

Taking action

The first step in implementing an energy management strategy is to review your current use and projected energy costs, e.g. inclusions of non-commodity costs as mentioned in this guide, and to establish whether you have the internal resource required to deliver the strategy. The second step may require engagement with external consultants to determine which management solutions are most appropriate for your sector. The potential of the external resources to deliver your objectives needs to be assessed in conjunction with compliance schemes such as ESOS Phase 2, CCA, CRC, and energy management approaches such as ISO50001 and Lean Six Sigma. There may be significant cost synergies to be achieved by adopting this holistic strategy.

Inenco takes a packaged approach to energy management and can deliver a comprehensive range of services aimed at helping your organisation make energy savings and mitigate rising costs.

Ready to take action?

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The Cost of Inaction

As future energy costs continue to rise, this report shows how your business will be impacted if you don't take action

Introduction

Most UK businesses can expect to see their energy costs increase by 25% by 2020. And they'll continue to rise well into the future – so it's time to take action.

While we can't predict whether wholesale energy costs will go up or down – because they're affected by so many unpredictable factors – we do know that non-commodity costs (the fixed price per kWh on a business energy bill) are set to rise and, in some cases, we know by how much.

In 2017/2018 alone, the Renewables Obligation (RO) Levy, the Feed-in-Tariff (FiT) Levy, the Contracts for Difference (CfD) Levy and the Climate Change Levy (CCL), coupled with carbon floor costs, will add around £41/MWh to an energy bill*.

And of course, these rises are all happening against a backdrop of other financial challenges – business rates are rising, the national living wage has increased further, a new Apprenticeship Levy has been introduced and the workplace pension will soon apply to all businesses.

Inenco has calculated that if businesses don't take action to manage their consumption throughout the year, UK organisations combined can expect to pay an extra £7.42 billion on their energy costs by 2019**.

How this stacks up by sector and business size

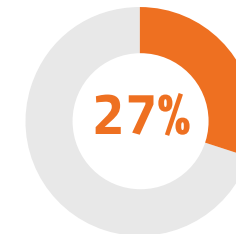
If no action is taken, businesses can expect to be adding thousands of pounds to their non-commodity costs over the next three years. But if businesses implement an energy management strategy, the cost rises will be significantly lower. The below demonstrates that introducing an Energy Efficiency Programme, for example, significantly mitigates cost rises.

Expected rise in non-commodity costs by 2019 if action isn't taken - £/% (vs 2016/17 baseline)

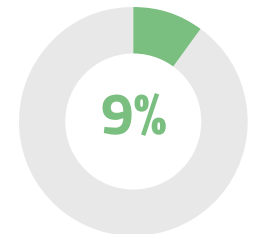
Expected rise in non-commodity costs by 2019 if an Energy Efficiency Programme is implemented - £/%

Large retail park
3 GWh per year, East Midlands

£47,561

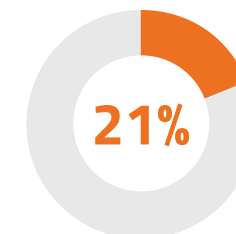


£15,985

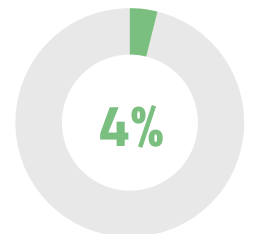


Small retail store
1 GWh per year, North Wales

£15,486

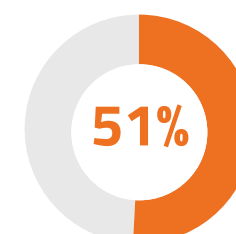


£2,875

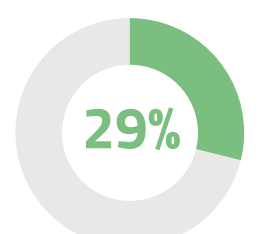


Manufacturing site
50 GWh per year, Hampshire

£950,057

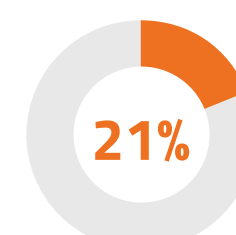


£548,057

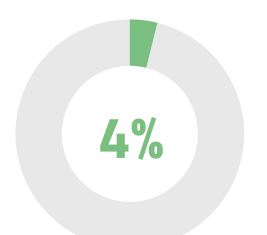


Inner-city university
3 GWh per year, North East

£43,501



£7,835



* Excluding businesses in energy intensive industries

** All figures based on current market information and data

Over the next three years and into the future, inaction is not an option.

Action versus inaction – the cost to your business

Investing in an energy management strategy can seem like a daunting task, especially if you don't know whether the time and effort involved will really pay off.

To help businesses decide on the best course of action, Inenco investigated the impact of continuing along the same path, versus taking a new approach to energy. They:



Analysed data from four different types of organisation.



Calculated their energy costs rises over the next three years if they don't take any action/continue in the same way. This scenario is called inaction.



Applied four different courses of action and calculated the subsequent energy cost rises.



Calculated the cost of inaction versus alternative steps to manage energy consumption.

The results show that implementing an energy management strategy will keep cost rises significantly lower than if no action is taken.

In all cases, scenario 4 (shifting 50% of consumption from Red bands and distributing across Amber bands) and scenario 5 (implementing an Energy Efficiency Programme over a three-year period) have the most impact compared to inaction, keeping energy costs rises as low as 2-4% in the case of a small retail store and 3-4% in the case of an inner-city university.

However, using a combination of these scenarios would maximise the savings, especially as shifting consumption can earn businesses revenue through demand management schemes – although the ability to do this will depend on your business (it's not always practical, for example, to shift 20% or 50% consumption).

Meanwhile, implementing an Energy Efficiency Programme is an action that all businesses can take, and it keeps cost rises very low.

Commercial operations analysed:

A typical **large retail park** in the East Midlands. 3 GWh annual consumption, HV, in CRC

A typical **small retail store** in North Wales or Merseyside. 1 GWh annual consumption, LV in CRC

A typical **manufacturing site** near the south coast (Hampshire). 50 GWh annual consumption, HV, in a CCA so exempt from CRC

A typical **inner city university building** in the north east (Leeds or York). 3 GWh annual consumption, LV in CRC

Scenarios applied:

- Keep same energy strategy (inaction)
- Reduce overall consumption by 10%
- Shift 20% of consumption from Red bands and distribute across Amber bands
- Shift 50% of consumption from Red bands and distribute across Amber bands
- Implement an Energy Efficiency Programme over a three-year period (aiming for a 5% reduction year-on-year)

Business/action	Non-commodity cost rises by 2019 (from 2016)				
	Inaction	Reduce overall consumption by 10%	Shift 20% of consumption from Red bands and distribute across Amber bands	Shift 50% of consumption from Red bands and distribute across Amber bands	Implement an Energy Efficiency Programme over a three-year period
Large retail park	£47,561	£25,434	£35,591	£17,209	£15,985
Small retail store	£15,486	£6,649	£9,849	£1,127	£2,875
Manufacturing site	£950,057	£668,347	£827,131	£640,161	£548,057
Inner-city university	£43,501	£18,507	£29,299	£7,038	£7,835

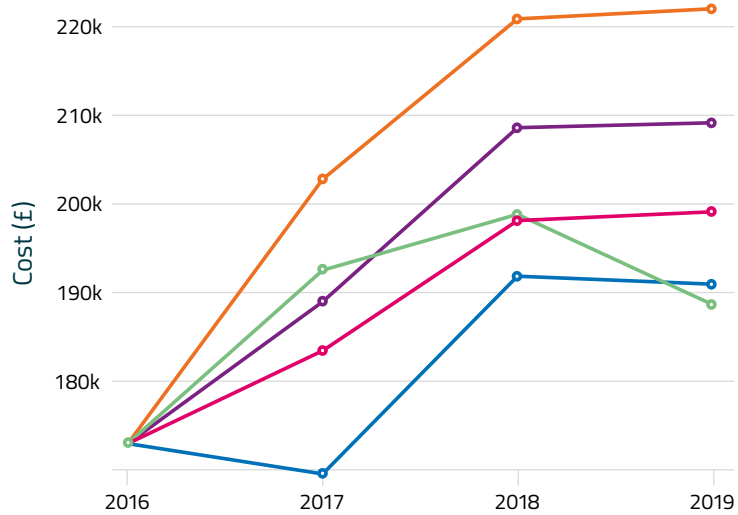
So, what energy price rises can each of these businesses expect if they don't take action?



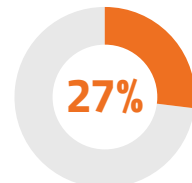
Large retail park

East Midlands, 3 GWh annual consumption, HV, in CRC

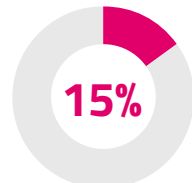
Rise after 3 years



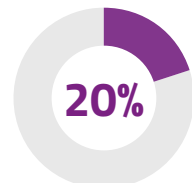
£47,561



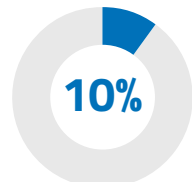
£25,434



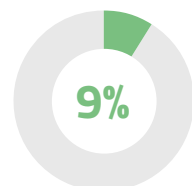
£35,591



£17,209



£15,985



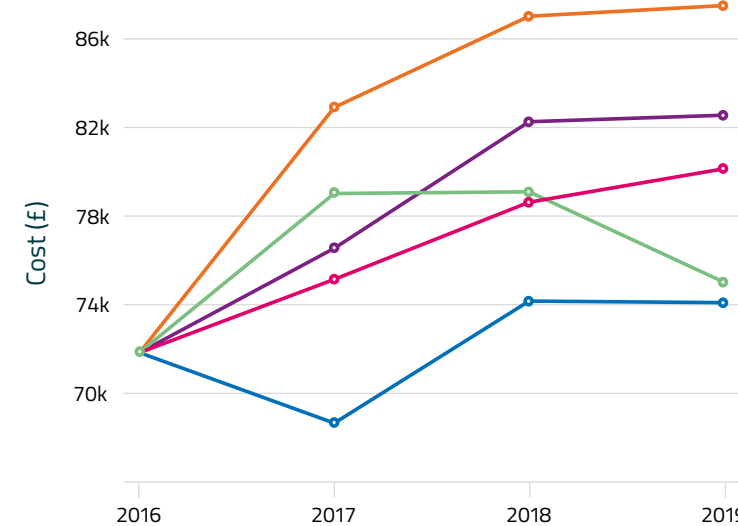
- Inaction
- Reduce overall consumption by 10%
- Shift 20% of consumption from Red bands and distribute across Amber bands
- Shift 50% of consumption from Red bands and distribute across Amber bands
- Implement an Energy Efficiency Programme over a 3-year period (5% reduction year on year)



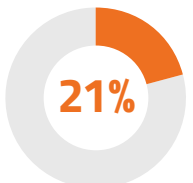
Small retail store

North Wales or Merseyside, 1 GWh annual consumption, LV in CRC

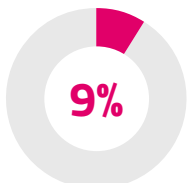
Rise after 3 years



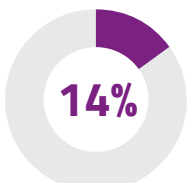
£15,486



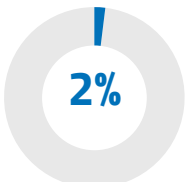
£6,649



£9,849

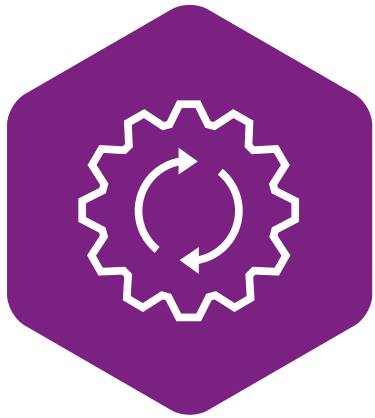


£1,127



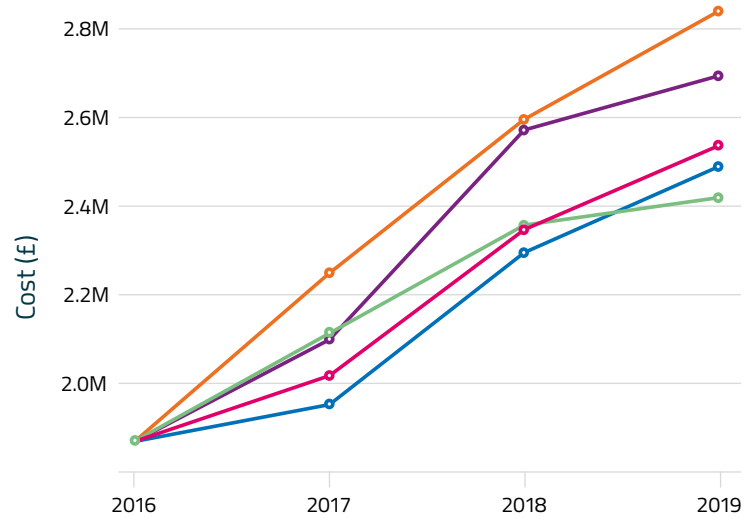
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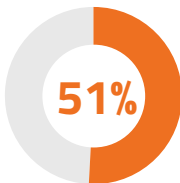
Manufacturing

Hampshire, 50 GWh annual consumption, HV, in a CCA so exempt from CRC

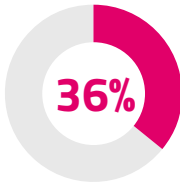


Rise after 3 years

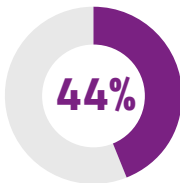
£950,057



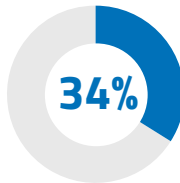
£668,347



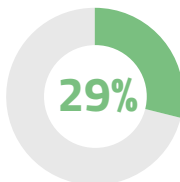
£827,131



£640,161



£548,057

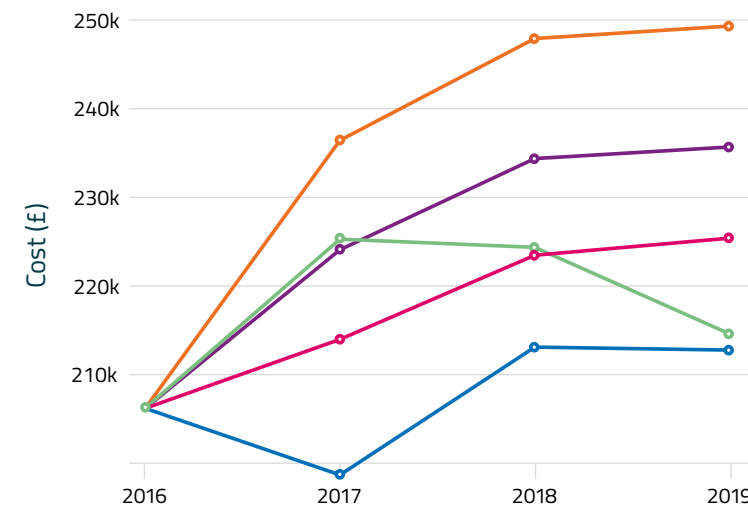


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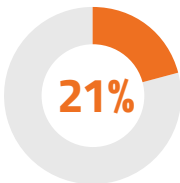
Inner-city University

North east (Leeds or York). 3 GWh annual consumption, LV in CRC

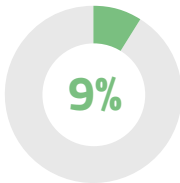


Rise after 3 years

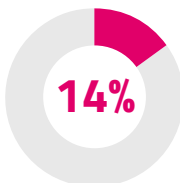
£43,501



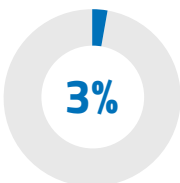
£18,507



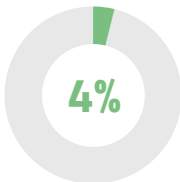
£29,299



£7,038



£7,835



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A closer look at non-commodity costs and why they are increasing

Non-commodity costs include:

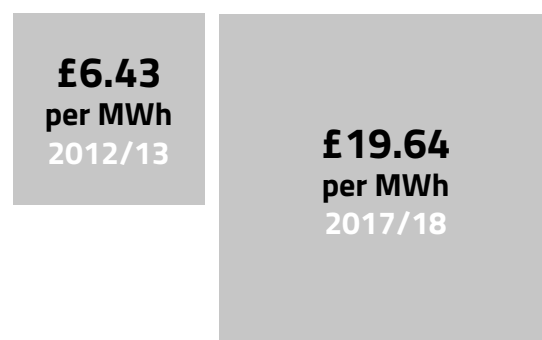
- **Renewable Obligation (RO) Levy**
- **Feed in Tariff (FiT) Levy**
- **Contracts for Difference (CfD) Levy**
- **Climate Change Levy (CCL)**
- **Carbon Reduction Commitment (CRC)**
- **Line Loss Factors (LLF)**
- **Assistance for Areas with High Electricity Distribution Costs (AAHEDC)**

Some costs go up or down depending on when you're using energy (and so it makes sense to avoid peak demand periods, particularly in the winter):

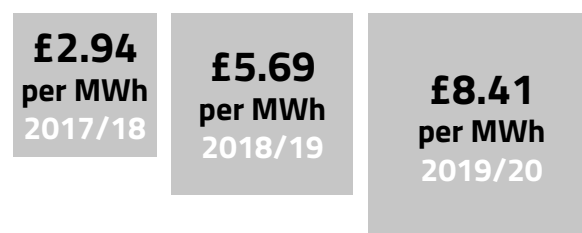
- **Transmission Network Use of System (TNUoS)** – costs will continue to rise quickly, but charges beyond 2019 are uncertain
- **Distribution Use of System (DUoS)** – from 2018/2019, Red band (peak times) charges will be reduced, but Amber and Green band charges will be increased
- **Balancing and Settlement Use of System (BSUoS)**

Many non-commodity costs are designed to subsidise the growing use of renewables, and ensure security of supply. While gas remains the fuel of choice for electricity generation, renewables have increased to 25% of total generation, and are set to steadily grow. This is of course good news for the environment and our carbon reduction commitments, and should therefore be supported – but it does mean businesses can expect to see their non-commodity costs continue to rise.

The RO Levy

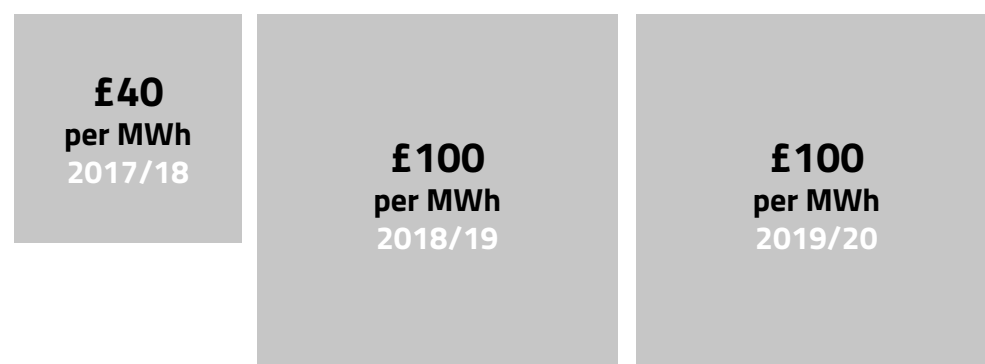


The CfD Demand Levy (designed to support large renewable projects)



Meanwhile, there's the **Capacity Market Levy** – new for 2017. The Capacity Market is a mechanism designed to control the rate of closure of power plants and to encourage new plants to be built. The scheme cost around £380 million in 2017 and will cost almost £1 billion in the following two years. However, this could rise considerably in the 2020s, when remaining coal plants start to close.

CM estimated levies for half-hourly consumption between 4-7pm on weekdays between November and February:



Take control of your non-commodity costs – take action. Implement an Energy Efficiency Programme today.

With costs increasing across the board, businesses will understandably be looking to mitigate the impact on their bottom line.

The good news is that energy is one area where savings can be made – but only if businesses take action.

Research from Inenco demonstrates that businesses cannot afford to stand still and carry on as before – and that implementing an energy management strategy will deliver significant cost savings.

While wholesale energy cost rises are beyond a business' control, there are still ways to mitigate non-commodity cost rises – remember it's the part of your energy bill that you can control.

To view the make-up of your typical energy bill going forward, including DUoS and TNUoS charges, visit Inenco's **interactive Non-Commodity Cost Dashboard**.

You can see how your business will be exposed to incremental non-commodity costs over the coming years and how your business will be impacted if you don't take action.

Search for non-commodity costs or visit www.inenco.com/non-commodity-cost



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