

The EU Energy Efficiency Directive – much more than Esos

The big noise is all around Esos. But there is a lot more to the EU Energy Efficiency Directive - and the public sector has a major role to play, according to the UK Association of Energy Engineers

With UK Plc heavily focussed on the Energy Savings Opportunities Scheme (Esos)¹ at the moment which stems from Article 8 of the EU Energy Efficiency Directive there are a number of areas that appear to have been forgotten about.

- Firstly, the Directive is not just all about Article 8 (Mandatory Energy Audits) of the Directive - there are a range of energy efficiency related initiatives encompassed by the Directive (see box out) including article 3 with National energy efficiency targets each member state needs to attain (20% by 2020²).
- Secondly, although it is a European-wide Directive the UK does appear to be ahead of the game by the design and implementation of the Esos but we can do more in terms of the implementation of measures proposed.
- Thirdly, the Directive also talks about the exemplar role that the public sector can play in reducing energy consumption across the EU. "Article 5 of the Energy Efficiency Directive requires Member States either to renovate, each year from 2014 to 2020, 3% of the floor space of their central government building stock in eligible buildings that does not meet minimum energy performance standards, or to take alternative measures to achieve equivalent energy savings by 2020 in eligible buildings owned and occupied by central government." (National Energy Efficiency Action Plan (NEEAP), 2014). Public bodies are not all currently in the Esos³. So there is an opportunity here for the UK Public Sector to get involved and there is always the

1 The UK Government's transposition of Article 8 of the EU Energy Efficiency Directive.
2 Final energy consumption in 2020 of 129.2 Mtoe on a net calorific value basis for the UK.
3 Some public bodies are if there is a proportion of private sector money large enough to meet Esos criteria

Snapshot of the EU EED

showing the range of elements of the Directive that may have been forgotten about under the limelight of the Esos.

- 3 = National Energy Efficiency Targets
- 4 = Buildings Energy efficiency in end use
- 5 = Demonstrate exemplar role of public sector
- 6 = Purchasing energy efficiency in the public sector
- 7 = Obligation scheme for suppliers
- 8 = Audits and energy management systems
- 9 = metering
- 10 = Billing information
- 11 = Cost of access to billing information
- 12 = Consumer information
- 13 = Penalties
- 14 = District heating & cooling
- 15 = Efficiency in transformation, transmission and distribution
- 16 = Qualification, Certification and accreditation
- 17 = Encourage success – info and training
- 18 = Promotion of ESCOs
- 19 = Removal of Barriers
- 20 = Energy Efficiency Fund
- 21 = Review & Monitoring

option to exceed renovation targets and to exercise greater purchasing power. According to DUKES⁴, 2014, the public sector consumes about half as much energy as commercial buildings.

One of the outcries about Esos from those involved in the energy industry is that despite Director-level sign-off, there is nothing to make organisations involved in Esos implement the

4 Digest of UK Energy Statistics.



opportunities offered in the audit. Indeed, some captured by Esos have made it clear to Lead Assessors that they only want 'compliance audits' or to spend the minimum amount of money. This can lead to a false economy or money poorly spent. Anecdotally heard, some organisations actually only have 4 employees and a small office in the UK but still meet the Esos turnover thresholds due to the nature of the business. Clearly, this depends on the energy footprint of the organisation however initial thoughts are in these circumstances, what real opportunity would there be to improve on energy consumption, that will impact our national targets?

Article 3 of the Directive is about binding national energy efficiency targets, meant to focus the mind of Member State governments where failure to meet targets may be met with penalties for non-achievement. That means, if Esos doesn't cause a dent in our national targets, we may need to do 'something' else past just audits.

Some Member States have started to look at how they can incentivise opportunities under a certain payback (e.g. 2 years) to be implemented. Although this is a good idea, there needs to be careful design and thought around a) Financial recompense or a tax break to enable this b) Be mindful of the fact that it is easy to magic the numbers to be just over 2 years so careful thought needs to be applied in any scheme design c) Potentially more audits may be required

of the Lead Assessor's work around opportunity assessment.

Here, we can use experience and learning from schemes such as the Electricity Demand Reduction (EDR) Pilot and the Carbon Reduction Commitment Energy Efficiency Scheme (CRC_EES), when it was a league table with a reward savings pot of money, to help the Esos create real opportunities and achieve the National Targets.

The UK can lead by example across Europe, with some countries still appearing to have not yet quite bottomed out the equivalent versions of Esos. Organisations such as the UKAEE have an advantage of being connected into other European Chapters and working at a grass roots level to identify issues - for example any skills gaps around the training and certification, and having internationally recognised qualifications for Esos-equivalent lead assessors such as the CEM® (Certified Energy Manager) that could be applied in Europe. Creating a level playing field in the quality of lead assessors is important - including recognising where additional training may be required (such as the recent Transport Energy Audits the UKAEE hosted) but also as the Directive covers a wide range of areas such as metering, billing and district heating, UKAEE are looking to provide more courses on these subject areas and aims to provide training packages from the AEE suite of courses so there is no need to re-invent the wheel in Europe. Energy professional are encouraged to join the UKAEE at no membership cost to contribute to the development of these areas.

Finally, the Public Sector has so much to offer in terms of reducing the UK's binding national targets (more explicitly provided in NEEAP), and with the promotion of ESCOs and EPCos as well as other innovative approaches. As cash-strapped organisations, which if the forecast is right under the new Government, will only become more cash-strapped - then the Energy Performance Contracting model is one that can become attractive to the Public Sector (for those that have scope for energy consumption reduction). Procurement frameworks such as the Mayor of London's RE:FIT or SALIX funding continues to break down the barriers to investment as the model begins to expand to areas such as Scotland. Will Europe be the next stop?



Innovative approaches such as Bristol City Council's municipal energy company Bristol Energy or the Low Carbon Oxford initiative catalysed by Oxford City Council are also providing new opportunities to engage on city wide, cross sector working that will be crucial in driving down energy consumption, creating more growth

in the energy efficiency sector and ultimately addressing the broader aims of the EU EED.

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To promote the Scientific and Educational interests of those engaged in the energy industry and to foster action for sustainable development.