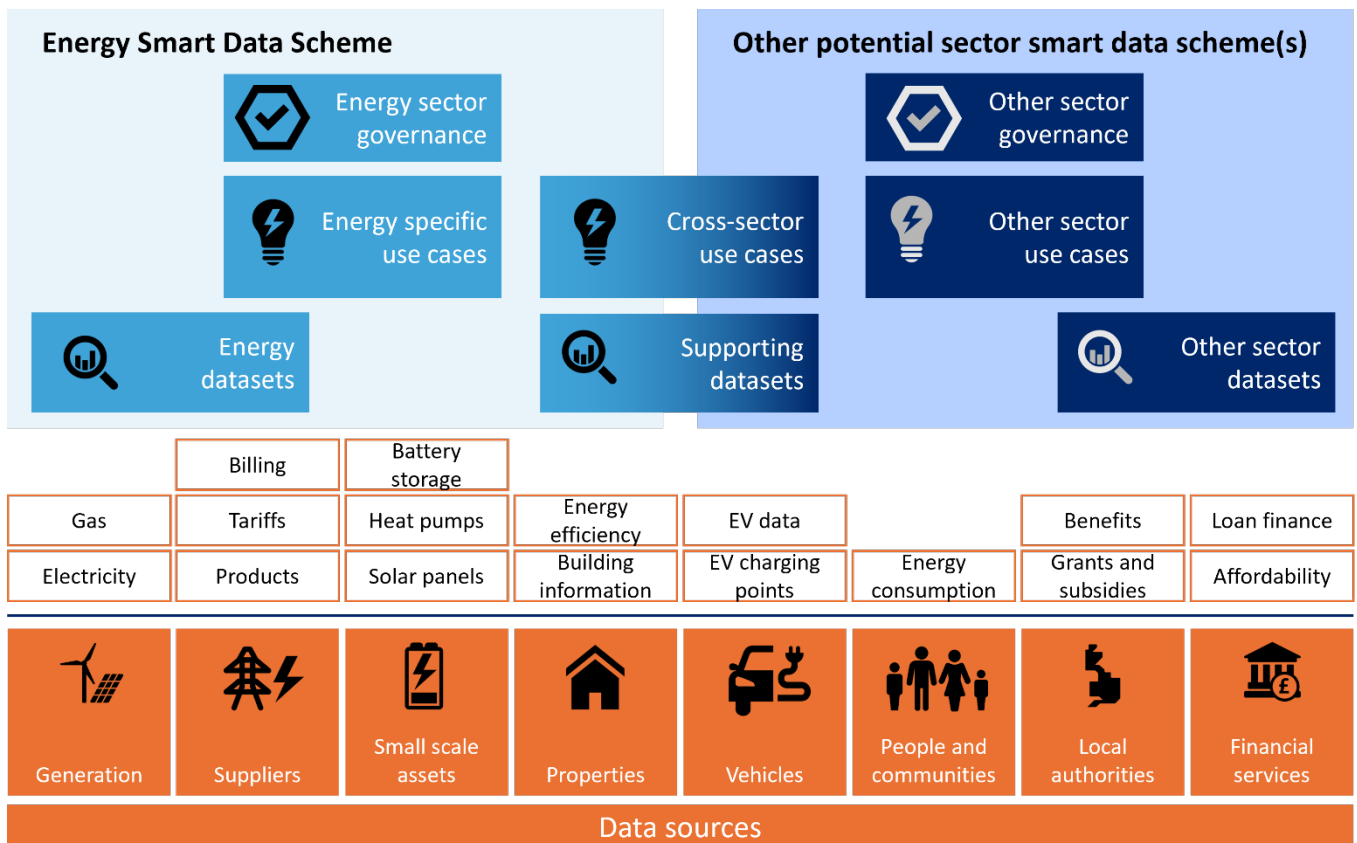
4. Scope, use cases and prioritisation

Rolling out a Smart Data scheme can be a gradual process. Additional datasets can be added over time, or additional capabilities such as write-access can be incorporated, leading to a wider range of potential use cases. In this section we look at how to define the scope of an energy smart data scheme, the use cases, innovation opportunities and datasets to consider, and how the scheme’s development might be phased.

4.1 Scope of an energy smart data scheme

The scope of a successful energy smart data scheme may need to cover a sufficient breadth and depth of the energy market, to ensure maximum customer benefit and facilitate a wide variety of use cases. By breadth, we want to understand which customer groups should be in scope - for example, domestic consumers, vulnerable customers, SMEs or larger businesses. By depth, we want to understand which aspects of the GB energy mix should be included (e.g. electricity, gas).

Figure 3: Possible scope of an energy smart data scheme



The scope defines what is included in the scheme and where the boundaries are drawn with other potential sector schemes. The image above is not intended to be exhaustive, but to illustrate some of the areas that could potentially be included within the scope of an energy smart data scheme. Many data sources - for example, property or vehicle data - could be relevant to other future sector schemes. We would welcome your views on what areas of the

energy market, and which customer groups and users should be included in a potential scheme.

12. What customer groups should be included in an energy smart data scheme and why?

13. What aspects of the GB energy mix should be included in an energy smart data scheme and why?

4.2 Energy use cases

The Smart Data Discovery Challenge was launched by DBT in October 2023 to encourage the generation of ideas on potential Smart Data solutions and use cases. It invited individuals, innovators, entrepreneurs, academia and civil society to share ideas for ambitious and feasible solutions that could harness Smart Data across different sectors of the economy to benefit customers in the future.²⁸

Through the Discovery Challenge and other research projects, a number of promising energy use cases have already been identified. For example, home retrofitting, carbon footprint management, EV charging point identification, and price comparisons using actual consumption data and tariff details. Many of the most effective use cases may also combine energy data with data from other sectors in the economy (e.g. property or financial information).

Use case examples

Switching: enhanced energy supplier comparisons

A Smart Data scheme could feed accurate energy usage into price comparison services. This could help customers find the most suitable tariffs or green energy plans based on actual usage rather than estimates. This could enable tailored recommendations, potential savings calculations and insights into supplier ratings and reviews.

Personalisation: tailored retrofit offerings

Access to actual energy usage with contextual information about the customer and property can allow third parties to provide tailored decarbonisation recommendations aligned to energy usage requirements and property suitability.

Vulnerable customers: supporting vulnerable and low-income users

Third party access to customer data such as consumption, energy account data and financial information could enable organisations to accurately identify and provide targeted support to vulnerable customers or those in fuel poverty. It could also help identify for early intervention those at risk of fuel poverty.

Product innovation: EV charging optimisation

EV charging optimisation is the process of managing EV charging to maximise efficiency, reduce costs, enhance user convenience, and minimise environmental impact. A Smart

²⁸ [Smart Data Discovery Challenge](#)

Data scheme could improve the data quality reported by charging point operators to increase the accuracy of EV charging point information available to customers.

Business data: sustainability and carbon reporting

Sustainability reporting is increasingly critical for businesses seeking access to capital, attracting investors, and customer reputation. An energy smart data scheme could streamline carbon reporting for businesses by allowing easier data sharing within and between organisations. This could lead to more accurate, verifiable carbon data reporting for customers, regulators and investors, and improve the ability to identify and target energy efficiency measures.

These use cases are a glimpse into what might be possible with access to the right data and the ideas of innovative third parties. Our ambition for a potential energy smart data scheme is to create the right ecosystem - with the right data and the right trust framework - that provides the fertile environment for new and existing firms to come up with new ideas (and new business models) to provide innovative products and services that customers want and need.

We see this as going wider than just smart meter consumption data, as a wide range of digital devices and solutions come together to support a customer's energy needs in their home or workplace. It is likely that the best use cases haven't even been considered yet, and the full scale of use cases may only materialise when the right data is made available.

We are interested in your views on potential use cases and the products and services that could be offered by a third party in an energy smart data scheme. While many use cases may have a nationwide focus, we are also interested in use case examples where an energy smart data scheme could be used at a local or regional level, or caters to the needs of a specific customer group. Please also include any examples of existing energy data sharing initiatives that might benefit from a standardised approach under an energy smart data scheme.

14. What are the potential use cases for an energy smart data scheme? Where relevant, please identify target customer groups or geographic region they would cover.

4.3 Datasets

A huge range of customer and business data is generated and used throughout the energy market. Fully realising the benefits of a potential energy smart data scheme may also require additional non-energy (or cross-sector) data to support and enable the most effective functioning of a scheme to deliver best customer outcomes.

Enabling datasets could include data from other sectors such as financial or property data, as well as broader contextual data like environmental, weather, geospatial or satellite data. For example, retrofitting use cases may require property and financial information, while carbon reporting use cases may require property and transport information alongside core energy datasets. There will also be a need to include datasets that link together cross-sector information to allow, for example, the identification of a smart device at a particular property or link the customer to a property or vehicle.

We are interested in your views on which types of energy and non-energy data should be considered for inclusion in a potential energy smart data scheme. This could include data from smart meters, EVs and EV charging points, smart appliances, heat pumps and boilers. We

would also welcome consideration of the energy market or energy network data, or other supporting data that would be required for specific use cases.

15. What datasets should be included in an energy smart data scheme and why? Please consider all types of energy data (e.g. electricity, gas), including which data should be a minimum requirement for any Smart Data use case and which data might be challenging to include.

4.4 Innovating with AI

Machine learning techniques are becoming increasingly important in the energy sector. For example, predictive maintenance is used to monitor equipment in real time and predict possible failures in advance. Demand forecasting is used to optimise energy production and make more efficient use of resources while reducing costs.

Generative AI is rapidly opening up opportunities to extract value from unstructured as well as structured datasets. With this wider set of data, AI has the potential to unlock even more innovative energy use cases and we are keen to understand what these might be. This could be improving participation through enhanced customer engagement, or improving the cost and efficiency of a home retrofit through improved project management.

At the same time as delivering opportunities, AI may introduce new and unforeseen risks, requiring additional oversight and control to mitigate them. The range of potential risks is very broad, ranging from a lack of transparency and data biases through to retail market instabilities from automated switching or flexibility services.

We are interested in your views on the opportunities and risks of AI when developing an energy smart data scheme.

16. What opportunities might there be to take advantage of AI and machine learning solutions in an energy smart data scheme? Please consider any additional governance and protections required to mitigate any risks.

4.5 Scheme phasing

Open Banking rolled out in a two-phase approach. Read-only access to information was implemented first. Write access was added later, allowing third parties to act on the customer's behalf, with their consent, to initiate payments. To have write access, third parties are subject to higher accreditation requirements. Open Finance could extend this further with additional use cases and supporting data sources. This includes HM Revenue & Customs (HMRC) data such as earnings and tax information, and pensions and investments data from a wider range of financial institutions.²⁹

Scheme rollout: Brazil Open Finance

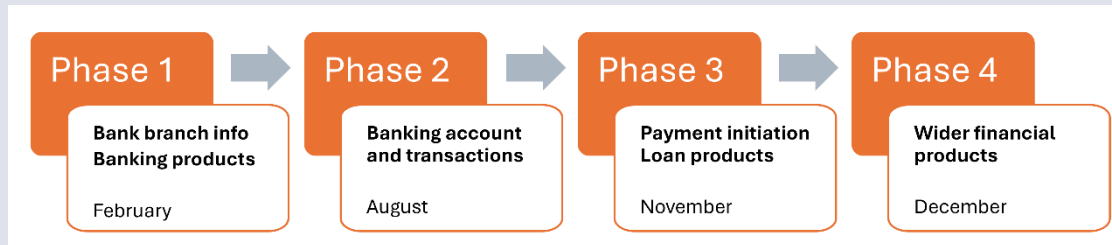
Brazil's rollout was much faster than Open Banking in the UK and resulted in a much wider range of datasets in scope by the end of year one.³⁰ Participation has been

²⁹ [CFIT Embracing the UK's Open Finance Opportunity \(2024\)](#)

³⁰ [Brazil Open Finance](#)

impressive, with 5 million connected accounts by the end of the first year post-implementation and 22 million customers by the end of the second.

Technical success has been led by a focus on interoperability, seamless integration, audited APIs and a central searchable directory of APIs. Participation success has been driven by customer incentives and wider awareness promoted through a broader range of data and use cases.



We anticipate taking a phased approach to rolling out an energy smart data scheme. This would allow us to build gradually, focusing on datasets and use cases that drive innovation and participation.

We are interested in your views on the phasing of an energy smart data scheme. We would welcome consideration of how to prioritise potential use cases and which datasets to include in the first and subsequent phases of a scheme. One option would be to consider focusing on new use cases that benefit the widest range of customers, or specific customer groups. Alternatively, we could focus on standardising some existing data sharing initiatives under an energy smart data scheme framework. The speed of participation and level of customer trust may also affect which use cases to prioritise.

17. How should we prioritise different energy use cases? Please consider aspects such as phasing, complexity, data accessibility and participation.

5 Scheme design

There are many factors to consider when designing a Smart Data scheme. There is a large field of research and live examples of a range of design decisions. In this section we look at the specific design decisions that would need to be made for the energy sector, alongside more general considerations to support the development of a secure, trusted and ethical scheme.

5.1 Energy-specific considerations

The design of a Smart Data scheme in a specific sector needs to consider what makes that sector different to other sectors, along with the common features of Smart Data schemes which will support interoperability and alignment. It is for this reason that the EU adopted a general data space approach, followed by creating separate data spaces across each sector.

We want to identify what makes the GB energy market unique so we can consider sector-specific requirements when developing an energy smart data scheme. For example, we are aware of the need to identify not only the customer, but to link that customer to their property and that property's energy consumption or smart devices. This becomes increasingly complex with tenant-landlord relationships, where tenants are the energy customers, but landlords might want to understand the benefits of investing in energy saving upgrades.

We would like your views on the energy-specific issues we should consider when developing a Smart Data scheme.

18. What unique or specific features of the energy market (and/or energy data) should we consider when developing a Smart Data scheme?

5.2 Design principles

While some design features of a Smart Data scheme will be specific to the energy market, there are some essential building blocks for any successful scheme - to ensure customer trust, consent, control, and support and redress.³¹

There is a significant body of work relating to best practice when developing a Smart Data scheme. The government has published several research papers on cross-cutting Smart Data topics, including design principles for inclusive Smart Data schemes, and research on consent, accreditation and liability.³² Which? recently published its report on building consumer trust in smart data.³³

The Competition and Markets Authority (CMA) has identified a set of design principles for an effective Smart Data scheme. This includes:

- Regulatory foundations that mandate industry participation, monitoring and oversight

³¹ [Design principles for inclusive smart data schemes research \(2023\)](#)

³² [Creating a Smart Data economy \(2024\)](#)

³³ [Which? Building consumer trust in Smart Data \(2024\)](#)

- Common and open data standards
- Data made available that reflects market dynamics and minimises the risk to competition and customers
- A funding model that reflects customer interests
- Interoperability with other Smart Data schemes
- Effective representation of customers and other end users in scheme administration³⁴

In addition to the CMA's principles, the Centre for Data Ethics and Innovation (CDEI) suggests key considerations for an ethical Smart Data scheme. This includes having a scheme with a clear and defined purpose and benefit, balancing tensions between innovation and fair customer outcomes, privacy and security controls, and ensuring accountability and transparency.³⁵

There are also a number of existing energy sector data sharing principles and standards such as Ofgem's Data Best Practice Principles designed to support the improved quality, accuracy and accessibility of data.³⁶

We are interested in your views on which principles are critical to designing an energy smart data scheme. We are also interested in how we might best take into account existing principles and standards in the energy sector.

19. What common principles are needed to support the development of an energy smart data scheme and why?

5.3 Technical considerations

When considering the technical development of an energy smart data scheme, we want to build on the work of Open Banking.

Open Banking developed a technical approach and supporting standards that enable data sharing between customers, data owners and third parties. Its approach facilitates the technical verification, authentication and secure transmission of data with best-in-class security. In particular, the FAPI 2.0 security profile avoids the use of API keys and secrets by using digital certificates on both sides of the data sharing - the data provider and the third party. These digital certificates are issued by a decentralised certificate authority and the data provider checks to ensure the certificate is valid. This way each party can confirm the legitimacy of the other.³⁷

We are interested in your views on the specific technical considerations that would need to be included in an energy smart data scheme. We are particularly interested in areas where we might need to diverge from the Open Banking approach. For example, identifying an energy customer or household (particularly in rented accommodation) may require an alternative approach to that used to identify banking customers.

³⁴ [CMA response to DSIT consultation: a smart data scheme for the UK telecoms market \(2023\)](#)

³⁵ [DBT Smart Data Implementation Guide \(2023\)](#)

³⁶ [Ofgem Decision on definition of Energy System Data in data best practice guidance \(2024\)](#)

³⁷ [OpenID Foundation, FAPI 2.0 Security Profile](#)

We are also interested in understanding whether there are any energy-specific privacy and security issues we would need to consider.

20. What are the specific technical considerations for developing an energy smart data scheme? (E.g. data standards, data access, use of APIs, authentication). You are welcome to include visual aids or diagrams to support your response.

21. What specific privacy and security issues should be considered when developing an energy smart data scheme and how might these issues be addressed?

5.4 Roles and responsibilities

There are a number of common functions and responsibilities which support the implementation and governance of Smart Data schemes worldwide. Roles and responsibilities can be divided into two categories: functional and supervisory. Functional requirements include data classification, role definitions for access and use, access rights, accreditation requirements and validation requirements. Supervisory requirements include monitoring, enforcement and reporting.³⁸

Minimum functions generally include an Authority and an Ecosystem Controller. The Authority is often the regulator who has the power to determine the rules of the scheme and assign roles and permissions. The Authority may then appoint a further body - the Ecosystem Controller - to administer the scheme on their behalf, ensuring compliance with the scheme rules.

For Open Banking, the Financial Conduct Authority (FCA) accredits and regulates authorised third parties. An additional entity - Open Banking Limited (previously the Open Banking Implementation Entity (OBIE)) is responsible for maintaining the Open Banking standards, API specifications, accredited provider directory and governance framework to ensure the scheme operates fairly and transparently.

Example structure: Australia's Consumer Data Right

Under Australia's centralised CDR approach, providers are accredited by a single body, the Australian Competition and Consumer Commission (ACCC), which also maintains the directory of authorised providers. An additional government organisation, the Data Standards Body, maintains standards across all sectors. Standards are developed in consultation with the ACCC and the Office of the Australian Information Commissioner (OAIC).

Alongside published banking APIs and energy APIs, the CDR also includes common APIs that cover cross-scheme requirements such as customer details and system status. A recent review of CDR suggested that success may have been impeded through choices made at the design stage - for example, enforcement (supervisory) and implementation (functional) responsibilities both sitting in the Data Standards Body.³⁹

³⁸ [BEIS Smart Data Research report: Third Party Accreditation \(2021\)](#), June 2021, BEIS

³⁹ [Consumer Data Right Strategic Review \(2024\)](#), July 2024, Australian Banking Association

Cross-sector alignment and interoperability across Smart Data schemes is key to fully realising the benefits of a world-leading Smart Data economy. Many use cases involve cross-sector data so the ability for different schemes to communicate between each other is crucial.

To drive efficiency and wider innovation, it may be possible to standardise and centralise certain functions or responsibilities. For example, aspects of the third party accreditation process, compliance and performance monitoring, enforcement and/or conduct oversight could operate centrally.

We are interested in your views on the roles and responsibilities required to deliver a Smart Data scheme in the energy sector and how that aligns with governance in other sectors. We would welcome consideration of the most appropriate delivery mechanism, including the different bodies that might be required and how these different bodies could best work together. We also want to understand the desired future structure as we move from implementation into operation.

We are interested in your views on how to ensure alignment across the economy, enabling interoperability between potential Smart Data schemes in different sectors through centralised common functions.

22. Which body (or bodies) should be responsible for scheme design and implementation? Which body should be responsible for regulating the scheme? Please include consideration of the most appropriate role for government.

23. What are the required roles and responsibilities for the ongoing operation of an energy smart data scheme? This might include (but is not limited to): accreditation, accountability, oversight, enhancement and liability.

24. What common functions and responsibilities should be centralised to enable interoperability with other markets outside the energy sector?

6 Delivery

The energy sector is undergoing a period of significant change as we transition to clean power by 2030. The timescales of an energy smart data scheme must align with and support this transition. We also need to understand and mitigate any additional risks that could arise as a result of increased data sharing. Finally, we would need to implement an energy smart data scheme in a cost-effective manner to all participants. In this section we cover the broad range of topics we would need to address to implement the scheme.

6.1 Feasibility

To consider reasonable timescales for implementing an energy smart data scheme, we want to understand the feasibility of delivering it alongside other current or planned industry developments or changes. These could be wider industry initiatives as mentioned above in section 2.4, or more local system and data activities.

We would welcome your views on the feasibility to deliver at least the initial phase(s) of an energy smart data scheme.

25. What are your views on the feasibility to deliver an energy smart data scheme? Please consider any current or planned industry developments or changes that might affect delivery and highlight any key challenges.

6.2 Risks

The introduction of new innovative use cases may bring new or unexpected challenges and risks. These could come from a wide range of areas related to the technical, operational or customer use of the scheme. Examples of risks could include data quality, competition or ethical risks. Data quality issues can lead to decisions being made on incorrect or incomplete data. Opportunities for innovative new entrants could be limited if barriers to entry are not removed. Societal inequalities could be exacerbated if certain customer groups are excluded from participation.

We welcome your views on the challenges and risks we might need to consider as part of the design of a scheme, alongside suggestions to mitigate these.

26. What challenges and risks should we consider when developing an energy smart data scheme and how can we mitigate these? This might include (but is not limited to): competition; customer exclusion; data quality or data misuse; ethical, operational or technical concerns.

6.3 Costs and funding

As we have not yet identified priority energy use cases or datasets, it is difficult to estimate the level of change required to implement an energy smart data scheme. However, we would welcome views on the potential costs to industry, as well as ongoing management costs, and where those costs might fall across different industry participants. We would also welcome

consideration of any aspects that might be costly or challenging to implement, based on your understanding of what would be involved.

27. What are the potential implementation costs to industry of introducing an energy smart data scheme? What aspects of a scheme might be most challenging to implement?

28. How might implementation and ongoing management costs of a scheme be distributed across industry participants in an energy smart data scheme?

6.4 Additional comments

If you have views on any aspects of developing a Smart Data scheme in the energy sector that have not been covered elsewhere, please add your comments here.

29. Do you have any additional comments on any aspect of developing an energy smart data scheme that has not been covered elsewhere in this call for evidence?

Call for evidence questions

1. What are your views on the benefits of an energy smart data scheme? This might include (but is not limited to) benefits to customers, decarbonisation, the economy and wider society.
2. What can we learn from Open Banking that would be helpful to consider when developing an energy smart data scheme? This might include (but is not limited to): phasing, structure, funding, participation, growth, implementation or governance.
3. What can we learn from international examples of Smart Data schemes for our approach in the energy sector?
4. What additional value could an energy smart data scheme deliver alongside existing data sharing initiatives? Please include your views on how an energy smart data scheme might support or hinder existing data sharing and digitalisation initiatives.
5. What energy customer needs could potentially be addressed by an energy smart data scheme?
6. Which customer groups might benefit most from an energy smart data scheme and why?
7. What specific challenges or barriers to participation might be faced by particular customer groups?
8. How can we build and maintain customer trust in an energy smart data scheme?
9. What measures should be considered to ensure customers are protected?
10. What are the potential incentives and barriers for established energy market actors to provide access to customer data (e.g. operational, commercial, legal)? What interventions might be necessary?
11. What are the barriers currently faced by third parties in accessing customer data? What potential barriers might be faced by authorised third parties in offering increased or improved services to customers through a Smart Data scheme?
12. What customer groups should be included in an energy smart data scheme and why?
13. What aspects of the GB energy mix should be included in an energy smart data scheme and why?
14. What are the potential use cases for an energy smart data scheme? Where relevant, please identify target customer groups or geographic region they would cover.
15. What datasets should be included in an energy smart data scheme and why? Please consider all types of energy data (e.g. electricity, gas), including which data should be a minimum requirement for any Smart Data use case and which data might be challenging to include.

16. What opportunities might there be to take advantage of AI and machine learning solutions in an energy smart data scheme? Please consider any additional governance and protections required to mitigate any risks.
17. How should we prioritise different energy use cases? Please consider aspects such as phasing, complexity, data accessibility and participation.
18. What unique or specific features of the energy market (and/or energy data) should we consider when developing a Smart Data scheme?
19. What common principles are needed to support the development of an energy smart data scheme and why?
20. What are the specific technical considerations for developing an energy smart data scheme? (E.g. data standards, data access, use of APIs, authentication). You are welcome to include visual aids or diagrams to support your response.
21. What specific privacy and security issues should be considered when developing an energy smart data scheme and how might these issues be addressed?
22. Which body (or bodies) should be responsible for scheme design and implementation? Which body should be responsible for regulating the scheme? Please include consideration of the most appropriate role for government.
23. What are the required roles and responsibilities for the ongoing operation of an energy smart data scheme? This might include (but is not limited to): accreditation, accountability, oversight, enhancement and liability.
24. What common functions and responsibilities should be centralised to enable interoperability with other markets outside the energy sector?
25. What are your views on the feasibility to deliver an energy smart data scheme? Please consider any current or planned industry developments or changes that might affect delivery and highlight any key challenges.
26. What challenges and risks should we consider when developing an energy smart data scheme and how can we mitigate these? This might include (but is not limited to): competition; customer exclusion; data quality or data misuse; ethical, operational or technical concerns.
27. What are the potential implementation costs to industry of introducing an energy smart data scheme? What aspects of a scheme might be most challenging to implement?
28. How might implementation and ongoing management costs of a scheme be distributed across industry participants in an energy smart data scheme?
29. Do you have any additional comments on any aspect of developing an energy smart data scheme that has not been covered elsewhere in this call for evidence?

Glossary

Application Programming Interface (API)	A set of rules and protocols that allow software applications to communicate and interact with each other, enabling the exchange of data or functionality.
Authorised third party (ATP)	A third party provider of a product or service that is approved by a regulated body to access customer information or act on a customer's behalf, with customer consent.
Cross-sector	The interaction, collaboration or exchange of data across multiple sectors, domains or industries to achieve common goals or solve complex problems. For example, parts of the economy that can be interdependent or impact on the energy market, such finance, transport, water and housing.
Data standard	A documented framework that defines consistent formats, structures and rules for how data should be collected, stored, shared and processed.
Electric vehicles (EVs)	Vehicles powered entirely by electricity.
Fintech (financial technology)	An organisation or innovation that uses technology to improve, automate or disrupt traditional financial services, such as banking, payments, lending or investments.
Flexibility	Modifying generation and/or consumption patterns in reaction to an external signal (such as a change in price) to provide a service within the energy system.
Interoperability	The ability for different systems, devices, applications or organisations to seamlessly exchange, understand and use data to ensure the effective use of shared resources.
Low carbon technologies	Innovations and systems that reduce greenhouse gas emissions compared to traditional methods, contributing towards achieving net zero. Examples include solar panels, electric vehicles, smart energy management systems and battery storage.
Minimum viable product (MVP)	The simplest version of a product with enough features to satisfy early users and gather feedback on future development.

Open Banking	A system that allows third party financial service providers to access customer banking data with the customer's consent through secure APIs.
Read-only access	A permission level that allows a user to view or retrieve data from a system, file or resource without making any modifications, deletions or additions to it.
Smart Data	The secure sharing of customer data, at the customer's request, with authorised third party providers (ATPs). These ATPs can use customer data to provide innovative products and services that save customers time or money.
Smart Data scheme	The set of rules governing how smart data works in a specific sector. It provides the overarching trust framework and structure under which data sharing operates, and the roles and responsibilities of different scheme participants.
Trust framework	A set of policies, standards and governance mechanisms that define how entities within a system can establish, maintain and verify trust relationships. This includes rules for identity verification, data security and compliance to ensure secure and reliable interactions.
Use case	A description of how a user interacts with a system or product to achieve a specific goal.
Write access	A permission level that allows a user to create, modify or delete data in a system, file or resource.

This consultation is available from: www.gov.uk/government/calls-for-evidence/developing-an-energy-smart-data-scheme

If you need a version of this document in a more accessible format, please email alt.formats@energysecurity.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.