

Energy Management Skills and Competencies



The current period of a heightened focus on steep energy prices, climate change, organisational and national Net Zero targets and governmental strategies give energy management and associated practices a far greater urgency and exposure on nearly daily basis.

The job market for energy management professionals is following this trend, and there are many exciting roles being advertised for the professionals with the right skills and expertise. Whilst the role descriptions continue to vary, the skills required to deliver on the aims of the organisations advertising the vacancies remain similar across key energy management competencies.

Whether your role sits under sustainability, environment, engineering, facilities, maintenance or operational management, chances are that you are already competent in navigating these areas for the benefit of your employer.

How many areas of key energy management competencies are you already regularly involved in? This questionnaire will help you answer

this question and identify areas for up-skilling that could be relevant to your current or future roles.

1) Technical and operational competencies

- Do you know where energy is generally consumed in different types of buildings within your remit?
- Do you know what type of major energy using equipment and systems (incl. control systems) are used in your business?
- Do you understand how energy consumption plays a role in the design, installation and commissioning of equipment, systems and buildings?
- Do you understand how good control systems and effective maintenance can be used to make equipment and systems efficient?

2) Energy audit and assessments (finding energy savings opportunities), measurements and verification

- Do you understand energy auditing process?
- Do you know how to prepare and carry out an energy audit?
- Do you know how to write an energy report?
- Are you able to calculate energy savings and return on investment?
- Do you understand basic metering types and the data they collect?
- Do you know how to carry out basic checks on bills and other recorded data to verify accuracy and repeatability?
- Do you know how to set targets in line with guidelines or trends?
- Are you able to explain reports against targets to a range of stakeholders?
- Are you able to compare energy assessment methods?

3) Behavioural change and motivation

- Are you able to identify

behavioural changes required to improve energy performance?

- Are you able to develop structures and strategies for change of stakeholders' behaviour to improve energy performance?
- Are you able to monitor and report on progress towards defined goals?

4) Regulatory & legal compliance and carbon management

- Do you understand key UK legislation relevant to energy and climate change?
- Do you understand economic incentives that may encourage energy generation or efficiency?
- Are you able to anticipate broad changes that might affect long-term organisational plans?
- Do you understand carbon emission scopes?
- Do you know how to assess simple carbon footprint?
- Are you able to factor the cost of carbon into business cases?

5) Energy management strategy/ plan

- Do you understand global energy trends and their impact on business operations?
- Are you able to determine suitable objectives and targets for improvement?
- Do you know how to develop a basic action plan around energy, carbon and water?
- Do you understand how success can be measured and verified?

6) Waste management

- Do you understand key challenges in dealing with waste streams?

- Do you understand financial advantages and opportunities of an organisation's waste stream?
- Do you understand possible use of waste as a renewable resource via recycling?
- Do you know how to undertake a basic waste audit?

7) Procurement

- Do you understand what may drive energy prices in the UK?
- Do you understand what makes up energy tariffs?
- Are you able to carry out simple procurement actions?
- Do you have a basic understanding of basic energy contracts?

8) Transport

- Do you understand the overall use of transport and fuel efficiency within an organisation?
- Do you understand what impact transport has on organisations, and potential ways to reduce its impact?

9) Water management

- Do you know how to undertake a basic water audit in your organisation, identify water using fixtures and fittings and suggest water efficient replacements?
- Are you able to identify water efficiency within processes?
- Do you understand the links between water and energy in your workplace?
- Are you able to develop behaviour change programmes and communications for water efficiency?

10) Information technology

- Do you understand the impact of ICT on energy consumption?

- Do you understand where energy and water are used by ICT in a workplace?
- Are you able to estimate the carbon footprint of an organisation's ICT infrastructure including offsite services?



If you have answered 'yes' to most of the above questions, then you may be eligible for the EMA Recognised Energy Manager status.



If you have identified competencies where you may need up-skilling, then check out the next feature for an overview of the courses in these areas.

Whichever answer you will end up with, or if still unsure where your current skills and expertise rank, you may consider the EMA Knowledge and Skills Gap Analysis Interview which is intended to help professionals to pinpoint areas that may need development.

The Interview is a professional discussion with other energy management professionals touching upon current areas of professional knowledge, whilst (at the same time) identifying any potential gaps, and suggesting ways to fill those gaps either through learning or mentoring.

If interviewees demonstrate all the necessary knowledge and expertise during the interview, they will be awarded the EMA endorsement of the Recognised Energy Manager. If not, they will receive a verbal and written feedback on how to develop their professional career further with advice and guidance on which areas of energy management to focus on in order to up-skill.