

# Taylor Wimpey Methodology Statement

## Specification of data sources

AJR Management (AJR) has managed data collection and reporting for Taylor Wimpey (TW) since 2014. AJR now oversees the management process from the point TW assumes supply responsibility, usually at installation, through to handover to the buyer, Housing Association (HA), Management Company, or disconnection. AJR also has been fully involved in the meter call-off process giving full visibility of meter requests.

As a backdrop to this management process, AJR complete quarterly site visits, obtain weekly legal completion reports from each TW Business Unit (BU), liaise with site and sales staff, receive and process all invoices and obtain missing data direct from suppliers where necessary.

During the course of this work, AJR monitor closely the release of new sites to ensure all sites are covered and complete a site checklist at each quarterly visit to each site to ensure all meters are covered. AJR receive a weekly legal completions report from each BU which is used to ensure all handover meter readings have been received and processed onto AJR system. On a monthly basis, a consolidated legal completions report is obtained from Head Office and this is used to ensure all completions are accounted for in terms of consumption or that any missing is explained, namely because they are HA plots that have invoiced but have not physically been built. There are also additions to this list which are HA plots built and handed over which have already “legally completed” but were not reported on at that point due to the circumstances previously mentioned above.

AJR system produces a suite of reports to identify missing data or to question data integrity measured against a set of expected criteria. It highlights contradictory meter data for further investigation, requests validation of things such as clocked meters, meter removals and identifies duplicated or potentially erroneous data.

The methodology below explains the protocols in place from which the 2025 data has been drawn together.

## Supply Types

All meters are divided into two categories – A and B. Within a given category, there are a number of different meter types.

The list of meter types for electricity meters in category A are: Bin Store, Business Premises, Car Charging Point, Car Park, Communal Areas, Community Centre, Compound, Existing Buildings, Feeder Pillar, Gates, Office, Pumping Station, Sales Centre, Secondary Power Supply, Showhome, Silo, Site Office, Street Lighting, TBS, TBS With Compound, Temp Building Supply, Undercroft Lighting, Unmetered - Monthly, Unmetered - Quarterly. All of these are then grouped in to Cost Centres for summarised reporting.

The full list of meter types for gas meters in category A are: Business Premises, Communal Areas, Community Centre, Existing Buildings, Office, Sales Centre, Showhome, Site Office. All of these are then grouped in to Cost Centres for summarised reporting.

The full list of meter types for electricity and gas meters in category B is Plot and Stock Plot. These are grouped into 'Plot' meters for electricity and gas.

## Data Collection

Data is collected from a variety of sources with the preferred method is by quarterly photograph taken on site by AJR site visit operatives. Where a photograph is not possible, contact is made with the supplier to obtain up to date invoices or recent consumption data. Contact is also made with site to resolve any access issues and obtain a photo or reading. Failing that, an estimate is generated.

In cases where consumption is not recorded on meters (Half Hourly or Unmetered Supplies), data is taken from invoicing. Where invoices have yet to be produced by the supplier, an estimate is generated.

Installation readings are obtained either from tags left with the meter, initial invoices, or directly from the supplier through requests or reports.

Final readings (when the meter changes responsibility or is disconnected) are taken from COR data or, where a COR hasn't been provided for Non-Plot supplies, from final invoices. In the event of COR not being collected by site or sales and the supplier having no available data, we will estimate the final read.

The majority of supplies are reported on a quarterly basis reflecting the usage during the quarter.

Please note that plot consumption is reported entirely within the quarter that it legally completes. This can sometimes mean consumption from prior quarters and even prior years is reported for that quarter. However, this was decided upon due to the fact that it was impractical to obtain quarterly meter readings for all plots given the volumes and also that the majority of plots legally complete roughly 90 days after meter installation and there are usually a similar number of stock plots, meaning the approach is consistent.

Please note that where a meter is found to have clocked, it is flagged as such. The reporting calculates the total consumption from supply start reading or quarter start reading to the point the meter returns to 0 plus the reading from 0 to the supply end reading or quarter end reading.

## Electricity

- Half-Hourly (Profile – 00) – This type of meter is connected to a modem for half-hourly data collection. As invoices show consumption over a period rather than an opening and closing reading, there is no requirement to obtain initial readings or change of responsibility readings.
- Unmetered Street Lighting – As there is no physical meter to read, an inventory of equipment is held by the network operator and an agreed amount of estimated annual consumption (EAC) is set.

- Plot Meters (except Showhomes, which are treated as Site Meters above) – Data is collected by site or sales staff at the point of handover.

## Gas

Consumption is reported in kWh. For some meters it is necessary to convert from an imperial or metric reading to kWh to aid in comparison of usage and pricing data.

The conversion factors are described below.

- Metric Meter – Records consumption in Cubic Metres which is shown as the open and close reads on the reports. The assumed Loss Conversion Factor and Calorific Value are 1.02264 and 39.23 (an average arrived at by averaging National Figures for a 12 month period provided by National Grid). The conversion factor from Joules to Watts is 3.6 and the conversion calculation is as follows:
  - Metered Units × Loss Factor (1.02264) × Calorific Value (39.23) ÷ Energy Conversion (3.6)
- Imperial Meter – Records in 100 cubic feet which is shown as the open and close reads on the reports. The conversion is the same as for Metric with the addition of the Imperial conversion:
  - Metered Units × Loss Factor (1.02264) × Calorific Value (39.23) × **Imperial to Metric Conversion (2.83)** ÷ Energy Conversion (3.6)
- Heat Meter – Records in kWh and no conversion is required.

## Fleet fuel consumption

### Vans

The methodology applied for vehicles fleet consumption has been reported on a more accurate basis than simply the contracted mileage.

This year we have received regular vehicle mileage reports providing mileage readings. Where we have two or more readings for a vehicle we have calculated the average daily mileage between the two readings that are closest to the extremes of the year. If the contract was live for the full year, we get the reading closest to 01/01 and that closest to 30/09 and calculate an average daily mileage which is then applied across the full year by creating estimated mileage readings for each and of the year.

Where a contract commenced within year, we have used the start date and reading and where available, used an additional reading later in the year to create a daily average which we have then applied for the active period.

Where a contract terminated during the year, we have used that end date and reading and where available, used an additional prior reading to create a daily average which has then been applied for the active period.

It was deemed that using the actual mileages available would always give us the best chance of an accurate reflection given that many of the contracts are substantially above or below the contracted mileage.

Where only one reading is available for a vehicle, we have taken an average daily mileage by dividing the contract mileage by the contract length in days and applied this to the active period during the year.

Please note that no deduction has been made for personal mileage as in prior years because there is no knowledge base or data available to assist.

A consideration for future reporting years is the impact of recent allegations regarding manufacturer quoted emissions figures. Thoughts may be given to an uplift to take account of 'real-life' figures.

## Cars

We are provided a report produced from the SAP Concur expense system which shows the following for each vehicle: Total Mileage, Emissions, Emissions Rating, and Fuel Type. This report shows all fleet business mileage expense claims for the relevant reporting period.

## Other fuels

Other Fuels consumption has been tracked by AJR requesting invoices from BUs on a monthly or quarterly basis depending upon the working practices of the individual BU and inputting data onto the AJR system.

1. Run an "Other Fuels" Report on a quarterly basis and advise BUs of all sites where there had been prior "Other Fuels" consumption that had reported zero for this quarter. Request confirmation that this was correct from the BU. The BUs confirm on a quarterly basis that we have received all invoices.
2. Verify sites taking delivery of "Other Fuels" as part of a site checklist completed on first site visit to any site and then reviewed quarterly as part of our audit process.

Data is input onto our system by AJR following receipt of approved invoices from the BU.

Due to a regulatory change in 2022, Red Diesel is no longer used on site and all Diesel is reported using a 100% Mineral Diesel emissions factor.

Please note that under "Metered LPG", this is metered in cubic metres and then converted to Litres of LPG on the invoices by using a multiplier of 3.85.

## Estimates

Unless an actual reading type was taken on the quarter end date, or the supply was installed or handed over/disconnected during the quarter, all reported readings will be one of two estimate types to the quarter end dates (31/03, 30/06, 30/09, 31/12). This is to standardise quarters and enable year-on-year comparisons.

- Validated System Generated Reading – this is a reading estimated that has been produced using evidenced readings from that quarter and the previous quarter.
- System Generated Reading – this is a reading estimated where we are unable to validate it due to the data available being outside of the current quarter.

## Plots Estimates

Estimated data is used where true data is missing or has been incorrectly provided and the correct data has yet to be submit. The estimation process varies depending on the amount of data available. This process is embedded in our processes for semi-automatic calculation.

Where possible, estimation uses data from the same supply, typically the installation reading and an actual reading. If plot-level data is unavailable, site-level averages are used, provided there are at least three valid plots. If site data is insufficient, business unit averages are applied, again requiring a minimum of three plots. If this is still not possible, nationwide averages are used.

Known data at the relevant level is used to calculate average daily usage and, where required, an average installation period. If the installation date is unknown, we will use the installation date of another meter on the same plot, this is usually the electric or gas. If no installation dates are known, the calculated average installation period is applied.

The estimated closing reading is calculated by multiplying the average daily usage by the metered period (closing date minus installation date) or by the average installation period where necessary.

## Estimated Methodology

To calculate the estimated reading, we project from the closest actual reading by taking the difference between quarter end date and latest read date (in days) multiplied by the calculated daily usage.

To calculate daily usage from two actual readings, the formula is as follows:

$$\frac{\text{Later Read} - \text{Earlier Read}}{\text{Later Date} - \text{Earlier Date}}$$

Estimations are carried out by AJR in line with the following.

- Where the Estimation date is between two known actual readings – daily usage is assumed to be constant between these readings and an estimate is calculated on the Estimation date.
- Where the Estimation date is after all known actual readings but at least two actual readings exist for the supply – a daily average is calculated using latest reading and closest actual reading to 1 year earlier to minimise seasonal variance. This daily average is used to project usage forward from the latest known actual reading.
- Where there is only one reading available for the supply and therefore no consumption history exists – a daily average is calculated using a set of a minimum of 10 supplies of a similar type and geographical area. This daily average is used to project usage forward from the known actual reading.

The priority order for estimations would be as follows:

- Calculate reading between two actual readings
- Calculate reading using closest actual and annual consumption average
- Calculate reading using average for the same supply type on the same site
- Calculate reading using average for the same supply type in the same Business Unit
- Calculate reading using average for the same supply type client wide

## UK Average Calculations

In cases where only a single meter reading available, or if there has been a prolonged period of no meter readings, a decision may be made to use UK averages. This is a set of averages calculated using the current reporting year data after it has been through AJR's full validation but prior to submission.

The averages are calculated considering both supply type and secondary supply type to ensure that the nature of the supplies are accounted for to ensure more accurate estimations. The averages are calculated across the entire portfolio rather than business unit specific to ensure a large enough data set.

An average daily value is calculated for each supply type and secondary supply type for each quarter by the below formula:

$$\text{Quarterly Average Daily Value} = \frac{\text{Total Consumption within Quarter}}{\text{Total Days within Quarter}}$$

An outlier cut-off point is then calculated, where extreme consumption is excluded as part of the averages. This is due to the occurrence of exceptional cases where supplies are being used for a specialist purposes (e.g. television studio, mass crane support, ground saturation) which are not indicative of normal usage and should not be included within the averages.

A revised average is then calculated in the same manner as described above but excluding the outliers.

These adjusted averages are used to estimate consumption for relevant supplies and incorporated into the final data set.

## TW Offices without directly metered supply

TW report on offices where there is no direct metered supply, rather that the costs of these elements are folded into the service charge / rent. We have assumed for the purposes of this assessment that all offices being estimated have both gas and electricity supplies and in order to estimate the consumption we have used the quarterly consumption in 2025 for the offices that have metered gas and electricity supplies. This is to exclude electric only offices where the electricity will be used for heating purposes.

For each quarter, we worked out an average kWh/ft<sup>2</sup> value for gas and electricity individually taking account of the total gas or electricity consumption across these offices and dividing these totals by the combined ft<sup>2</sup> of the same offices. TW Logistics has been excluded from this calculation as their new premises, incorporating substantial warehouse space, massively skews the values and is a very different type of premises than all of the other purely office environments.

We have then applied this kWh/ft<sup>2</sup> to the unmetered offices by multiplying the ft<sup>2</sup> of each unmetered office by the kWh/ft<sup>2</sup> and applying the resulting value as gas or electricity consumption for that office. This has been added to the main raw data and factored into all subsequent totals.

## Spain

Electricity data is available for TW Spain. Data collected relates only to category A meters (please see meter types above).

TW Spain does not report on category B meters (plots) as all plots are managed by sub-contractors prior to sale. TW Spain pays for negligible amounts of energy so it is deemed to be de minimis.

TW Spain does not consume natural gas.

Data was provided in relation to a small amount of other fuels consumption for 2017. However, the Golf site to which this related is now closed and there is therefore no other fuels consumption for Spain.

Fleet data has been provided for 2025 in the form of mileage figures for specific vehicles on a quarterly basis. Although the fuel type of each vehicle is not known, we have added those that we can be sure of and used the appropriate factors. For those classified as unknown we have used a factor for unknown fuel kgCO<sub>2</sub>e per km provided by DEFRA but in other cases (kgCO<sub>2</sub>e per litre and kWh per litre) have erred on the side of caution and opted for a Diesel Factor as the worst case scenario.

## Scope 2 emissions - 'Location-Based' and 'Market-Based'

Under the GHG Protocol Scope 2 Guidance ([http://www.ghgprotocol.org/scope\\_2\\_guidance](http://www.ghgprotocol.org/scope_2_guidance)), organisations wishing to report their carbon emissions are now required to publish two numbers for their Scope 2 emissions. The first of these is calculated under the location-based method, using a national or regional emission factor, as in previous years. The second is generated using the market-based method. This method enables organisations to report the carbon emissions of the electricity they have chosen to purchase based on specific supplier's fuel mix disclosure, and/or on the emissions from specific tariffs and/or based on a residual grid mix.

Both the 'location-based' and 'market-based' Scope 2 emissions are published in our Annual Report and Accounts and our Sustainability Report. The calculation methodology for the market-based Scope 2 emissions is given below.

We have extracted all actual consumption by supplier and included, where known, the specific tariff name. Please note that where there have been changes of supplier, the supplier quoted is the one in place at the commencement of that quarter unless there is a change in REGO status, at which point the location is split to show both with the consumption apportioned based on switch date and days in quarter.

Location	Supplier	Determination of Factor Used	Emission Factor (kgCO <sub>2</sub> e / kWh)	Q1		Q2		Q3		Q4		Total	
				Energy Consumption (MWh)	Emissions (tCO <sub>2</sub> e)	Energy Consumption (MWh)	Emissions (tCO <sub>2</sub> e)	Energy Consumption (MWh)	Emissions (tCO <sub>2</sub> e)	Energy Consumption (MWh)	Emissions (tCO <sub>2</sub> e)	Energy Consumption (MWh)	Emissions (tCO <sub>2</sub> e)
	British Gas	REGO Backed Renewable Tariff	0.000000	3,232.63	0.00	2,206.14	0.00	2,156.34	0.00	0.00	0.00	7,595.11	0.00
	British Gas Business	REGO Backed Renewable Tariff	0.000000	24.25	0.00	19.38	0.00	17.67	0.00	0.00	0.00	61.30	0.00
	British Gas Business	Supplier Specific Residual Fuel Mix Excluding Renewable	0.081000	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.00
	Ecotricity	Supplier Specific Residual Fuel Mix Excluding Renewable	0.000000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	EDF	Supplier Specific Residual Fuel Mix Excluding Renewable	0.254000	0.69	0.18	0.68	0.17	1.64	0.42	0.00	0.00	3.01	0.76
	EDN	REGO Fuel Mix Disclosure	0.000000	7.10	0.00	6.94	0.00	6.33	0.00	0.00	0.00	20.37	0.00
	EON Next	GB Residual Mix	0.420760	1.16	0.49	1.02	0.43	0.79	0.33	0.00	0.00	2.98	1.25
	Npower Business Solutions	REGO Backed Renewable Tariff	0.000000	3,755.76	0.00	2,237.41	0.00	2,135.02	0.00	0.00	0.00	8,128.19	0.00
	Npower Business Solutions	Supplier Specific Residual Fuel Mix Excluding Renewable	0.458000	279.00	127.78	115.38	52.84	105.20	48.18	0.00	0.00	499.58	228.81
	Octopus Energy	Supplier Specific Residual Fuel Mix Excluding Renewable	0.000000	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
	Positive Energy	Supplier Specific Residual Fuel Mix Excluding Renewable	0.420760	0.34	0.14	0.18	0.08	0.24	0.10	0.00	0.00	0.76	0.32
	Scottish Power	REGO Backed Renewable Tariff	0.000000	3.35	0.00	3.31	0.00	3.17	0.00	0.00	0.00	9.83	0.00
	Scottish Power	Supplier Specific Residual Fuel Mix Excluding Renewable	0.465000	1.84	0.86	0.58	0.27	0.38	0.18	0.00	0.00	2.80	1.30
	Scottish Power I and C	Supplier Specific Residual Fuel Mix Excluding Renewable	0.465000	26.16	12.16	25.36	11.79	24.21	11.26	0.00	0.00	75.72	35.21
	SSE	Supplier Specific Residual Fuel Mix Excluding Renewable	0.373000	109.57	40.87	43.02	16.05	69.31	25.85	0.00	0.00	221.90	82.77
	SSE	REGO Backed Renewable Tariff	0.000000	0.00	0.00	60.93	0.00	20.13	0.00	0.00	0.00	81.06	0.00
	Unknown - UK	GB Fuel Mix	0.420760	349.70	147.14	272.11	114.49	250.62	105.45	0.00	0.00	872.44	367.09
	Spain	Unknown - Spain	0.292200	191.92	56.08	210.25	61.43	268.81	78.55	0.00	0.00	670.98	196.06
<b>Total</b>				<b>7,985.65</b>	<b>385.70</b>	<b>5,202.71</b>	<b>257.56</b>	<b>5,059.87</b>	<b>270.32</b>	<b>0.00</b>	<b>0.00</b>	<b>18,246.24</b>	<b>913.58</b>

## Operational Boundary

Scope 1 and 2 footprint of Electricity, Gas, and other on-site fuels and fuels used by vehicles owned or based within the organisational boundary and based on financial control.

Specifically in relation to CHP / District Heating Systems these are treated as follows.

- Where TW are responsible financially for the input supply (main incoming gas or electricity supply), then this is reported under the usual reporting terms as described earlier in this document. However, in these circumstances, the output supplies, namely plots before sale, are excluded as this would constitute double reporting.
- Where TW are responsible for the input supply but receive financial recompense for plots that have handed over, we have calculated for each quarter the number of plots that are not the responsibility of TW versus the number that are. We have then turned that into a Multiplier for the TW responsibility by calculating the percentage (as a fraction) of the plots that were theirs during that quarter. We have added this multiplier under the Column Heading "Joint Venture Multiplier" such that the consumption is calculated appropriately. A note has been added to all affected "Joint Venture Multipliers" in the affected cells.
- Where TW are not responsible financially for the input supply, this is not reported and the output supplies (typically heat meters for the plots before sale) are reported as for conventional plot supplies.

The following sources of emissions were excluded or part-excluded from this report:

- Fugitive emissions (refrigerant gases): excluded on the basis of expected immateriality and difficulty in acquiring.
- Gas and electricity of part-exchange properties: excluded on the basis of immateriality due to very few completions of this type;
- Certain joint venture properties: where Taylor Wimpey was not part of the handover process. In these cases other house builders have captured MCR-related data;