Stonewater

SHIFT Environmental Report

2025

SHIFT

Contents

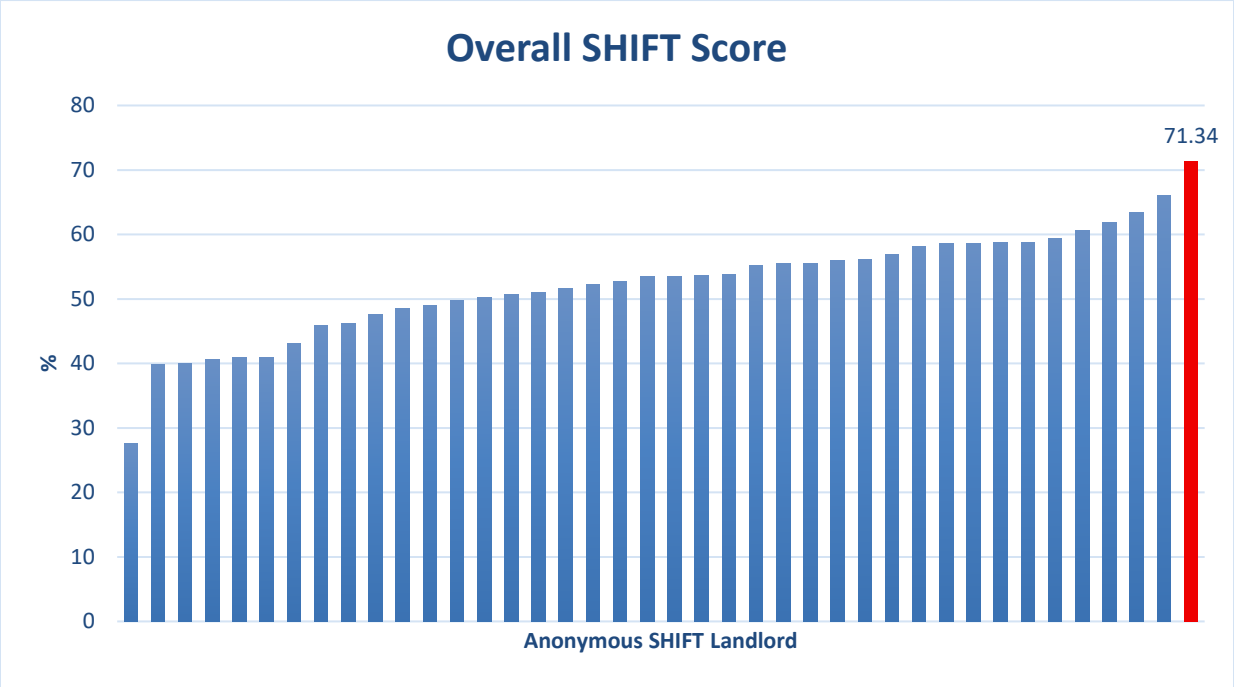
Executive summary

Environmental reporting remains supremely important in a world of environmental damage, climate change, and high fuel prices. These issues affect everyone including residents and staff. This report focuses on quantitative metrics. As the adage goes, you can only manage what you measure. Furthermore, stakeholders such as investors and regulators are becoming keener than ever to see these metrics.

Stonewater Housing provide and manage nearly 40,000 affordable homes in England. The results of this assessment will show, as best as the data allows, the gaps between Stonewater's current environmental performance and environmentally safe levels of impact. Stonewater are keen to understand the impacts of their current performance and to display their commitment to improving their sustainability and environmental performance. The findings of this assessment will be used to monitor Stonewater's environmental performance progress and support the identification of targeted areas for improvement.

The report outlines Stonewater's most recent environmental performance. It is based on primary data supplied by your organisation, which has been processed using nationally recognised methodologies where applicable. In cases where such methodologies are unavailable, we have applied SHIFT's own approaches, developed through our specialism and the best available scientific knowledge. The audit trail for this assessment can be found on the SHIFT portal.

Each environmental issue for each part of the organisation has been assessed and the results, including CO_2 emissions, are detailed in the report and the Summary Statistics section. For the purposes of this executive summary there is a scoring system which combines overall performance into a single SHIFT score. The score is based on historic weightings derived by social landlords. As a caveat, the scoring is purely a convenience and should not be taken as anything other than that. The priority of the SHIFT assessment it to provide environmental metrics, backed by a defendable audit trail. The chart below shows Stonewater's score and comparison against peers in UK social housing.



Stonewater has achieved the SHIFT Gold accreditation, with a score of 71.34%. It ranks 1st out of the 40 most recent SHIFT assessments.

We strongly encourage you to take the steps outlined in this report to ensure effective management of resources, leading to sustainable stock and operations. Beyond the environmental necessity, there is significant evidence demonstrating the financial advantages of these actions[1]. As well as driving action, clients use the data in SHIFT report for:

- Effective environmental strategy development
- ESG reporting
- Annual progress monitoring on environmental targets
- Compliance reporting – most recently SECR reporting

SHIFT also has the bronze, silver, gold and platinum accreditation element. Clients find this useful for having a single corporate aim for all directorates and for easy communication with stakeholders. However, clients are reminded that this is not the point of SHIFT. The purpose of SHIFT is to provide you with highly useful data to effectively manage your way to a sustainable stock and sustainable operations.

[1] https://shiftenvironment.co.uk/news/financial-benefits-of-sustainability/

Summary statistics

Carbon

Environmental issue	Absolute[1]	Intensity[2]	Intensity target for SHIFT platinum 2025[3]	Long term intensity target (by 2050)
SAP – all homes	SAP 74.74	81.09% of all homes SAP 69 or higher	SAP 74.94 ×	SAP 85
Individually heated homes, regulated emissions Scope 3	52,068.49 tonnes CO_2e	1,770.31 kg CO_2e / independently heated home		
Communal heat systems Scope 1 Scope 2 Scope 3	2,560.05 tonnes CO_2e 0 tonnes CO_2e 0 tonnes CO_2e	8,688.37 kWh / home managed	5,177.58 kWh / home managed ×	3,600 kWh / home managed
Other landlord supply Scope 1 Scope 2 Scope 3	334.52 tonnes CO_2e 1,827.03 tonnes CO_2e 161.76 tonnes CO_2e	74.88 kg CO_2e / home managed	100.86 kg CO_2e / home managed ✓	0 kg CO_2e / home managed
Offices Scope 1 Scope 2 Scope 3	11.99 tonnes CO_2e 11.67 tonnes CO_2e 1.03 tonnes CO_2e	26.18 kg CO_2e /m^2	48.19 kg CO_2e /m^2 ✓	0 kg CO_2e / m2
Business mileage Public transport (Scope 3) Employee-owned (Scope 3)	18.08 tonnes CO_2e 295.73 tonnes CO_2e	10.12 kg CO_2e / per home managed	8.49 kg CO_2e / per home managed ×	0 kg CO_2e / home managed
Maintenance activities DLO (Scope 1) External (Scope 3)	16.37 tonnes CO_2e 1,155.41 tonnes CO_2e	51.52 kg CO_2e / per home managed		0 kg CO_2e / home managed
Embodied carbon Maintenance (Scope 3) New Build (Scope 3)	1,209.90 tonnes CO_2 34,569.56 tonnes CO_2e	39 kg CO_2e / per home managed 35,096 kg CO_2e / per new home		0 kg CO_2e / per home managed 0 kg CO_2e / per new home

Other environmental performance

Environmental issue	Absolute[1]	Intensity[2]	Intensity target for SHIFT platinum 2025[3]	Long term intensity target (by 2050)
Water – homes	3.18 million m^3	121.91 lpd	136.55 lpd ✓	110 lpd
Water – offices	757.61 m^3	18.48 m^3/employee/yr	6.02 m^3/employee/yr ×	3 m^3/employee/yr by 2030
Waste – homes	67.60% homes with internal recycling bins	9.64% increase in residents diverting waste from landfill	7.59% increase in residents diverting waste from landfill ✓	17.6% increase in residents diverting waste from landfill
Waste – offices	7.10 tonnes	28.00% of waste diverted from landfill	75.03% waste diverted from landfill ×	100% diverted from landfill
Fly tipping – number of incidents	1,995 incidents	64.31 incidents/1000 homes managed		
Promotion of sustainable transport facilities – homes	30.00% homes with cycle storage	10.51% increased likelihood of resident use		100% increased likelihood of resident use
Responsible materials – maintenance & capital works	64.88%	64.88%	53.29% responsibly sourced ✓	100% responsibly sourced
Responsible materials - offices	36.25%	36.25%	63.71% responsibly sourced ×	100% responsibly sourced
Resilience to climate change – flooding	95.91% low risk 1.69% medium risk 2.40% high risk	96.42% of homes resilient to flood risk	85.63% adapted to flood risk ✓	100% adapted to flood risk
Resilience to climate change – overheating	78.80% low risk 20.30% medium risk 1.00% high risk	78.80% of homes resilient to overheating risk	81.03% adapted to overheating risk ×	100% adapted to overheating risk
Biodiversity value	10,496.09 tonnes biomass above ground	13.16 tonnes biomass per hectare	10.59 tonnes biomass per hectare ✓	11.9 tonnes biomass per hectare by 2043

1 – In line with best practice environmental reporting, the absolute environmental impact is given here – this gives an overall assessment of impact.
2 – In line with best practice environmental reporting, the intensity is given. Intensity is the environmental impact per meaningful unit. E.g. per home managed or per m^2 of office space. Intensity allows organisations to monitor progress towards long term aims, even if they change in size e.g. gain more homes or office space. Intensity is used for SHIFT scoring and benchmarking.
3 – When '✓' is displayed, you are achieving or exceeding the platinum intensity target for the year stated. When '×' is displayed, the platinum intensity target has not been met.

Priority actions

Throughout the report actions are listed under the relevant part of your organisation and environmental issue. To help identify the most important actions we have graded each action against a set of criteria. The more criteria that are met, the higher the priority for the action. Suggested criteria are:

- Cost
- Staff resources
- Importance – based on likelihood of being regulated
- Peer comparison – if you are lowest in the benchmark then this would indicate that this is more urgent

The actions are described in ways that departments can implement. The efficacy of the actions will be calculated in next year's SHIFT report (for example, carbon emissions will decrease). Implementing an action does not necessarily equal more SHIFT points directly. However, landlords that take time to improve data quality and monitor their environmental performance tend to perform better score wise. We suggest that monitoring of actions is carried out in normal business processes (e.g. appraisals, quarterly reports).

To help you focus on priority actions, your SHIFT assessor can extract the following information, based on this report:

- The actions described in this report
- Where data allows, a ranked breakdown of the energy efficiency of your communal heating systems
- An indication of which part of your organisation is contributing most to sustainability

If you require this in any other format or wish to amend any suggested actions, please let your assessor know as this may require extended consultation work.

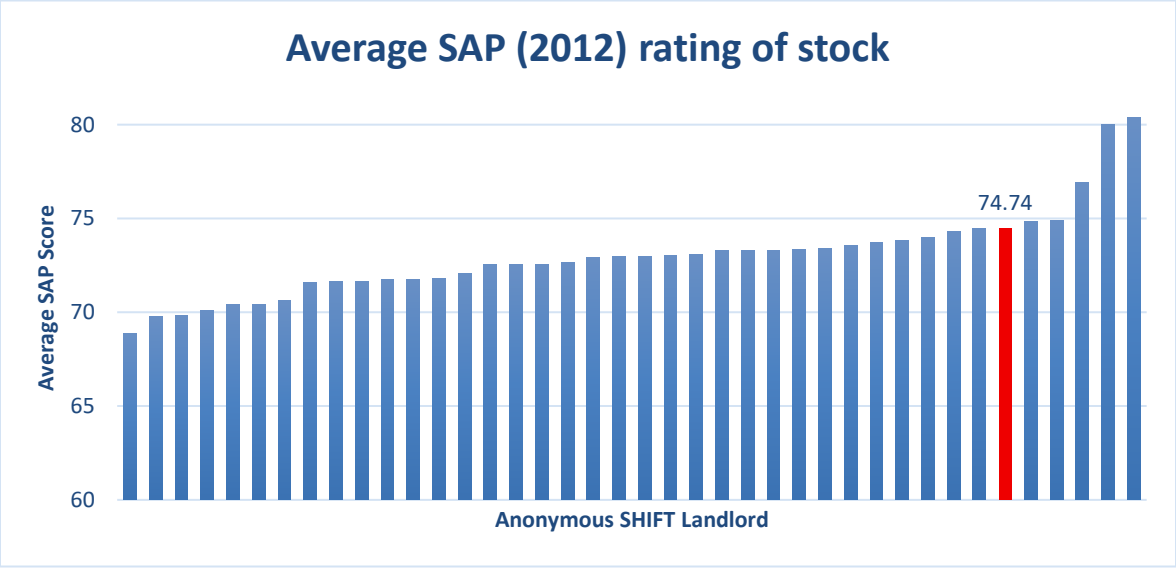
Existing Homes

Most of the homes that exist now will be in use in 2050 and it is essential to ensure that existing homes are truly sustainable. Key issues remain energy efficiency, adaptation to climate change and biodiversity and green spaces. Your performance in each of these areas, and others, is presented below.

Energy and average SAP

SAP is the UK's standard measure for energy efficiency of homes. Higher SAP scores indicate lower running costs for homes and correlate with lower CO_2 emissions. Despite well-known inaccuracies in the SAP methodology, it is a good proxy for CO_2 emissions, and SAP remains the Government's favoured method for assessing energy efficiency. The net zero plan for UK homes is a combination of achieving EPC C for all properties, shifting to non-fossil fuel heating (with corresponding changes to SAP methodology) and expected energy efficiency standards for new builds up to 2050. SHIFT research indicates this results in an average SAP of 85.

Energy performance data was extracted by Stonewater's Environmental and Sustainability Business Partner from their asset management database, Active H, which indicated an average SAP of 74.74 has been achieved across their housing stock.

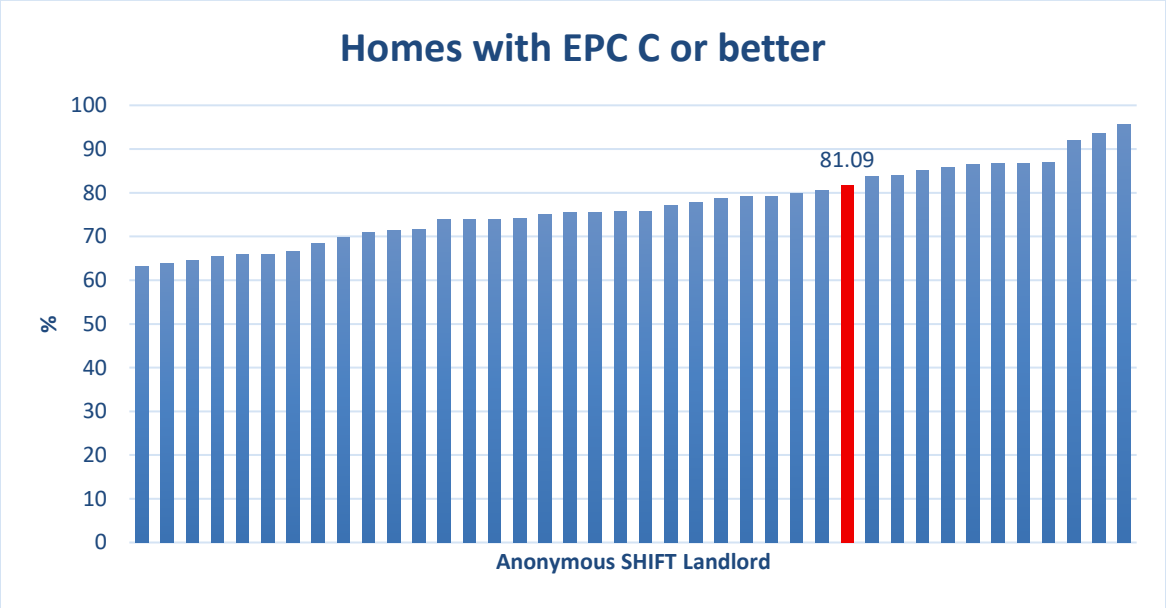


Peer Comparison: ahead

Fuel poverty

Tackling fuel poverty aligns with the UK's net zero pathway. As well as significantly improving environmental performance, achieving EPC C / SAP 69 will dramatically improve the lives of residents in both health and financial terms.

Consulting Stonewater's asset management database, 25,157 properties are believed to be EPC C or above, this equates to 81.09% of Stonewater's stock. Including leaseholders and shared ownership properties may bring this figure up but as Stonewater are not responsible for major works for these properties, they have been excluded from the SHIFT assessment.



Peer Comparison: comparable

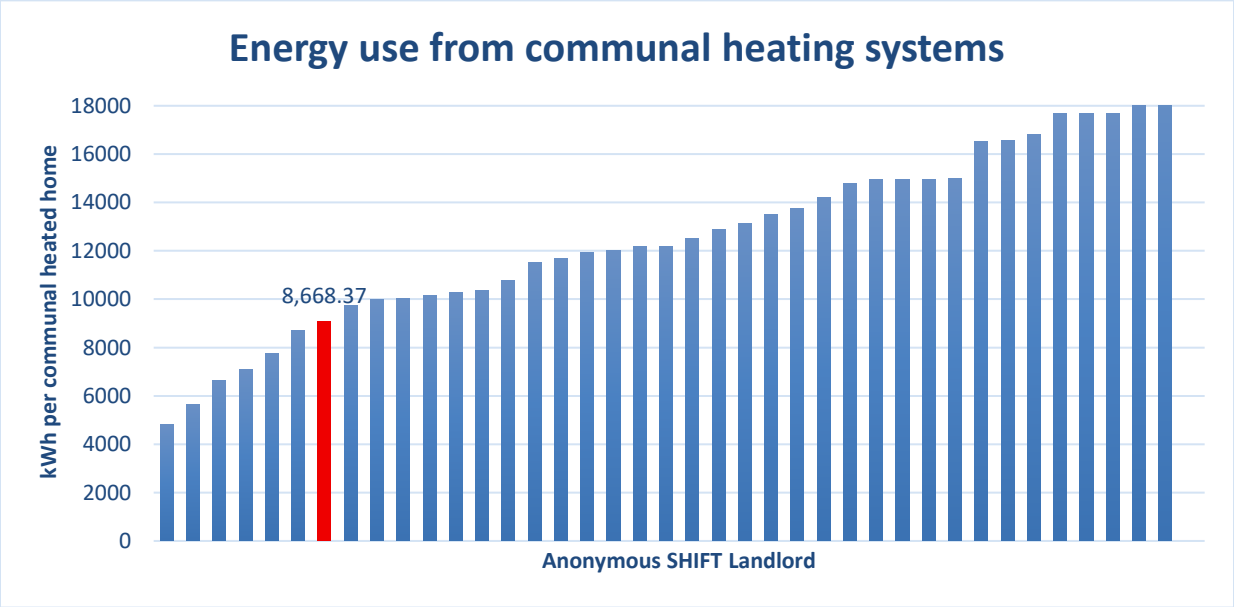
Recommended Improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Develop long term, detailed, address level plans that align with the UK's net zero pathway for homes, namely EPC C by 2030 then gradually upgrade to non-fossil fuel heating systems up until 2050. 3rd party software is available to allow you to do this. See this blog for more information: Completing an EPC analysis of your housing stock	Lo	Lo	Lo
Upgrade ~10% of the annual upgrade number when triggered by component replacements and/or voids. The aim is to get teams used to doing opportunistic upgrades at the same time as other works. The most obvious example is to install solar PV at the same time as a roof replacement.	Lo	Med	Hi
Upgrade ~10% of the annual upgrade number with a heat pump, EWI and/or solar PV where appropriate as identified in the long term plan. The idea here is to start spreading examples of the technologies throughout the stock so that residents get used to it and share positive experiences with other tenants. This is essential to gain access to other homes in future upgrade programmes.	Lo	Med	Hi
Repeat the actions for the first year plan each year until 2030 and monitor performance by tracking the % of homes that area EPC C or better. This should be 100% by 2030.	Hi	Hi	Hi
Monitor policy changes for beyond 2030 in readiness for upgrading heating systems to non-fossil fuel versions that do not add extra cost for residents.	Lo	Lo	Hi

District and communal heating

Energy for communal and district systems is a huge cost to landlords and is highly visible. The heating systems are known to be very inefficient and are not adequately reflected in the SAP rating. They are also regulated under the Heat Metering regulations which may require retrofitting heat meters at some point in the near future. SHIFT research indicates that an efficient communal heating system, comparable with a SAP 85 property, would require only 3,600 kWh of heating and hot water energy per home.

Stonewater identified 1,611 communally heated properties. Stonewater were able to determine the kWh usage data for 1,421 of these communal heated homes. The SHIFT defaults were applied to the remaining 134 bedsit/hostel rooms and 56 flats. Communally heated homes should be clearly documented under the requirements of the Heat Networks (Metering and Billing) Regulations 2020. The relevant 2024 Defra conversion factors have been applied to the total 13,996,968 kWh of energy were used in Stonewater's communally heated homes. This equates to 8,688.37 kWh per home and 2,560.05 tonnes CO_2 e. The table below shows the average kWh values per communally heated home from other SHIFT landlords.



Peer Comparison: SHIFT default was used/comparable

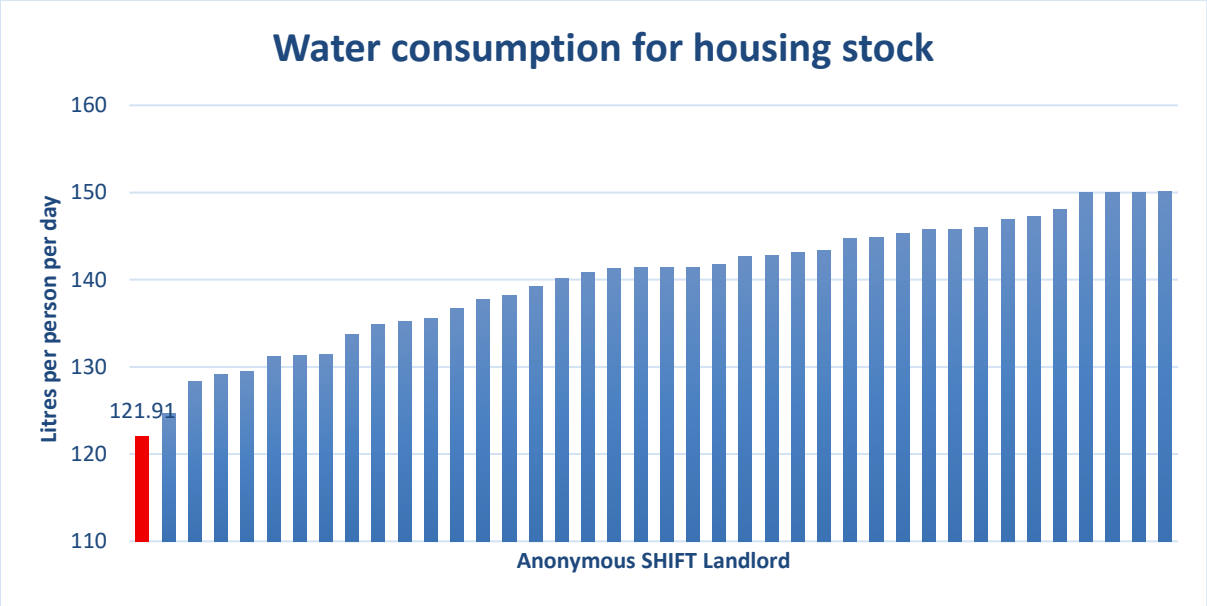
Recommended Improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Identify worst performing blocks by calculating kWh/unit and benchmarking against other blocks or against SAP estimates of what the kWh/unit should be.	Lo	Lo	Med
Devise and implement upgrades to the worst performing block. Aim for EPC C or better homes with non-fossil fuel heating.	Med	Med	Hi
Improve databases to show a clear link between communally heated homes and the addresses on energy broker data. E.g. have the block UPRN appear on broker lists of energy usage. This allows more accurate reporting and monitoring of energy and CO_2 emissions.	Lo	Lo	Med
Devise a plan to upgrade all communal heating systems such that they do not us non-fossil fuel heating by 2040.	Lo	Lo	Med

Water

At the time of writing there are emerging targets for water efficiency. In England the target is 110 litres per person per day by 2050.

As with most landlords no complete assessment has been made of water efficiency in Stonewater's stock. Therefore, the SHIFT water efficiency estimator tool has been used. The estimator uses water efficiency measures data provided by Stonewater and build age information to identify the likely water efficiency measures in Stonewater's stock. This estimated 121.91 litres per person per day (lpd).



Peer Comparison: ahead

Recommended Improvements:

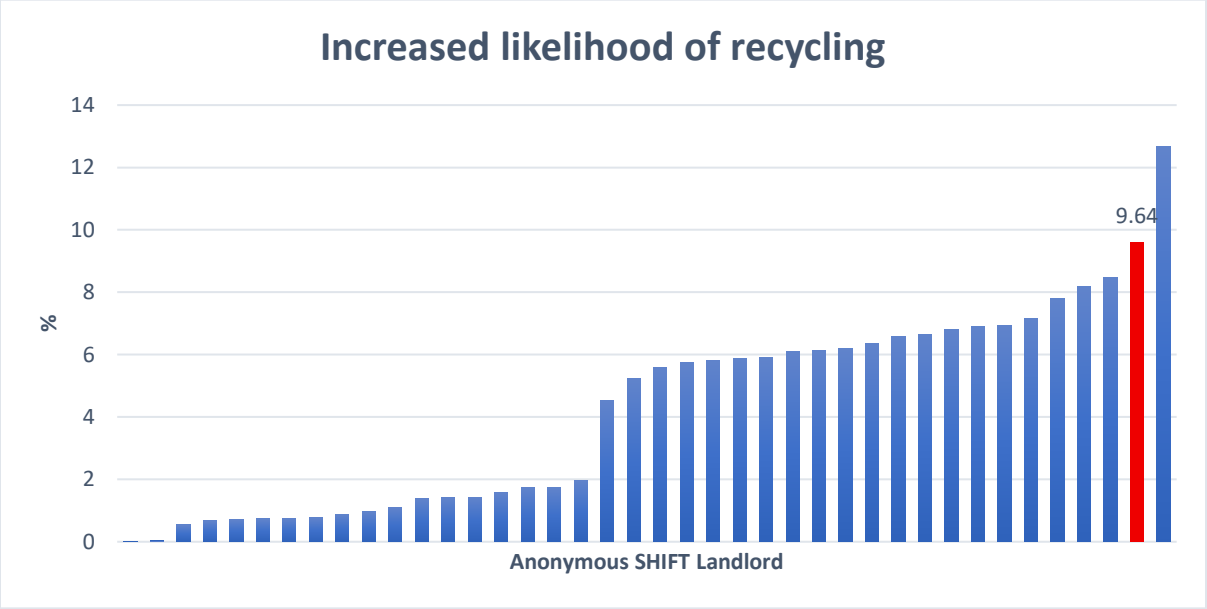
Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Create a database which shows the water efficient fittings for each home. SHIFT can give you first pass assumptions to help populate the database. As well as	Lo	Lo	Lo

showing data for existing homes, the database can be populated with information from new build.			
Update all retrofit specifications for water fittings. Suggested values are: • **WC 4/2.6 litres dual flush** • **Shower 8 l/min** • **Bath 170 litres** • **Basin taps 5 l/min** • **Sink taps 6 l/min** • **Water meter**	Lo	Lo	Med
For 100% of bathroom and kitchen upgrades install water fittings to the new specification and record upgrades on the water efficiency database.	Med	Med	Med
For at least ~5% of voids with a shower flow rate of 8 litres/min, retrofit an aerating shower head/fitting and record upgrade on the database.	Lo	Lo	Med
For at least ~5% of voids with a non-dual flush toilet, retrofit a water displacement device to reduce flush volume.	Lo	Lo	Med
Contact your local water supplier and explore ways to get meters retrofitted in voids.	Lo	Lo	Med
Active engagement: encourage residents to use water efficient appliances, and liaise with installers to ensure advice on how to maximise efficiency of installations is provided (and recorded) as standard for all work completed	Lo	Med	Lo
Devise a plan to ensure that all homes have water efficient fittings by 2050.	Lo	Lo	Lo
Implement the water efficiency plan.	Med	Med	Med

Domestic recycling

This SHIFT metric reflects the measures that landlords can take to encourage additional recycling by residents, above and beyond what local authorities are doing to boost recycling rates.

SHIFT estimate that 67.60% of Stonewater's homes have internal recycle bins fitted using data provided by Stonewater and build date assumptions. It is assumed that 100% of residents can engage passively via information on Stonewater's 'Living more sustainably' section of their website. 7.06% of residents were actively engaged in domestic or bulky waste disposal during the reporting period. This included conversations with residents, surveys, and scheme walkabouts. Based on this information, a 9.64% increase in the likelihood of residents diverting waste from landfill is estimated.



Peer Comparison: ahead

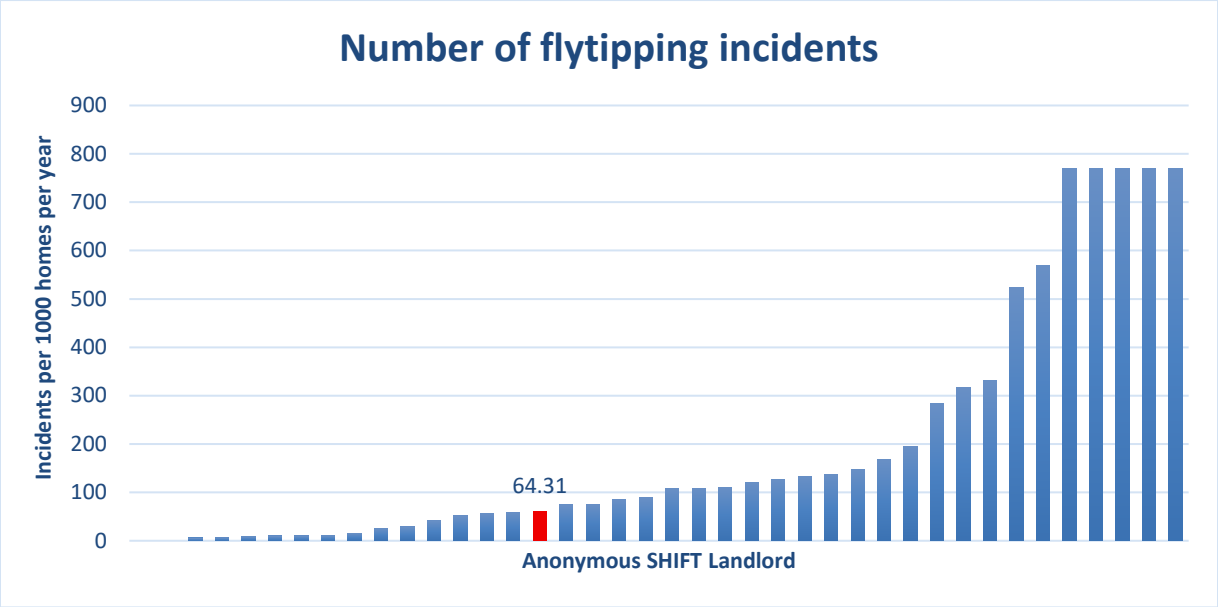
Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Include recycling bins in your asset database. SHIFT can give you first pass assumptions to help populate the database. As well as showing data for existing homes, the database can be populated with information from new build.	Lo	Lo	Lo
Update kitchen retrofit specifications to include internal waste recycling bins and ensure new build specifications include recycling bins as standard	Lo	Lo	Lo
For 100% of kitchen upgrades install internal waste bins to the new specification and record upgrades on the internal waste bin database.	Lo	Med	Med
Put waste reduction and recycling tips for residents on Green Pages. This should include details on bulky waste.	Lo	Lo	Lo
Develop an active engagement programme on waste management and ensure all interactions are recorded for environmental reporting	Lo	Med	Lo

Fly tipping

Fly tipping is unsightly, presents a potential fire hazard and is costly for landlords to deal with.

1,995 fly tipping incidents were reported by Stonewater over the period, equating to 64.31 per 1000 homes.



Peer Comparison: comparable

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Devise a strategy to reduce fly-tipping to zero incidents per 1,000 homes by 2050, including interim monitoring targets and milestones.	Lo	Lo	Lo
Implement the strategy to reduce fly-tipping and monitor impact.	Med	Med	Lo

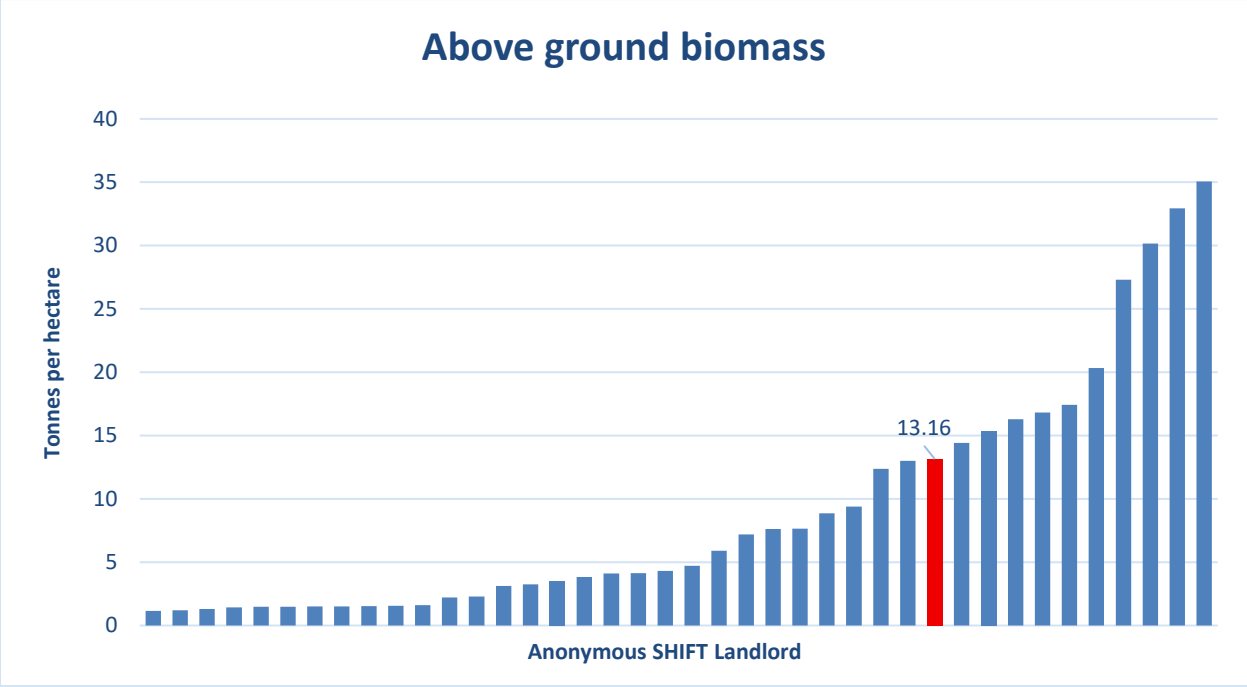
Biodiversity and green spaces

Green spaces and biodiversity can deliver major benefits to our health and wellbeing. These include air quality improvement, flood attenuation, cooling during heatwaves, recreational value and carbon sequestration. As such biodiversity is rising up national, international and ESG agendas. Biodiversity Net Gain (BNG) is beginning to impact new build developments and the methodology provides a good way to measure biodiversity in general. We are reviewing the methodology and data and intend to introduce it in future SHIFT assessments. What is very

clear from all methodologies, targets, and initiatives is that the amount of land owned by landlords will need to be known.

For the time being, SHIFT research indicates that there should be 11.9 tonnes of above ground biomass per hectare of landlord land by 2043. This metric aligns with ESG reporting and provides an estimate of above ground biomass per hectare from land coverage data on all land holdings, including gardens as well as communally maintained land. It provides and indication of the level of biodiversity.

Stonewater were able to provide both GIS land area and vegetation type information, and tree data/count from 'Bluesky's National Tree Map'. For tree cover estimations, tree count data was used from the 'Bluesky National Tree Map', along with land registry information. The SHIFT biodiversity tool estimated 13.16 tonnes of above ground biomass per hectare of land owned, which equates to 10,495.60 tonnes of biomass across Stonewater's stock.



Peer Comparison: comparable/ahead

Recommended improvements:

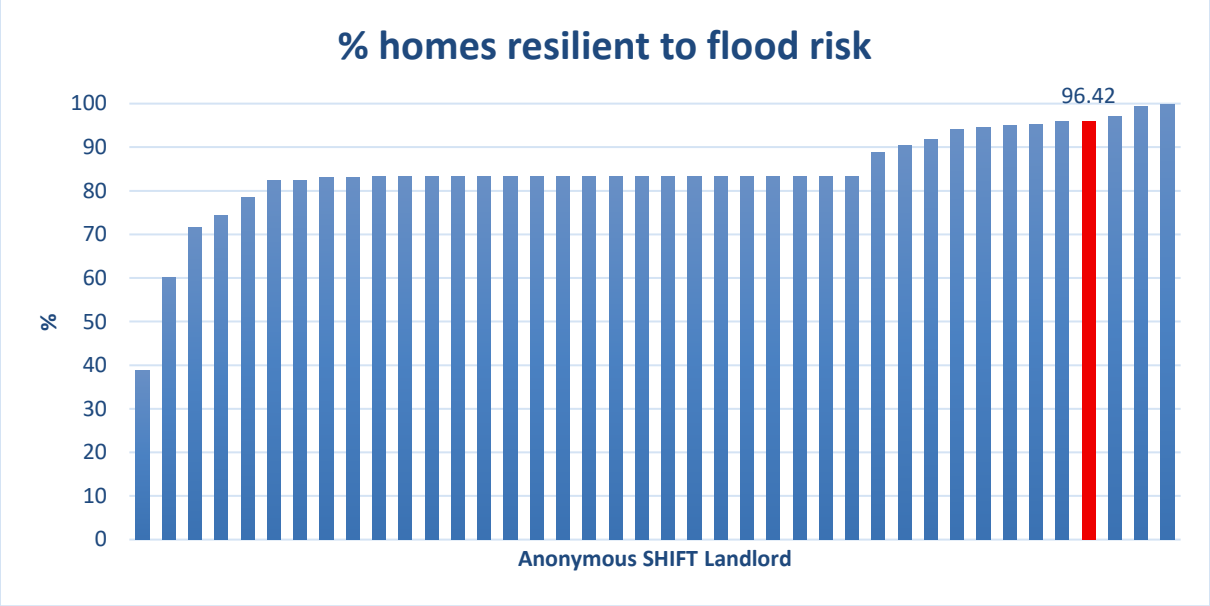
Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Create a database which shows the m2 of area for each property as well as vegetation types of private gardens. Include other land owned beyond buildings and tree locations and canopy sizes. SHIFT can give a first pass assumption. As well as showing data for existing homes, the database can be populated with information from new build.	Lo	Lo	Lo
Devise a plan to achieve 11.9 tonnes above ground biomass per hectare by 2043, with the caveat that this may be superseded if new guidance emerges. Include milestones and interim monitoring targets.	Lo	Lo	Med
Implement biodiversity and green spaces strategy and monitor progress against milestones and biomass/ha interim targets.	Med	Med	Med

Homes resilient to flooding

Met Office projections indicate more flood events. The Environment Agency states over 3 million properties in England are at risk of surface water flooding, even more than those at risk from rivers and the sea (2.7 million). The ideal is to have 100% of homes at low risk or adapted to flooding. For SHIFT purposes, we define adapted as homes that are in locations at low risk of flooding or homes that have responsive actions in place to quickly react to a flood event or flood warning. Homes may still flood, but they can be quickly occupied again after a flood event.

Environment Agency research on flood risk in England which indicates that 1 in 6 properties are at risk of flooding. It is considered best practice to assess individual property level flood risk which includes the risk of fluvial and surface water flooding and groundwater if a known risk. Surface water flooding is especially important to assess in urban areas as it is projected to be the most likely form of flooding in future years.

Stonewater provided the results from their flood risk assessment in the asset data template as requested. This included both fluvial and surface water flood risk and indicated that 95.91% of homes are at low risk of flooding. In addition to this, Stonewater have developed their 'Flood Mitigation Strategy' – in which they have identified 159 homes at high risk of flooding to provide measures from early warnings to specialist property flood resilience specialists. This increases the resilience of Stonewater's housing stock to flooding to 96.42%.



Peer Comparison: ahead

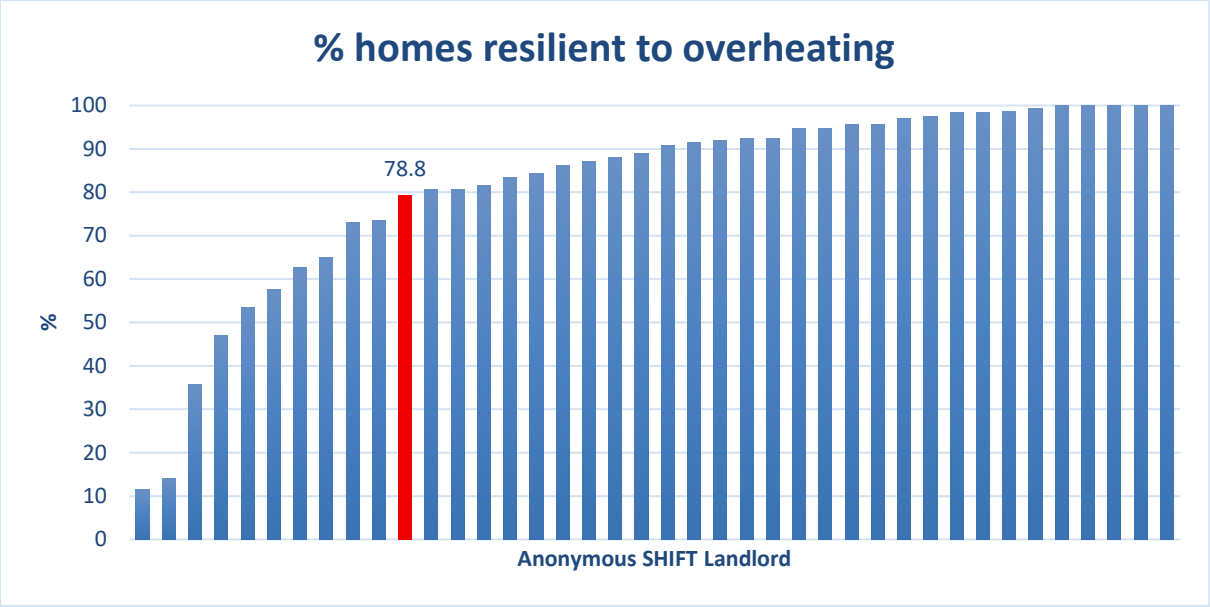
Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Assess flood risk and include this in your asset database. This should include fluvial and surface flood risk, be address specific and assessed within the most recent 3 years. As well as showing data for existing homes, the database can be populated with information from new build.	Lo	Lo	Hi
Devise a flood resilience strategy including interim monitoring metrics, with the end goal to have 100% of homes resilient to flood by 2050. Ask your SHIFT assessor for our suggestion which clients are free to use.	Lo	Lo	Hi
Implement flood resilience strategy and monitor against interim targets.	Med	Med	Hi

Homes resilient to overheating

Met Office data (and recent experience) indicate that heat waves will become more prevalent in coming years. Landlords will need to adapt and manage their stock such that residents are protected from adverse effects. For SHIFT purposes, we define adapted as homes that are either at low risk of overheating or homes that have responsive actions in place to quickly react to overheating events or overheating warnings. Homes may still overheat, but they can quickly be occupied again after a heat wave event.

The SHIFT overheating risk assessment uses information on housing stock property types, postcodes, communal heating and build dates along with SHIFT sourced data on risk factors such as the urban heat island effect and population density to estimate overheating risk in Stonewater's housing stock. It is estimated that 78.80% of Stonewater's homes are at low risk of overheating.



Peer Comparison: comparable

Recommended improvements:

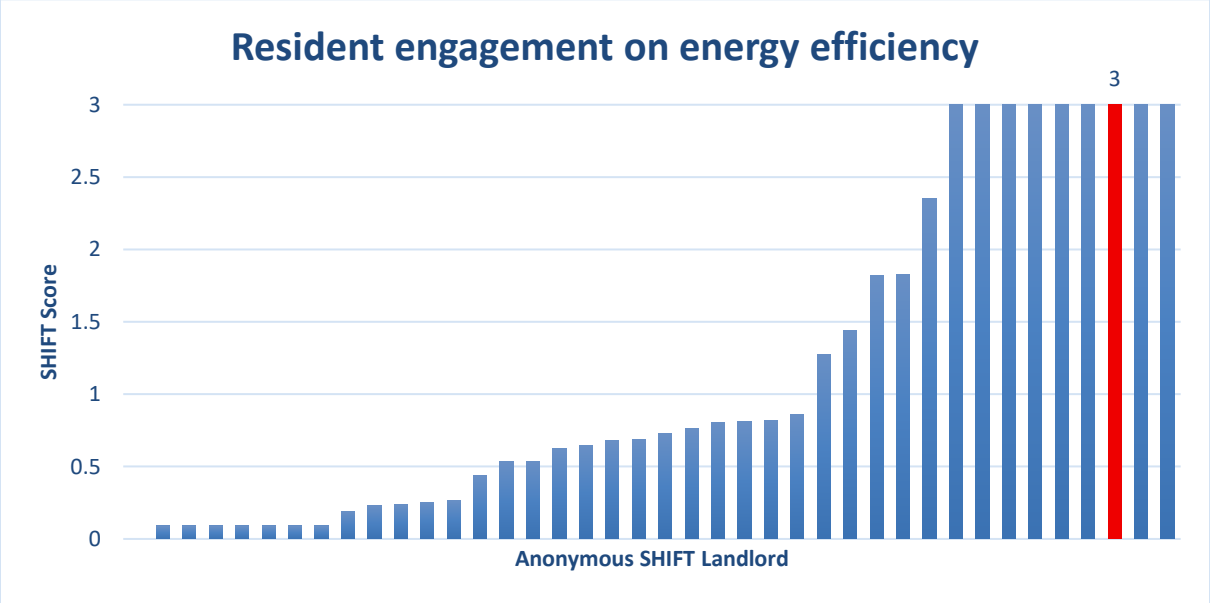
Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Create an overheating resilience database to UPRN level. As well as showing data for existing homes, the database can be populated with information from new build.	Lo	Lo	Hi
Devise an overheating resilience strategy including interim monitoring metrics, with the end goal to have 100% of homes resilient to flood by 2050. Ask your SHIFT assessor for our suggestion which clients are free to use.	Lo	Lo	Hi
Implement the overheating resilience strategy and monitor against interim targets.	Med	Med	Hi

Resident engagement

Energy Efficiency

Resident engagement is an important way of encouraging residents to lead more sustainable lives and to save both energy and money. There is an emerging nuance with resident engagement as it is recognised that there will be huge disruption as each home is transformed to net zero. Explaining and demonstrating the benefits of net zero will also be vitally important.

100% of residents have access to energy efficiency advice through Stonewater's various social media posts as well as through resident newsletters and are considered passively engaged. While it is important for residents have access to this information, it is difficult to monitor the effectiveness/interaction of this engagement. It is considered that more active engagement with residents can have the greatest impact. At present, it is considered that 49.87% of Stonewater's residents had been actively engaged on energy efficiency. Gas engineers provide energy advice during Gas Safe visits, it is a standard to offer advice on energy when performing retrofit assessment and works. Stonewater also provide an 'Energy hub', where energy efficiency advice is given to residents. These measures resulted in a SHIFT score of 3 out of 3 for performance on resident engagement on energy efficiency. This is benchmarked against other SHIFT landlords below.



Peer Comparison: ahead

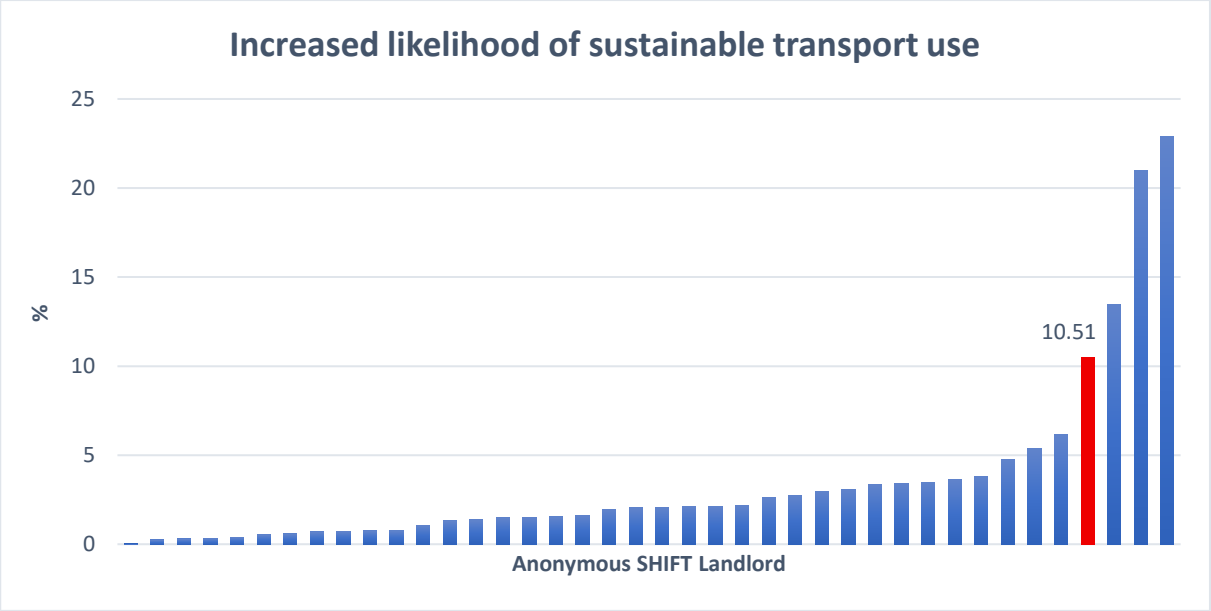
Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Design an active engagement programme that ensures that residents have an opportunity to learn first hand, from sufficiently knowledgeable people, how to lead a more sustainable life. Ensure the programme has milestones and meaningful targets.	Lo	Lo	Lo
Implement the active engagement programme.	Med	Med	Lo

Sustainable transport

Transport facilities and initiatives for residents can help to encourage sustainable travel choices which reduce carbon emissions and improve local air quality. This metric is based on the provision of cycle storage facilities as well as transport advice, from travel maps and timetables to cycling and eco-driving training. The national plan for transport is to encourage everyone to switch to walking and cycling, coupled with moving to electric vehicles. It is recognised that poor air quality is an issue to residents across the UK and that inequalities exist; air pollution can disproportionately impact less affluent areas. Attempts to improve local air quality will be essential and promoting active transport and low emission travel is a priority.

As a result of Stonewater's sustainable transport interventions, the increased likelihood of residents using sustainable transport is 10.51%. For sustainable transport facilities, data was provided that indicates 30% of Stonewater's homes have cycle storage facilities. Stonewater also provided data showing that 5.37% of homes have EV chargers. New residents have access to address specific transport advice, Stonewater provides address specific sustainable transport information via property profiles that list their local public transport facilities (local train stations, bus stops, and the distance to these facilities). Stonewater also has great information and useful links on their website for residents to access information on walking, cycling and car share clubs. Below you can see how your performance compares to other SHIFT landlords.



Peer Comparison: ahead

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Create a database which shows sustainable transport features that are included in each home. This can be an add-on module to asset management database. It should have fields for noting the presence of cycle storage, nominated parking and EV chargers. As well as showing where current cycle storage is located, the database can be populated with information from new build. SHIFT can provide first pass assumptions of which homes may have cycle storage to start the database.	Lo	Lo	Lo
Retrofit at least 1% of homes with EV chargers and record in the database.	Lo	Lo	Med
Retrofit at least 1% of homes with cycle storage units and record in the database.	Lo	Lo	Med

New build

More sustainable new homes means lower whole-life costs for the landlord. Retrofitting non-sustainable homes at a later date incurs higher whole life costs for the landlord. In addition, when good quality new homes are added to the asset register, they improve the average environmental performance in a cost-effective manner.

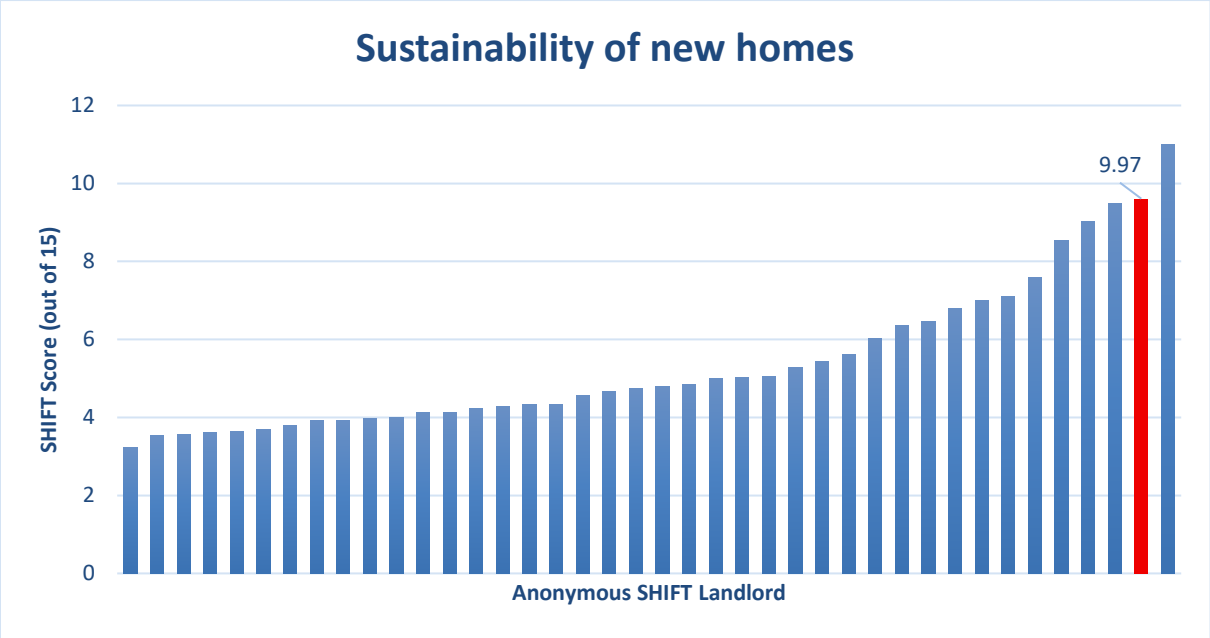
The SHIFT metric factors in a range of measures to determine the sustainability of new builds, including energy efficiency, above ground biomass, flood risk, overheating risk, recycling support, use responsibly sourced materials and sustainable transport support.

We also encourage the use of some form of third-party verification to ensure that the so-called performance gap between design and final home, is minimised. There is no intention to create an industry out of this and we believe that there is sufficient data and systems in place to do this effectively without extra cost.

Figures provided for this assessment by Stonewater's Environmental and Sustainability Business Partner indicated that 30.46% of homes achieved an EPC A (SAP 92+), 38.78% a high EPC B (SAP 86-91), 29.85% of homes were rated as a low EPC B (SAP 81 – 85) rating, and 0.91% as an EPC C (SAP 69-80). It is highly recommended that Stonewater continues to increase the proportion of new builds homes to an EPC Grade A (SAP 92+ minimum). Stonewater recognise that this will help bring up its average energy efficiency closer to environmentally safe levels and reduce the level of investment needed in its existing stock in order to achieve the net-zero 2050 target.

Stonewater provided evidence of full third-party verification representative of 69.44% of the new builds handed over during the reporting period. It should be noted, in future SHIFT assessments photographic evidence of sustainability features will be required to meet this standard.

Using the SHIFT calculator for new build and the data above, the sustainability score for Stonewater's new build homes is 9.97 out of 15.



Peer Comparison: ahead

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Develop an environmental quality management system (EQMS) for new builds that includes net zero homes, in addition to other environmental issues, a design specification, independent on-site checks and post-handover checks. The system should enable easy data collection for a variety of reporting and hand over to asset management colleagues[2]. SHIFT has produced a draft EQMS ask your SHIFT assessor for a copy.	Lo	Lo	Lo

[2] SHIFT: Data to transfer from the new build department to asset management

Implement the EQMS	Med	Med	Med
Install MVHR space heating and heat-pump hot water heating in ~5% of new builds.	Med	Lo	Lo
Conduct a supply chain survey of your new build contractors to ensure that they are working to the same sustainability goals as you. You can contact your SHIFT assessor for our supply chain survey but the main issue will be embodied CO_2 in the materials used.	Lo	Lo	Lo

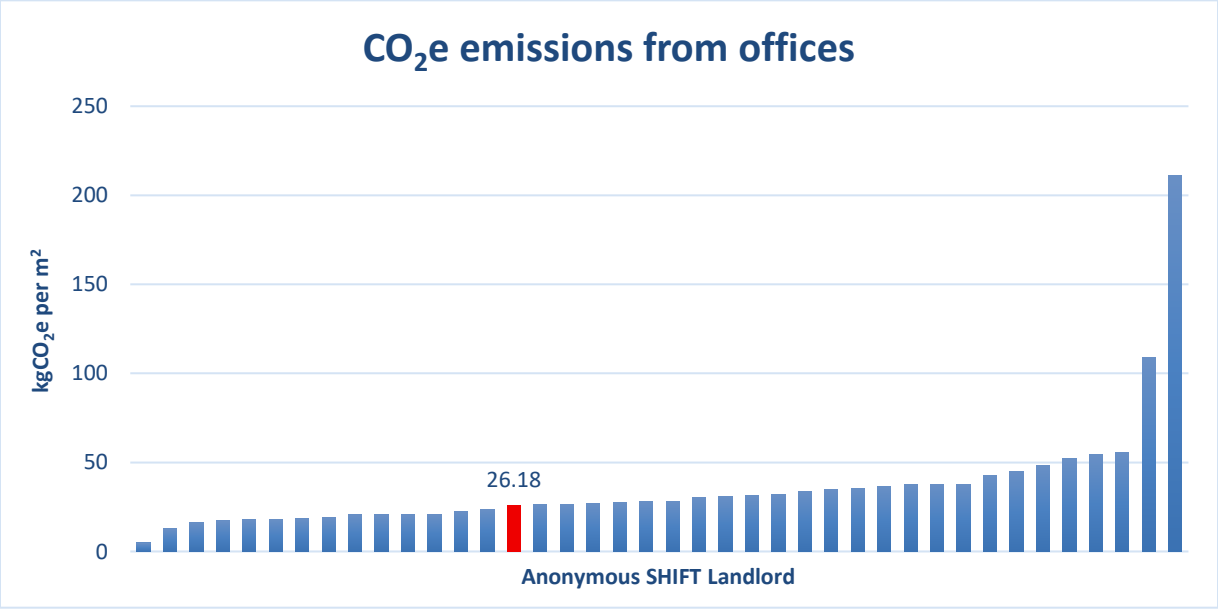
Offices & Operations

Offices and operations have a minor impact on the organisation's overall environmental performance but there are several advantages to focussing on improving their environmental qualities. Utility bills reduce, staff can see a tangible commitment to sustainability and facilities teams gain first-hand experience in environmental technologies. In addition, new regulations are emerging which will impact on building performance.

Energy usage

The ultimate target is net zero emissions by 2050 through low energy demand buildings and a decarbonised grid. The Government states a target of rented, non-domestic properties to be EPC B by 2030. Similar to homes, office buildings are expected to have non-fossil fuel heating systems.

Stonewater documented the energy use at their 4 office spaces. The Reading office was documented as using 4,075 kWh of energy (a large reduction year-on-year), the Bournemouth office consumed an estimated 20,313 kWh the Coventry office consumed 16,725 kWh (occupied for 6 months during the reporting period), and finally the Leicester office consumed 15,236 kWh. In total, 24.69 tonnes CO_2e were emitted in the assessment period which equates to 26.18 kg CO_2e per m^2 of office space.



Peer Comparison: comparable

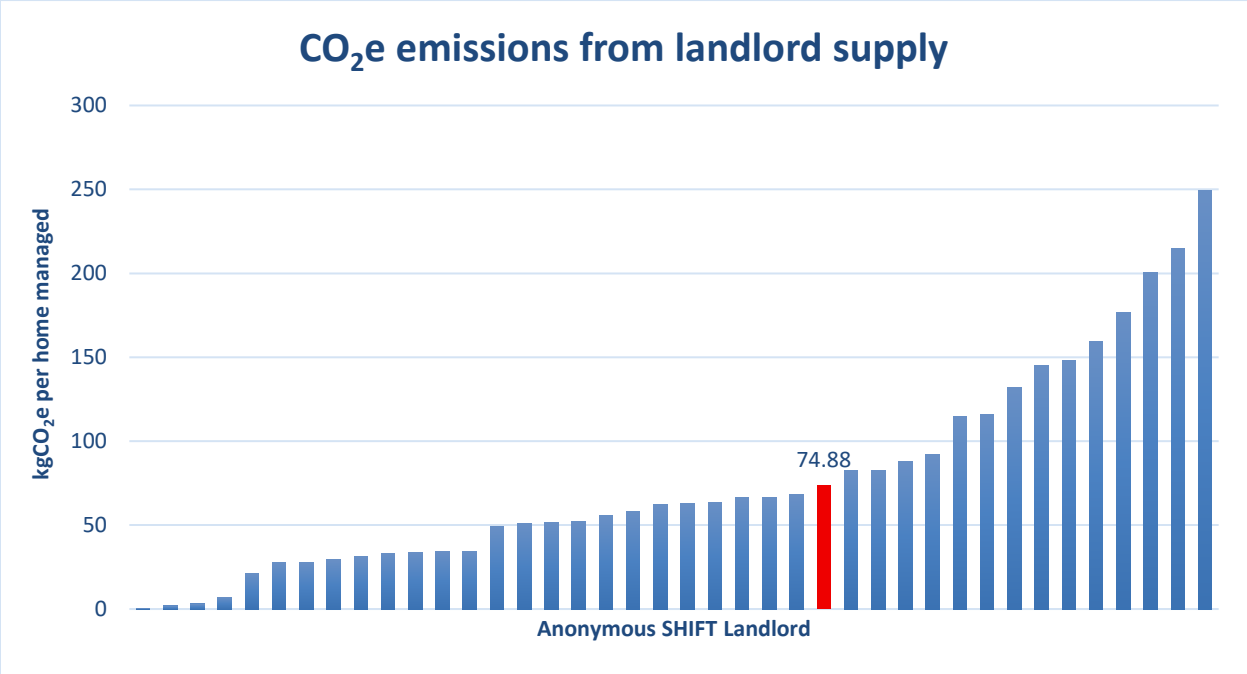
Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Devise plans to improve office energy efficiency – this can be by commissioning an EPC Recommendations Report and/or an ESOS[3] style review of each office. Ensure plans include transition to non-fossil fuel heating. This will most likely be electricity, but biomass and/or heat networks are also possible.	Lo	Lo	Hi
Implement the office energy efficiency plans.	Med	Med	Hi

Other landlord supply

For SHIFT this is made up of communal areas in homes as well as 'other landlord supply' such as community centres. Stonewater identified 10668341 kWh of communal area usage during the reporting period. The associated CO_2 was calculated using the relevant Defra conversion factors. This totalled tonnes 2,323.31 tCO_2 e or 74.88 kg CO_2 e/home managed. This is for the total number of homes which Stonewater have decent homes responsibility. In previous assessments this intensity ratio has been calculated for the homes served by communal areas and the energy use from them. However, this intensity ratio aims to provide an indication of the energy consumption relative to the size of the organisation.

[3] SHIFT ESOS reporting



Peer Comparison: comparable

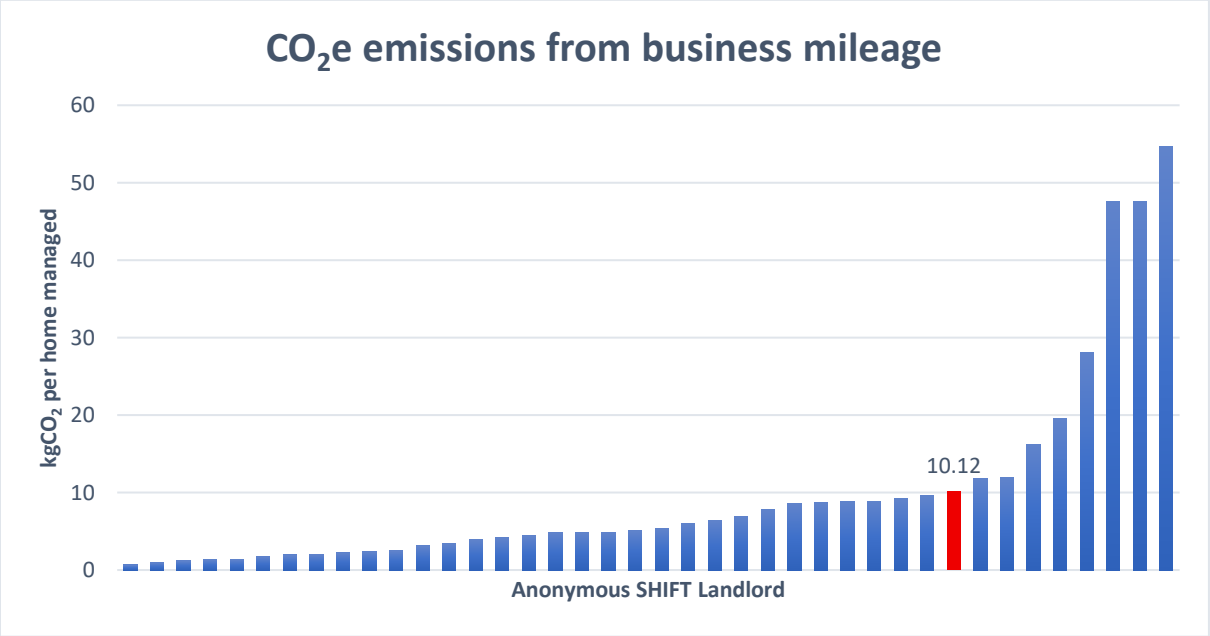
Recommended improvements

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Devise and implement net zero plans for each site not already captured elsewhere in this report – typically street lighting and other non-domestic sites like community centres or sewage treatment plants	Med	Med	Hi
Set up regular (at least quarterly) monitoring of non-domestic properties by kWh/entity. The monitoring should incorporate broker data and report anomalies to asset management to rectify. Monitoring saves energy and easily provides data for compliance reporting.	Lo	Med	Lo

Business mileage

Controlling business mileage expenditure can make a real difference to landlords. The SHIFT metric for business mileage looks at car claims, public transport usage and air miles (if applicable).

Business mileage data was collected by Stonewater's Environmental and Sustainability Business Partner for the 24/25 financial year. This included petrol, diesel, electric, and unknow fuel type vehicle mileage from employee-owned vehicles, as well as public transport of via rail. Appropriate Defra carbon conversion factors were used to calculate that 313.81 tonnes CO_2e or 10.12 kg CO_2e per home managed was emitted through business travel.



Peer Comparison: comparable

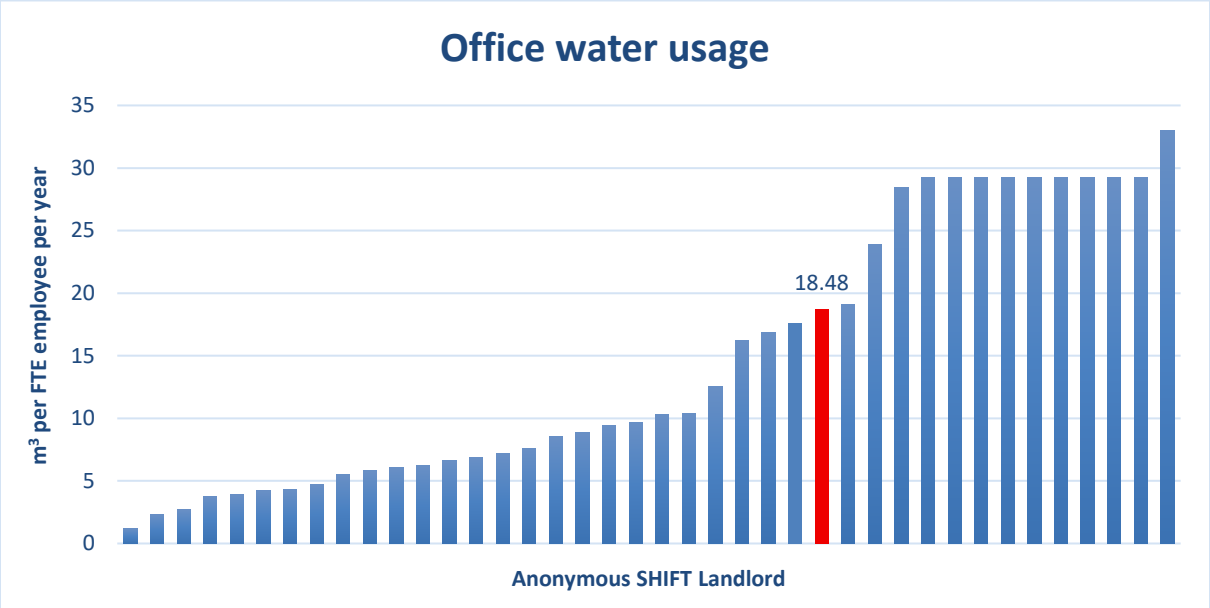
Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Carry out an analysis of business miles per employee to identify those with the highest mileage drivers and identify ways to reduce this. E.g. switching to videoconferencing.	Lo	Lo	Lo
Devise a sustainable transport policy that encourages public transport, car-sharing, reduces unnecessary travel, walking and cycling for business purposes.	Lo	Lo	Lo
Ensure mileage claims include type of car e.g. petrol, diesel, hybrid or electric. This allows for more representative calculation of CO_2 emissions.	Lo	Lo	Lo
Consider if electric pool cars are viable. They could be stored and charged at the Head Office if charging infrastructure is installed. This may reduce fuel costs and discourage the use of personal vehicles for business travel[4].	Lo	Lo	Lo

[4] Download EV roundtable summary for practical experience from other landlords on EV chargers: SHIFT: Publications

Water

Water use was reported as 34.35m^3 at the Reading office, a further 67.18m^3 was recorded at Bournemouth, 405.88m^3 was recorded at the Leicester office. No data was available at the Coventry office, and therefore the SHIFT default of 33m^3/FTE employee was applied for the 6 months of occupancy. Combined, water usage was recorded as 757.61m^3. This equates to 18.48m^3 per employee.



Peer Comparison: SHIFT default was used/comparable

Recommended improvements:

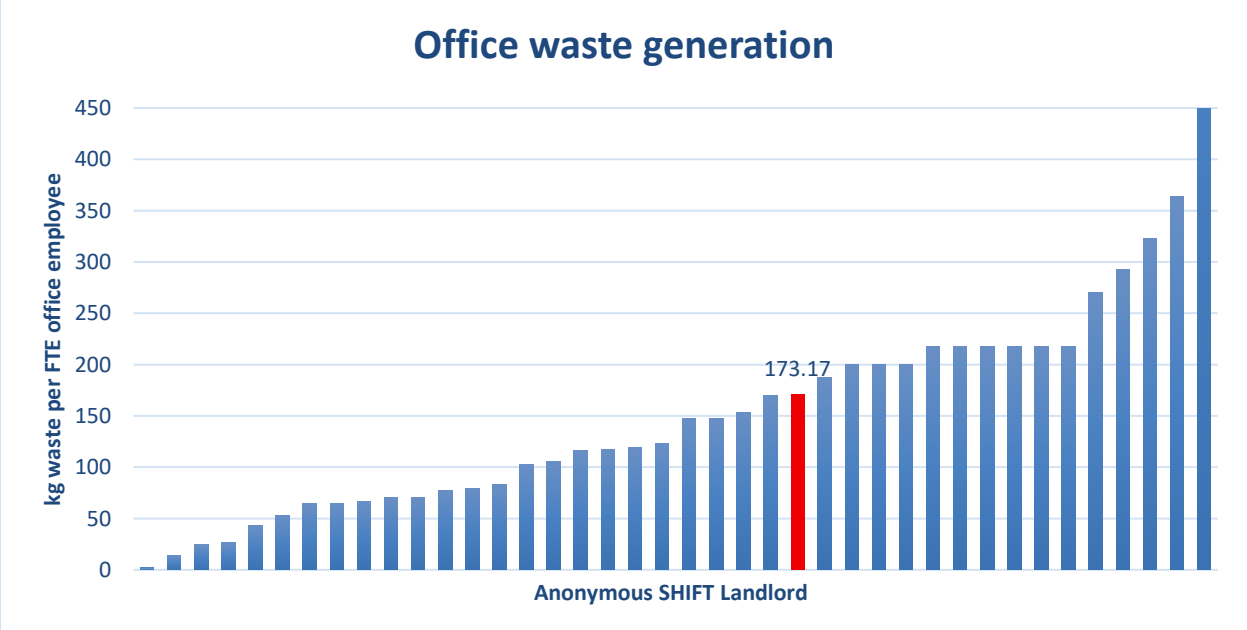
Action	Cost Hi/Med/Lo	Staff Effort Hi/Med/Lo	Likelihood of regulation Hi/Med/Lo
Set up a quarterly utility reporting system for your offices to keep a consistent track of data. This will also help identify leaks at an early stage.	Lo	Lo	Lo

Carry out a water audit as this could identify further environmental and cost savings	Lo	Lo	Lo
Engage staff on water efficiency initiatives and water saving measures. Incorporating these into water savings policies and procedures e.g., ensuring the dishwasher is full before turning it on.	Lo	Lo	Lo

Waste

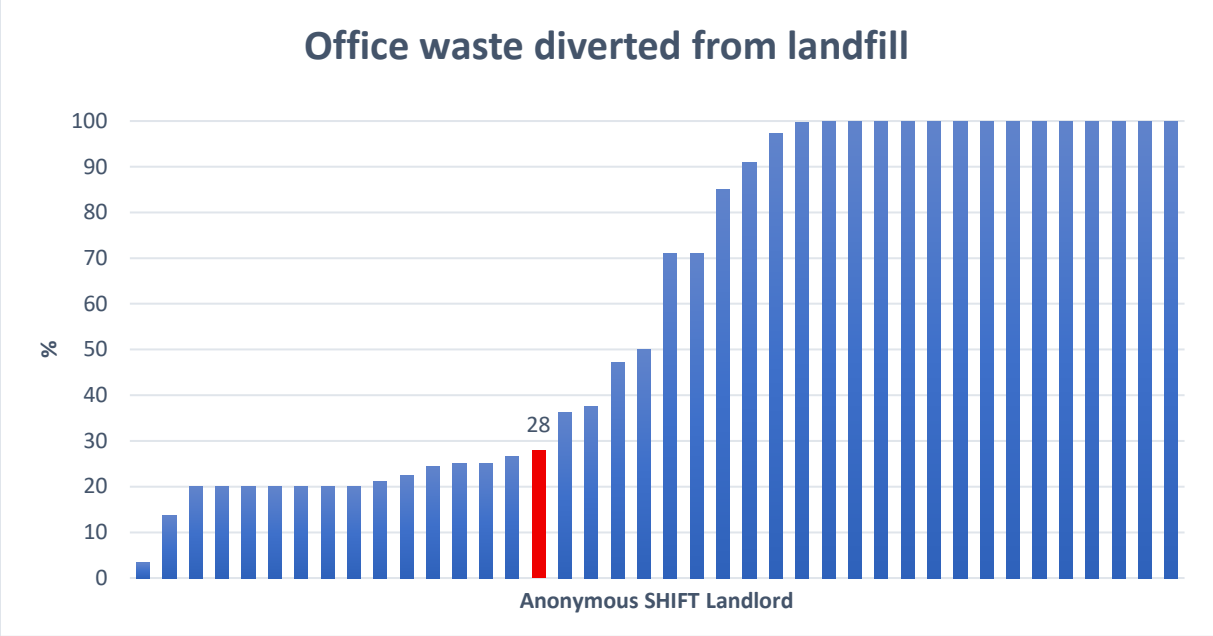
As interest rises in the circular economy, alongside an awareness of the damaging impacts of plastic pollution, companies from all sectors are ramping up efforts to tackle waste. Quantifying total waste outputs and treatment is an important first step.

Stonewater provided waste collection quantities from 3 of their 4 offices. The SHIFT default was used to estimate waste generated at Stonewater's Coventry office for the 6-month period that the office was in use. In total, it is estimated that 7.10 tonnes of general waste was collected by over the reporting period, which is equivalent to 173.17 kgs per full-time equivalent employee.



Peer Comparison: SHIFT default was used/comparable

Stonewater reported 100% waste diverted from landfill at their Reading office. Unfortunately Stonewater were unable to obtain data from any other offices, and therefore, the SHIFT default of 0% was applied at these locations. Overall, it estimated that 28% of Stonewater's office waste is diverted from landfill.



Peer Comparison: SHIFT default was used/below average

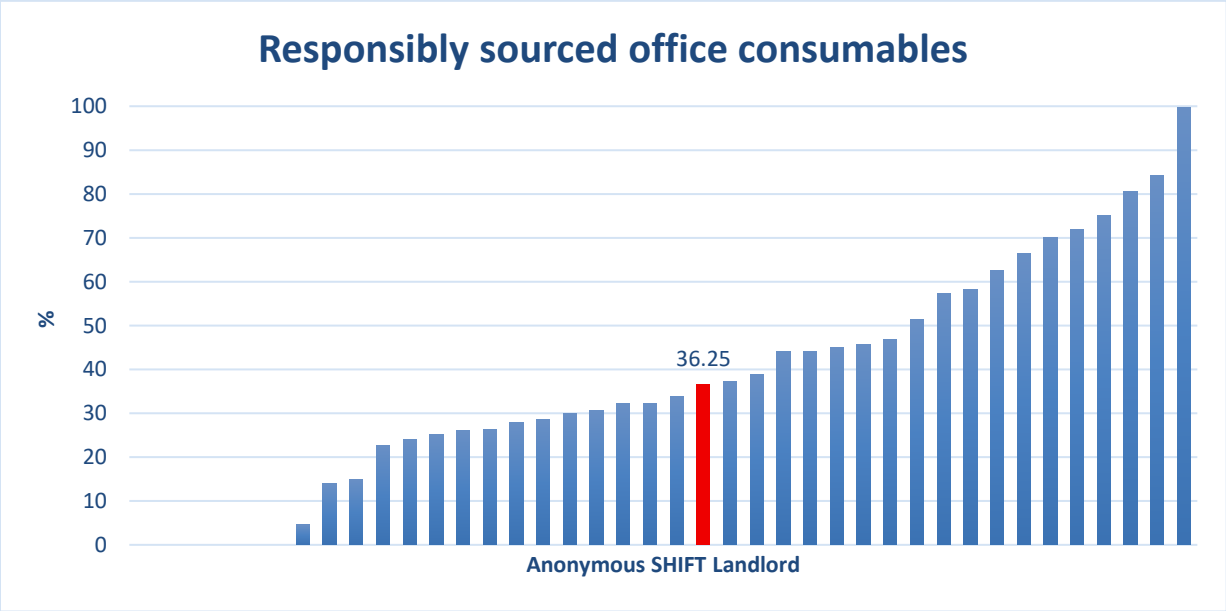
Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Engage with your waste contractor to provide a breakdown of waste disposition (landfill, recycling) as a minimum requirement.	Lo	Lo	Lo
Develop your own waste monitoring system to begin developing waste reduction targets across various teams.	Lo	Lo	Lo

Review in-house processes with the aim of reducing or even eradicating the necessity for printing – many processes are or can be electronic now.	Lo	Lo	Lo
Provide clearly labelled/information on bins to encourage the correct recycling, making it easy for staff members and visitors.	Lo	Lo	Hi

Office consumables

Stonewater do not have an office consumables eco/green report. However, the Environmental and Sustainability Business Partner did provide some a stock report with information on the environmental credentials of some office consumables. As recommended in SHIFT 2024, Stonewater should investigate this further and request documentation from their supplier. Developing a system at Stonewater to document all green spending for office consumables or requesting that all products from suppliers are clearly labelled as 'green' will not only save time for future SHIFT assessments but also allow for easy selection and targeting an increase of future sustainable product procurement. Using the office consumables calculator and data supplied, it is estimated that 36.25% of office consumables are responsibly sourced.



Peer Comparison: comparable

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Survey your suppliers (you can use the supply chain survey as a template) to receive a list of responsibly sourced consumables and a breakdown of spend for green/eco-label purchased products compared to those that are not.	Lo	Lo	Lo
Increase the proportional spend on green/responsibly sourced products by ~5%. Consider an automatic switch through your current or new supplier.	Lo	Lo	Lo

Offices adapted to flooding and overheating risk

Climate change will affect offices as well as homes. The same flood and overheating risk precautions should be taken for offices as for homes. This will ensure business continuity.

Stonewater analysed the Environment Agency's Flood Risk maps and identified that all office spaces are at low risk to flooding.

No official overheating survey of Stonewater's offices has been conducted, but it is documented that all offices are at low risk to overheating. Stonewater's Environmental and Sustainability Business Partner stated that all offices are fitted with air conditioning units.

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
For offices identified as at risk of overheating install risk reduction measures. Preferably passive measures such as the addition of brise soleil, blinds, and additional film glazing on windows. As a last resort, energy efficient air-conditioning.	Med	Med	Med
For offices identified as at risk of flooding install risk reduction measures.	Med	Med	Lo
Sign up to Environment Agency flood alerts and enact flood risk reduction measures accordingly.	Lo	Lo	Lo

Strategy & Management

A strong sustainability strategy underpins robust environmental monitoring and performance at any organisation, by setting out a clear direction of travel in both the short and long term, as well as SMART KPIs to measure progress against. When assessing strategies for efficacy we look for specific, measurable, achievable, realistic and time-bound targets only, for a range of areas including energy efficiency, waste, water and climate adaptation. These targets provide clear direction to the staff who must implement them and give some assurance that your organisation will align with science-based environmental targets. In addition, senior level commitment and defined responsibilities help ensure the efficacy of the strategy.

Stonewater have scored 14.16 out of 15 for an effective strategy. Stonewater's Environmental Strategy 2021 - 2025 ensures that sustainability runs throughout their organisation including their homes and office and other organisational activities. It demonstrates organisational commitment from the Board and Senior Management as it is fore worded by Stonewater's Chief Executive. Sustainability targets and objectives cover almost all environmental areas assessed in SHIFT including energy efficiency, flood risk, overheating risk, materials etc. SMART targets allow for interim and long-term ambition to be monitored and analysed. Stonewater have a thoroughly researched and detailed strategy which offers various scenarios for net zero, options for reduced fuel poverty, and targets to support high environmental performance. Stonewater have developed a system to monitor progress towards achieving targets with clear KPIs.

SMART targets on water, waste, and resident engagement were not included in the Environmental Strategy, but SMART targets for waste and water were provided in the 'Stonewater Sustainability Framework'. Stonewater plan to integrate these SMART targets into their main environmental strategy renewal. For full SHIFT points, specific resident engagement SMART targets are required.

Peer Comparison: ahead

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Integrate KPIs into your strategy so that all areas of sustainability that are covered by SHIFT are included. Ensure targets align with corporate objectives.	Lo	Lo	Lo
Ensure actions are assigned to directorates and monitor progress quarterly.	Lo	Lo	Lo
Communicate targets across the organisation to staff and residents.	Lo	Lo	Lo
Implement quarterly scorecard style reporting of environmental metrics to Senior Management Teams. (By adapting the advice given in earlier sections to	Lo	Lo	Lo

include data in asset management systems, this may become an easier task).			
Lobby Government to develop a sensible funding mechanism for funding upgrades to net zero.	Lo	Lo	Hi

DLO & Supply Chain

Engaging with your supply chain is a way to encourage improved environmental performance. As well as bringing an enhanced local environment to staff and residents, there are also financial benefits for your organisation. For example, if a maintenance contractor uses more efficient transport, they save costs which could be passed on to you. More landlords are reporting ESG investors asking about supply chain emissions. Our calculations so far indicate that supply chain emissions are a significant proportion of a landlord's overall carbon footprint.

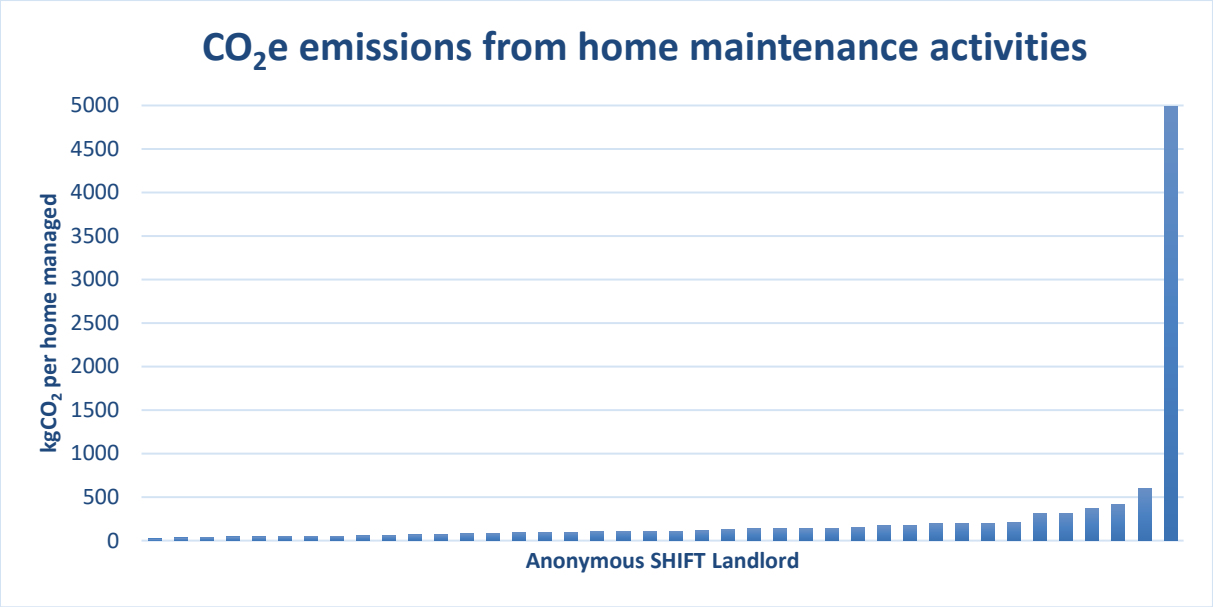
For SHIFT purposes, we include in-house maintenance team data in with the supply chain questions. This allows better comparability between organisations that have a DLO versus those that subcontract out all work.

Maintenance CO_2e emissions

In-house (DLO) and subcontracted maintenance teams emit CO_2e from their fleets, offices, and other operations. Importantly, maintenance fleets also emit air pollutants which contribute to localised poor air quality and consequential health issues.

Figures are based on survey requests to larger contractors requesting their figures for organisational emissions. Where a landlord has its own maintenance fleet, these figures are included too. This metric indicates the total CO_2e emitted due to maintenance activities.

Stonewater have a very small direct labour operative/in house maintenance team - just 40,653.4 diesel miles travelled was reported. In addition to this, several of Stonewater's external contractors, accounting for 73.20% of Stonewater's repairs and maintenance budget, replied to the supply chain survey. They provided carbon emission figures attributable to Stonewater totalling 1,155.41 tonnes CO_2e. When the emissions are scaled up to represent 100% this equates to 1,598.4 tonnes CO_2e or 51.52 kgCO_2e per home managed.



Peer Comparison: for transparency, the above graph shows the current data we have on maintenance emissions. This has been included to demonstrate the disparity of emissions reporting within the repairs and maintenance sector. As this is for indicative purposes only, Stonewater's performance is not plotted

As part of SHIFT 2025 embodied carbon figures for repairs and maintenance are being included. The aim is to encourage landlords to request this information from external suppliers and gain detailed waste reports for their in-house maintenance to facilitate these calculations. It is expected that most external suppliers will not be able to provide embodied carbon figures at this stage. However, landlords should demonstrate demand for this data and request this information as early as possible.

Stonewater provided photographic evidence of waste consignment notes from waste carrier KNK. However, it is not known to SHIFT what percentage of Stonewater's supply chain these waste notes represent, which would allow embodied carbon to be calculated. The SHIFT assumption is that any material disposed of by the repairs and maintenance teams is replaced by like materials, therefore the embodied carbon can be calculated based on this. Therefore, the SHIFT default 39kgs/home has been used. The total embodied carbon for Stonewater's DLO and supply chain has been estimated to be 1,209.90 tonnes CO_2 e, which is equivalent to 39kgs per home managed.

Recommended improvements:

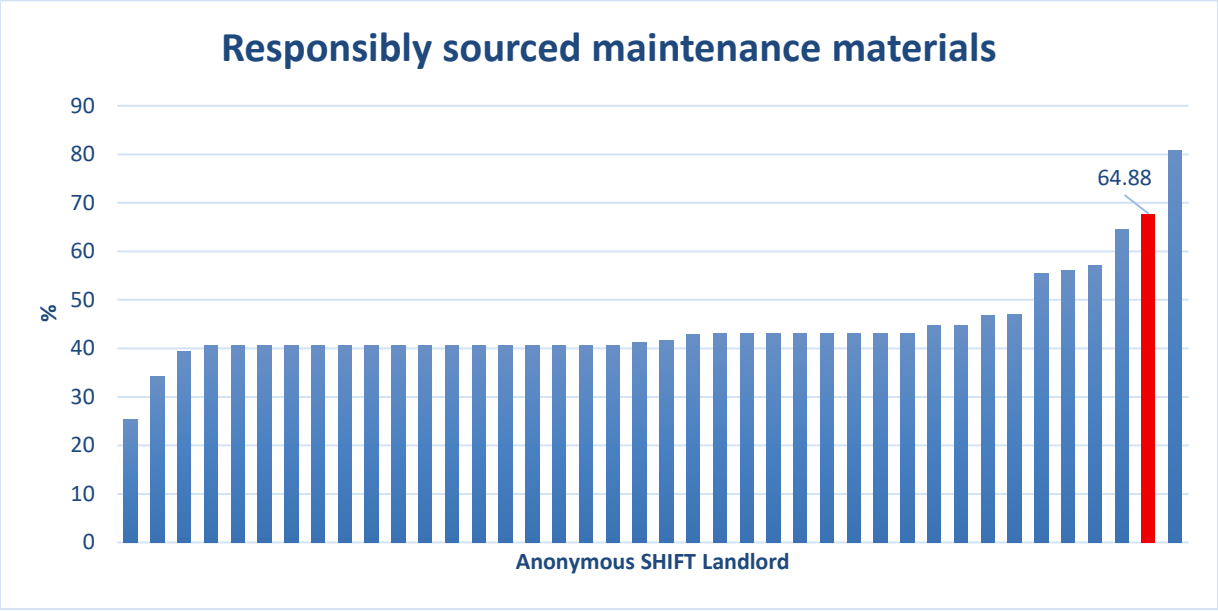
Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Devise a database that collects DLO fuel usage data. Many landlords now use fuel cards which record the litres of petrol or diesel bought. Accurate mileage for EV vans should also be recorded. Installing EV charge points which are sub metered would allow accurate reporting of kWhs.	Lo	Lo	Med
Implement a telematics system for fleet vehicles, ensuring that quarterly reports can be extracted.	Lo	Lo	Med
Combine DLO fuel usage and telematics data to set up monthly monitoring of mpg data and enable anomaly identification with alerts for the fleet manager.	Lo	Lo	Med
Implement investigations and rectification for any anomaly alerts from the mpg	Lo	Med	Med
Upgrade at least ~5% of vehicles in the fleet to a more efficient vehicle, possibly an EV if charge points and range allow.	Med	Lo	Med
Include a clause in procurement contracts stipulating that suppliers must answer the annual environmental survey. This is to encourage engagement.	Lo	Lo	Med
Conduct an annual supply chain environmental survey for the largest suppliers. Ask your SHIFT assessor for a standard survey question template.	Lo	Lo	med

Benchmark contractors' carbon emissions per £1,000 of contract value annually. This can be a good way of identifying anomalies – where a contractor's CO_2 e per £1,000 spend is much lower or higher than the average, you can see how their calculations are verified.	Lo	Lo	Med
Communicate to existing and potential suppliers your commitment to sustainability and explain you want to work with organisations who will help you on your journey.	Lo	Lo	Lo

Responsibly sourced maintenance materials

Responsibly sourced materials have been manufactured in an environmentally sound way and where the producers treat their workers well. Although there are many eco-labelling schemes for maintenance materials, this remains a difficult area to assess. Nevertheless, SHIFT encourages maintenance teams and contractors to devise ways to assess this themselves using a methodical approach.

Stonewater engaged with 10 major suppliers on their responsible sourcing of materials. The percentage of responsibly sourced material was calculated as 64.88%.



Peer Comparison: ahead

Recommended improvements:

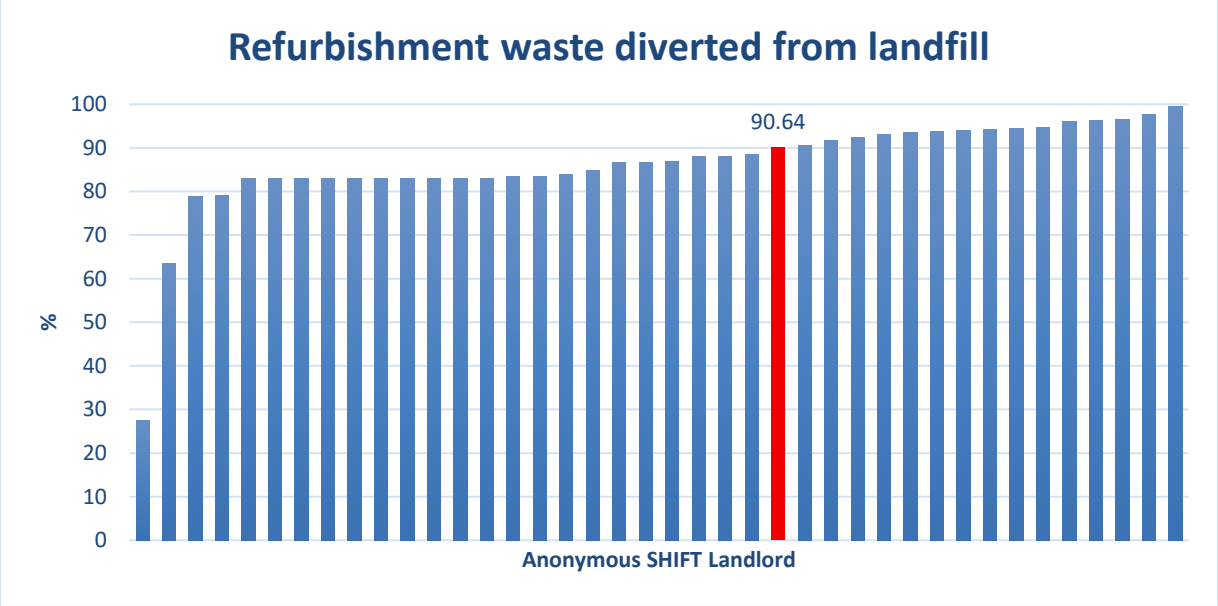
Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Communicate to existing and potential suppliers your commitment to sustainability and explain you want to work with organisations who will help you on your journey.	Lo	Lo	Lo
Include a clause in procurement contracts stipulating that suppliers must answer the annual environmental survey. This is to encourage engagement.	Lo	Lo	Med
Lobby the Supply Chain School to devise a practical and meaningful metric for responsibly sourced materials. **Here is an interim metric we have devised at SHIFT:** A new metric for sourcing materials responsibly	Lo	Lo	Lo

Refurbishment recycling

Detailed breakdowns of waste treatment are normally available from contractors and DLOs. Good reporting and recycling practices should be factored into the decision-making when contractors are selected. Knowing the total amount of waste generated is proving useful for embodied carbon calculations, especially where the quantity of new materials used is unknown, which is often the case. We assume that if 1 tonne of waste is generated in a refurbishment project, then approximately 1 tonne of new materials is used. From this data we can approximate embodied CO_2 of materials used in maintenance.

Stonewater provided waste consignment notes from carrier KNK (Full waste reports are readily available from contractors, and these provide a breakdown of waste type (e.g., general, glass, wood) and recycling rates) and dashboard screenshot from Aaron Services. Stonewater also received waste diverted from landfill figures from the other 9 contractors that engaged. These

figures were used, along with the SHIFT default to estimate that 90.64 of Stonewater's repairs and maintenance waste is diverted from landfill.



Peer Comparison: SHIFT default was used /comparable

Recommended improvements:

Action	Cost Hi/Med /Lo	Staff effort Hi/Med /Lo	Likelihood of regulation Hi/Med /Lo
Require subcontracted maintenance firms to report their recycling rates to you and provide supporting evidence in the form of waste reports.	Lo	Lo	Med
Implementing subcontractor KPIs, aiming for 100% diverted from landfill by 2050.	Lo	Lo	Med

SHIFT

SHIFT carries out a full range of environmental reporting specialising in the social housing sector. We do:

- SHIFT standard – environmental reporting and accreditation for existing homes, new build, supply chain and offices
- Related consultancy and compliance e.g., ESG, ESOS and SECR reporting
- Environmental road mapping and strategy development – creating a path from a baseline to a truly sustainable housing stock whilst maximising financial benefits to the landlord
- Post-Occupancy Evaluation – comparing actual performance in retrofit and new build with design performance

Please be in touch for a free consultation on any of the above. Contact Richard on 07718 647117 or richard@SHIFTenvironment.co.uk

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