

# SSE Guide to the Energy Industry



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# Understanding energy costs

Non-commodity costs (NCCs) are increasing. It is therefore important to understand how they are calculated and how they can affect your energy expenditure.

These NCCs fall into two broad categories: government measures and levies intended to reduce carbon emissions and ensure security of supply; and the costs and charges associated with operating the national grid.

We think it's important that customers understand exactly how the cost of energy is calculated, and how much (or little) comes directly from our activities as a supplier, so we have created this brief guide to explain what the different NCCs are all about.

We can't do much about NCCs themselves, but we can help you anticipate what you'll have to pay, take steps to reduce their impact on your contract, and explain the options that are under your control.



# Government Schemes

## Renewables Obligation (RO)

### What is it?

The RO is the main Government support mechanism for large scale renewable electricity generation in the UK. It's based on a system of tradeable Renewable Obligation Certificates, known as ROCs, which Ofgem issues to eligible generators. Electricity suppliers, like SSE, must source a certain level of the electricity they supply from renewable sources.

The RO has closed to new generation projects, but the scheme will continue until 2037.

### Who is the money paid to?

The RO can be met through buying ROCs from eligible generators. If a supplier does not have a sufficient number of ROCs to meet their obligation, they must pay the equivalent amount into a buy-out fund. This fund is used to cover the administration costs of the scheme, with any surplus redistributed to the generators.

In 2015/16 SSE met its total obligation through purchasing ROCs.

### How is it charged?

The overall obligation level, which dictates how much renewable energy each supplier must source, is set by the UK Government on an annual basis. The size of each supplier's obligation is based on the amount of electricity they supply to customers each year.



## Feed-in-Tariff (FITs)

### What is it?

The FIT scheme promotes the installation of small-scale renewable and low carbon electricity generation of up to 5MW.

### Who is the money paid to?

Electricity suppliers with more than 250,000 customers, such as SSE, are required to pay generators accredited under the FITs scheme a fixed tariff for the electricity they generate as well as the surplus electricity they export to the grid. Suppliers with fewer than 250,000 customers can voluntarily participate. The scheme is only available for sign up until 2019 and has been capped by the government to a budget of £100m.

### How is it charged?

The cost of the scheme is paid by suppliers based on their share of the electricity market.

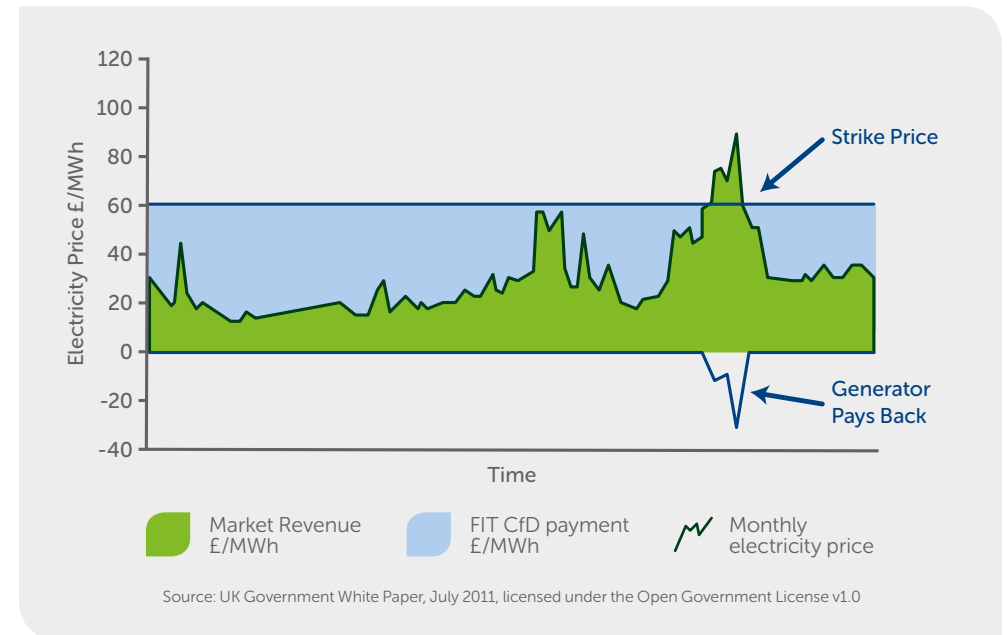
## Contracts for Difference (CfDs)

### What is it?

Contracts for Difference were introduced in 2013 to incentivise the development of new low carbon generation in the UK (renewables and nuclear). CfDs provide stable revenues for generators by guaranteeing a fixed price for each MWh they generate. Each contract is a legal agreement between a low carbon electricity generator and the Government-owned Low Carbon Contracts Company (LCCC).

### Who is the money paid to?

If the fixed price, or 'strike price', received by the low carbon electricity generator falls below the wholesale reference price, it is topped up by subsidy payments, but if it rises above the market average the generator pays back the difference.



### How is it charged?

The CfD is funded by a compulsory levy on suppliers, based on their market share of demand, and has two elements: an operational cost levy, which funds the day to day running of the scheme, and supplier obligation costs which reflect the amount of generation funded by the scheme.

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## Energy Intensive Industry (EII) exemptions

Customers working within EIIs are compensated for some of the indirect costs of the Renewables Obligation (RO) and the Feed in Tariff (FiT) scheme. This is to ensure that EIIs which operate in an international market are not put at a competitive disadvantage due to renewable energy support costs. Eligible customers are those whose electricity costs amount to 20% or more of their gross added value, or those who are on a Government list of defined EIIs.

At the moment, EIIs are compensated for 85% of the cost of the RO and FiT scheme. However, Government has decided to move from a compensation scheme to an exemption; this means that EII customers will receive a rebate on their energy bill for the cost of these schemes, instead of receiving compensation at a later date. This change will be introduced once legislation has passed through Parliament, with the Government hoping to start the exemptions from the RO in January 2018. There is less certainty about the timescale for the introduction of the FiT exemption. Until the exemptions are introduced, the compensation schemes will remain in place.

The Government also plans to introduce an exemption from the cost of the Contracts for Difference (CfD) scheme. We are waiting for further details on the timescales for this exemption.

To benefit from the compensation and future exemption scheme EIIs must be registered with the Department for Business, Energy and Industrial Strategy and receive a certificate proving eligibility.

## Capacity Market

### What is it?

The Capacity Market is the Government's main mechanism to ensure the GB electricity system remains secure, with sufficient reliable capacity to meet demand.

### Who is the money paid to?

Capacity providers, including power stations and storage owners, bid for Capacity Market agreements in two annual auctions – one held four years in advance of the delivery date and another held one year in advance of the delivery date. Holders of Capacity Market agreements are expected to provide their agreed generation volumes, or load reductions, at times of system stress in return for a Capacity Payment.

### How is it charged?

The Capacity Market is also funded by a supplier levy, which comprises two elements: an operational cost levy, which covers the cost of running the scheme, and a supplier obligation levy, which covers payments to generators.

A supplier's share of the levy is calculated based on their market share during periods of high demand over the winter period.





## Climate Change Levy (CCL)

### What is it?

The CCL is a tax on electricity and gas used by businesses and public sector consumers. It's designed to promote energy efficiency and reduce greenhouse gas emissions. You can find out more about this at [www.gov.uk/green-taxes-and-reliefs/climate-change-levy](http://www.gov.uk/green-taxes-and-reliefs/climate-change-levy)

### Who is the money paid to?

As a supplier, SSE collects this levy from customers and passes it on to HM Revenue and Customs.

### How is it charged?

The CCL is charged per kWh of energy used and is index-linked; there are different rates for electricity and gas. The level of CCL payment is shown on your bill.

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# EU ETS and Carbon Price Support

Electricity generators pay for emitting carbon emissions through allowances issued by national governments under the EU emissions trading scheme (EU ETS).

The UK's Carbon Price Floor (CPF) sets a rising carbon price trajectory, thereby stimulating investment in low carbon infrastructure, and discouraging carbon intensive generation such as coal-fired power stations, as the cost of carbon increases.

The Carbon Price Support (CPS) acts as a top up tax levied on fossil fuels used for electricity generation on top of the EU ETS price. The CPS, which is set out by HMRC two years in advance, was intended to make up the difference between the EU ETS and Carbon Price Floor. However, it is currently fixed at £18 per tonne of CO<sub>2</sub> until 2021.

## Who is it paid to?

The revenue raised from EU ETS and CPS receipts goes to the UK Treasury.

## How is it charged?

The CPS, is recovered by power station operators through the wholesale electricity price and is part of customer's normal unit rate. The pass through cost of carbon pricing fluctuates depending on the marginal plant on the electricity system setting the wholesale price at any given time.



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# Use of System Charges

## Balancing Services Use of System (BSUoS)

### What is it?

It's important that the electricity network operates with the correct amount of electricity – not too much or too little. BSUoS charges cover the cost of this.

### Who is it paid to?

As the system operator, National Grid is responsible for balancing supply and demand, by increasing or decreasing the volume on the grid.

### How is it charged?

BSUoS charges are non-locational and pay for the day to day balancing of the electricity system by National Grid plc. They are calculated daily and paid by generators and suppliers.

## Transmission Network Use of System (TNUoS)

### What is it?

TNUoS charges cover the cost of installing and maintaining the electricity transmission system in England, Wales, Scotland and offshore.

### Who is the money paid to?

These charges are payable to National Grid plc.

### How is it charged?

The tariffs are set annually in advance and are split between generation and demand, with a cap on how much can be charged to generation. There is also a split between a residual charge and a locational charge. The latter varies depending on geographical location, reflecting the costs that users impose on the transmission network to transport their electricity. The way in which they are calculated for customers depends on the type of meter they have (half-hourly or non-half hourly).

## Distribution Use of System (DUoS)

### What is it?

DUoS charges recover the cost of building and operating the distribution networks that transport energy to the customer.

### Who is the money paid to?

These are set by, and paid to, each regional distribution company.

### How is it charged?

As each distribution company sets the DUoS charges, they vary according to geographical location. Each distribution company also sets three time-based price bands (red, amber, and green) based on times of peak usage.

## Gas transportation charges

These make up around a third of your overall gas bill, and are adjusted twice a year. They cover the costs of the National Transmission System (NTS) and the Gas Distribution Network (GDN).

## AUG (Allocation of Unidentified Gas)

AUG charges pay for gas lost through measurement errors, unauthorised meters, and theft.

Unidentified gas is gas that entered the network but can't be accounted for, after allowing for expected losses from leakage, and is recovered from both business and domestic users.



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# We hope this helps explain the various energy costs

At SSE we work hard to help businesses make the most of their energy. We know it can be complex, but we believe it's an asset worth understanding. We hope this guide was useful.



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