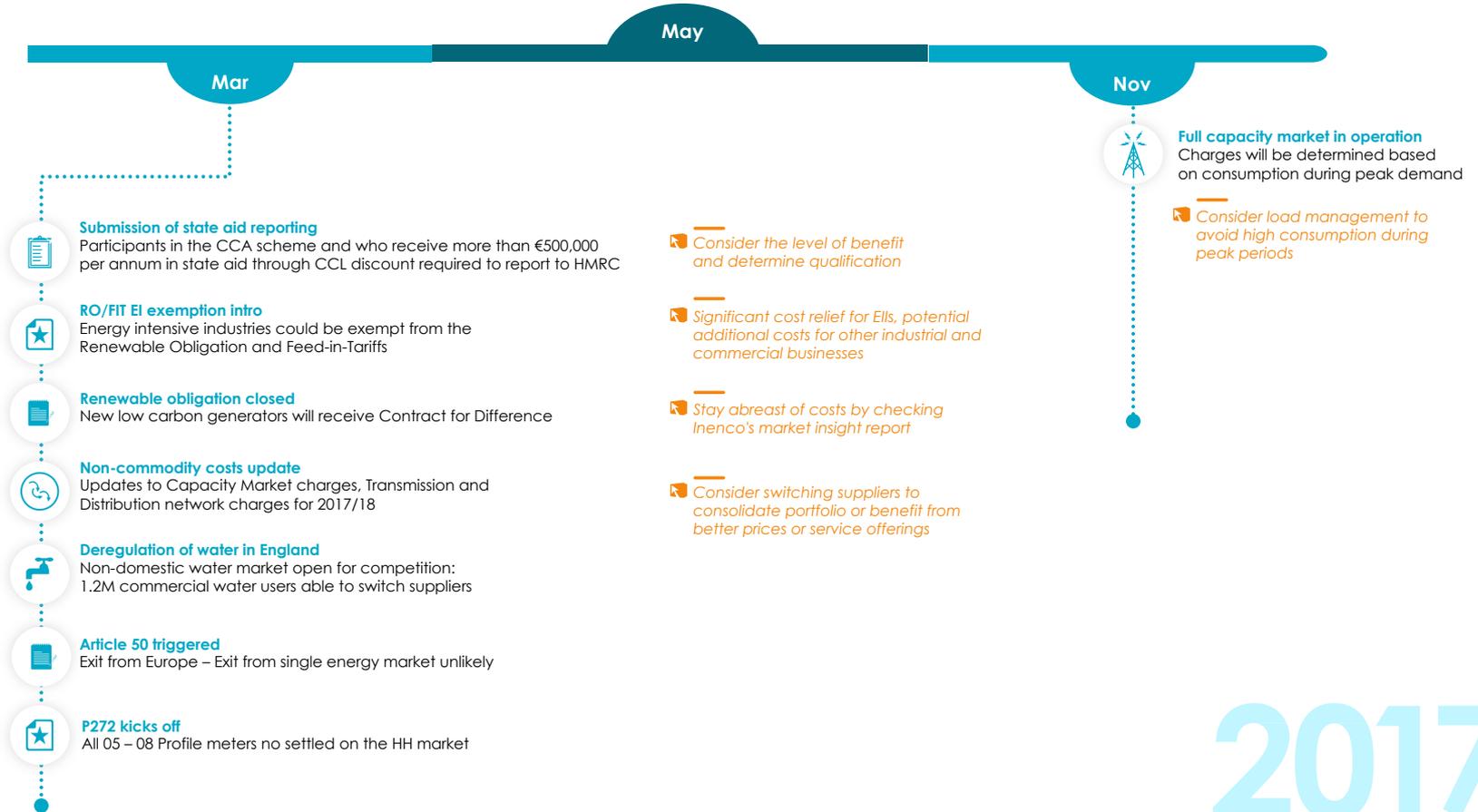


# COMPLETE ENERGY MANAGEMENT A HOLISTIC APPROACH TO MANAGING ENERGY

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# UK ENERGY COMPLIANCE AND REGULATION 2017



2017

# UK ENERGY COMPLIANCE AND REGULATION 2019

**MEES**  
MEES introduced: all property must be E-rated or above

Be prepared: take action now to make sure your properties meet the required standards

Apr

**CRC Ends**  
Ends on 31<sup>st</sup> March 2019

CRC revenue will be obtained from elsewhere in the energy sector – understand impact on business to minimise risks

Mar

**General Election**  
Latest date for General Election

May trigger changes in policy - Stay updated; Minimise negative impact whilst maximising opportunities

May

2018

Apr

Dec

**CCL costs increase**  
Climate Change Levy costs will increase to cover the costs of scrapping CRC

**Power and Gas levies rebalanced**  
CCL ratio between power and gas reduced to 2.5:1

**CCA exemption rate to increase to 95%**  
Will reflect increased cost of CCL

**ESOS phase 2 deadline**  
Second phase of ESOS

**Carbon Floor Price cap ends**  
£18/te cap on Carbon Floor Price ends on 31<sup>st</sup> March 2020

**Brexit: Britain leaves the EU?**

**ESOS Phase 2 deadline: December 2019**

Limit the impact by controlling the amount of CCL you pay

Gas intensive users – Look at the impact on business and find ways to mitigate

Check for eligibility for a CCA scheme to take advantage of exemptions and benefit from reduced carbon and consumption

Decide strategy, ESOS compliance, or ESOS avoidance through ISO50001. Ensure early adoption

Carbon floor price increase implies rise in wholesale electricity costs

2019

# BACK TO BASICS

“  
*A simple  
truism*  
”

**Total cost of energy**



=

**“Effective unit rate”**



×

**Consumption**



# A STEP FURTHER...

**Effective Unit Rate**

- Commodity Price
- Non-Commodity
- Capacity Charges

50%-55%



**Consumption**

- Generation
- Technologies
- Systems
- Metering & Sub-metering
- Behaviour



**Total Cost of Energy**



# IMPROVING ORGANISATIONAL ENERGY MANAGEMENT

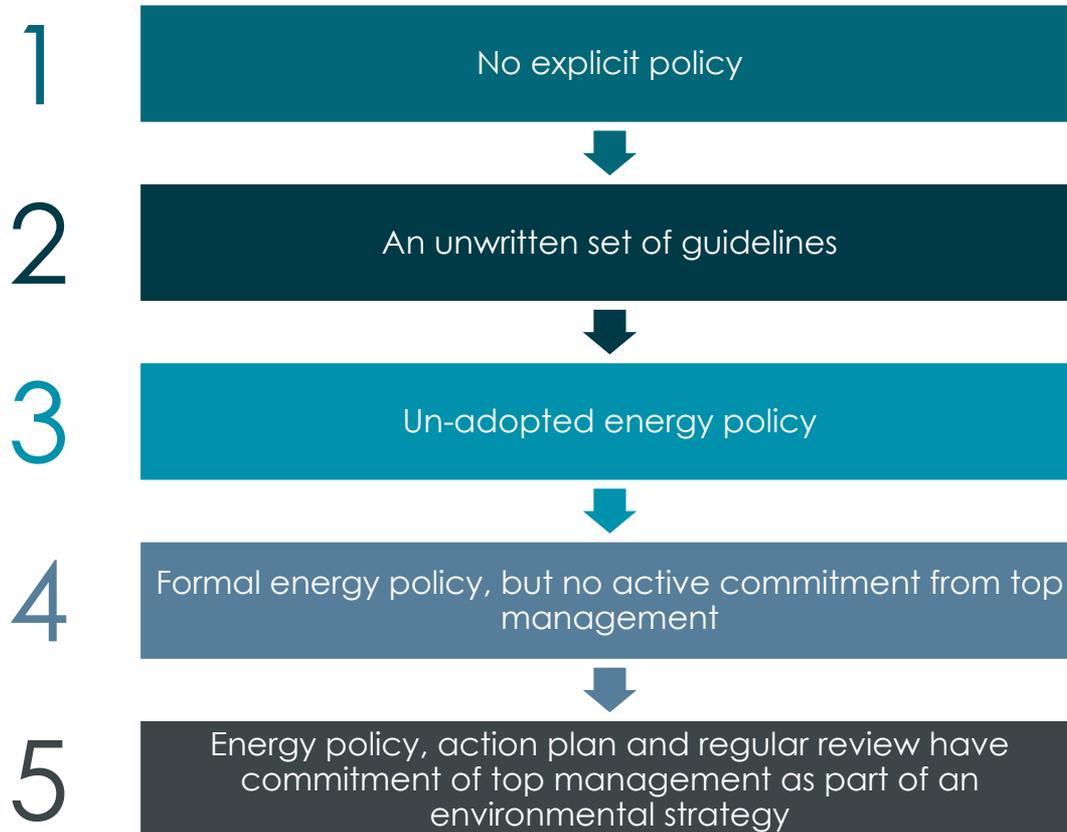
A quick guide to improving your  
energy management  
credentials

# WHERE ARE YOU NOW?

Level	Energy Policy	Organising	Training	Performance Measurement	Communicating	Investment
4	Energy policy, action plan and regular review have commitment of top management as part of an environmental strategy.	Energy management fully integrated into management structure. Clear accountability and responsibility for energy cost and consumption.	Appropriate and comprehensive staff training tailored to identified needs, with evaluation.	Comprehensive performance measurement against targets with effective management reporting.	Extensive communication of energy issues within and outside organisation.	Resources routinely committed to energy efficiency in support of business objectives.
3	Formal energy policy, but no active commitment from top management.	Energy manager accountable for cost, consumption and responsible for improvements.	Energy training targeted at major users following training needs analysis	Weekly performance measurement for each process, unit or building.	Programme of staff awareness and regular employee briefings.	Same payback criteria employed as for all other investment.
2	Un-adopted energy policy.	Energy manager in post but line management and authority are unclear.	Contact with major users through ad-hoc training.	Monthly monitoring by fuel type	Some ad-hoc staff awareness training.	Low or medium investment only if short-term payback criteria achieved.
1	An unwritten set of guidelines.	Informal, mainly focussed on energy supply.	Informal contacts between engineer and a few users	Invoice checking only.	Informal contacts used to promote energy efficiency.	Only low cost measures taken.
0	No explicit policy.	No energy management or any formal delegation of responsibility for energy consumption.	No energy related staff training.	No measurement or accounting for energy consumption.	No communication or promotion of energy efficiency or issues.	No investment in increasing energy efficiency.



# Energy policy



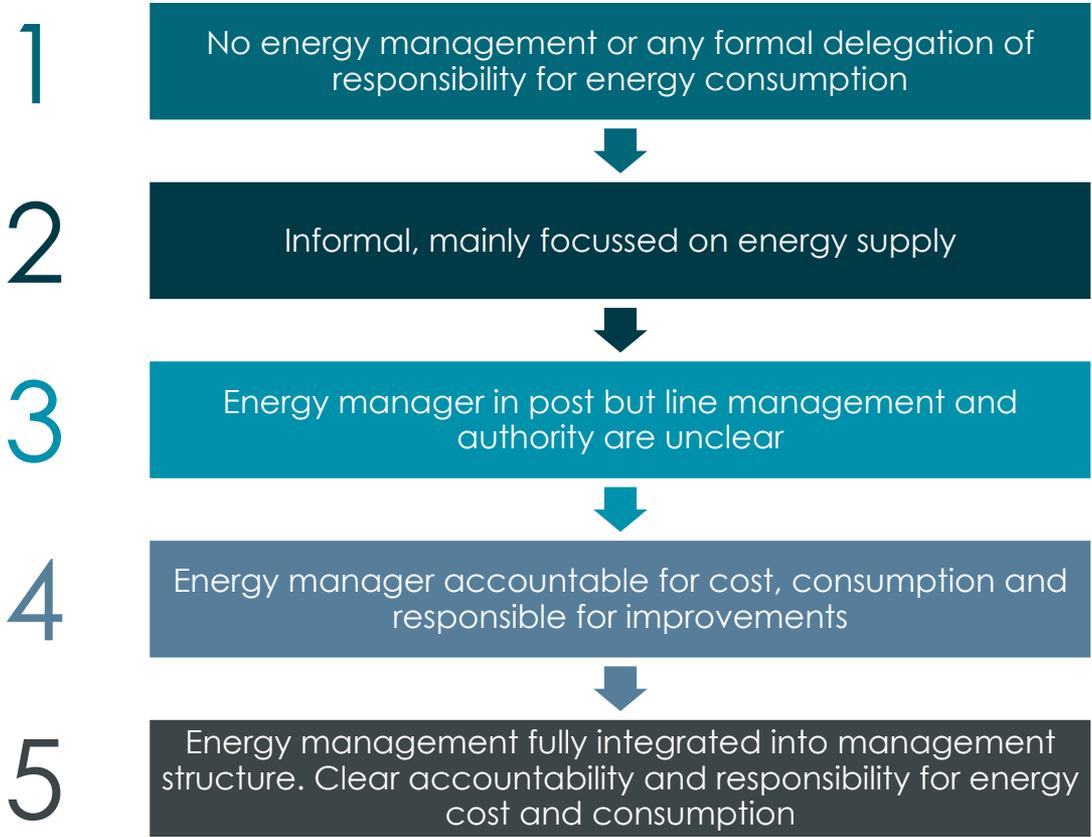
## Top Tip

**Electric Vehicles – Watch your capacity:** Whilst the incentives for Electric Vehicles are good, businesses need to watch their capacity, installing a number of 50kW charging units could impact your capacity charge, which means additional costs on the bill (along with cost of charging)

## Counter This By:

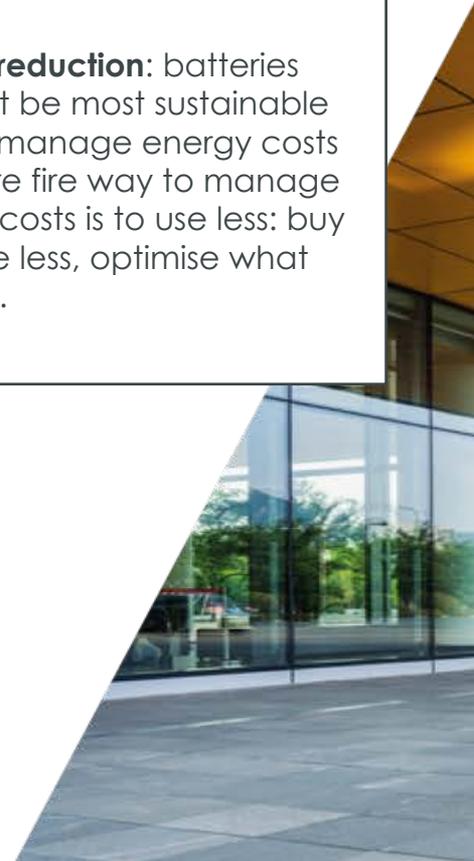
Installing LED lighting – this could reduce your capacity by 100kW, the equivalent of two charging points.

# Energy management



**Top Tip!**

**Energy reduction:** batteries may not be most sustainable way to manage energy costs  
Only sure fire way to manage energy costs is to use less: buy well, use less, optimise what you use.



# Energy training

1

No energy related staff training



2

Informal contacts between engineer and a few users



3

Contact with major users through ad-hoc training



4

Energy training targeted at major users following training needs analysis

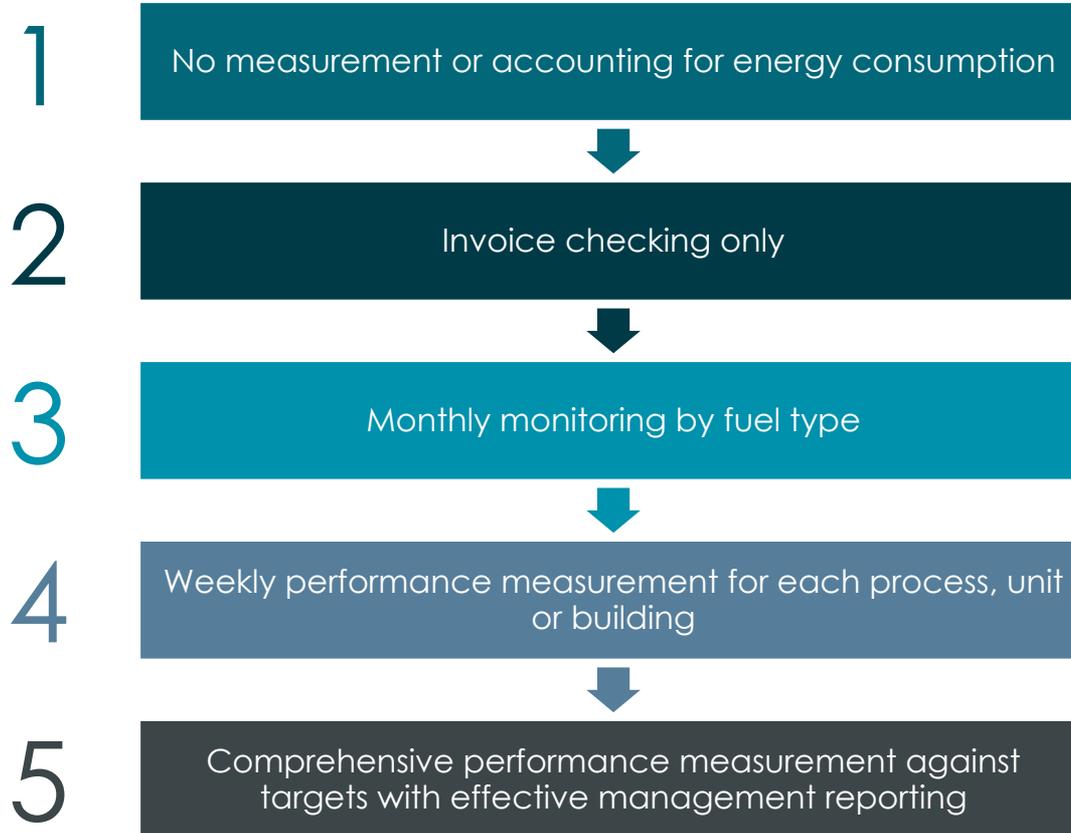


5

Appropriate and comprehensive staff training tailored to identified needs, with evaluation



# Performance Measurement

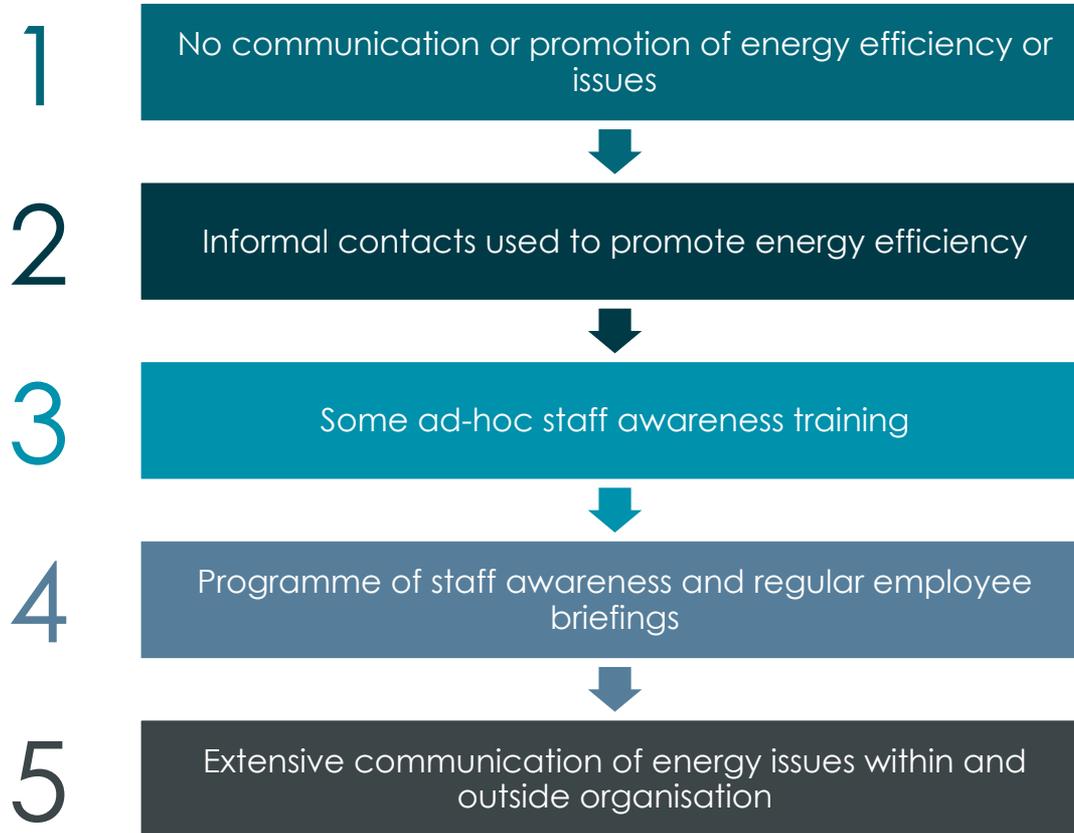


## Top Tip!

**Employ a 'Night watch':** some retailers have started to analyse their night energy consumption on a daily basis. They have a specific process:

1. Calculate the average/norm and then identify those that aren't conforming to it.
2. Within first four weeks, they alert business to which stores have unusually high consumption
3. Adjust behaviour
4. Measure significant reduction

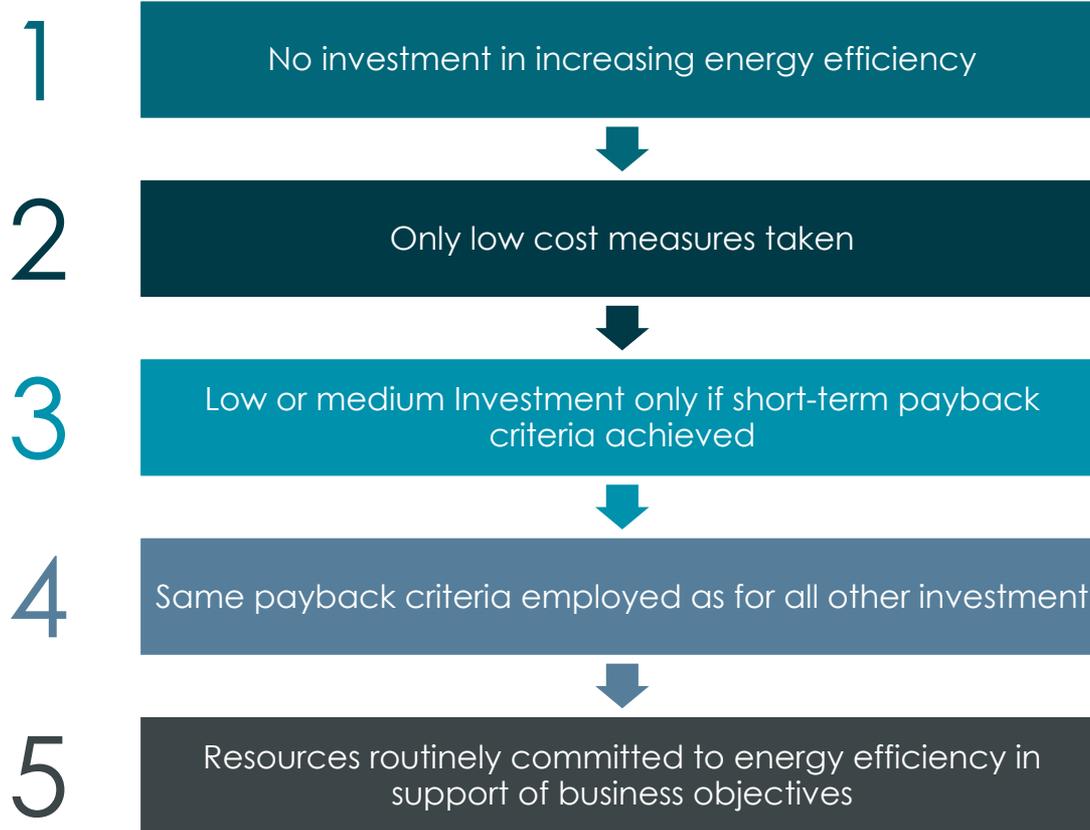
# Communicating



## Top Tip!

**Take a holistic approach:** its really important for multi-site portfolios: turning down one fridge or upgrading one store won't make huge difference for one site, but if delivered holistically, the savings become significant.

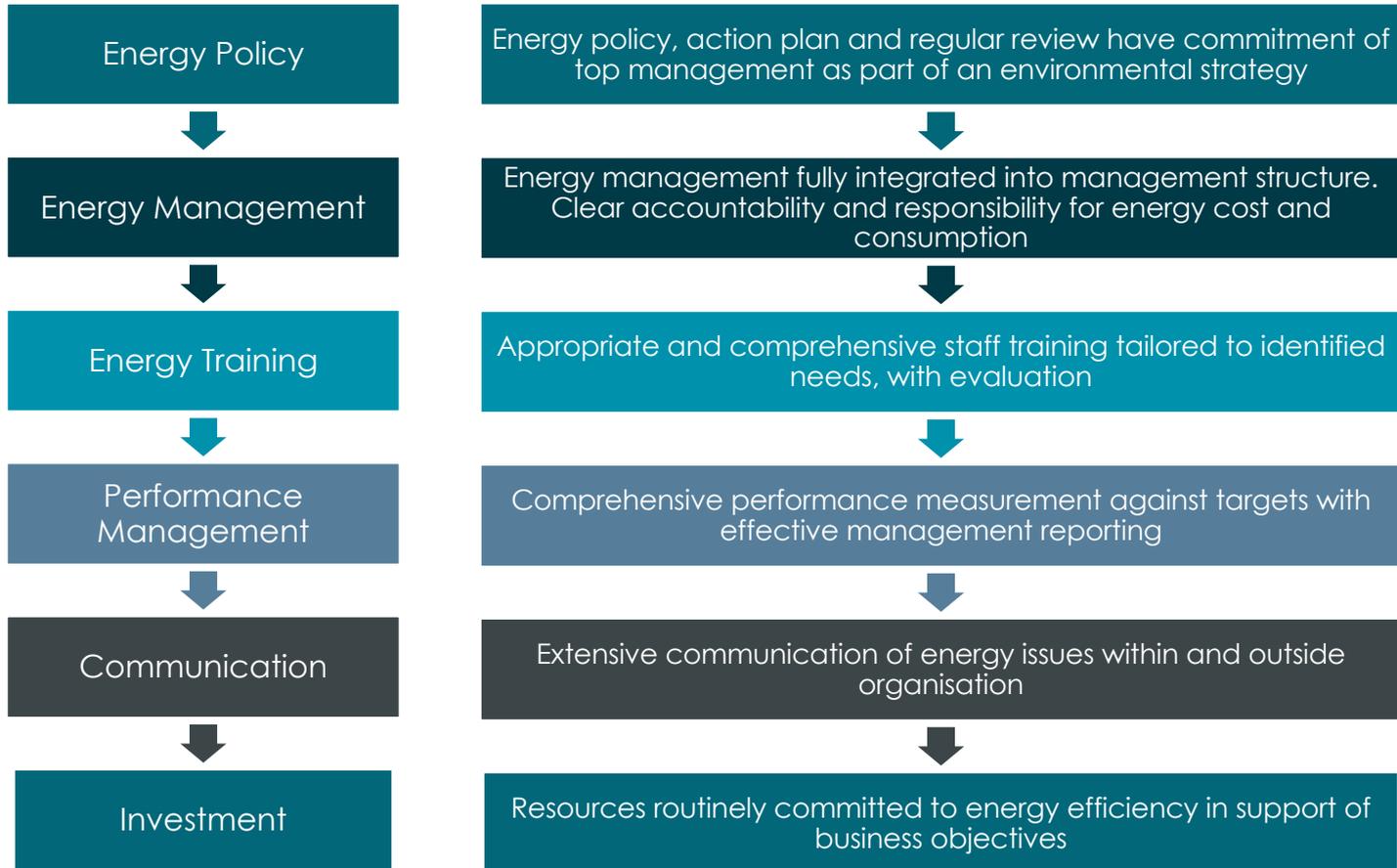
# Investment



## Top tip

**Data:** make sure you're getting the energy reduction you were expecting from measures. Data and ROI crucial – also helps to secure additional funding for future projects too (when you can prove success of previous project)

# ENERGY ACTION PLAN



Use your action plan: what steps can you take to improve your benchmarking score?

# THANK YOU

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