

West Yorkshire Low Emission Procurement Guidance

Vehicle / Transport Procurement

This note provides guidance on the procurement of low emission vehicles and transport services in order to meet the Council's duties with regards to improving local air quality and compliance with the EU Clean Vehicles Directive 2009.

Public sector authorities have an obligation under the Clean Vehicles Directive to use its purchasing power to promote the uptake of clean and energy efficient vehicles. When the public sector either buy or lease a vehicle, they must take into account energy consumption, CO₂ emissions and pollutant emissions over the whole lifetime of vehicles. The Clean Vehicle Directive is enacted in England, Wales and Northern Ireland by the Cleaner Road Transport Vehicles Regulations 2011. The Regulations state that any public sector contracting authority, entity or operator when purchasing or leasing road transport vehicles must take into account the operational lifetime energy and environmental impacts, in respect of vehicles purchased or leased, including:

- Energy consumption.
- Carbon Dioxide emissions.
- Emissions of Oxides of Nitrogen, Hydrocarbons and Particulate Matter.
- Noise can also be taken into account.

To satisfy the requirements of the Regulations, one of 3 options must be chosen:

1. The technical specification for energy and environmental performance is set out in the documentation for the purchase and leasing of road transport vehicles or services.
2. Energy and environmental performance is included as part of the contract award criteria.
3. A monetised whole-life cost assessment, including the damage cost of lifetime emissions, is carried out as part of the tender evaluation.

Therefore to carry out any vehicle or transport service procurement, one of these three options **MUST** be included in the procurement process. The following section provides basic guidance on how to include these options in the procurement process:

Low emission vehicle specifications and award criteria.

Table 1 below provides criteria that should be used for providing specifications or using award criteria, and are based on the Government

Buying Standards for Transport¹. These three sets of criteria should be used as follows:

- Minimum standards – these are the minimum standards that are expected to be used for procuring vehicles or services. They form the minimum specification standards or minimum award criteria.
- Best Practice – provide more stringent standards that can be used for specifications or enhanced award criteria.
- Other considerations – provide additional elements that could be used for specifications or within award criteria.

Table 1: Vehicle Emissions Standards to be used in Specifications

| Vehicle Type | Minimum standard | Best Practice | Other considerations |
|----------------------------|---|---|---|
| Cars | CO ₂ - 130g/km or less Emissions – Euro 5 | CO ₂ – 100g/km or less Emissions – Euro 6 or better (e.g zero emission) | Use of renewable fuels – e.g. bio fuels, renewable electricity. Telematics to support fuel efficient driving. |
| Vans | CO ₂ - 175g/km or less Emissions – Euro 5 | CO ₂ – 150g/km or less Emissions – Euro 6 or better (e.g zero emission) | Use of renewable fuels – e.g. bio fuels, renewable electricity Telematics to support fuel efficient driving. |
| Heavy duty vehicles | Emissions – Euro V | Emissions – Euro VI or better | Use of renewable fuels – e.g. bio fuels, renewable electricity Telematics to support fuel efficient driving. |
| Waste collections vehicles | Emissions – Euro IV or equivalent retrofit | Emissions – Euro VI or better (e.g zero emission), or equivalent retrofit | Use of renewable fuels – e.g. bio fuels, renewable electricity Telematics to support fuel efficient driving. Monitoring and targets for CO ₂ , NO _x and PM emissions. |
| Bus services | Emissions – Euro IV or equivalent retrofit | Emissions – Euro VI or better (e.g zero emission), or equivalent retrofit | Use of renewable fuels – e.g. bio fuels, renewable electricity Telematics to support fuel efficient driving. Monitoring and targets for CO ₂ , NO _x and PM emissions. |

¹ <https://www.gov.uk/government/publications/sustainable-procurement-the-gbs-for-transport-vehicles>

Whole life costing

The alternative to using set specification and award criteria is to carry out a whole life cost assessment as part of the tender or contract evaluation process. This should form the cost element of the tender evaluation process and should be calculated for the full vehicle or contract life including:

| Vehicles | Services |
|--|--|
| <ul style="list-style-type: none">• Capital cost• Running costs including fuel consumption, maintenance, taxes• Re-sale value• Damage costs | <ul style="list-style-type: none">• Full contract costs• Damage costs |

In order to calculate vehicle **running costs** the supplier will need to provide vehicle fuel consumption data and expected annual maintenance costs. This can then be combined with mileage data and fuel cost data to provide total lifetime running costs.

To calculate **damage costs** the total emissions generated by the vehicle or service need to be calculated over the over lifetime of the vehicle or service. A methodology for monetising damage costs is provided in Article 6 of the Clean Vehicle Directive.

Using emissions performance data provided by the supplier (in terms of g/km or g/KW/hr), combined with mileage data;

Using emission calculation tools are available, such as:

- a. The DEFRA emission factor toolkit - <http://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html>

Or

- b. The EU have created an online tool for calculating whole life costs - http://ec.europa.eu/transport/themes/urban/vehicles/directive/clean_vehicle_portal_en.htm

These emission results can then be monetised using factors in Table 2 below to give the whole life cost of the vehicle or service, accounting for the damage costs associated with its emissions.

Table 2 Damage cost data (based on 2007 prices)

| Carbon Dioxide (CO₂) | Oxide of Nitrogen (NO_x) | Non-Methyl Hydrocarbons (NMHC) | Particulate Matter |
|--|---|---------------------------------------|---------------------------|
| 0.03 - 0.04 Eur/kg | 0.0044 Eur/g | 0.001 Eur/g | 0.087 Eur/g |

The above damage costs are then used towards calculating and comparing the relative whole life costs of vehicles / services.

Procurement of Goods and Services – Emissions Criteria

Under the Public Services (Social Value) Act 2012 public authorities must take into consideration “social value” when procuring goods and services. This means that environmental considerations, including emissions standards, can be incorporated into the scoring criteria when awarding contracts, where it is relevant and appropriate to do so. In order to incentivise potential suppliers to improve their environmental credentials and contribute to overall emission reductions an Emissions Scoring Criteria (Table 3) has been developed in order to assess relative environmental (emissions) performance. This scoring system can then be used to support the quality score when awarding contracts.

Table3: Emissions Scoring Criteria

| Score | Emissions Scoring Criteria | |
|-------|----------------------------|---|
| 5 | Excellent answer | Can evidence vehicle emission reduction activity, considering NOx, NO2, PM & CO2, and, using reasonable endeavours, will use vehicles (including NRMM) that comply with the latest European Emission Standard (Euro Standard) and include some vehicles that are classified as low or ultra-low emission vehicles to deliver the contract |
| 4 | Good answer | Can evidence vehicle emission reduction activity, considering NOx, NO2, PM & CO2, and, using reasonable endeavours, will use vehicles (including NRMM) that comply with the latest Euro Standard to deliver the contract |
| 3 | Acceptable answer | Can evidence vehicle emission reduction activity, considering NOx, NO2, PM & CO2, and, using reasonable endeavours, will use a mix of vehicles (including NRMM), some that comply with the latest Euro Standard with the remainder complying with the previous Euro Standard, to deliver the contract |
| 2 | Poor answer | Can provide a commitment to vehicle emission standards for NOx, NO2, PM & CO2 (including NRMM) but may fall below the current or previous Euro Standard to deliver the contract |
| 1 | Very poor answer | Information may be provided but cannot commit to a reasonable vehicle emission standard to deliver the contract |
| 0 | No answer given | No information provided |