



**CHAMBER
LOW CARBON**



European Union

European Regional
Development Fund

Understanding Your Business Energy Bills

Energy bills and the energy market can be confusing, meaning that it isn't always easy to understand your business's energy consumption patterns, or whether you are getting a good deal on your energy supply.

This guide aims to give you some understanding of your business's energy bills, and how suppliers measure and charge you for your energy consumption.

Chamber Low Carbon is brought to you by East Lancashire Chamber of Commerce, in partnership with North & Western Lancashire Chamber, Businesswise Solutions and BOOST Supporting businesses across Lancashire to go green, save money and reduce their carbon footprint.

Part funded by the European Union European Regional Development Fund, this £4 million programme provides a suite of FREE services to help businesses improve energy and environmental efficiencies, introduce on site renewable energy generation and by doing so save money.

ARE YOU A LANCASHIRE BASED BUSINESS? LOOKING REDUCE YOUR CARBON FOOTPRINT, SAVE MONEY & DRIVE ENERGY EFFICIENCIES? WE CAN HELP YOU ACCESS



1-TO-1 BUSINESS SUPPORT IN

- Reducing bills and raw material waste
- Energy efficiency
- Process resource efficiency
- Water efficiency
- Waste / resource management
- On-site energy auditing
- On-site carbon footprint analysis and action plan



BEST PRACTICE EVENTS

- Let us help you understand which low carbon renewable energy to choose and why
- Find out about low carbon technology, how you can use it and which is best for your business
- We can help you calculate the pay back period
- Understand how it can be installed on your premises



ADVANCED BUSINESS SUPPORT

- Behaviour change/On-site training
- Masterclass of management systems ISO 14001 and ISO 50001
- Masterclass into on-site energy auditing
- Introduction to environmental auditing



If you are an eligible, Lancashire based, small to medium sized enterprise looking to install equipment, or measures to improve your energy or resource efficiency, or perhaps thinking about installing on-site renewable energy generating equipment, the Chamber Low Carbon Programme could be in a position to help. We have 30% grants available up to £25,000.

The programme also helps Lancashire businesses developing new low carbon technologies to bring their products to market, facilitate them being manufactured in Lancashire and find demonstrator sites.

DO YOU DEVELOP LOW CARBON TECHNOLOGY? ARE YOU LOOKING TO MAKE YOUR IDEAS A REALITY, BUT NOT SURE HOW? WE CAN HELP YOU ACCESS



**LOW CARBON TECHNOLOGIES
ON-SITE GENERATION**

- Meet Low Carbon technology adopters
- View demonstrator sites
- Attend showcase events on Low Carbon technologies
- Access support in finding funding if you choose to implement renewable energies on your site and how to install it



**LOW CARBON TECHNOLOGY
INNOVATION & MANUFACTURING**

- Product innovation support
- Prototype design verification
- Establish product readiness and find your local manufacturer to help you start production
- Assisting the product to market and finding your demonstration customers
- Specialist support



**LOW CARBON TECHNOLOGIES
SUPPLY CHAIN & SUPPORT SERVICES**

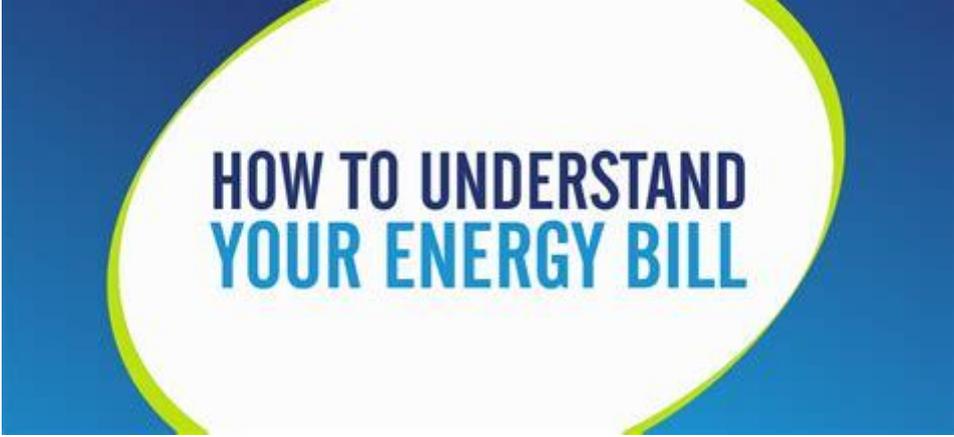
- Low carbon supplier support network
- Business support consultations
- Meet the manufacturers and suppliers events
- Networking
- Showroom space for your products

For further assistance or information on how the Chamber Low Carbon Programme can help your business

Call 01254 356 487

Email info@chamberlowcarbon.co.uk or

Visit www.chamberlowcarbon.co.uk



HOW TO UNDERSTAND YOUR ENERGY BILL

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1 WHAT'S ON YOUR BILL?

Knowing how to understand and navigate your energy bills is a step towards keeping your energy costs down. The key information displayed on your bill may include:

- 💡 **The unit charge:** the price you pay per kWh of energy supplied to your business.
- 💡 **The standing charge:** the daily charge that you will pay your supplier for having energy supplied to your business. This does not change according to how much electricity you use.
- 💡 **The Climate Change Levy:** Businesses are required to pay the appropriate Climate Change Levy (CCL) rate on every unit of non-renewable energy that they use, with the aim of incentivising renewable energy use.
- 💡 **VAT:** Most businesses are required to pay VAT at 20 % on the gas and electricity supplied to them.
- 💡 **Your contract type and end date:** Knowing when your contract ends will allow you to avoid rolling into an expensive default contract with your current supplier, after your previous contract has ended.
- 💡 **Your business's energy profile class:** This is denoted by a number between 00 and 08. The allocation of your business's energy profile class will depend on how and when your business consumes energy.
- 💡 **Your energy consumption:** This is taken from estimated or actual meter readings, or you may have supplier customer readings.
- 💡 **Your billing period:** This is the time period over which you have been charged for your energy consumption.
- 💡 **Your meter reference number (MPRN / MPAN):** Your Meter Point Reference Number (MPRN) for gas, or Meter Point Administration Number (MPAN) for electricity, is the unique identification number of your meter. This will be displayed on your bills and on your meters. You may need your MPRN / MPAN when getting quotes for new tariffs.



2 THE DISPLAYED COSTS:

The following gives some explanation of the costs that you are likely to see displayed on your energy bills:

Unit rate

The unit rate is the amount that you pay per kWh of gas or electricity used, and usually makes up the largest part of your energy bill.

Standing Charge

Most electricity and gas tariffs in the UK include a standing charge. This rate varies between tariffs, so it's worth comparing the standing charge rates that different providers offer as well as the unit rates.

It's possible to find tariffs which don't include standing charges, but this may be offset by an increased unit rate. Despite this, tariffs with no standing charges may be a more economical option for seasonal businesses, enabling them to avoid having to pay a standing charge during periods when the business is not consuming any energy.

The Climate Change Levy

Most businesses are required to pay the main Climate Change Levy (CCL) rate on the electricity, gas, and any solid fuels (such as coal) that they consume. The amount of CCL that you have paid will be displayed on your bill.

The following are [exempt from the CCL](#):

- Charities using energy for non-commercial activities
- Small businesses that use less than 4397 kWh of gas and less than 1000 kWh of electricity per month
- Electricity purchased for domestic use such as in care homes, caravans, and self-catering holiday accommodation

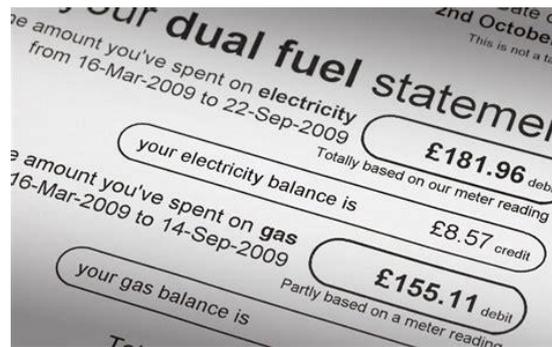
The main CCL rates change each year. More information on the CCL rates can be found [here](#).

Businesses with a higher energy demands, who have entered a [Climate Change Agreement](#) with the Environment Agency, can pay a reduced CCL rate.

VAT

Most businesses will pay VAT at 20 % on the energy they use. VAT may be charged on energy bills at a reduced rate of 5 % under similar circumstances to the exemptions from the CCL:

- Charities using energy for non-commercial activities
- Small businesses that use less than 4397 kWh of gas, or 1000 kWh month of electricity per month
- Electricity purchased for domestic use such as in care homes, caravans, and self-catering holiday accommodation



3 WHAT ARE THE COSTS THAT YOUR ENERGY BILLS COVER?

The unit rate and standing charge that you pay for your energy represent various integrated costs incurred along the energy supply chain. Energy suppliers incur costs from various parties including electricity generators, the National Grid, and other companies that own energy infrastructure, and these are passed on to energy consumers through energy bills. The proportions of your energy bills accounted for by these various costs will vary over time due to the volatility of the energy market.

Network and balancing costs

Energy suppliers are charged for use and maintenance of gas and electricity infrastructure by the companies that own it. These costs cover the maintenance of the network, transmission and distribution losses, and the balancing of supply and demand for energy.

IGT Charges

Some businesses and homes are supplied gas by pipes owned by Independent Gas Transporters (IGTs) rather than pipes owned by the National Grid. IGTs charge energy suppliers for the use and maintenance of their pipes, and this cost is passed on to customers through energy bills. The costs charged by IGTs are regulated by Ofgem to maintain them at a similar level to the main Gas Distribution Network which they are connected to. Therefore, it shouldn't cost consumers more to be supplied by an IGT. You can identify from your gas meter number (MPRN) whether you are supplied by an IGT.

Metering Charges

Your energy bills will cover the costs incurred through the installation and maintenance of your gas and electricity meters.

Wholesale energy costs

The wholesale price of energy makes up a variable proportion of the rate charged by your energy provider. Wholesale energy costs vary daily according to a variety of factors including the time of year, the weather, and the state of the UK's energy infrastructure.

As wholesale energy prices drop this doesn't necessarily mean that you will then pay less for the energy supplied to you, as energy suppliers won't necessarily drop the prices they charge their customers. Businesses on variable energy contracts are more likely to make savings as wholesale energy prices drop. However, the wholesale energy price makes up only a proportion of the rate that your energy provider charges you.

Business expenditure

A proportion of the prices that energy consumers pay will cover costs incurred by energy suppliers through running their business.

Other environmental costs

Other environmental costs that suppliers incur include:

- **Feed-in Tariff scheme (FITs)**

All licensed energy suppliers are required to pay into the Ofgem FIT Levelisation Fund. This fund is then used by certain licensed energy suppliers, who pay small-scale renewable energy generators for the energy that they produce and feed into the National Grid.

- **The Renewables Obligation (RO)**

This is an obligation imposed upon energy suppliers to source a gradually increasing proportion of the energy they supply to consumers from renewable sources.



4 YOUR BUSINESS'S ENERGY PROFILE CLASS

Your business will be allocated to an energy profile class according to its energy consumption pattern. There are 9 classes of UK energy profiles, numbered '00' to '08', and these are defined by the daily and yearly energy consumption patterns of an average consumer within each class.

Profile classes 05 to 08 are 'maximum demand' customers. A maximum demand customer will have an energy meter that enables the business's maximum energy demand to be measured. This is the highest rate at which energy was supplied to the business over a given time period e.g. the most recent billing period.

Maximum demand customers are allocated to profile classes according to their 'peak load factor'. This is the ratio of the business's average energy demand over a given period, to the business's maximum energy demand. This is usually given as a percentage. The peak load factors of maximum demand customers are used to allocate them to energy profile classes.

The nine energy profile classes are defined as follows:

 **Profile Class 1:** Domestic Unrestricted Customers

Most domestic energy consumers.

 **Profile Class 2:** Domestic Economy 7 Customers

Domestic energy consumers with an Economy 7 meter.

 **Profile Class 3:** Non-Domestic Unrestricted Customers

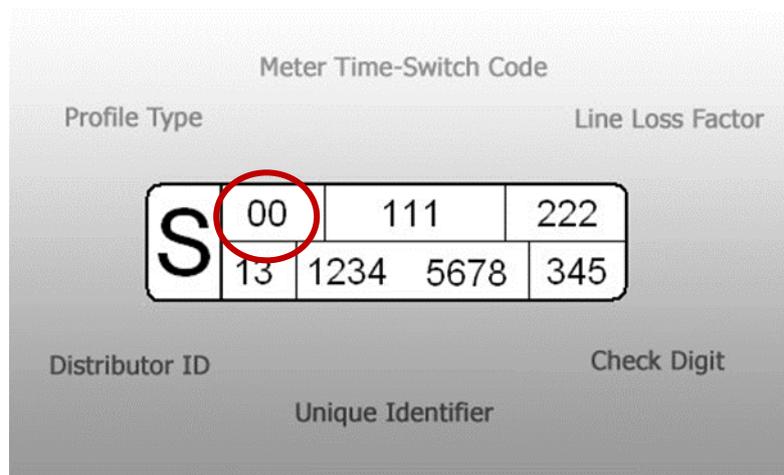
Most small and micro-businesses which do not have high energy demands.

 **Profile Class 4:** Non-Domestic Economy 7 Customers

Small and micro-businesses with an Economy 7 meter.

- 💡 **Profile Class 5:** Non-Domestic Maximum Demand Customers with a Peak Load Factor of less than 20%
- 💡 **Profile Class 6:** Non-Domestic Maximum Demand Customers with a Peak Load Factor between 20% and 30%
- 💡 **Profile Class 7:** Non-Domestic Maximum Demand Customers with a Peak Load Factor between 30% and 40%
- 💡 **Profile Class 8:** Non-Domestic Maximum Demand Customers with a Peak Load Factor over 40%
- 💡 **Profile Class 00:** Customers with a peak load usage of electricity above 100 kW

Your energy profile class will be displayed on your bill as the first two digits of your meter point administration number:





5 HOW IS YOUR ENERGY CONSUMPTION MEASURED?

The volume of electricity that you are billed for may be settled on via the following methods:

- 💡 **Actual readings:** these may be obtained remotely via an advanced meter, or your energy supplier may send a staff member to read your meter manually.
- 💡 **Customer readings:** your energy supplier may ask you to provide meter readings.
- 💡 **Estimated consumption:** your energy supplier may estimate your energy consumption if they don't have information on this.

The method of calculating your energy consumption is usually indicated by either an 'A' (actual), 'C' (customer), or 'E' (estimate) next to the energy consumption figure on your bill.

Half hourly readings for larger businesses:

Due to regulatory changes called [P272](#) and [P322](#), it is now mandatory that all businesses in energy profile classes 05 to 08 have advanced meter reading devices (ARMs) installed. Energy suppliers must collect half hourly consumption data from their maximum demand customers via these meters. This helps to better inform 'settlement' process between energy suppliers and energy generators, in which they trade with each other to meet consumer energy demands.

The use of advanced meters also means that the affected business's will no longer have manual or estimated meter readings, enabling more accurate billing.

The smart meter roll-out:

The aim of the smart meter roll-out is to have smart meters provided to as many energy-consumers in the UK as possible, by offering smart meter installation to all domestic and small business consumers. The original deadline for doing this was the end of 2020, but since this was not met, the deadline will likely be pushed back to 2024.

Again, the aim of this initiative is to provide energy suppliers with a greater amount of data on consumers' energy consumption patterns, allowing them to more accurately purchase energy

from generators to match consumer demand. It is hoped that the increased efficiency in the supply of energy would then allow more of the UK's energy to be generated by low carbon sources.

It isn't mandatory to have a smart meter installed, but all suppliers must offer them to their customers.

What is a smart meter?

Like ARMs, smart meters allow a consumer's energy consumption to be recorded remotely and accurately. However unlike ARMs, the communication of data from smart meters is managed through a national data communication network (the [Data Communication Company](#)).

Smart meters also come with a display unit which gives information to the energy consumer on the volume and cost of their energy consumption.

How does this impact small businesses?

Smart meters all give energy consumers more power to manage their energy consumption through providing access to near to real-time energy consumption data via a display unit. Monitoring when and how much your business's energy consumption peaks throughout the day or year could allow you to make changes to reduce your peak demand. If you are on a variable tariff, you could potentially save money through shifting some of your energy consumption to times when energy is cheaper.

Additionally, monitoring your energy consumption allows you to track savings that you could make through efforts you make to increase energy efficiency in your business.



6 TIPS FOR SAVING ON YOUR ENERGY BILLS:

- 💡 Ensure that you know what your current tariff is, and when your contract ends.

Knowing when your contract ends will enable you to start comparing tariffs with plenty of time before your contract ends. This will help you to avoid rolling over into a default contract renewal with your current supplier, which might not be the best deal for your business. It's also important to bear in mind that some energy suppliers require business customers to give a certain amount of notice before switching suppliers.

- 💡 Consider both unit rates and standing charges when comparing tariffs.

It's worth comparing not just the unit rates offered with different tariffs, but also the standing charges as these could make a significant difference to your bill.

- 💡 Know your MPAN / MPRN and your energy profile class to ensure you get accurate quotes and the right tariff for your business

Your MPAN and MPRN will be displayed on your electric and gas bills, and on your meters. You can obtain your energy profile class from your MPAN as illustrated above.

- 💡 Know your energy consumption pattern – when is your energy usage highest?

Knowing your energy usage patterns can help you get a more accurate quote when switching suppliers and can help you make the right decision on which tariff is best for you. You can obtain information on your consumption pattern from previous bills, or from your smart meter, if you have one.

- 💡 Know the different types of tariff available

When shopping around for energy deals, it helps to know the types of tariffs on offer for your business. Below is a non-exhaustive list of some of the tariffs available:

- **Fixed rate tariff:** The unit rate will remain constant throughout the duration of a fixed rate tariff. However, your bill will still go up or down as your energy consumption varies each billing period. Fixed rate tariffs may make it easier for your business to budget, as a rise in energy prices won't mean that your unit rate rises. On the other hand, you wouldn't benefit from any lowering of unit prices that your supplier might implement in response to falling energy prices.
- **Variable tariff:** The unit rate for your gas or electricity may vary throughout your contract as energy prices rise and fall allowing you to make potential savings as energy prices fall. However, falling energy prices do not always translate into savings for energy customers. Variable tariffs may also not have exit fees for ending your contract.
- **Time of use tariff:** Businesses which are able to shift some of their energy demand to off-peak times may be able to make savings through time-of-use tariffs. Due to the roll-out of smart meters, suppliers may offer new time-of-use tariffs.
- **No standing charge tariff:** If there are frequent or long periods where your business doesn't consume energy (e.g. seasonal businesses), you may be able to make savings through a no-standing-charge tariff. These tariffs may have higher unit prices but allow consumers to avoid paying standing charge fees during periods when they are not consuming energy.
- **Green tariff:** On a green tariff, your supplier will match all or a some of your energy demand with purchases of energy from purchased from renewable generators. Your supplier may also invest in environmental schemes such as carbon offsetting schemes to 'offset' emissions from your energy consumption.



7 SOURCE LIST

What's on your energy bills:

<https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/understand-your-gas-and-electricity-bills>

<https://www.businessjuice.co.uk/energy-guides/understanding-business-energy-bills/>

The displayed costs:

<https://www.businessjuice.co.uk/energy-guides/understanding-business-energy-bills/>

<https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/understand-your-gas-and-electricity-bills>

<https://www.gov.uk/green-taxes-and-reliefs/climate-change-levy>

<https://www.gov.uk/guidance/vat-on-fuel-and-power-notice-70119#qualifying-use>

<https://britishbusinessenergy.co.uk/no-standing-charge/>

The hidden costs:

<https://britishbusinessenergy.co.uk/wholesale/>

<https://www.ofgem.gov.uk/gas/distribution-networks/connections-and-competition/independent-gas-transporters>

<https://www.ofgem.gov.uk/environmental-programmes/fit/electricity-suppliers>

<https://www.ofgem.gov.uk/environmental-programmes/ro/energy-suppliers>

Business energy profile classes:

<https://britishbusinessenergy.co.uk/profile-classes/>

Smart meters:

<https://www.ofgem.gov.uk/publications-and-updates/moving-half-hourly-energy-reads-bsc-p272-and-p322-guide-businesses>

<https://www.smartenergygb.org/en/smart-meter-benefits/benefits-for-britain>

https://www.ofgem.gov.uk/sites/default/files/docs/2015/07/factsheet_131_cheaper_electricity_for_businesses_web_0.pdf

<https://www.ofgem.gov.uk/gas/retail-market/metering/transition-smart-meters>

<https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/consumer-guide-understanding-energy-meters-ofgem/smart-meters-guide-your-rights>

<https://www.smartdcc.co.uk/>

Saving money on your energy bills:

<https://britishbusinessenergy.co.uk/quotes/>

<https://switch.which.co.uk/energy-advice/energy-tariffs-explained.html>

https://www.ofgem.gov.uk/sites/default/files/docs/2015/07/factsheet_131_cheaper_electricity_for_businesses_web_0.pdf