Contractors and wholesalers – working together to deliver net zero

EDA and ECA

ECA
Excellence in Electrotechnical & Engineering Services

www.eca.co.uk

ECA Technical Team

Agenda

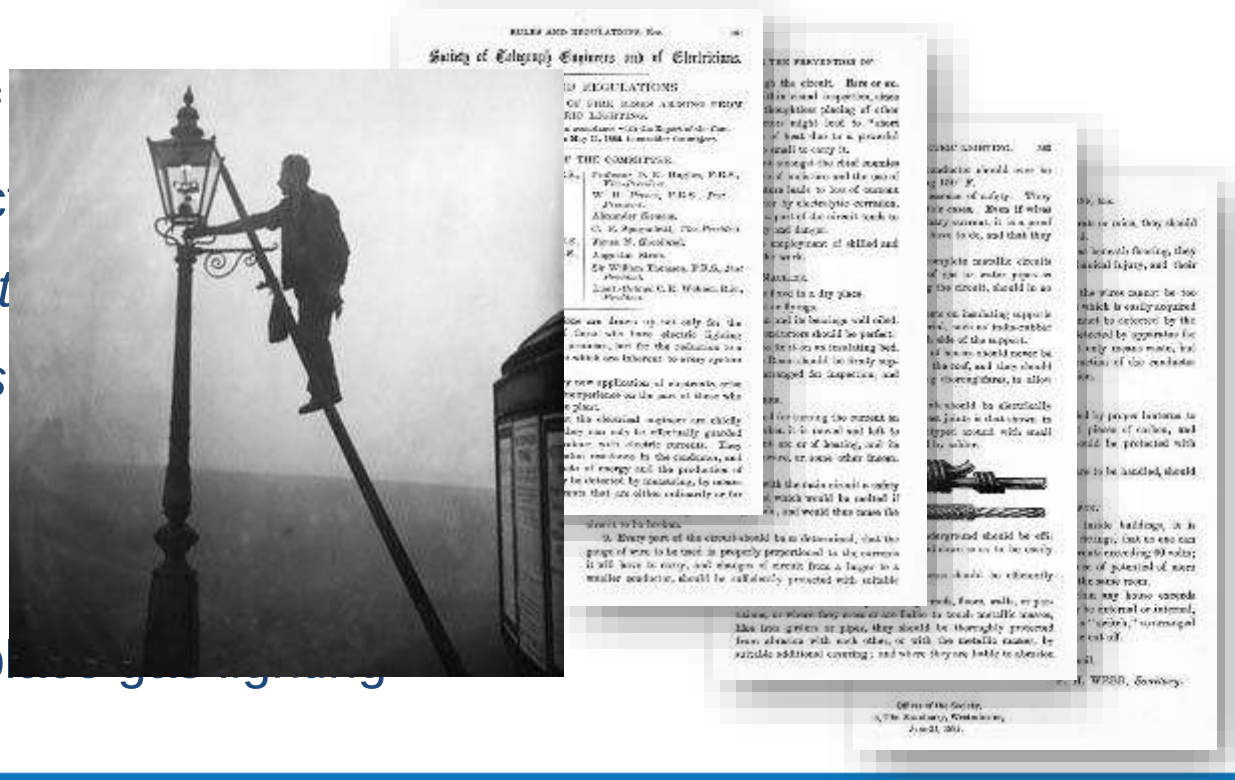
- The history of the electrical contractor
- The energy contractor
  - EV
  - PV
  - Batteries
- Upselling and awareness
- Summary
- Q&A

The birth of an industry

The history of the electrical contractor

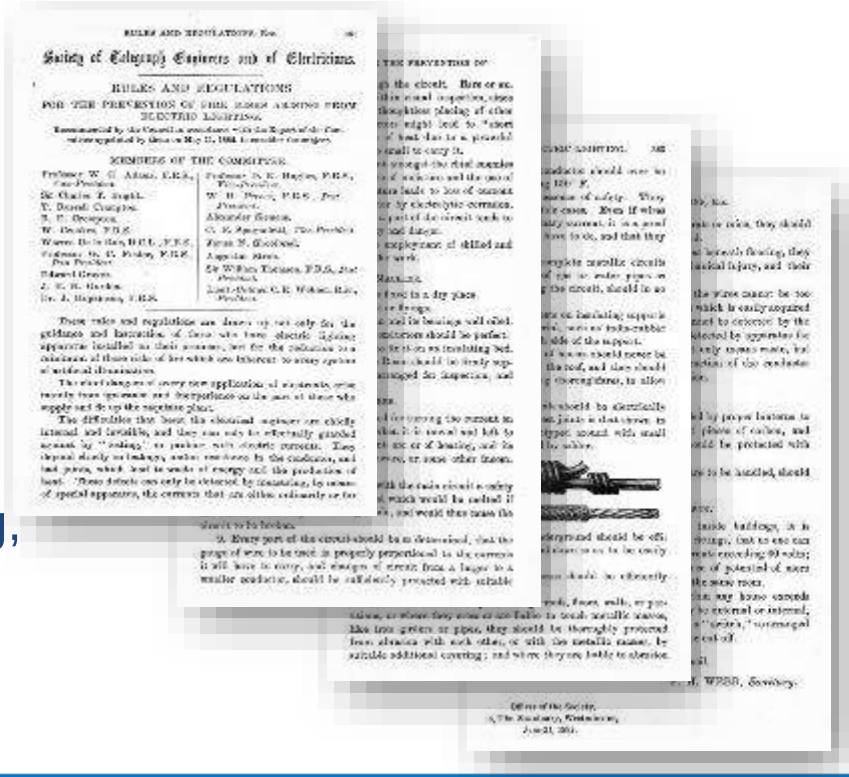
The birth of the electrical contractor

- In 1882 the Society of Engineers and of Elec the *Rules and Regulat prevention of fire risks electric lighting*
- This came about after **lighting** started to rep



The birth of the electrical contractor

- The guide developed at pace over the next 100 or so years due to increasing demand for electrical installations
- Sockets, earthing, bonding all became the norm
- Electrical contractors started diversifying, installing emergency lighting and fire alarm systems


Society of Telegraph Engineers and of Electricians.

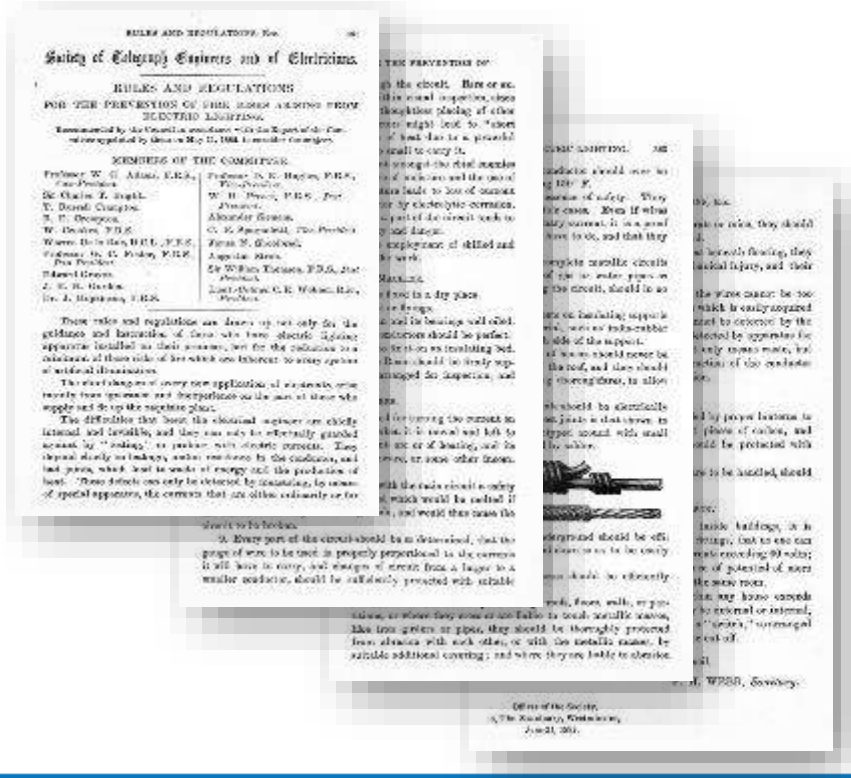
RULES AND REGULATIONS

FOR THE PREVENTION OF FIRE RISKS ARISING FROM ELECTRIC LIGHTING.

COMMITTEE OF THE COMMITTEE.

The birth of the electrical contractor

- Data, fibre optic installations, periodic testing all allowed the electrotechnical contractor the opportunity to expand their business and diversify
- Training changed, apprenticeships changed
- Soon electricians became designers, testers, metal fabricators etc.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RULES AND REGULATIONS

FOR THE PREVENTION OF FIRES ARISING FROM ELECTRIC LIGHTING.

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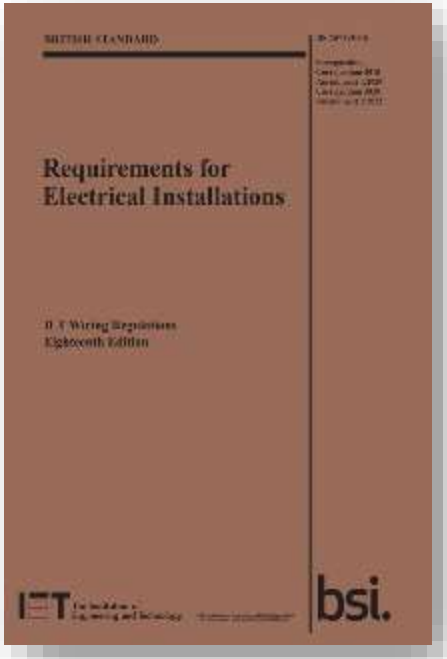
The Wiring Regulations – and its 7 usual parts?

- The Wiring Regulations, or BS 7671, developed into a document more than 600 pages long
- In 2022 a new Part 8 was introduced that brought about phrases such as prosumer and prosumers electrical installations
- These are new terms to the industry that bring big **opportunities**



The birth of a NEW industry

The energy contractor

The energy contractor

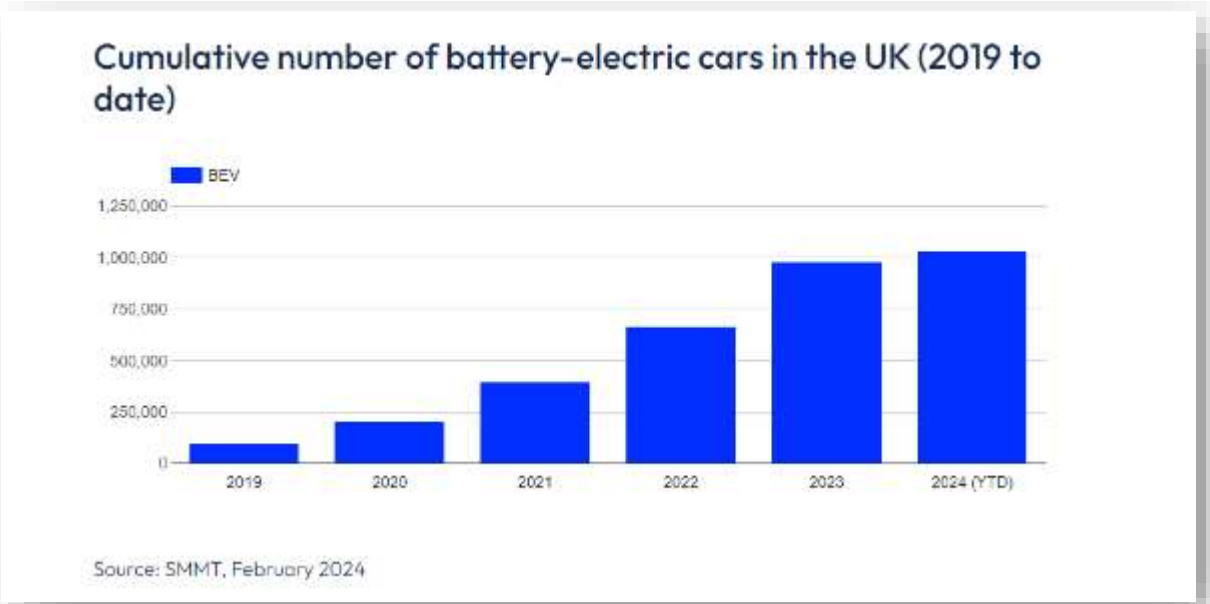
- Now we are seeing a new industry develop and grow
- The electrical contractor is changing into an energy contractor
- Buildings are changing, client demands are changing and wholesalers need to change to meet those demands
- Do you only want to sell gas lights?

The energy contractor

- The rise of the renewables industry has been rapid and is unlikely to slow any time soon
- Electric vehicle installations, solar PV and battery energy storage systems are becoming common place
- This is your opportunity to service your clients
- But don’t take my word for it…

The wave of a new industry – Electric vehicles

- Since 2019 EV sales have rocketed
- Over 1,000,000 are on UK roads
- Each need a charger plus public charge points



The wave of a new industry – Solar PV

- Since 2009 almost 1.5 million small scale PV systems have been installed in the UK with 29,000 in NI

Source:
https://mcscertified.com/

Electrical energy storage systems - EESS

- Add to this the recent developments in EESS
- This *new* technology helps to join up solar PV, EVs and can provide close to free fuel

"When a man gets on to accumulators or rechargeable batteries his inherent capacity for lying comes out"

Thomas Edison - 1908

Some hints and tips

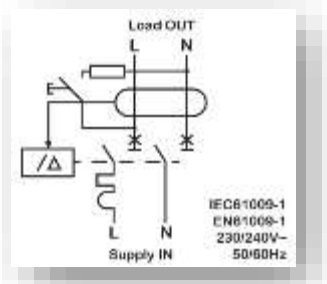
Upselling and awareness

How can you help your customers?

- Working with your customers you can help to keep them informed of changes to requirements, new technology and research
- This is an opportunity for you to work with your customers to share information and upsell
- We are all learning when it comes to renewables – so here are some easy tips

Electric vehicles– upselling and tips

- RCDs – some charge point manufacturers provide ‘digital RCDs’ in their units
- These **do not** comply with the Standards and many now state you need an additional RCD upstream
- It needs to be a specific Type
- And switch all live conductors



A Hager Type A 2 pole RCD – a compliant and reputable product

Solar PV – upselling and tips

- If installing the invertor in the loft (more on this later) then there must be a suitable smoke alarm system in the loft too*
- Protective devices must be double pole
- And should be capable of dealing with power flowing both ways
- This is known as being bi-directional, many older devices are not capable of this

*See BS 5839-6

Battery storage systems – upselling and tips

- If adding to an existing PV system, inverters have a life span of approx. 10 years so it could be cheaper to replace the existing inverter
- They SHOULD NOT be installed in lofts – if anyone is buying a battery, please make this clear*
- They are a dangerous good and should only be transported by people with appropriate training and insurances

*See PAS 63100:2024

Competence is key

- As with anything, it is vital that designers and installers are competent
- You can help by informing your customer of suitable training courses to ensure that they are up to speed with the latest rules and requirements
- Some may not know what they don't know

An example of a battery being installed in a new loft courtesy of Google Images

Competence is key

- Competence is needed by everyone, including you
- EDA can support you with their online training modules including specific ones on renewables
- Visit www.eda.org.uk for more information

Putting this together

Summing this all up

Summary

- We are on the brink of a new industry
- Your support and work is vital in the electrification of the built environment
- Ensure you understand your customers needs
- Competence is everything, including yours
- Make sure you offer the best service by staying ahead of the ever changing requirements

And finally, RenewableNI

- RenewableNI is the voice for the renewables industry in NI
- Their mission is to ensure that NI reaches its net zero requirements
- Their aim is to have clean, zero carbon energy by 2035 and have 80 % renewables by 2030
- That is just 6 years!

https://renewableni.com/

Questions?

Links

- https://pages.bsigroup.com/PAS63100:2024
- https://renewableni.com/
- https://niceic.com/for-the-trades-1/develop-your-skills/training/training-brochure/?gad_source=1&gclid=Cj0KCQjwztOwBhD7ARIsAPDKnkCSx3FC-LjUidaTm7OB4gp6VKgo4t0OxQm36zSDZXmWXY2lD57Z-ZIaAlU-EALw_wcB
- https://www.eda.org.uk/training-apprenticeships/modules/