# Guide to open banking and smart data in the energy and utilities sectors

The cost of energy and utilities, such as water, are a key concern for many UK consumers and small businesses.

Our guide explains how open banking and smart data can help to transform how these services are consumed, managed, and paid for, and give people greater control over their energy usage and costs.

It also demonstrates how some utilities companies are using open banking to streamline billing and collection, and switch financially vulnerable consumers to affordable tariffs.

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# Introduction

In January 2024, **research from UK charity Citizens Advice** revealed that 5.3 million people were in debt to their energy supplier. Against a backdrop of cost-of-living increases, there's been a strong focus for UK households, businesses, and public sector organisations on rising energy costs and water bills. Opportunities to reduce the size of bills, and for utilities companies to find more efficient, cost-effective and accurate ways to receive and manage payments, as well as assess future payments, are critical.

Open banking is already playing a key role in delivering some of these opportunities, and with the advent of smart data – as set out in the previous Government's proposed 'Smart Data Big Bang' – there is now the opportunity to expand open banking's benefits across the economy.

Powers in the Data Protection and Digital Information (DPDI) Bill, which failed to make it on to the statute books, would have mandated open banking data sharing initiatives to unlock innovation, competition, and economic benefits for consumers and SMEs across seven key sectors:

- **Banking**
- **Energy** (Including fuel and utilities)
- **Finance**
- **Home-buying**
- **Transport**
- **Telecoms**

Although the DPDI Bill failed to make it through the parliamentary wash-up, Open Banking Limited (OBL) is working with industry, policymakers, and regulators to urge government to prioritise the Digital Information and Smart Data Bill that will support the future development of open banking and smart data schemes, as set out above.

**Marion King**

OBL Trustee

"Open energy promises a future where consumers have greater control over their energy consumption, costs, and environmental impact. By seamlessly sharing energy usage data, consumers can make more informed decisions, reducing waste and promoting sustainability."

Our guide explains how open banking and smart data can help to transform how energy and utility services are consumed, managed, and paid for. We also set out how both can offer transparency over pricing, improve the effectiveness and speed with which energy and utility services are provided to consumers and businesses, giving them greater control over their energy usage and costs.

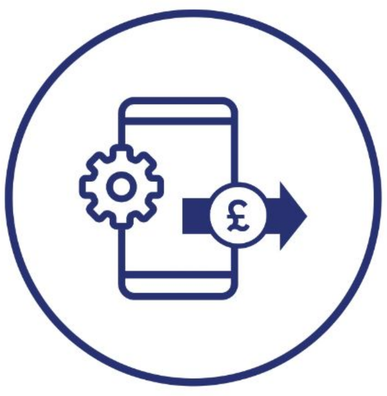
# Paying for energy and utilities

Open banking payments have helped to revolutionise the way consumers and SMEs can manage their energy and utility bills, as well as streamlining payments collection and offering cost savings on card processing costs for firms.

Open banking enables direct, near real-time transactions between bank accounts and utility providers. For consumers and SMEs, this can translate to cost savings, more transparent billing and greater visibility over their spending, as we set out in the examples below.

## QR Codes

Following its partnership with fintech firm Ecospend-Trustly, water company **Anglian Water** included QR codes on monthly bills, allowing customers to set up a direct bank transfer. Ecospend's technology also enables customers to receive bills via text and pay by phone, as well as an open banking-enabled 'Pay by bank option' on the Anglian Water website and app.



## Minimising manual errors

Similarly, a partnership between **American Express and OVO Energy** gives the company's four million customers who pay their bills monthly the option to 'Pay with Bank' transfer rather than use debit or credit card, cheque or Faster Payments. Choosing this way to pay means customers don't have to type in any reference numbers, reducing the risk of manual errors and misallocated payments, benefiting both the customer and the receiving firm.

Customers also get visibility of their bank account before their payment is processed, giving them a clear view of their finances before they confirm their payment.

## Pay-As-You-Go customers

Retail technology provider PayPoint is one of the first open banking providers to offer open banking **bank-to-bank transfers to Pay-As-You-Go energy customers** as a payment initiation service provider (PISP).

Customers select the 'Pay By Bank' option on the merchants' website or app – in this case, an energy or utilities firm – and consent to the payment. PayPoint, as the PISP, connects to the customer's bank account and the customer authenticates via their banking app. The PISP then initiates the payment which is processed by the customer's bank and transferred to the merchant's account, usually within two hours.

**"PayPoint is currently one of the only open banking providers that can provide PISP payments to Pay As You Go Customers by completing the payment and vend (top-up) seamlessly together.**

**PISP payments are more straightforward than traditional card payments and offer a number of benefits, including lower transaction costs, near real-time settlement and an improved customer experience with a secure and simple payment journey."**

Jo Toolan, PayPoint Managing Director, Payments

## Variable recurring payments

Looking ahead, Variable Recurring Payments (VRPs) enable a more flexible way for consumers and small firms to pay bills. Because the payments are instructed 'within customer-defined parameters', customers can set a limit, say for a month, which limits payments to say, £50 per month for electricity.

This avoids unexpected billing and gives end-users reassurance that they won't be pushed into overdraft if an unexpectedly large bill lands or if monies owed have been incorrectly calculated, requiring them to reclaim the funds.

The implementation of smart data also allows for more personalised service offerings (*see our case study with Ordo and Eviden on the next page*). Consumers can benefit from tailored energy usage plans that match their consumption patterns, leading to better budget management and potential cost reductions.

For example, real-time data analysis can suggest the most cost-effective times to use energy-intensive appliances, such as washing machines or electric vehicle chargers, helping to avoid peak tariffs and reduce overall expenditure.

# Cost savings for consumers and providers

For energy and utilities providers, open banking payments could support significant operational efficiencies. By streamlining the collection process, companies may receive payments faster and potentially save on card processing fees. This efficiency could help to reduce manual errors and operational costs and speed up administrative handling, as well as improving cash flow.

## Case study: FlexiPay solution uses VRPs to offer flexible bill payments

Payments-as-a-service company, **Ordo**, recently partnered with digital transformation company, **Eviden** to offer an alternative way for organisations, including utilities providers, to collect customer payments.

The FlexiPay solution combines Ordo's variable recurring payments (VRPs) and account information services with Eviden's artificial intelligence (AI) notifications platform to provide a flexible alternative to Direct Debit and card-on-file instructions for bill payments.

It enables flexibility on the amount and frequency of payments to cover a bill, suiting a customer's finances, rather than a set amount on a regular fixed date.

## Helping vulnerable customers

FlexiPay allows a business or organisation, such as a utilities company, to identify vulnerable customers and provide flexibility on when and how they pay their bills. Instead of relying on a single payment, on a specified date, for example a Direct Debit, flexible payments make it easier for customers to pay their bills.

The system monitors customers' finances via a consented process and can make recommendations for one or multiple payments. Each month, FlexiPay will suggest realistic amounts to pay to help the customer make their required payments.

**Fliss Berridge,**

Ordo Director

"One of the key advantages of FlexiPay is that it can help customers to keep their bill payments on track, and even prompt them to change their payment habits.

Eviden's recommendations platform encourages customers to make the effort to pay, in part or in full.

It can also spot those who are financially vulnerable, those who are in hardship and even who may be about to enter hardship. It triages and recommends practical next steps, followed up by the appropriate team."

## Multiple payments when in funds

She added: "It can also help avoid arrears by allowing multiple payments when customers have funds to do so. Generally, customers who are offered payment flexibility will try to pay something towards their bill, rather than nothing, and offering the option to pay a bill in instalments helps to avoid arrears."

## Lower cost-per-transaction

For energy firms, open banking-powered solutions such as these typically offer a lower cost-per-transaction to process than cards - automatic reconciliation to accounts (reducing administration costs), lower costs when compared with chasing failed Direct Debits, and a smoother customer experience.

James Sharpe, Sales Director Digital Native Business, Eviden, said: "FlexiPay plays its part in the payments mix for utilities firms, and offers a credible alternative to Direct Debit and Standard Credit, especially for customers who are nervous of potentially large hikes via monthly Direct Debits."

He added: "Direct Debit is considered a convenient payment solution for utilities. However, it can be troublesome for those consumers who find it difficult to make a single payment from a single account once a month, or even simply don't trust Direct Debit. Standard credit or pre-payment meters often attract significant costs to transact, along with costs to reconcile."

## Different income profiles

James continued: "FlexiPay is a consumer-friendly, intelligent recommendation engine that understands the diverse needs of consumers. For example, individuals working in the gig economy are often paid weekly or fortnightly and those on zero hours contracts often have different income and outgoing profiles each month, so single payments can be a challenge."

Solutions such as FlexiPay, which understand a customer's specific financial situation and makes payment recommendations accordingly – whether smaller or larger, or more frequent – put customers back in control of their bill payments. They also support firms' ability to bill and collect efficiently. This is a win-win for firms and consumers.

# Simplifying switching

## Using open banking data to assess affordability and switch tariffs

Smart data schemes build on open banking's data sharing principles and **trust framework** to allow consumers and SMEs to share data to relevant third parties – in sectors ranging from energy, telecoms, home-buying and fuel – to benefit from cost savings.

The schemes have been proposed by the Government, and considered by the **Smart Data Council**, of which OBL is a core member. The council was established by the Department for Business and Trade (DBT) and one of its early objectives was to tackle the 'loyalty penalty', making it easier to switch providers and shop around for cheaper bills.

## Tackling the loyalty penalty

The **loyalty penalty** is the difference between what loyal and new consumers pay for the same service. This is currently calculated at £1,114 a year for households across mobile tariffs, mortgages, and broadband services.

Open banking's data-sharing capabilities also enable utilities providers to better forecast demand and adjust supply, minimising wastage, and optimising resource allocation. These enhanced data insights can lead to improved customer segmentation, which is essential for developing competitive pricing strategies and innovative service packages that meet evolving consumer needs.

For example, budgeting apps such as **Snoop** and **Emma** use open banking APIs to access and analyse a user's financial data before offering personalised recommendations for more cost-effective utility options, including mobile and broadband services. By examining spending patterns and usage data, these apps can suggest the best times to switch providers or highlight deals that align with the user's consumption habits.

Open banking data can also enable fast and efficient affordability checks and facilitate the switch to cost-effective utility tariffs, particularly for financially vulnerable consumers.

## Cost-effective tariffs for consumers

For consumers, open banking-driven affordability checks help to ensure that individuals and are on tariffs that match their financial capabilities. This proactive approach helps manage monthly expenditures and safeguard against the risk of arrears.

E.ON and United Utilities are two utilities providers which have pioneered the integration of open banking solutions to enhance billing systems and support vulnerable consumers.

In 2019, electricity company **E.ON** introduced a pilot scheme to test customer appetite for sharing open banking data for affordability assessments. The pilot aimed to reduce the length of time it takes to help customers in financial difficulty and to make it easier for those customers to engage with the company.

E.ON's customer service agents sent out a link to customers to enable the assessment, and where appropriate, switch to the affordable tariff, often in the space of a single call.

The pilot was a success, and use of the process was also extended to other customers who could benefit from longer-than-standard debt repayment terms.

Water supply company **United Utilities** also used open banking to verify customers' affordability in near real-time, as well as improve customer experience of this journey. By accessing customers' financial information (with their permission), the company can offer tailored payment plans and emergency support, helping to prevent service interruptions and supporting those who may be struggling financially. The firm's **2023 Open Data Strategy** revealed that 45% of customers who were offered the option to use open banking accepted.

The administrative benefits also paid off for the water firm, reducing a three-week paper-driven process to an online experience of about 7 minutes.

# Energy costs for small businesses

**On average, UK SMEs can spend up to 20% of their total business costs on energy consumption, a large part of operational expenses. Open banking applications can analyse financial data in near real-time to assess a business's spending patterns and energy usage, offering recommendations for less costly utility options based on actual consumption data.**

## Case study: VoltView's energy marketplace for SMEs

One of the shortlisted entrants for the Department of Business and Trade's recent **Smart Data Discovery Challenge**, **VoltView** is a smart energy marketplace (SEM) which aims to simplify utilities management for small firms.

Businesses, unlike domestic customers, are not protected by **the energy price cap** and can be impacted by market volatility, potentially facing sudden increases in bills. Many business owners, however, lack the time to source alternative suppliers. VoltView's proposition aims to simplify this.

By utilising half-hourly smart meter data, retail tariff data, and credit checks, VoltView's marketplace can offer:

**Custom supplier recommendations based on their energy profile – including for the most appropriate 'class' of smart meter.**

**A payback period calculator to support decision-making.**

**A repository of relevant grants and support.**

It will enable users to anticipate future consumption changes before committing to contracts and support the transition to time-of-use tariffs when economically viable. Once firms have signed up, VoltView will continue to monitor their energy use and pricing, and if these change, enable simple switching from a choice of thousands of suppliers.

As well as helping to reduce energy costs, VoltView can also help small businesses in moving towards net zero.

It is currently being piloted at a dozen small business locations to make utility management easier, offering average savings of more than 10%. VoltView will be publicly available to SMEs in the summer of 2024.

**Pierre Tabet**

VoltView founder

"Our marketplace intelligently aggregates relevant open data to help firms manage their energy better. This is particularly useful for businesses in the hospitality sector, which often have high energy costs because of the amount of equipment they use – fridges, freezers and fryers, for example.

By monitoring usage, VoltView can identify inefficient energy usage in their buildings, or when equipment is left on unnecessarily, to provide tailored recommendations – and enable simple switching to a more cost-effective tariff or appropriate meter."

## The future...

### IceBreakerOne

Based on open banking's data sharing principles, energy data initiative **IceBreaker One** develops standards-based marketplaces for environmental and financial data. For example, the **Open Energy** proposition aims to enable the sharing of energy data via a trust framework.

### Project Perseus

**Project Perseus**, run by Bankers for Net Zero and Icebreaker One, aims to transform data sharing and sustainability practices for the UK's small businesses. It works by taking smart meter energy data to automatically generate low-cost, low-friction sustainability and emissions reporting.

Supported by banks, fintechs, trade associations, accountancy bodies, and small business associations, Perseus offers the potential to identify and track the biggest opportunities for emissions savings among small firms.

# Conclusion: moving to a data-driven economy

Open banking has highlighted the extensive range of opportunities that can benefit consumers and businesses when customers are put in control of their data. The Department for Business and Trade estimates that commercial opportunities created by personal data mobility have the potential to increase GDP by £28bn.

This is particularly true of the energy and utilities sectors – gas, electricity, water, and fuel – the cost of which is a key concern for many businesses and consumers.

As we move forward under the new government, the implementation of a new Digital Information and Smart Data (DISD) Bill will be crucial in realising these benefits to end-users across various sectors. It will also support the transition to an innovative, data-driven economy and reinforce the UK's pioneering role as a leader in global fintech.

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