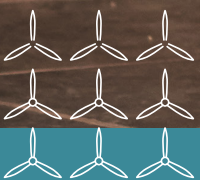




# Taking care of your energy

Business Energy Intelligence





# Using insights from your energy data

Before you can fully optimise your organisation's energy consumption, you have to really understand how it uses energy. Although reviewing energy data used to mean spending a lot of time gathering figures, poring over endless spreadsheets and getting to grips with complex systems, our Business Energy Intelligence solution brings all your data together effortlessly and uses a number of different techniques to make sense of it all.

## Understanding requires intelligence

Business Energy Intelligence can help you to identify opportunities to save time, energy, carbon and money.

### Remote monitoring online

Our online platform allows you to remotely monitor all your utility data by creating a wide range of reports for both long and short-term trend analysis. The system is easy to navigate and use. Because it's web based, you don't have to install any special software, just access it from your web browser. The interface is also optimised for desktops, laptops and tablets.

Its interactive data visualisations provide a detailed view of your consumption or energy usage trends, allowing you to assess your energy performance and to identify areas to make energy and operational savings.

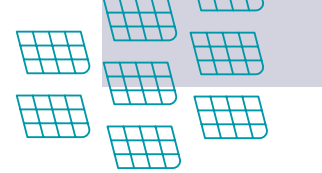
### Customisable report views

The platform allows you to monitor properties in multiple locations and to set default parameters for each tool so you can see your reports at the click of a button.

You can customise each report view according to location, utility, unit and date, giving you full flexibility as you view your data. The platform supports main, sub and calculated meters and is available 24 hours a day, 7 days a week giving you unlimited access to customisable key information.

You can also set up 'Energy Snapshots' on your home page which provide quick views of energy data,





# Analyse the data in greater depth

## A complete toolkit to understand your energy consumption

Business Energy Intelligence relies on a sophisticated set of tools to collect and analyse your energy data and provide the insights required to make energy saving changes.

### Consumption

The Consumption report is perhaps the most crucial report in any energy management software. Users can plot consumption from electricity, gas, water, heat and even virtual meters, and compare it with consumption over multiple locations, time periods or utilities. The tool allows you to drill down into the data and analyse in more depth and visualise it using graphs and charts. This leads to quick identification of actionable intelligence of energy consumption, improving efficiency and cost effectiveness.

### Contour map

The energy Contour Map is an innovative and highly effective way of visualising meter consumption data. This report is best utilised for long-term trend analysis, identifying patterns, faults, exceptions and the direct impact of energy conservation measures.

### Day/night split and off-peak

The ability to identify overnight energy wastage is important when devising an energy efficiency strategy. The Day/ Night split report looks at multiple buildings, areas or zones to evaluate energy usage and cost during the day and then during the night. It can be tailored to suit user requirements and consumption over different buildings and time frames, helping to set benchmarks for optimum energy usage during the day and night.

The Off-Peak report focuses on energy performance, specifically during the night, giving you a quick visualisation of night consumption abnormalities and identifying problems that need to be addressed.

## League Table

League tabling is a simple and efficient way to identify over-spending by ranking the best and worst performers within a multi-site portfolio. It's a powerful tool providing a way of comparing multiple sites, regardless of location, size or brand and allows you to sort your data according to location, floor space, time-period and energy usage, meaning comparison and consumption abnormalities are easily identified.

### Tariff

The Tariff report allows users to compare actual costs versus actual consumption using our tariff engine. It identifies the periods of time when energy usage costs the most (which are not always necessarily the highest usage periods) and exactly how much is spent during these periods. The data is displayed in a simple and efficient format allowing users to take immediate action to implement energy conservation measures at high cost times.

### Top Hat

Top Hat profiles are an effective way of analysing short-term trends, exceptions and overuse. This consumption data can be examined in weekly, daily and half hourly snapshots providing a clean graphical view of potential excess energy consumption over short periods, automatically calculated on the past energy profile. Half hourly snapshots can be compared on different dates and the report also overlays the outside air temperature to correlate weather with consumption. Potential wastage issues are colour coded to allow quick decision making helping you to save energy, time and money.

### Alarms

We can also set two alarms which flag up issues that need to be addressed. The energy alarm flags uncharacteristic changes in energy usage. The data integrity alarm shows anomalous readings and data over a certain time period, which may indicate a fault in the data gathering chain. All alarms are centrally managed and can be sent by email to nominated recipients for immediate reaction.

# Acting on intelligence

While the Business Energy Intelligence platform helps you to identify problems and exceptions with your energy usage, our Remote Energy Manager is there to help you act on what you've learned and make any changes through our Energy Management Centre.

Our expert data analysts review and interpret the information generated by your sites. They then advise on actions that need to be taken or, through an agreed set of processes, can assist in the implementation of the insights.

Our Energy Management Centre is staffed by energy engineers who have a deep understanding of Building Energy Management Systems (BEMS). They carry out their work remotely with very little expensive on-site labour required.

We can also support you by being your virtual energy manager taking on jobs, timescales and outputs as if we were one of your own members of staff.

Our team of analysts will make sure you get the most out of the monitoring and targeting software, interrogating the data to gain group expert thinking ideas rather than individual. It's a completely flexible service where the Remote Energy Manager's time can be allocated based on hours per week, day/s per month or right up to full time. Outputs include reports and/or meetings to deliver findings in presentation formats.

All of this can help drive your energy saving strategy and help you evaluate the effectiveness of energy conservation measures before deciding which options should be rolled out. Perhaps most importantly, our energy experts can help you make savings through smarter deployment while helping your business to save money and reduce its carbon footprint.





# Half hourly data collection and data aggregation

We are pleased to bring to the market our recently launched Half hourly Data Collection and Data Aggregation (DC/DA) service, where we will manage the secure collection of half hourly consumption data and ensure accurate data is provided to you, your customers and the registered energy supplier.

As an accredited Data Collector and Data Aggregator that specialises in half hourly metering, we ensure all of your consumption data is validated in line with industry regulations and issued within Day+1.

Our team of Half Hourly Settlement experts are also on hand to assist with data queries; making it easier for you to plan how you can reduce your energy consumption.

Historically, only the largest consumers would have half hourly meters on site recording the electricity consumption at 48 half hour intervals. But the Industry has seen programmes such as P272 and the current Smart Meter Implementation Programme (SMIP) enabling more consumers to have access to their half hourly data. Ofgem are working on transitioning the whole electricity market into half hourly settlement which will see suppliers begin migrating smart meters, allowing businesses to consolidate all meters under a single half hourly DC/DA.

## Why choose SSE?

Many customers with half hourly supplies are unaware that they can choose their own provider for Data Collection and Data Aggregation services, instead of using their supplier's default agent. By choosing your own agent, clients can make significant savings by having direct contracts for DC/DA. You'll also have the assurance that our personalised service will provide bespoke and independent consumption reports allowing you to reconcile against supplier invoices, making for a smoother and more efficient bureau service.

By choosing SSE as your half hourly Data Collector and Data Aggregator, we can support your journey to net zero carbon emissions by ensuring the secure collection of accurate consumption data from your

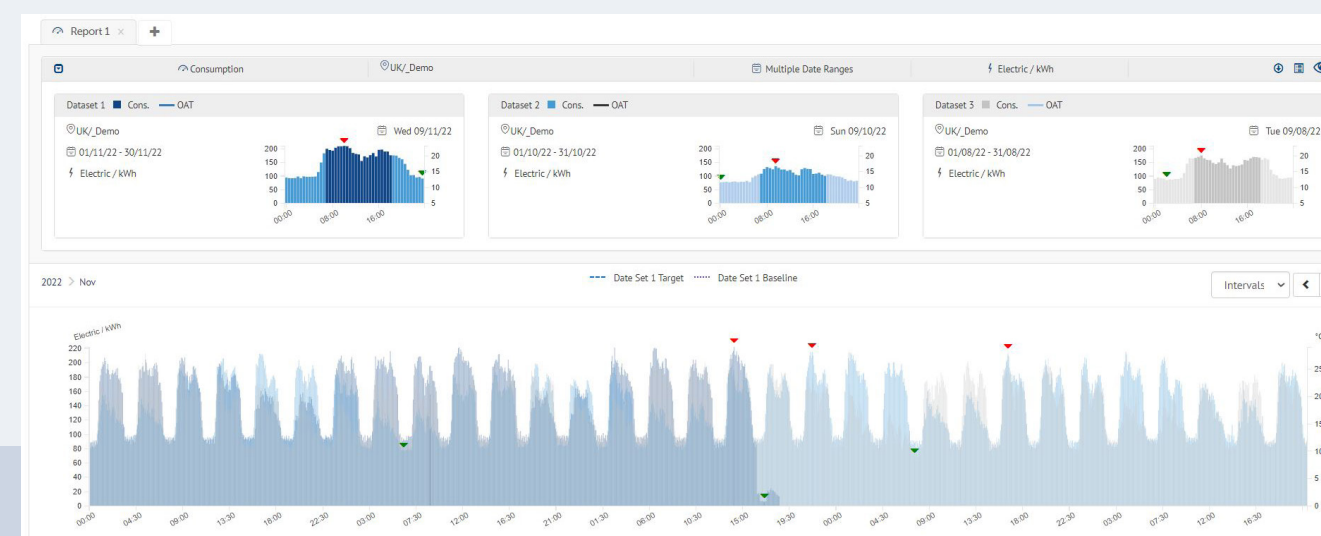
electricity meter, providing insight into your energy usage and enabling you to take full control of your energy strategy.

To supplement our DC/DA service, our Business Energy Intelligence online energy management platform allows you to remotely monitor your data. It provides access to a wide range of reports that are easy to navigate and enable you to drill down into the data, leading to quick identification of improving carbon efficiencies and cost-effectiveness. We are extremely excited about this new venture and it is an important part of our growing range of value added services for our customers. Contact us today to find out more about this service.

## Data input

### Getting the best data input to achieve the best output

At SSE we take a proactive approach and will work with your chosen meter operator and supplier to ensure the swift resolution of any dial-up failures or exceptions. We also closely monitor any outstanding issues that are preventing the remote collection of your consumption data until resolved, and using our expert knowledge in the half hourly market, establish root cause errors to ensure continuous improvement.





# What is data collection?

Consumption data is automatically collected from your electricity meter in 48 half hour periods everyday via a remote connection.

Where a remote connection is not possible, the data will be collected manually via a site visit. Once the data has been retrieved it will be validated to ensure accuracy and to identify any anomalies prior to submitting to the supplier.

Where the Data Collector has been unable to obtain actual data, estimates will be created inline with industry regulations and once this has been completed the data will be securely submitted to your registered supplier for billing.

The Balancing and Settlement Code require 99% actual data across the half hourly industry. This is achieved by working closely with your meter operator and Supplier in order to resolve any dial failures and meters which don't have a remote connection. At SSE we'll work in partnership with your chosen agents to ensure actual data can be provided.

Features	Benefits
Secure collection of your half hourly consumption data	Data collection by a secure specialist system ensuring data quality and completeness.
Accurate data provided to you and your supplier	An accurate picture of your energy consumption to assist with energy efficiencies, providing you with the ability to ensure your supplier invoices are accurate.
Data validation and estimation	Data validation by a specialist system giving you quality assurance.
Fault management	We will take a pro-active approach for all exceptions and identified faults. We will work closely with your meter operator and supplier to ensure a quick resolution.
Data aggregation services and compliance with the balancing and settlement code	Compliance and transparency with industry regulations.
Half hourly consumption reports	A better understanding of your data usage making it easier to commit to a plan to reduce carbon and energy consumption.
Data services helpdesk during office hours	Half hourly experts with knowledge of industry regulations on hand to help you with data queries.

# What is data aggregation?

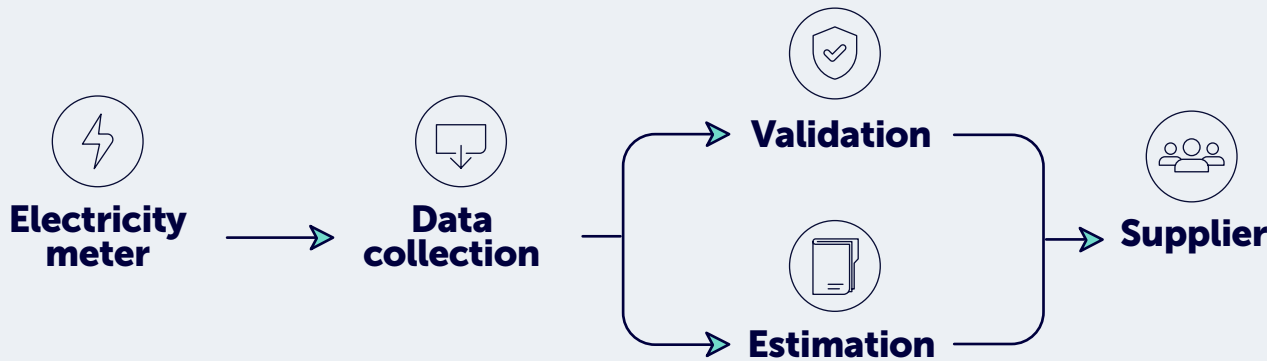
Once the consumption data has been retrieved and validated it will be submitted to the Data Aggregator.

The Data Aggregator is responsible for profiling the data received in line with industry regulations and submitting this into settlements.

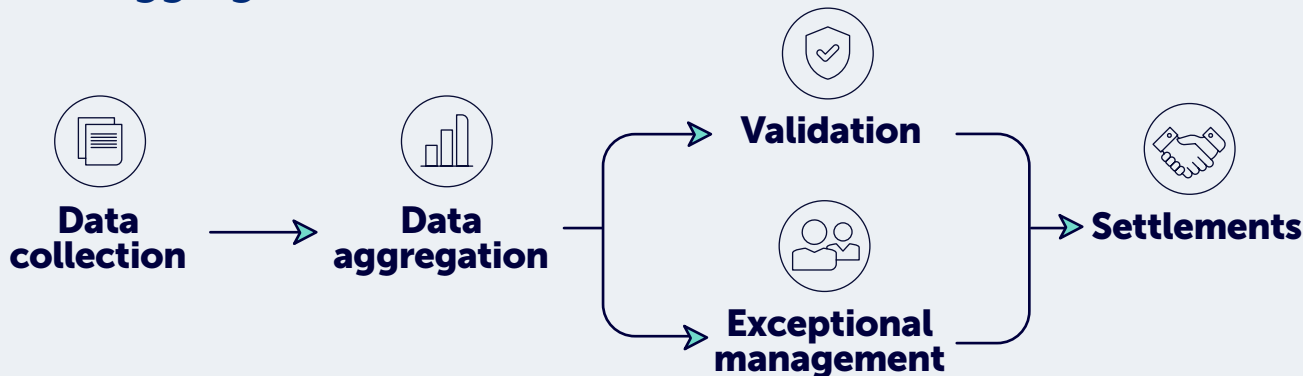
It is imperative that the data submitted into settlements is accurate as this is used to bill the supplier for the energy their customers have used.

The Data Aggregator will also be responsible for managing any exceptions in the data received. At SSE we take a pro-active approach in identifying, managing and resolving these exceptions to ensure only accurate data is submitted.

## Data collection



## Data aggregation





# Smart distributed energy infrastructure solutions

## Designed to meet local energy needs and drive Net Zero.

SSE Energy Solutions is part of SSE plc, a UK based FTSE 100 company with 75 years' experience operating in the fast-changing energy industry.

SSE Energy Solutions plays a major part in the emerging consumer-led energy system, and provides key services to enable users to benefit from new ways to optimise and manage their low carbon energy use.

Our Distributed Energy business teams adopt a whole system approach by investing in, building and connecting your localised, flexible energy assets to accelerate your path to net zero and create a more resilient energy system for the long-term.

Right now, your decision to pick SSE Energy Solutions, part of an established renewable energy company investing in all our futures, will be the right choice for you and for our environment.

Our energy solutions include:

- Electric vehicle infrastructure for public transportation and vehicle fleets
- Local electricity infrastructure including building, owning and adopting private HV networks
- Heating and cooling networks for residential, commercial and industrial consumers
- Local energy generation, including funded offsite/ onsite solar PV
- Energy storage solutions, including battery storage
- Optimising building energy consumption and use
- In-house digital twin engineering team for modelling optimised energy flows
- Data platform services to support smart buildings, places and cities
- SSE Enhance, our aggregation and trading platform for small energy assets
- A growing suite of green energy supply solutions, including corporate power purchase agreements.

## Whole system thinking - Accelerating the journey to net zero

### Core energy infrastructure

Solar PV Generation and Battery Storage

Electricity Networks

Heat and Cooling Networks

Electric Vehicles

### Digital platforms and analytics

Smart Cities and Places

Energy as a Service

Smart Buildings

Platforms, Data and Analytics

