Gas Transmission

Understanding the consumer bill

Calculation methodology – 2016/17 bill

December 2018



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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
- 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

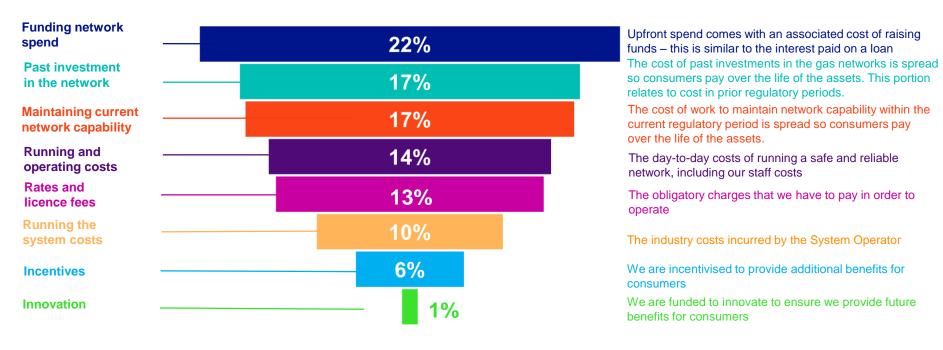
Our regulator, Ofgem, provides us with an average energy demand per household which we use in our bill calculations

How is this different to customers?

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

Components of the bill – what makes up the £9?

The £9 paid for Gas Transmission are split into the below components



For more information on what we do and our performance, please click <u>here</u>.

How are our charges impacted by regulation?

Why we are regulated?

Because there's no alternative to our gas 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?

- 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
- 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.
- 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.

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How consumer charges are calculated

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

We provide services across the industry, not directly to the end consumer so we collect some of our revenues through your supply companies, or the wholesale cost of the gas you use.

This means that the numbers we quote are our *direct impacts* to end consumers and do not include costs we charge to other transmission network users.

For more information on Ofgem's bill methodology please click <u>here</u>

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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?
	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
Factor 1 Revenue		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 gas consumption by consumers can alter the bill impact

The revenue for our gas business is collected across the industry



Revenue collected for others

The Gas System
Operator collects
revenue for other parts
of the gas system, such
as Scotland Gas
Networks and
innovation competition.

Directly charged

We provide services
directly to large
businesses such as
meter maintenance and
collect the associated
site-specific charge –
this is not charged
directly to consumers

Shippers and Suppliers book capacity to put gas on the Transmission System. This revenue is not charged directly to consumers but is collected through wholesale revenue

Suppliers book capacity to take gas off the Transmission System. Large users of gas such as factories are approximately 65% of total demand. Households and small business form the remainder of demand.

This revenue form the basis of our consumer bill calculation

£27m

Revenue charged in 2016/17

£62m

Revenue charged in 2016/17

£527m

Revenue charged in 2016/17

£458m

Revenue charged in 2016/17

£1.1bn

Total 2016/17 revenue

National Grid

For more information on transmission charges please see link below:

How revenue is turned into bill impact

Start with the total revenue collected from exit customers

c£0.5bn

Divide by exit demand to derive a unit cost for network costs (cost per Megawatt Hour)

c£0.5bn ÷ **c615 MWh** = unit cost of £0.70 per MWh

Use the Ofgem assumption on household consumption data

12.5* MWh per household

Multiply unit cost by household consumption to derive bill impact per household

£0.70 x 12.5 MWh = c£9 per household

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