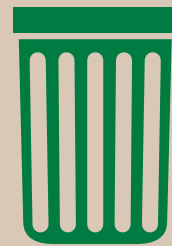


Transport for London

Environment Report – Data tables

2008



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> Energy consumption by mode and source

| Mode or business unit | Total energy consumption (million kWh) | | | Energy source (%) | | | Notes |
|----------------------------|--|---------|---------|---|--|--|---|
| | 2005/06 | 2006/07 | 2007/08 | 2005/06 | 2006/07 | 2007/08 | |
| LU | 1,221 | 1,221 | 1,226 | Grid supplied electricity (80%), green tariff electricity (14%), natural gas (6%) | Grid supplied electricity (78%), green tariff electricity (14%), natural gas (5.7%), diesel (1.6%), petrol (0.4%), LPG (0.1%), fuel oil (0.2%) | Grid supplied electricity (78.8%), green tariff electricity (14.9%), natural gas (5.2%), diesel (0.7%), petrol (0.2%), fuel oil (0.2%), | Includes traction, stations, depots, support fleet, contractor vehicles and LU's back-up power station Fuel consumption by the support fleet and contractor vehicles was first reported in 2006/07 |
| London bus network | 2,349 | 2,392 | 2,473 | Diesel (99.7%), grid supplied electricity (0.006%), green tariff electricity (0.2%), LPG (0.02%), natural gas (0.1%), petrol (0.005%) | Diesel (95.77%), biodiesel (3.72%), grid supplied electricity (0.32%), green tariff electricity (0.13%), LPG (0.04%), natural gas (0.01%) | Diesel (95.72%), biodiesel (3.73%), grid supplied electricity (0.33%), green tariff electricity (0.16%), natural gas (0.01%), petrol (0.03%), on-site renewables (0.01%) | Includes London Buses, support fleet, bus stops, stations, road-side ticketing machines and shelters. For the 2007/08 report, emission factors are fleet weighted so are more accurate |
| Bus permits and agreements | 77 | 85 | 95 | Diesel (100%) | Diesel (100%) | Diesel (100%) | Includes the impacts of coaches with London Service Permits, for the portion of their journeys that take place in London. Also includes buses operating under London Local Service Agreements |
| London Trams | 11 | 11 | 11 | Grid supplied electricity (82.3%), green tariff electricity (14.5%), natural gas (3.2%) | Grid supplied electricity (97.2%), natural gas (2.8%) | Grid supplied electricity (97.2%), natural gas (2.8%) | Includes traction, stops and depot. 2007/08 figures are estimated |
| Taxis | 903 | 921 | 949 | Diesel (100%) | Diesel (100%) | Diesel (100%) | |
| Private hire vehicles | 935 | 969 | 967 | Diesel (55.5%), petrol (44.5%) | Diesel (60.28%), petrol (39.7%), LPG (0.02%) | Diesel (60.25%), petrol (39.72%), LPG (0.03%) | |
| Dial-a-Ride | 10 | 11 | 12 | Diesel (88.6%), grid supplied electricity (7.1%), natural gas (4.3%) | Diesel (89.5%), grid supplied electricity (6.7%), natural gas (3.8%) | Diesel (90.5%), grid supplied electricity (5.6%), natural gas (3.9%) | Includes vehicle fuel and depots |

> Energy consumption by mode and source (continued)

| | | | | | | | |
|--|-----|-----|-----|--|---|---|---|
| LRS | 49 | 45 | 49 | Marine diesel (98.9%), grid supplied electricity (0.4%), green tariff electricity (0.7%) | Marine diesel (96.5%), grid supplied electricity (1%), green tariff electricity (2.5%) | Marine diesel (97.2%), grid supplied electricity (1%), green tariff electricity (1.1%), natural gas (0.7%) | Includes fuel for boats using LRS piers and electricity used for piers |
| VCS | 1.8 | 1.6 | 1.6 | Grid supplied electricity (40.2%), green tariff electricity (28.3%), natural gas (31.5%) | Grid supplied electricity (30.5%), green tariff electricity (43%), natural gas (26.5%) | Green tariff electricity (68%), natural gas (32%) | Only includes energy for operating the building, does not include coaches travelling to or from it (see bus permits and agreements) |
| London Streets | 73 | 92 | 98 | Grid supplied electricity (17.6%), CHP electricity (24.4%), green tariff electricity (56.6%), diesel (0.5%), petrol (0.7%), LPG (0.2%) | CHP electricity (39.9%), green tariff electricity (55.3%), diesel (4%), petrol (0.5%), LPG (0.3%) | Green tariff electricity (90.1%), diesel (9.23%), petrol (0.55%), LPG (0.14%) | Includes street lighting, traffic signals, support fleet and some contractors. Contractor vehicles did not report fuel consumption in 2005/06 |
| London Overground | - | - | 22 | | | Grid supplied electricity (52.8%), natural gas (38.3%) diesel (0.9%) | Includes traction, stations and depots. Diesel consumption for Gospel Oak - Barking line services |
| Community Safety, Enforcement and Policing | - | 0.4 | 0.3 | | Diesel (27.6%), petrol (61.8%), LPG (10.6%) | Diesel (30%), petrol (70%), | TPED was included in London Streets data for 2005/06 |
| DLR | 51 | 45 | 48 | Grid supplied electricity (88.2%), natural gas (11.8%) | Grid supplied electricity (93.8%), natural gas (6.2%) | Grid supplied electricity (92%), natural gas (8%) | Includes traction, stations and depots. Electricity consumption was estimated for 2005/06 |
| Head office buildings | 59 | 53 | 53 | Grid supplied electricity (3.6%), green tariff electricity (54.6%), natural gas (41.8%) | Grid supplied electricity (4.7%), green tariff electricity (58.7%), natural gas (36.5%) petrol (0.05%), LPG (0.05%) | Grid supplied electricity (6.3%), green tariff electricity (57.8%), natural gas (35.7%), LPG (0.1%), on-site renewables (0.02%) | Includes buildings and fuel for support vehicles. Support vehicles were not reported on in 2005/06 |
| New capital works | - | - | 11 | - | - | Grid supplied electricity (2.21%), diesel (97.48%), petrol (0.3%) | Includes construction works associated with the ELL extension |

> CO₂ emissions by mode

| Mode or business unit | Total CO ₂ emissions (tonnes) | | | Notes |
|--|--|---------|---------|--|
| | 2005/06 | 2006/07 | 2007/08 | |
| LU | 628,474 | 624,048 | 632,090 | Includes emissions associated with traction, stations, depots, support fleet, contractor vehicles and back-up power station |
| London bus network | 618,881 | 622,558 | 643,878 | Includes emissions from London Buses, support fleet, stations, bus stops, ticketing machines and shelters |
| Bus permits and agreements | 20,313 | 22,353 | 24,998 | Includes emissions from coaches with London Service Permits, for the portion of their journeys that take place in London. Also includes emissions from buses operating under London Local Service Agreements |
| London Trams | 5,656 | 5,534 | 5,534 | Includes emissions associated with traction, stops and depot. 2007/08 figures are estimated |
| Taxis | 237,442 | 242,165 | 249,496 | |
| Private hire vehicles | 241,871 | 251,083 | 250,393 | |
| Dial-a-Ride | 2,872 | 3,115 | 3,314 | Includes emissions from vehicles and depots |
| LRS | 13,108 | 12,206 | 13,312 | Includes emissions from LRS piers and boats that use them |
| VCS | 775 | 667 | 670 | Only includes emissions from operating the building, does not include coaches travelling to or from it |
| London Streets | 34,842 | 39,649 | 49,926 | Includes street lighting, traffic signals and vehicles run by London Streets employees and some contractors. Contractors did not report emissions in 2005/06 |
| London Overground | - | - | 8,165 | Includes emissions from traction, stations and depots |
| Community Safety, Enforcement and Policing | - | 97 | 65 | TPED was included in London Streets data for 2005/06 |
| DLR | 25,275 | 23,263 | 24,495 | Includes emissions associated with traction, stations and depots |
| Head office buildings | 22,812 | 21,539 | 21,747 | Includes emissions associated with buildings and support vehicles. Support vehicles were not reported on in 2005/06 |
| New capital works | | | 2,912 | Includes construction works associated with the ELL extension |
| Grey fleet | | | 80 | Grey fleet refers to business miles travelled by employees in their own cars |

Note: CO₂ emissions from electricity use (renewable and non-renewable) were calculated using Government guidance (July 2008).

> NO_x and PM₁₀ emissions by mode

| Mode or business unit | Total emissions (tonnes) | | | | | | Notes |
|--|--------------------------|------------|------------|------------------|------------|------------|--|
| | NO _x | | | PM ₁₀ | | | |
| | 2005/06 | 2006/07 | 2007/08 | 2005/06 | 2006/07 | 2007/08 | |
| LU | 29.3 | 7.22 | 8.00 | 1.06 | 0 | 0 | Includes back-up power station only. Emissions from support fleet and contractor vehicles were included for 2005/06 only |
| London bus network | 6,356 | 6,293 | 6,288 | 12 | 11 | 12 | |
| Bus permits and agreements | 123 | 137 | 146 | 3 | 2 | 2 | Includes emissions from coaches with London Service Permits, for the portion of their journeys that take place in London. Also includes emissions from buses operating under London Local Service Agreements |
| London Trams | 0.07 | 0.06 | 0.06 | 0.001 | 0.001 | 0.001 | Includes emissions from boilers in the depot. 2007/08 figures are estimated |
| Taxis | 854 | 722 | 698 | 89 | 74 | 51 | |
| Private hire vehicles | 711 | 651 | 635 | 49 | 45 | 44 | |
| Dial-a-Ride | 36 | 36 | 37 | 1 | 1 | 1 | Includes emissions from Dial-a-Ride vehicles and boilers in depots |
| LRS | 298 | 265 | 295 | 32 | 29 | 32 | Includes emissions from boats using LRS piers |
| VCS | 0.11 | 0.1 | 0.11 | 0.02 | 0 | 0 | Includes emissions from boilers in the building, does not include coaches travelling to or from it |
| London Streets | 4.31 | - | - | 0.27 | - | - | Includes emissions from support fleet. Emissions were not reported for 2006/07 |
| London Overground | - | - | 17 | - | - | 0.46 | Emissions from electric traction, diesel traction and non-traction uses |
| Community Safety, Enforcement and Policing | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | |
| DLR | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | |
| Head office buildings | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | |
| New capital works | - | - | - | - | - | - | |

Note: Emission factors for NO_x and PM₁₀ from buses are derived using the Millbrook test cycle, for London operating conditions. For other sources of air pollution, emission factors are extracted from the National Atmospheric Emissions Inventory (www.naei.org.uk). Although CO₂ emissions associated with the generation of electricity used by TfL are included in this report, NO_x and PM₁₀ emissions from electricity generation are not included as the significance of air pollution is highly dependent on source location.

> Built environment quality indicators

| Mode or business unit | KPI | Score | | | Notes |
|--|--|---------|---------|---------|--|
| | | 2005/06 | 2006/07 | 2007/08 | |
| LU | Train graffiti | 72 | 74 | 74 | LU specific rating known as the mystery shopper survey (MSS) score |
| | Station graffiti | 78 | 81 | 81 | |
| | Train cleanliness | 66 | 67 | 64 | |
| | Station cleanliness | 67 | 70 | 67 | |
| London bus network | Bus cleanliness and condition | 80 | 79 | 80 | Customer satisfaction score (CSS) |
| | Station cleanliness and condition | 75 | 75 | 76 | |
| | Stop and shelter cleanliness and condition | | | | |
| Bus permits and agreements | No KPI | | | | |
| London Trams | Tram cleanliness and condition | 85 | - | - | CSS |
| Taxis | Transport cleanliness and condition | 88 | 88 | 87 | CSSs |
| Private hire vehicles | Transport cleanliness and condition | 83 | 83 | 84 | CSSs |
| Dial-a-Ride | Transport cleanliness and condition | 93 | 92 | 93 | CSSs |
| LRS | Station cleanliness and condition | 87 | 88 | 88 | CSSs that cover all the LRS piers |
| | Boat cleanliness and condition | 87 | 88 | 88 | CSSs that cover all river boats licensed by LRS. The figures do not include Woolwich Ferry |
| London Overground | Station cleanliness and condition | - | - | 71 | CSS |
| | Train cleanliness and condition | - | - | 60 | |
| VCS | Station cleanliness and condition | 76 | 73 | 74 | CSS for VCS only |
| London Streets | Quality of the street environment | 3.8 | 3.4 | 3.2 | LEQS score for TLRN streets |
| Community Safety, Enforcement and Policing | No KPI | | | | |
| DLR | Train cleanliness | - | 95 | 96 | CSS |
| | Station cleanliness | - | 95 | 96 | |
| Head office buildings | No KPI | | | | |
| New capital works | | | | | |

Note: The MSS and CSS award scores up to 100, based on perception of cleanliness and condition. The higher the MSS and CSS score, the better the performance. The LEQS is conducted by the organisation Capital Standards at many sites across London. Scores range from minus eight to eight, with a score between zero and four classed as satisfactory, and from four to eight as good.

> Water consumption

| Mode or business unit | Water consumption (m ³) | | | Notes |
|--|-------------------------------------|---------|---------|--|
| | 2005/06 | 2006/07 | 2007/08 | |
| LU | 603,679 | 569,605 | 585,897 | Includes water used in train washes, stations and depots |
| London bus network | 8,060 | 55,516 | 51,901 | Includes water used in stations and depots |
| Bus permits and agreements | Not applicable | | | |
| London Trams | No figures reported | | | |
| Taxis | Not applicable | | | |
| Private hire vehicles | Not applicable | | | |
| Dial-a-Ride | 5,602 | 5,609 | 16,767 | Includes water used in depots |
| LRS | 15,667 | 19,286 | 19,696 | Includes water used on LRS piers. The last two years also include water used on the Woolwich Ferry |
| VCS | 24,637 | 26,411 | 44,447 | |
| London Streets | No figures reported | | | |
| London Overground | - | - | 10,385 | Includes all water consumed at stations and depots |
| Community Safety, Enforcement and Policing | Not applicable | | | |
| DLR | - | 27,214 | 28,000 | Includes water used at stations and depots |
| Head office buildings | 91,189 | 89,860 | 84,655 | |
| New capital works | No figures reported | | | |

> Waste production and recycling

| Mode or business unit | C&I waste (tonnes) | | | | | | C&D waste (tonnes) | | | | | | Hazardous waste (%) | | | Notes |
|--|---------------------|--------|--------|-----------------|-------|-------|--------------------|---------|--------|-----------------|---------|--------|---------------------------|-------|-------|---|
| | Total waste | | | Amount recycled | | | Total waste | | | Amount recycled | | | Proportion of total waste | | | |
| | 05/06 | 06/07 | 07/08 | 05/06 | 06/07 | 07/08 | 05/06 | 06/07 | 07/08 | 05/06 | 06/07 | 07/08 | 05/06 | 06/07 | 07/08 | |
| LU | 9,052 | 11,690 | 14,248 | 2,421 | 3,680 | 5,735 | 134,204 | 131,439 | 71,666 | 114,505 | 107,937 | 51,050 | 2 | 9 | 8 | Includes waste from stations, depots, trains and Investment Programme works |
| London bus network | 229 | 1,053 | 624 | 57 | 255 | 193 | 0 | 673 | 668 | 0 | 658 | 667 | 33 | 6 | 10 | This only includes waste from East Thames Buses, bus stops, stations and shelters |
| Bus permits and agreements | Not applicable | | | | | | | | | | | | | | | |
| London Trams | No figures reported | | | | | | | | | | | | | | | |
| Taxis | Not applicable | | | | | | | | | | | | | | | |
| Private hire vehicles | Not applicable | | | | | | | | | | | | | | | |
| Dial-a-Ride | - | 104 | 89 | - | 6 | 6 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | Includes waste from depots |
| LRS | 215 | 260 | 295 | 53 | 120 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 38 | 21 | Includes waste from LRS piers, Woolwich Ferry and grid boat waste |
| VCS | 350 | 360 | 349 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 14 | 7 | Includes waste from the station |
| London Streets | - | - | - | - | - | - | - | - | 65,382 | - | - | 59,435 | - | - | 0.01 | Only C&D waste recorded 533 tonnes of waste that is reused |
| London Overground | - | - | 58 | - | - | 14 | - | - | - | - | - | - | - | - | 13 | |
| Community Safety, Enforcement and Policing | - | - | 0 | - | - | 0 | - | - | - | - | - | - | - | - | 0 | Negligible |

> Waste production and recycling (continued)

| | | | | | | | | | | | | | | | | |
|-----------------------|-----|-------|-------|-----|-----|-----|---|---|---------|---|---|---------|---|---|------|--|
| DLR | - | 294 | 300 | - | 0 | - | - | - | - | - | - | - | - | - | - | Waste from stations and depots. No recycling data is collected |
| Head office buildings | 852 | 1,088 | 1,760 | 290 | 421 | 737 | - | - | 90 | - | - | 83 | - | - | - | |
| New capital works | - | - | 3 | - | - | 2 | - | - | 319,052 | - | - | 317,200 | - | - | 0.01 | |

