

Energy and Low Emissions Strategy Indicators through time – updated February 2023

| # | Indicator Baseline in bold | 2017 (unless indicated in brackets) | 2018 | 2019 | 2020 | 2021 | 2022 | Data source | Direct or indirect indicator of emissions | Lead or lag indicator ¹ |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------|
| 1. | Terrestrial/Production emissions from 6 main sectors in Kent (industry/commercial/public sector/domestic/transport/Land use land use change (LULUC)). Total greenhouse gas emissions (kt CO2e) covers CO ₂ , CH ₄ and N ₂ O. | Not available | 9791.9 | 9262.5 | 8398.2 | Released in June 2023 | Released in June 2024 | BEIS Territory-based emissions, (also known as production emissions) are those that take place within a country's territorial boundaries and include exports but omit imports. The transport category does not include emissions from airports, ports, or military transport. These are calculated at country level, rather than county level and the UK Government is responsible for reducing these. | Direct | Lag |
| 2. | Carbon emissions from 6 main sectors (industry/commercial/public sector/domestic/transport/LULUCF) (kt CO2e) (These figures are the breakdown of row 1.) | <i>BEIS methodology was updated in 2022 to include methane and nitrous oxide emissions from livestock and agricultural soils. This data has been backdated to 2018, but no earlier, meaning earlier data is not comparable.</i> | Industry: 1440.2 Commercial: 690.3 Public Sector: 327.3 Domestic: 2634.7 Transport: 3807.2 LULUCF: -331.6 Agriculture: 620.3 Waste Management: 603.5 | Industry: 1305.8 Commercial: 614.1 Public Sector: 294.8 Domestic: 2525.1 Transport: 3677.3 LULUCF: -334.5 Agriculture: 603.1 Waste Management: 576.8 | Industry: 1247.6 Commercial: 525.6 Public Sector: 272.8 Domestic: 2517.7 Transport: 3046.0 LULUCF: -332.3 Agriculture: 583.2 Waste Management: 537.2 | Released in June 2023 | Released in June 2024 | BEIS | Direct | Lag |
| 3. | Per capita greenhouse gas emissions for terrestrial/production emissions (tonnes CO2e per person) (These emissions are row 1 divided by the number of people in Kent.) | | 5.3 | 5.0 | 4.5 | Released in June 2023 | Released in June 2024 | BEIS | Direct | Lag |
| 4. | Total greenhouse gas emissions (kt CO2e) Covers CO ₂ , CH ₄ and N ₂ O, aligned to Global Covenant of Mayors common reporting framework, including categories of industrial products and processes, agriculture, land use and livestock. | 8956.5 | Data requested for both Kent and Medway from Anthesis (Scatter). | 8633.4 | Not yet released | Not yet released | Not yet released | Scatter Scatter calculates terrestrial/production emissions similar to BEIS, but with just a few small differences hence the small difference in figures. It is added to this spreadsheet for completeness. | Direct | Lag |

¹ Lead indicators predict future emissions reductions, lag have a time delay between the action and the effect.

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|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------|
| 5. | Greenhouse gas consumption-based emissions giving the total carbon footprint of Kent (kt CO ₂ e) ² (N.B This is based on Kent's proportion of England's total carbon footprint (England's total carbon footprint divided by the proportion of Kent's population). It includes emissions from everything we consume in the UK including imports. As we import more than we export, these emissions are more than our production emission.) | 21490.34 | 21922.14 | 21648.88 | Released in May 2023 | Released in May 2024 | Released in May 2025 | https://www.gov.uk/government/statistics/uks-carbon-footprint/carbon-footprint-for-the-uk-and-england-to-2019 DEFRA | Direct | Lag |
| 6. | Total carbon footprint per capita greenhouse gas consumption-based emissions (CO ₂ e tonnes per person) (N.B these are row 5 figures divided by the population of people in Kent.) | 11.7 | 11.9 | 11.6 | Released in May 2023 | Released in May 2024 | Released in May 2025 | DEFRA | Direct | Lag |
| 7. | Fraction of mortality attributable to particulate air pollution (%) | | Kent: 7.7% Medway: 8.9% | Kent: 7.4% Medway: 8.4% | Kent: 6.0% Medway: 7.1% | Not yet released | Not yet released | Public Health England | Indirect | Lag |
| 8. | Number of air quality management areas | 43 | 40 | 40 | 40 | 41 | 35 | DEFRA | Indirect | Lead |
| 9. | Tree canopy coverage % | 17% | 17% | 17% | 17% | tbc ³ | tbc | National Tree Map | Indirect | Lag |
| 10. | Carbon storage value of habitats (Net carbon sequestration from land use) (kt CO ₂ e) | | -331.6 | -334.5 | -332.3 | Released in June 2023 | Released in June 2024 | BEIS | Direct | Lag |
| 11. | Carbon storage value of specific habitats (carbon sequestration or emissions from land use subsets) (kt CO ₂ e) | | Forest land: - 367.4 Cropland: 65.3 Grassland: -87.1 Wetlands: 0.0 Settlements: 55.9 Harvested Wood Products: 0.0 Indirect N₂O: 1.8 | Forest land: - 366.6 Cropland: 66.3 Grassland: -92.0 Wetlands: 0.0 Settlements: 56.0 Harvested Wood Products: 0.0 Indirect N ₂ O: 1.7 | Forest land: - 366.0 Cropland: 66.6 Grassland: -91.6 Wetlands: 0.0 Settlements: 57.0 Harvested Wood Products: 0.0 Indirect N ₂ O: 1.7 | Released in June 2023 | Released in June 2024 | BEIS | Direct | Lag |
| 12. | Mean domestic gas consumption per meter (kWh) ⁴ | 13155.7 | 13069.7 | 13066.2 | 13250.8 | 12,616.0 | Released in January 2024 | BEIS | Direct | Lag |

² This is based on Kent's share of England's consumption footprint by population. This methodology is expected to improve in future years (see [University of Leeds work with London Councils](#)).

³ Updated data on tree canopy coverage is due to be available in Summer 2023 following a successful bid to the Woodland Creation Accelerator Fund.

⁴ Mean consumption (kWh per meter): Domestic, Column K, Kent & Medway, Subnational Gas Consumption Statistics. Note gas data is weather corrected.

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------|----------------------------------------|-------------------------------------------|------------------------------------|
| 13. | Mean domestic electricity consumption per household (kWh) ⁵ | 4041.1 | 3906.4 | 3874.8 | 4094.5 | 3815.3 | Released in January 2024 | BEIS | Direct | Lag |
| 14. | Total annual gas consumption of local authority estates owned and managed (kWh) (all 14 councils) Excludes KCC street lighting and highways | Earlier figures excluded Dover and used expected rather than actual consumption | | 83,788,527 (Oct 18 – Sep 19) | 65,160,411 (Oct 19 – Sep 20) | 76,290,221 Oct 20 – Sep 21) | tbc | LASER | Direct | Lag |
| 15. | Total annual electricity consumption of local authority estates owned and managed (kWh) (all 14 councils) Excludes KCC street lighting and highways | Earlier figures excluded Dover and used expected rather than actual consumption | | 69,179,240 | 47,672,536 | 43,531,688 | tbc | LASER | Direct | Lag |
| 16. | Carbon emissions from gas and electricity consumption across all sectors (mega tonnes CO ₂ e) | 4.16 | 4.06 | 3.80 | 3.66 | Released in June 2023 | Released in June 2024 | BEIS | Direct | Lag |
| 17. | Renewable electricity generated in Kent and Medway from solar photovoltaics (mWh/yr) ⁶ | 447,796 | 449,550 | 442,598 | 462,012 | 421,242 | Released in September 2023 | BEIS | Direct | Lag |
| 18. | Active travel to school (walking, cycling, scooting) Excludes park & walk. | 45.9% of primary school children. 29.5% of secondary school children | 51.1% of primary school children. 34.4% of secondary school children | 48.4% of primary school children. 29.5% of secondary school children | 58.9% of primary school children. 47.9% of secondary school children ⁷ | 51.4% of primary school children. 28.1% of secondary school children | Not yet released | Kent County Council Active Travel team | Indirect | Lead |
| 19. | Active travel to work (% of people working within 5km of home that actively travel to work in Kent) | 32% (2011) | n/a | n/a | n/a | To input from 2021 census once multivariate datasets have been released. Due Spring 2023. | n/a | Census | Indirect | Lead |

⁵ Mean consumption (kWh per household): Domestic, Column X, Kent & Medway, Subnational Electricity Consumption Statistics. Note gas is per meter and electricity per household, as not all households use gas, but virtually all use electricity.

⁶ This indicator formerly covered all renewable electricity generation in Kent and Medway, however from 2019 BEIS suppressed any information in their releases which could be used identify the output of specific plants. This meant that significant volumes of offshore wind and other renewable generation was excluded and the indicator was no longer representative, hence the decision to report only on Solar PV.

⁷ Smaller sample size in 2020 due to Covid-19.

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| 20. | Licensed cars by fuel type (%) (UK data, as of Q4 of each year) ⁸ | Diesel: 40.1% Petrol: 58.3% Hybrid: 1.0% Plug-in hybrid: 0.2% Battery electric: 0.1% | Diesel: 39.9% Petrol: 58.2% Hybrid: 1.3% Plug-in hybrid: 0.4% Battery electric: 0.2% | Diesel: 39.1% Petrol: 58.5% Hybrid: 1.6% Plug-in hybrid: 0.4% Battery electric: 0.3% | Diesel: 38.2% Petrol: 58.4% Hybrid: 2.0% Plug-in hybrid: 0.6% Battery electric: 0.6% | Diesel: 36.9% Petrol: 58.0% Hybrid: 2.8% Plug-in hybrid: 0.9% Battery electric: 1.2% | Released in May 2023 | DfT (Veh1103) | Indirect | Lead |
| 21. | Average miles travelled per year per person (South East region, excludes aviation) Active travel modes and non-active travel modes | Active travel: 266 Non active travel: 7,185 Total: 7,451 (2017/18) | Active Travel: 248 (2018/19) Non active travel: 7,342 Total: 7,590 (2018/19) | No data for 2019 – shifted to calendar year reporting | Active Travel: 275 Non active travel: 4,404 Total: 4679 (2020) | Active Travel: 300 Non active travel: 4,522 Total: 4822 (2021) | Released in August 2023 | National Travel Survey Data (DfT) (NTS9904) | Indirect | Lag |
| 22. | Road transport fuel consumption by all vehicles (thousand tonnes of oil equivalent, (ktoe)) | 1,243.7 | 1,240.8 | 1230.8 | 1008.5 | Released in June 2023 | Released in June 2024 | BEIS | Direct | Lag |
| 23. | Number and percentage of households in fuel poverty | 73,010 (9.6%) households in fuel poverty | 67,801 (8.9%) households in fuel poverty | 65,715 (8.6%) households in fuel poverty⁹ | 75,941 (9.8%) households in fuel poverty | Released in April 2023 | Released in April 2024 | BEIS | Indirect | Lag |
| 24. | Excess winter deaths | 1,610 (2017/18) | 820 (2018/19) | 1,190 (2019/20) | Not yet released | Not yet released | Not yet released | Public Health England | Indirect | Lag |
| 25. | Energy Performance Certificate (EPC) rating of homes (% rated A/B) | | | | | | 13.9% A or B (2022) | C-Path (using EPC data) | Indirect | Lead |
| 26. | % of domestic properties in Kent and Medway predominantly heated by oil, gas or mineral solid fuels | | | | | | 86.8% (2022) | C-Path (using EPC data) | Indirect | Lead |
| 27. | MCS certified ¹⁰ heat pumps installed (air, ground and water source) | 185 | 189 | 239 | 232 | 469 | 627 | MCS | Indirect | Lead |
| 28. | Number of energy efficiency measures installed in homes under the Energy Company Obligation (ECO) in Kent and Medway (cumulative since the launch of ECO) | 38,974 | 43,019 | 44,099 | 46,224 | 49,099 | Full 2022 figures released by May 2023 | BEIS | Indirect | Lead |

⁸ The totals given here do not include less common fuel types such as electric vehicles with auxiliary power units, fuel cell electric and gas.

⁹ From 2019 onwards, fuel poverty has been calculated using the LILEE metric (Low Income Low Energy Efficiency). 2018 and earlier used a different methodology, known as the Low Income High Costs (LIHC) definition. This means that comparisons cannot be made between years and for the purposes of comparison 2019 is being used as a baseline.

¹⁰ MCS (Microgeneration Certification Scheme) is a nationally recognised quality assurance scheme, supported by the Department for Business, Energy & Industrial Strategy. Whilst certification of a heat pump system via MCS is not mandatory, it is best practice and is required for Renewable Heat Incentive Payments and other government financial incentives.

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| 29 | Percentage of households in receipt of at least one ECO measure (since the launch of ECO) | 4.3% | 4.8% | 4.9% | 5.1% | 5.3% | Full 2022 figures released by May 2023 | BEIS | Indirect | Lead |