Power Data
ASSOCIATES

Phase out of inefficient lamp types

There is confusion in the industry, with articles contradicting each other, as to which lamps are phased out or will be phased out in the near future. Focusing on the Highway Sector and The Ecodesign for Energy-Related Products and Energy Information (Lighting Products) Regulations 2021[1] and paying due regard to preceding associated EU Directives, this document presents our interpretation of the current framework.

As a broad overview, some of the following lamps are still utilised in the highway sector across traffic signals, signs, bollards, subways, underpasses, footways and road lighting assets in the UK.

GLS (General Lighting Service) Lamps – banned 2009/2012

The GLS lamp provided artificial lighting to the world for more than a century, but 1st September 2012 saw the final phase banning this inefficient lamp.

We interpret this requirement to currently impact lamps with charge code commencing with 01. As of April 2015, PDA customers had some 2,561 GLS lamps, by April 2021 PDA customers were still reported as using 1,717 of these lamps.

Mercury Vapour Lamps – banned 2015

Due to the poor efficacy of mercury vapour lamps, April 2015 saw the coming into force of the second stage of The EU Directive – Commission Regulation (EC) No 245/2009[2]. This Directive ultimately banned mercury vapour and mercury hybrid lamps from use within the European Union, including the UK.

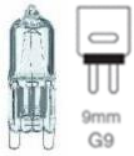
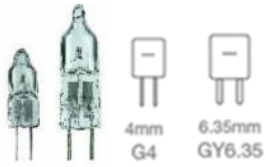
Mercury Vapour lamps		
Descriptor	**Example**	**Phase Out Date**
Lamps with an internal phosphor coating MBF (HPL-N, HQL)		April 2015
Lamps with an internal reflector coating MBFR (HPL-R, HQL-R)		April 2015
Lamps have a tungsten filament in series with the mercury discharge tube MBTF (ML, HWL)		April 2015

We interpret this requirement to currently impact mercury vapour lamps with charge codes commencing with 21 & 23. As of April 2015, PDA customers had some 30,437 mercury blended lamps, by April 2021 PDA customers were still reported as using 16,562 of these lamps.

[1] www.legislation.gov.uk/ukdsi/2021/9780348225488
[2] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:076:0017:0044:en:PDF

Halogen and Fluorescent Lamps – banned 2021/2023

The new Regulations will phase out the least efficient products (light source / lamp) that fail to meet stated requirements and reflects what the UK agreed when it was an EU Member State in December 2018. We interpret that the affected products to be phased out are:

Halogen lamps		
Descriptor	**Example**	**Phase Out Date**
Low voltage reflector lamps MR11/GU4, MR16/GU5.3, R111/GU10		September 2021
Mains voltage linear lamps R7 >2,700 lm		September 2021
Mains voltage non-directional capsule lamps G9		September 2023
Low voltage non-directional capsule lamps G4, GY6.35		September 2023

It is not possible for us to exactly differentiate the number of these banned lamps from other halogen lamps due to some of the caveats in the legislation, but as of April 2021 PDA customers were still report as using 1,618 halogen lamps (excl. traffic signals) with charge codes commencing 03.

FLUORESCENT LAMPS		
Descriptor	**Example**	**Phase Out Date**
Compact fluorescent lamps (CFLi) with integral ballast		September 2021
T12 – linear fluorescent lamps		September 2021
T8 – linear fluorescent lamps 600mm, 1200mm, 1500mm		September 2023

It is not possible for us to differentiate the number of these banned lamps due to different fluorescent types within multiple charge codes and to state a number of banned fluorescent lamps still being reported by customers would be misleading. Customers will need to analyse their detailed inventories to identify assets with banned fluorescent lamp types.

Observations

There are several exemptions from the new Regulation relating to specialist lamps and applications, such as: halogen R7's <2,700 lm, fluorescent T5's, HID and luminaires with fixed/non-replaceable lamps.

Even though HID lamps are an exemption and not identified as being phased out, it is expected and worth noting:

- Low pressure sodium (LPS) will not continue as they will not meet the chromaticity requirements.
- High pressure sodium (HPS) and Metal halide (MH) are likely to be naturally phased out due to the improved functionality, reduced cost and energy efficiencies associated with LED.

Considerations

For those organisations responsible for the maintenance of light sources we recommend that you:

- Utilise the Inventory Overview and Inventory tabs in your PDA Monthly Report to quantify lamps of concern
- Strengthen the identification of all assets with lamps affected by the legislation by analysing your detailed inventory
- Identify a suitable alternative
- Implement a replacement programme
- Update asset management inventories
- Submit updated inventories to reflect the removed or replaced equipment

It is important to update the inventory regularly to reflect replacement (or removed) lamps as the replacements normally show a reduced energy consumption and consequential cost.

It is highly recommended that customers keep an updated and accurate detailed inventory, submitting this on a regular basis to your UMSO.

For further information contact UMS@PowerDataAssociates.com or 01525 601201.

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