

Electricity
Transmission

Understanding the consumer bill

Calculation methodology – 2016/17 bill
December 2018

nationalgrid



Energy bills can sometimes be confusing, and it's not always clear what consumers are paying for.

Read on to find some answers...

National Grid direct charges account for 3% of the average dual fuel household energy bill

That's around **£35** a year on average per household

For this, we perform three key roles:

£25

Electricity Transmission – building and maintaining the wires, cables and substations that make up the England and Wales electricity network, so it continues to be one of the most reliable networks in the world

£1

Electricity System Operator – balancing supply and demand to make sure electricity is always there when you need it

£9

Gas Transmission Owner and System Operator – performing the same roles as electricity, but for the high pressure gas transmission network across all of Great Britain

What do we mean by consumers?

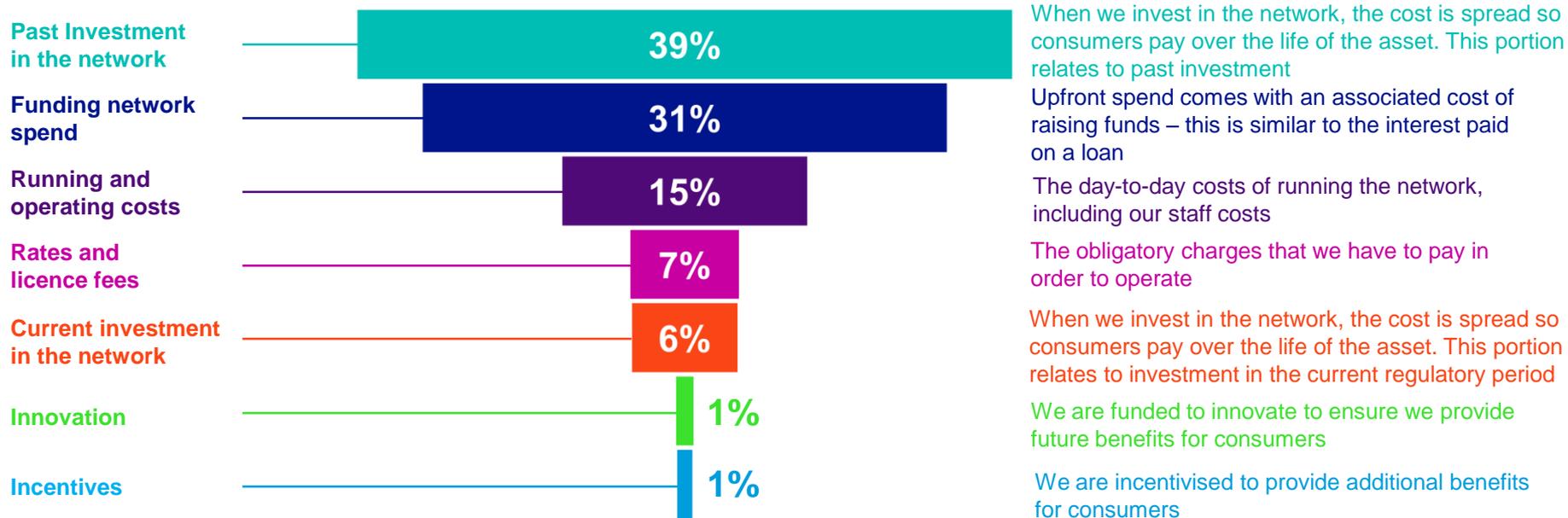
When talking about our impact on consumer bills, 'consumer' means households across Great Britain

Our regulator, Ofgem, provides us with an average energy demand per household which we use in our bill calculations

How is this different to customers?

Our customers are people or organisations who pay for the products and/ or services they receive from us

Electricity Transmission: how the £25 is made up



For more information on what we do and our performance, please click [here](#).

How are our charges impacted by regulation?

Why we are regulated?

Because there's no alternative to our high voltage electricity transmission network, we're classed as a 'natural monopoly'

To simulate the pressures of competition and make sure we're charging fair prices for the services we provide, we're regulated by the energy regulator, Ofgem

Every few years, we submit our future business plans to Ofgem. They review and assess these plans and tell us what we can charge our customers for the next regulatory period, known as a 'price control' period.

How does regulation impact our charges?

- 1** Regulation makes sure that our charges represent an efficient cost for the services we provide, whilst also allowing us to invest in the transmission networks and run them properly
- 2** To encourage us to provide additional benefits for consumers, Ofgem uses financial incentives. These can either be penalties or additional revenue (funded by our customers), depending on whether or not we meet Ofgem's targets.
- 3** Ofgem incentivises us to find more efficient ways to deliver our activities, if we can find cheaper solutions the benefit is shared between consumers and National Grid.

How consumer charges are calculated

We calculate our consumer bill impact using Ofgem's consumer bill methodology – this splits costs into segments such as wholesale energy costs, environmental and network charges

The numbers we quote are our **direct impacts** to end consumers. We collect this revenue from electricity generators and suppliers, for example.

This doesn't include the costs we charge to other transmission network users, such as large-scale industrial users.

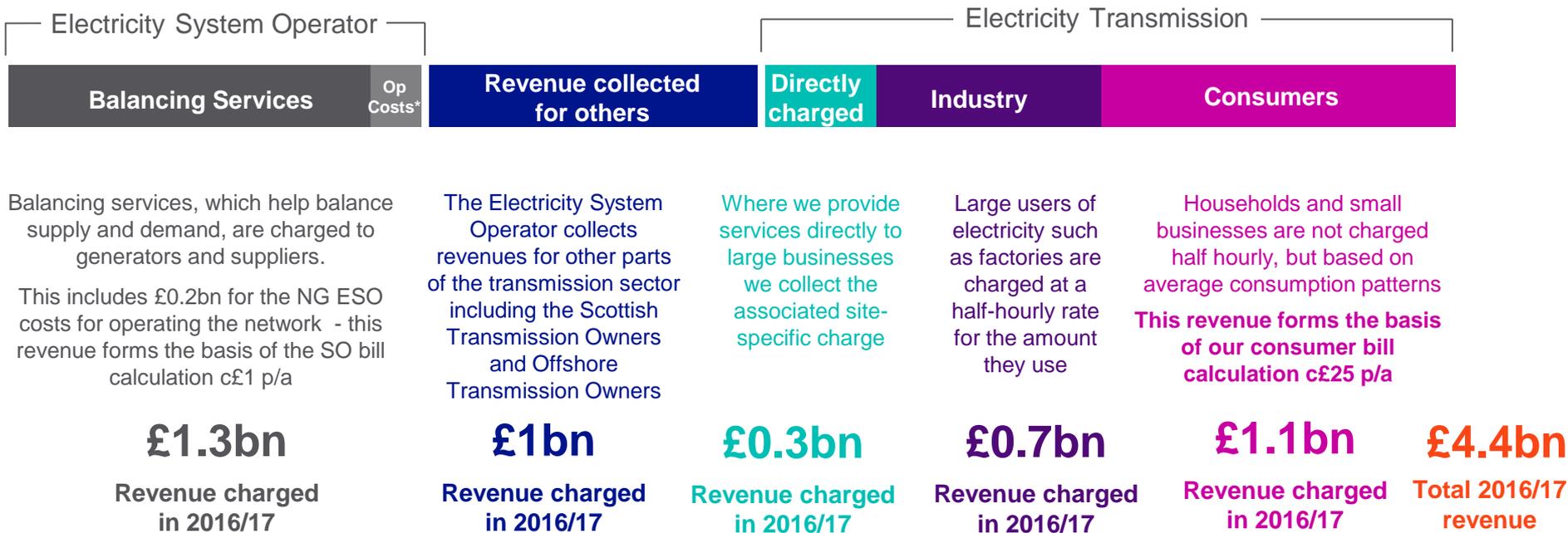
For more information on Ofgem's bill methodology please click [here](#)

What can change the National Grid element of the consumer bill?

There are two key factors which have an impact on consumer bills:

	What is it?	How does it affect the consumer bill?
Factor 1 Revenue	Revenue is the money we collect for the services we provide, as agreed with Ofgem at the start of the price control	Our revenue can go up or down, depending on what we need to deliver Changes to the way we charge our customers can affect the proportion of revenue we collect from different types of users
Factor 2 Demand	Demand is the amount of energy that is required on the network	Changes in overall demand and average electricity consumption by consumers can alter our bill impact

The revenue for our electricity business is collected across the industry for both Electricity Transmission and the Electricity System Operator



Balancing services, which help balance supply and demand, are charged to generators and suppliers.

This includes £0.2bn for the NG ESO costs for operating the network - this revenue forms the basis of the SO bill calculation c£1 p/a

The Electricity System Operator collects revenues for other parts of the transmission sector including the Scottish Transmission Owners and Offshore Transmission Owners

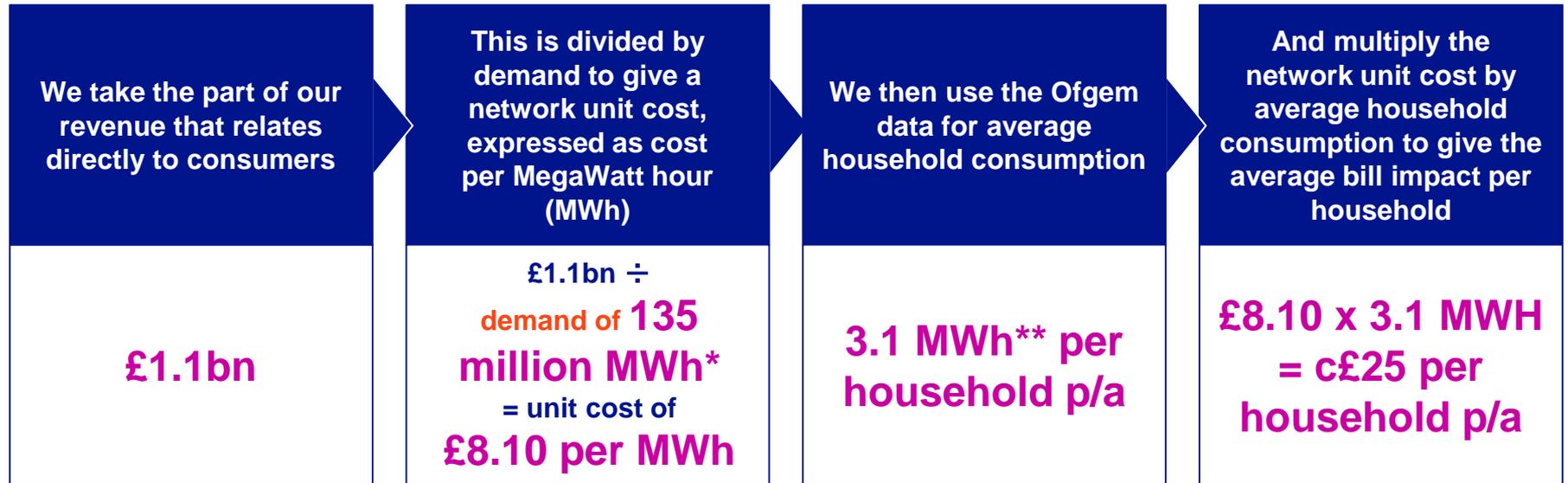
Where we provide services directly to large businesses we collect the associated site-specific charge

Large users of electricity such as factories are charged at a half-hourly rate for the amount they use

Households and small businesses are not charged half hourly, but based on average consumption patterns
This revenue forms the basis of our consumer bill calculation c£25 p/a

From April 2019 the Electricity System Operator will be legally separated from Electricity Transmission— for more information click [here](#)

How revenue is turned into bill impact



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