Stonewater

SHIFT Environmental Report

2024

SHIFT

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Contents

Executive summary

This report details Stonewater's latest environmental performance. It is based on the primary data provided by your organisation and this data is transformed using nationally established methodologies where available. Where national methodologies are not available, we have used methodologies devised by SHIFT based on our experience and available science.

Our intention is that you use the data in this report to effectively manage your way to a sustainable stock and sustainable operations. We have arranged the report to align with directorates within your organisation which will make improvements easier to identify.

We find clients use the data in SHIFT report for:

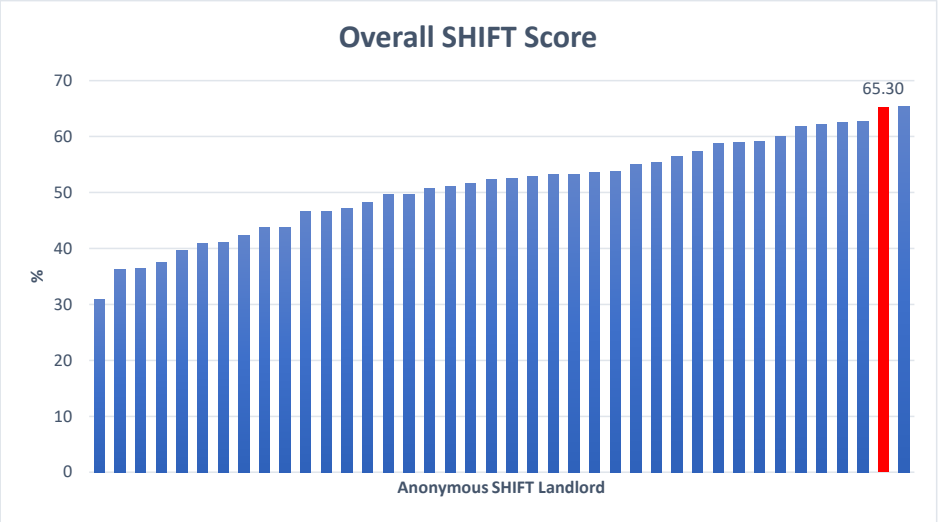
- Effective environmental strategy development
- ESG reporting
- Annual progress monitoring on environmental targets
- Compliance reporting – most recently SECR reporting

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.

The report spans existing homes, new build, facilities, resident engagement, supply chain and strategy and management. It covers energy and resource use, transport and travel, climate risk, biodiversity and responsible sourcing, thereby providing a comprehensive overview of your organisation's environmental footprint.

Stonewater Housing provide and manage nearly 30,000 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.

Stonewater has achieved the SHIFT Gold accreditation, with a score of 65.17. It ranks 2nd out of the 40 most recent SHIFT assessments.



Throughout the report you will see your organisation's sustainability performance across key areas of your business and how it compares to that of other SHIFT landlords.

Overall performance

Carbon

Environmental issue	Absolute[1]	Intensity[2]	Intensity target for SHIFT platinum 2023[3]	Long term intensity target (by 2050 unless otherwise stated)
Individually heated homes, regulated emissions Scope 3	87,394.14 tonnes CO_2e	SAP 73.56 3,057.66 kg CO_2e/ independently heated home	SAP 74.1 ×	SAP 85
Communal heating systems metered data Scope 1 metered data Scope 2 [5]	2,164.03 tonnes CO_2e 0 tonnes CO_2e	9,044 kWh / home managed	5,304 kWh yr / home managed ×	3,600 kWh yr / home managed
Other landlord supply Scope 1 Scope 2 [5]	331.91 tonnes CO_2e 2300.97 tonnes CO_2e	88.09 kg CO_2e / home managed	109 kg CO_2e / home managed ✓	0 kg CO_2e / home managed
Offices Scope 1 Scope 2 [5]	19.92 tonnes CO_2e 25.30 tonnes CO_2e	28.14 kg CO_2e /m^2	52.0 kg CO_2e /m^2 ✓	0 kg CO_2e / m2
Business mileage Scope 3	257.73 tonnes CO_2e	8.62 kg CO_2e / per home managed	9.1 kg CO_2e / per home managed ✓	0 kg CO_2e / home managed
Maintenance activities DLO Scope 1	0 tonnes CO_2e			
Scope 1-3 scaled up to represent 100%[6]	1,449.44 tonnes CO_2e	50.94 kg CO_2e / per home managed	TBA	0 kg CO_2e / home managed
Embodied Carbon Repairs and Maintenance Scope 3 New Build Scope 3	1,165.71 tonnes CO_2e 38,926.78 tonnes CO_2e	39 kg CO_2e / per home managed 35,196 kg CO_2e / per new home	TBA TBA	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 2023[3]	Long term intensity target (by 2050 unless otherwise stated)
Water – homes TBC	3.25 million m^3	133.3 lpd	138.2 lpd ✓	130 lpd by 2030
Water – offices	423.14 m^3	17.63 m^3/employee/yr	7.1 m^3 / employee/yr ×	3m^3/employee/yr by 2030
Waste – homes	8,420 homes with internal recycling bins	8.18% increase in residents diverting waste from landfill	6.8% increase in residents diverting waste from landfill ✓	17.6% increase in residents diverting waste from landfill
Waste generated – offices	4.8 tonnes	20% of waste diverted from landfill	73.0% waste diverted from landfill ×	100% diverted from landfill
Promotion of sustainable transport facilities – homes	4,781 homes with cycle storage	7.29% increased likelihood of resident use	TBC	100% increased likelihood of resident use
Responsible materials – maintenance & capital works	80.86%	80.86%	49.6% responsibly sourced ✓	100% responsibly sourced
Responsible materials - offices	26.25%	26.25%	60.9% responsibly sourced ×	100% responsibly sourced
Adaptation to climate change – homes protected from flooding	28,677 homes	95.94% of homes adapted to flood risk	84.5% adapted to flood risk ✓	100% adapted to flood risk
Adaptation to climate change – homes protected from overheating	27648 homes	92.5% of homes adapted to overheating risk	79.6% adapted to overheating risk ✓	100% adapted to overheating risk
Biodiversity value	1,580.44 tonnes biomass above ground	2.22 tonnes biomass per hectare	10.5 tonnes biomass per hectare ×	11.9 tonnes biomass per hectare by 2043

Commented [AH1]: Update to FTE

1 – in line with best practice environmental reporting, the absolute environmental impact is given here – this gives an overall assessment of impact.

2 – again, 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.

4 - 2050 targets unless otherwise stated.

5 – Scope 2 emissions shown here include Scope 3 transmission and distribution losses associated with UK electricity. To calculate just Scope 2, multiply the tonnes CO_2e by 1000, then divide by 0.23112 and then multiply by 0.21233.

6 – This figure has been derived using available carbon emission data from the DLO and external suppliers, scaled up to represent 100% of repairs and maintenance activities.

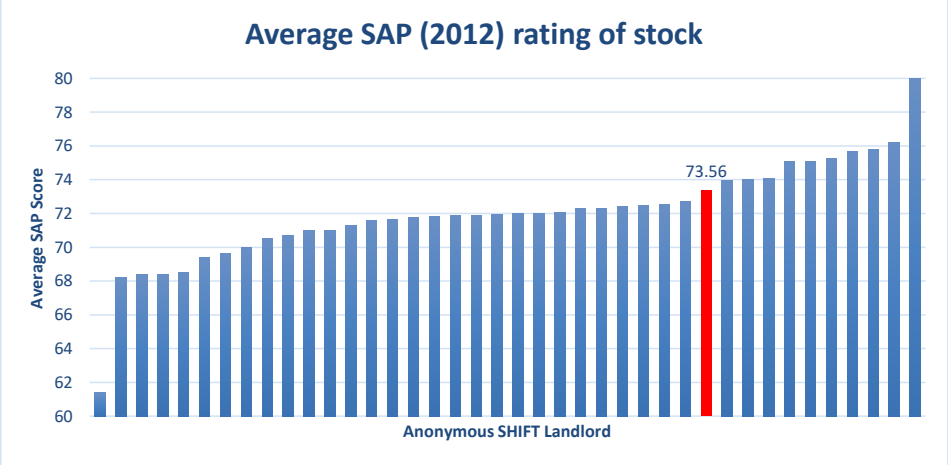
Existing Homes

Most of the homes that exist now will be in use in 2050 and the imperative to future proof them is gaining momentum. Therefore, it is essential to ensure that existing homes are truly sustainable. Your performance in each of these areas is presented below.

Energy and average SAP

Average SAP is a standard way of assessing energy efficiency in homes and provides a very good estimate of CO_2. It also remains the Government's favoured method for assessing energy efficiency. The SAP rating refers to the cost per m^2 of heating, hot water, lighting, pumps and fans. These are called regulated emissions. Unregulated emissions are appliances such as cookers, fridges and TVs. SHIFT research indicates that an average SAP of 85 represents a 'net zero housing stock' and has been derived through a combination of achieving EPC C for all properties, shifting to electric heating (with corresponding changes to SAP methodology) and expected energy efficiency standards for new build up to 2050. Until there is an updated target for housing specifically, SHIFT recommends this as a long-term target. Please contact your SHIFT Assessor for a full explanation on how this target has been produced.

Energy performance data was extracted by Stonewater's Environmental and Sustainability Business Partner from their asset management database which indicated an average SAP of 73.56 has been achieved across their housing stock.



Recommended improvements:

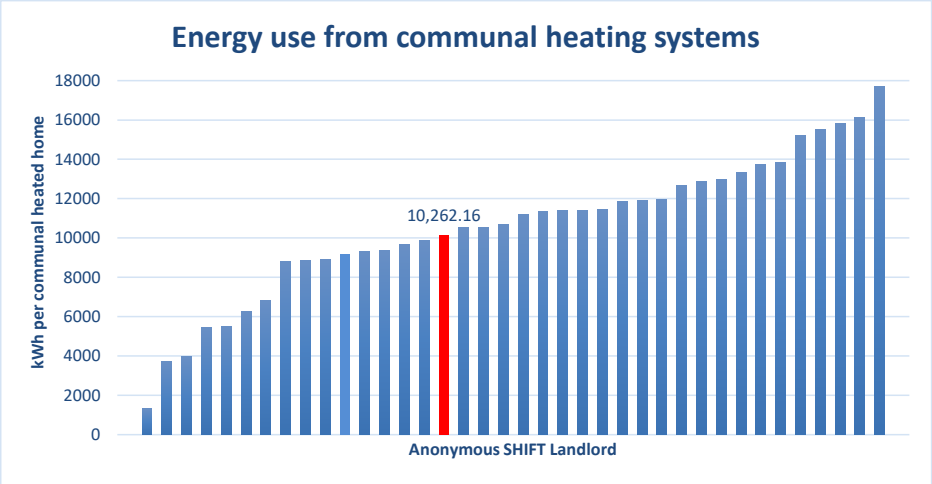
- The direction of travel for UK homes is:
    - All current homes brought up to EPC C (i.e. well insulated) by 2030
    - Switching to electric heating (or other non-fossil fuel heating) by 2050
    - Grid decarbonised to net zero by 2035
    - All new homes to be net zero
- There are still lots of issues to iron out (e.g., hard to treat, hydrogen fuel). For detailed guidance on net zero, download the "Net Zero carbon roadmap roundtable summary" from here: https://shiftenvironment.co.uk/publications/
- Ensuring a full dataset is crucial in preparing address-level upgrade plans. The idea is to gain a vision of what your organisation would like each home to be by 2050 in order to be as close as possible to net zero. Upgrade recommendations can normally be taken from the EPC data, but there is a limit. Further analysis will be needed on electrical forms of heating. At the time of writing heat pumps are low carbon but may increase residents' bills depending on the previous heating system in the properties. There are signals emerging from the Government that electricity bills could be cut to increase the viability of replacing gas boilers with electric systems.
- Include stock analysis in retrofit plans to establish a baseline to help prepare stock improvement strategies. It will also be beneficial to estimate costs for upgrade plans. The analysis can be done on spreadsheets, but third-party software is available which makes the job much easier (ask your SHIFT assessor for more details).
- When designing annual plans, factors worth considering:
    - Identify how many homes per year you will need to upgrade to EPC C by 2030
    - Of these homes, say ~80% of them could be "worst homes first".
    - For the remaining ~20% consider a "triggers approach" which will save costs in the long run – ideally, you can do sustainability upgrade works at the same time as other anticipated works. The benefit of doing upgrades whilst you have access and trades could reduce installation costs. This approach will involve transforming the way your repairs and maintenance teams work and may take some time to change processes within your organisation. Triggers to consider:
        - Component replacements
        - Disrepair claims
        - Voids
    - Resident engagement opportunity – some highly visible interventions are ideal for getting residents used to new technologies. If these are strategically distributed around the stock then there are more opportunities for residents to hear from each other about the new technologies, especially if they reduce bills. Example interventions that will be part of the future are:
        - Solar PV (possibly with battery storage)
        - Heat pumps
        - External wall insulation

- Finance mechanisms are not fully established for achieving net zero at the time of writing. Various grant funds are available but are not sufficient. Nevertheless, many landlords are finding that achieving EPC C is manageable and are putting plans in place. In any case, it will be better to make a start event with 'stepping-stone' projects so that teams can gain knowledge.
- Retrofitting may also present opportunities to address other sustainability issues such as adapting to climate change, water efficiency, internal waste recycling bins and cycle storage.
- Monitoring progress at a strategic level is crucial. In the absence of any clearer definitions of net zero for housing, SHIFT has reviewed the roadmap and has assessed that, if the roadmap is followed, and the promise of cheaper bills for residents is kept, then by 2050 the average SAP of the stock will be SAP 85. This includes all the new builds added to the stock. Average SAP is a straightforward metric to monitor on a quarterly basis.
- Given the greater requirements for data monitoring, landlords may wish to add extra fields to their asset management databases. Estimated CO_2 emissions can be estimated using existing data and knowing the types of heating systems in place. Please ask your SHIFT assessor if you need more help with the formulas to calculate CO_2 from SAP rating.
- Landlords may also consider APIs which link their asset management database with third parties. This will enable faster and easier environmental reporting and the third parties will be able to keep the methodologies up to date in a rapidly changing environment.
- If you have over ~50 solar PV arrays in your stock it may be cost effective to monitor their performance based on actual sunlight. Third party systems are available to do this which may ensure that landlords are maximising their income from them. Please ask your SHIFT assessor for more information on this.

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 1308 communally heated properties. Stonewater were able to determine the kWh usage data for 1218 of these communal heat networks. For the remaining 90, the SHIFT default of 17,700 kWh/home was applied. Heat networks should be clearly documented under the requirements of the Heat Networks (Metering and Billing) Regulations 2020. In total, 2,455.44 tonnes CO_2e from communal heating systems. This equates to 10,262.16 kWh/communally heated home. The table below shows the average kWh values per communally heated home from other SHIFT landlords.

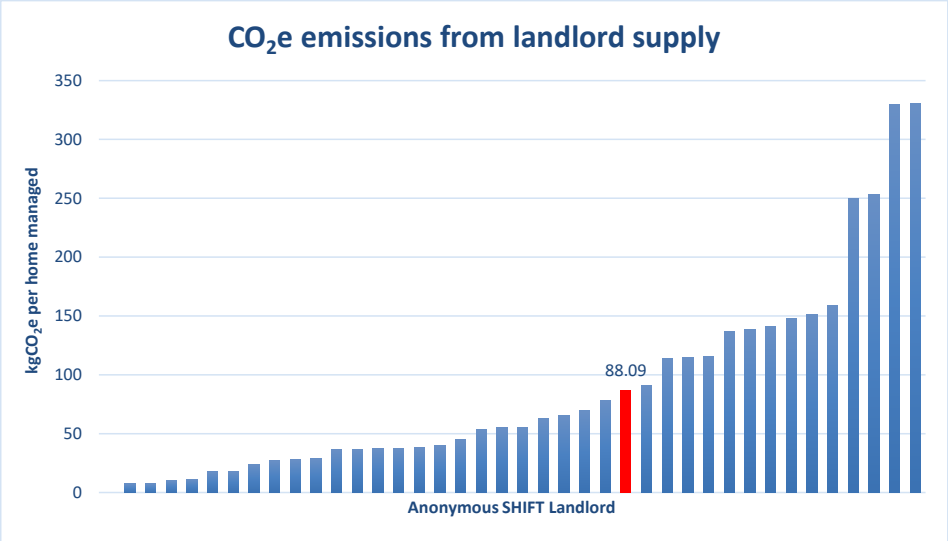


Recommended improvements:

- Gain access to data for 90 communally heated properties not captured in the broker template.
- Ensure full compliance with the Heat Networks (metering and billing) regulations and install individual meters where viable.
- Identifying communal heating systems within the stock profile has presented difficulties for many clients. We recommend that the UPRN for blocks containing communal heating systems be linked with energy broker data using the SHIFT templates provided. This will allow calculating the actual 12-month energy use for each flat and feeding this back into the asset management database. This will for allow better CO_2 emission calculation.
- Review all communally heated networks for inefficiencies in heating demand. As an easy first start, clients can consider benchmarking all their communal heating systems on kWh bought/unit, to identify worst performing systems.
- Conduct a review of all communal systems in your stock – the review should include control settings, boilers, pumps and bypass valves. Contact your SHIFT assessor for more information on this.
- Ensure that replacement systems are not oversized – this can lead to excess maintenance, poor use of space and overheating in flats.
- Ensure that new build colleagues specify systems correctly – try to get input into new schemes at an early stage.
- The Climate Change Committee recommendation is for all communal heating systems to be net zero by 2040.

Other communal area energy

Stonewater also assessed premises and homes that use communal energy. For SHIFT this is made up of communal areas in homes as well as 'other landlord supply' such as community centres. This totalled 2,632.89 tonnes CO_2e or 88.09 kg CO_2e/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.



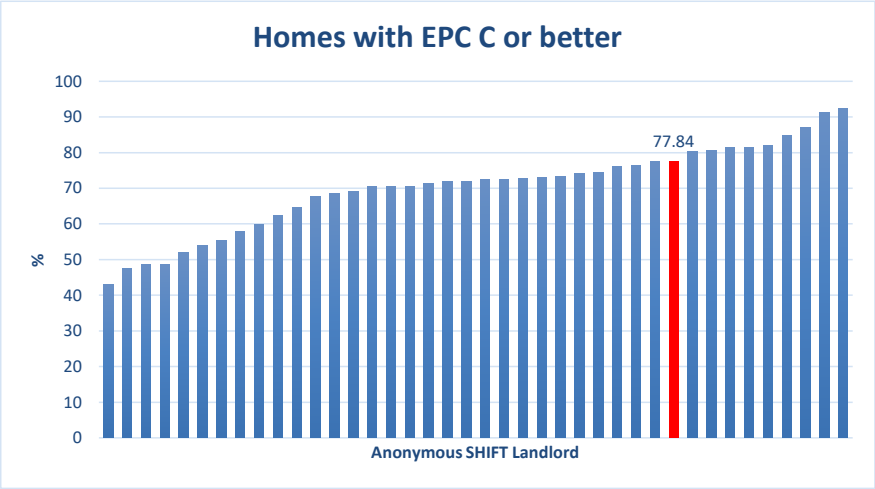
Recommended improvements:

- Switch communal area lighting to LED and automatic lighting within blocks and outside areas.
- Consider low energy street lighting.
- For other buildings the roadmap to net zero is similar for domestic in that energy efficiency should be pursued and then ultimately switch to electric forms of heating.

Fuel poverty

Tackling fuel poverty now 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, 23,267 properties are believed to be EPC C or above, this equates to 77.84% 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.



Recommended improvements:

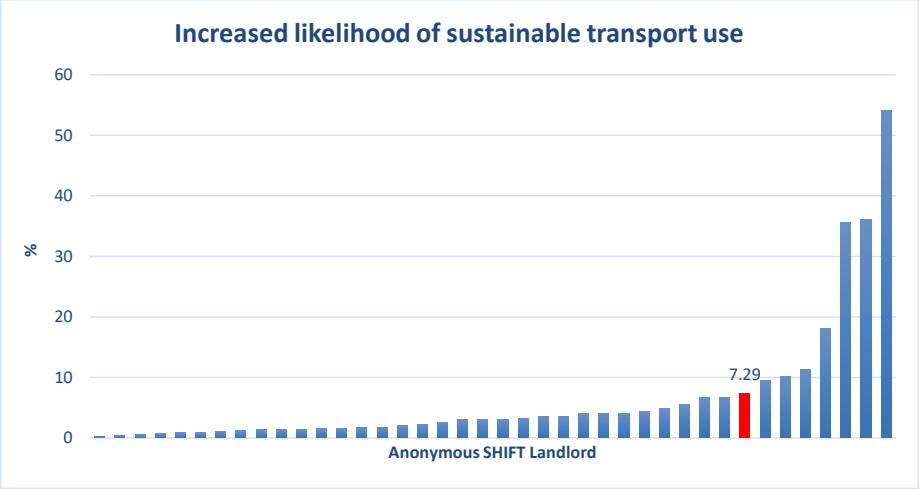
- The government target is minimum EPC C by 2030. Landlords should ensure this is identified in their strategies and develop upgrade plans to reach this.
- Some interventions such as "rent a roof PV schemes" improve EPC but do not necessarily lead to big cost savings for residents as the scheme often sells the generated energy at normal prices to recoup their investment. The current version of SAP gives generous rewards for solar PV. This may not be the case when the new version of SAP is issued, so it would be wise to concentrate on improvements that reduce energy demand such as insulation.

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 residents 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.

For sustainable transport facilities, data was provided that indicates 16.00% of Stonewater's homes have cycle storage facilities. Stonewater also provided data showing that 3.05% of homes have EV chargers. New residents do 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). As a result of Stonewater's sustainable transport interventions, the increased likelihood of residents using sustainable transport is 7.29%. Below you can see how your performance compares to other SHIFT landlords. Stonewater recognises that cycle storage data was not provided in the format requested by SHIFT, and that this data should be integrated into their asset management at a UPRN level. This will allow Stonewater to better understand and track where cycle storage has and hasn't been installed, strategically prioritise future installation of cycle storage facilities, and include SHIFT assumptions on cycle storage on properties with no data in future SHIFT reports. Stonewater recognise that for future years, data will not be accepted in this format for the purposes of SHIFT and should be provided down to a UPRN level in the relevant data collection template.



Recommended improvements:

- Integrate data on cycle storage (down to UPRN level) into asset management system and include this data in the Existing Homes data collection template for future assessments.

- You may wish to include data on sustainable transport in the asset management database (e.g., cycle storage provision or EV charge points). This will allow easier and faster reporting on this issue. You can ask your SHIFT assessor for a list of which UPRNs we think may have cycle storage to use as a first pass. Liaise with your new build department so they can also provide this data ready to go into the asset management database.
- Working with new build colleagues to ensure that cycle storage is included at all new builds will aid the transition to more sustainable modes of transport. New building regulations require EV charge points.
- Consider installing EV charging points at places where staff can use them during the day, but out of hours, these can be used by residents (for a fee). There is potential that local councils will have initiatives to support businesses and organisations to invest as part of local transport plans.
- The national net zero transport plan indicates that all drives should have EV chargers, so this may be worth prioritising.
- It may be beneficial for residents to engage in cycle training and workshops. This may offer an opportunity to provide additional face-to-face travel advice. It is also an opportunity for community outreach work, improving residents' experience.
- You may facilitate partnering to integrate car clubs, cycle hire and shared transport facilities.
- Promote the health and wellbeing benefits of improved active modes of transport. Consider asking for feedback on resident satisfaction surveys about the facilities you provide for active modes of transport.

Water

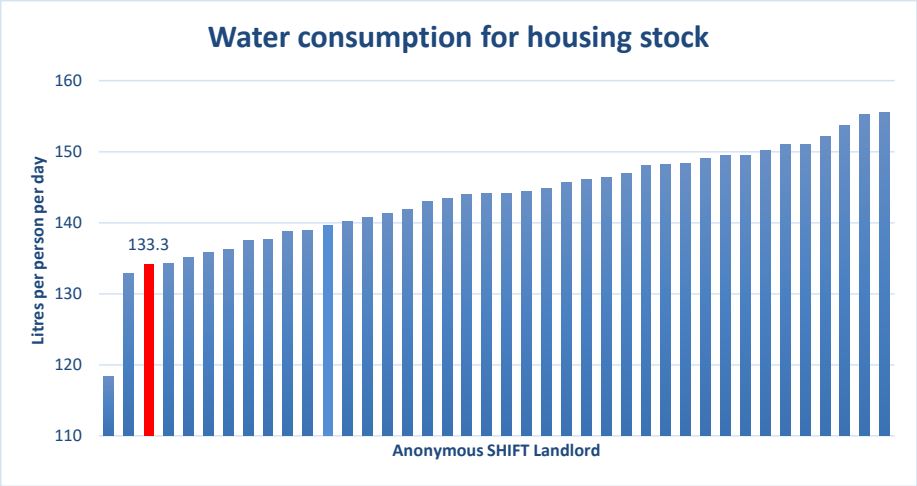
At the time of writing Environment Agency research suggests that UK domestic water efficiency should be 130 litres per person per day (lpd) by 2030 to adapt to forthcoming climate change. However new national strategies are emerging which may mean this target is reduced to 110 lpd[1]. Water efficiency saves residents money too if they are on meters and if hot water is used efficiently.

As with most landlords no complete assessment has been made of water efficiency in Stonewater's stock. However, Stonewater has provided some data on how many properties have had water efficiency feature installed. Stonewater recognises that water efficiency data was not provided in the format requested by SHIFT, and that this data should be integrated into their asset management system at a UPRN level. This will allow Stonewater to better understand and track where water efficiency features have and have not been installed, strategically prioritise future installation of water efficiency features, and include SHIFT assumptions on water efficiency features (on properties with no data) in future SHIFT reports. Stonewater recognise that for future years, data will not be accepted in this format for the purposes of SHIFT and should be provided down to a UPRN level in the relevant data collection template.

- Smaller than 180L bath: 80.70%
- Low flow taps: 80.7%
- Low flow showers: 27.80%
- Dual flush toilets: 98%
- Flats (representing less water usage in garden): 43.51%
- Water butts: 40.8%
- Water meters: 61.6%
- Greywater/rainwater harvesting systems: 0%
- Residents given information on water efficiency: 100% including social media posts on water efficiency to celebrate world water day and water efficiency advice on the website.

This gave a result of an estimated 133.3 litres per person per day (lpd) using the SHIFT water efficiency calculator tool.

[1] https://shiftenvironment.co.uk/news/water-efficiency-targets-for-uk-housing/



Recommended improvements:

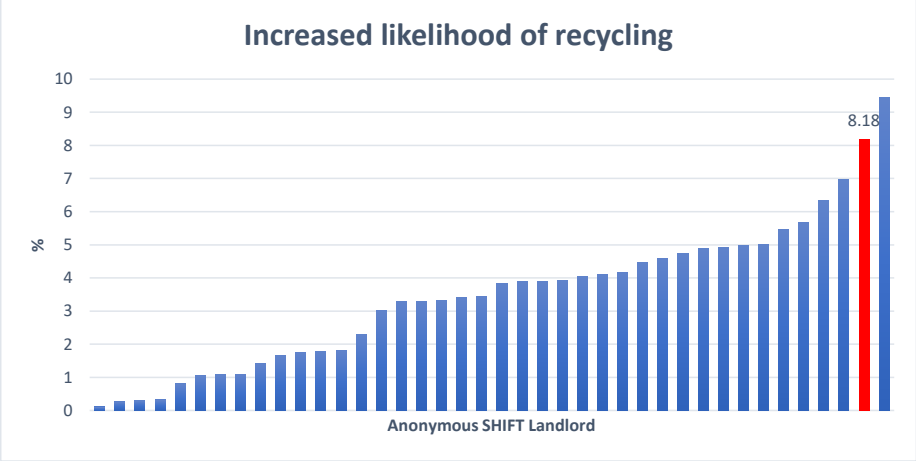
- Include water efficient fitting information on your asset management system. SHIFT can provide a "first pass" likelihood of certain features to help populate your database, but stock condition surveys can confirm these details.
- Incorporate the recording of water efficiency measures in stock condition surveys. This will allow upgrade plans to be developed.
- Water efficient showers reduce the amount of steam in bathrooms which may reduce the risk of mould growth.
- Develop a formalised water efficient specification for kitchen and bathrooms replacements could be created which prompts installation of water meters and other components when plumbing work is undertaken at a home or during a void period for example.
- Consider engaging with your local water supplier as some landlords have found that their local water companies are willing to provide free water efficiency devices, home visits and other engagement work with your residents.
- Ensure that fittings and appliances offer reduced water consumption beyond normal principles- this may include white goods such as washing machines. Ensure that there is a high energy efficiency rating on these products. The water-efficient product labelling schemes further simplify the task of procurement.
- Ensure effective use of installed water-efficiency information- liaise with installers and residents to ensure this happens. For all installations, you may wish to make providing advice to residents a standard for all work completed on the homes, ensuring there is monitoring of these conversations will help with future SHIFT assessments.

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.

28.17% of Stonewater's homes are believed to have internal recycle bins fitted using data provided by Stonewater. Stonewater recognises that data on internal recycling bins was not provided in the format requested by SHIFT, and that this data should be integrated into their asset management system at a UPRN level. This will allow Stonewater to better understand and track where internal recycling bins have and have not been installed, strategically prioritise future installation of recycling bins, and include SHIFT assumptions on internal recycling bins (on properties with no data) in future SHIFT reports. Stonewater recognise that for future years, data will not be accepted in this format for the purposes of SHIFT and should be provided down to a UPRN level in the relevant data collection template.

100% of residents were passively engaged in domestic or bulky waste advice over the reporting period via tips on Stonewater's website. A further 6.00% were actively engaged on waste initiatives. Stonewater held conversations with residents after fly tipping events to explain the impact of fly tipping and how to recycle items. These measures encouraged an estimated 8.18% increase in the likelihood of residents diverting waste from landfill.



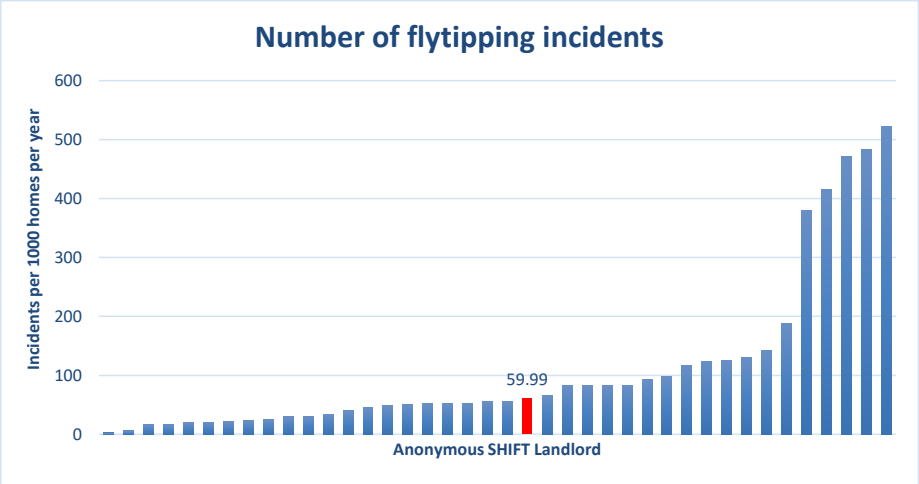
Recommended improvements:

- Consider installing internal recycling bins into kitchen refurbishment works for resident recycling ease.
- Include a new field on asset management databases to show recycling facilities. This will make easier environmental reporting. Ask your SHIFT assessor for a list of UPRNs that we believe may have internal recycling bins.
- Liaise with new builds colleagues and ensure that all homes have internal recycling facilities and ensure this remains a standard in all new builds. Ensure this data is transferred to asset management database.
- Ensure active engagement with residents on waste management. Top performing landlords in this area make regular efforts to engage with resident groups, caretakers, and estate teams to keep track of waste issues throughout your stock. Consider arranging a quarterly estate clean up involving residents and staff.
- Engage with recycling and reuse community schemes. For example, hosting second hand/exchange events for household items. Another example is working with upcycling groups/community projects to fix household items and support a circular economy.
- Make residents aware of the local arrangements for bulky waste collection.
- 'Skip days' where landlords provide free bulky waste collection are a popular way for landlords to reduce fly tipping issues and offer an opportunity to engage directly with residents on waste issues their estate may be facing.

Fly tipping

Fly tipping is unsightly, presents a potential fire hazard and is costly for landlords to deal with. Landlords have reported an increase in the prevalence of fly tipping since the Covid-19 pandemic began, possibly due to the closure of tips and collection services for bulky waste and reduced resident engagement in dealing with bulky waste.

Stonewater record fly-tipping based on number of call outs. Over the reporting period, 1,793 fly tipping incidents were recorded over the 12-month reporting period equating to 59.99 per 1,000 homes.



Recommended improvements:

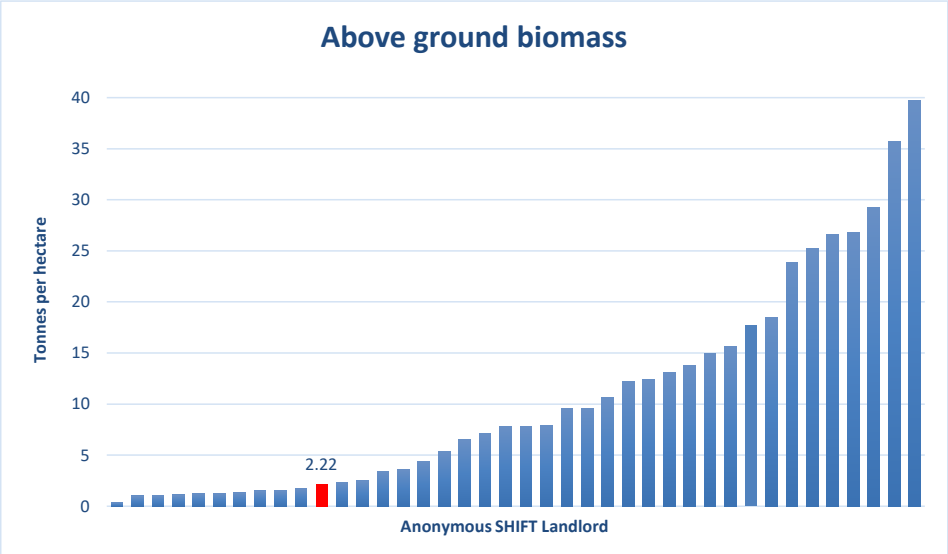
- Make it easy for residents to report fly-tipping.
- Signpost residents to correct ways to deal with waste and contextualise the fly tipping clearing costs through comparison a with number of home improvements that could be completed instead. Providing clear information about new 'green pages' on the website will support this.
- SHIFT landlords have found that leaving notices on fly tipped waste, to show that you are investigating the source, results in local residents coming forward with information.
- Improvements to facilities may include increasing communal bin capacity, install CCTV in fly tipping hotspots, purchasing internal recycle bins for residents etc.

Biodiversity and green spaces

Green spaces and biodiversity can deliver major benefits to our health and wellbeing. These include air quality improvement, flood attenuation and cooling during heatwaves. 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. In response to the Environment Bill new biodiversity metrics are emerging, most notably Biodiversity 3.0 for new build and biodiversity offsetting. At SHIFT we are keeping a close eye on this and assessing its applicability to existing homes.

Stonewater's Environmental and Sustainability Business Partner provided a GIS summary extract of the land use within their stock. Recorded in this was the appropriate land uses to fit

the SHIFT tool. Using this information, a breakdown of areas of lawn, planted areas and hedging area was documented. The SHIFT biodiversity tool estimated that there is 2.22 tonnes of above ground biomass per hectare of land owned.



Recommended improvements:

- Consider planting higher density biomass areas in existing green spaces.
- Ensure you know much land you own and the vegetation type. It may be possible to record this on asset management databases to allow easier biodiversity reporting in future. If you do not have this information, contact your SHIFT assessor for some "first pass" estimates of garden sizes and typical vegetation types.
- Consider including in asset management databases the land area and vegetation types for each UPRN. Special consideration will need to be given for blocks of flats.
- Mown areas are common in most communal spaces but require time, money and carbon emissions to maintain. It may be beneficial for you to allow 'wilder' gardens and communal spaces that do not require as much maintenance and can improve biodiversity.
- Ensure crown spread data is included when conducting tree surveys. It is also possible that, when conducting these surveys, it be assessed if denser tree planting can occur in these areas.
- Liaise with new build colleagues to ensure that they maximise biodiversity within their schemes. Forthcoming biodiversity ambitions may help with this- the recent Social

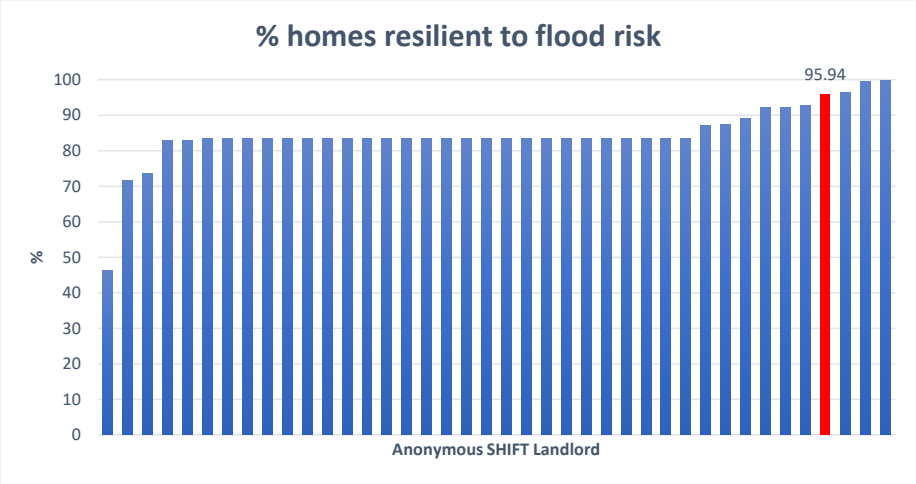
Housing White Paper makes considerable mention of improving green space provision for example and biodiversity offsetting is being introduced for new build in 2023.

- Above ground biomass can be increased by the addition of green roofs, green walls, and street trees can increase sequestration potential, air quality, water management, and heat regulation. Sustainable Urban Drainage (SuDS) and other biodiversity enhancements are encouraged for new builds. Consider these and additional enhancement potential for supporting broader biodiversity and amenity aims.
- Work with local community groups to enhance biodiversity features across the organisation. Consider whether a biodiversity fund for residents to do wildflower planting could be achieved by partnering with contractors. This will provide good examples for their Corporate Social Responsibility and help you convert more of their underutilised green/grey spaces into high biodiversity areas. Creating community gardens, tree planting and introducing wildflower planters are potential projects.

Homes adapted to risk of 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.

Flood risk data was provided at an individual property level for fluvial and surface flood risk. It is considered best practice to assess individual property level flood 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. The flood risk assessment indicates that 28,665 of Stonewater's stock is at low risk of flooding. The SHIFT climate resilience assessment tool was used to assess Stonewater's flood mitigation strategy. This calculated that an additional 10% of high-risk properties (12 of 120) should be considered low risk. Overall, the number of properties considered low risk equates to 28,677, or 95.94% of Stonewater's stock.



Recommended improvements:

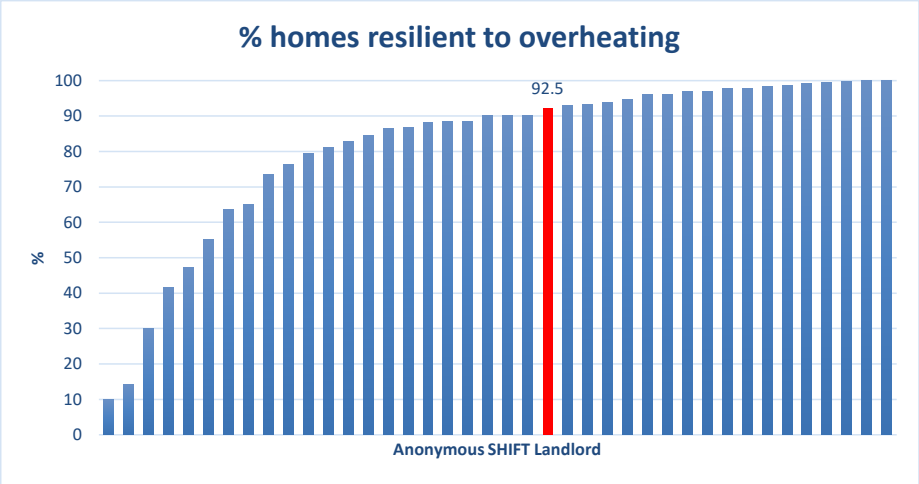
- Completely carry out existing flood mitigation strategy, and update annually.
- Ensure future flood risk assessments are assessed annually. Use the Environment Agency's long term projection maps which are updated regularly.

- For homes in medium or high-risk areas devise a risk management approach so that these homes can be protected and/or upgraded before, during and after a flood event or warning. Ask your SHIFT assessor for our climate resilience assessment methodology which describes such a system and was devised with SHIFT clients.
- Remain vigilant for funding opportunities through local government and other agencies for flood mitigation works.
- Confirm with new build colleagues that all new homes are low flood risk, and that relevant flood risk assessments and subsequent mitigation works are undertaken. Transfer this data onto asset management systems.
- Ensure good quality green areas, especially in urban areas, to increase flood attenuation.

Homes adapted to risk of 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.

Information provided from Stonewater's database was used in the SHIFT overheating risk assessment tool to estimate that 92.5% of homes to be at low risk of overheating. The SHIFT overheating risk assessment uses information on housing stock property types, postcodes, communal heating and build dates. The SHIFT overheating risk assessment also uses 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.



Recommended improvements:

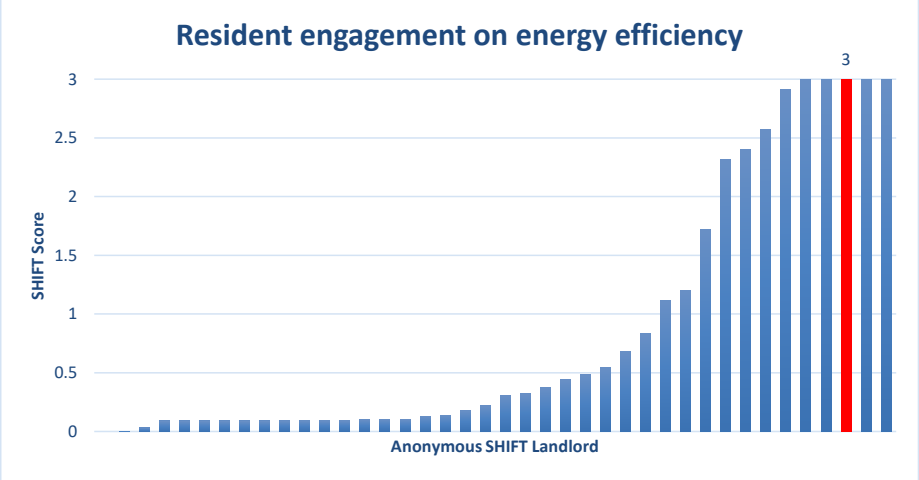
- Create full overheating mitigation strategy for properties identified as high risk.
- Ensure any overheating risk assessments cover the risk factors addressed in the SHIFT overheating estimator tool.
- Consider including overheating data in asset management systems. First pass assumptions of risk factors for each address are available from your SHIFT assessor to help you populate your database. In future surveys, you may replace the assumptions with better data. For example, SHIFT assumptions on whether or not a flat is a single aspect or not may require updating.
- Liaise with new build colleagues to ensure that all new homes address all risk factors and have suitable measures to prevent overheating if necessary. Ensure this data is entered into asset management database.
- Incorporating assessments of risk factors, i.e., single aspect, shading facilities, ability to open windows etc, within stock condition surveys will help identify higher risk properties and allow for adaption measures.
- For homes identified at high risk, and have condensation and mould issues, install adequate ventilation measures which will go some way to reducing both risks.
- Ensure good quality green areas to increase shading and reduce the urban heat island effect.
- For homes in medium or high-risk areas, devise a risk management approach so that these homes can be protected and/or upgraded before, during and after a heat wave event or warning. Ask your SHIFT assessor for our climate resilience assessment methodology which describes such a system and was devised with SHIFT clients.

Resident engagement

Resident engagement

Resident engagement is an important way of informing residents about how they can make a difference and empowering them 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 44.73% of Stonewater's residents had been actively engaged on energy efficiency. With all new tenancy visits, it is a standard to offer advice on energy providers, additional services supporting energy efficiency actions, and helping residents understand their energy uses. 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.



Recommended improvements:

- Include energy advice in all contact with residents – e.g. refurbishments and rent arrears activities.
- As part of procurement, you may wish to make providing advice to residents a standard requirement for any contractors carrying out work on the homes, (i.e., gas servicing). This will be particularly important as new retrofit measures be added to the homes. Ensuring that there is a record of these conversations will not only help with future SHIFT assessments, but also ensure that your organisation's expected standards are met.
- Consider developing an active engagement programme. SHIFT landlords have found this the most effective way to influence behaviour. Community engagement teams may host drop-in sessions for staff to discuss energy efficiency in homes and wider sustainability concerns with residents.
- Encourage all staff members to receive carbon literacy and sustainability training. It is hoped that they will then be able to provide sufficient advice to residents when completing other key tasks. For example, if home inspections are conducted, staff can advise residents on energy efficiency improvements in their homes.
- When an energy efficiency visit occurs, attempt to undertake small works such as installing radiator reflectors, hot water saving devices and draught proofing.
- When a new heating system is installed, you should also provide a full tutorial for the tenant as complaints can often be raised about bills going up after a new system goes in – potentially you could introduce an option where tenants with new heating systems can report energy use within the first 12 months of usage to you. If bills seem significantly higher than expected this could trigger a request to visit and discuss heating use.

New build

It is critically important to ensure that homes built now are 100% sustainable. Retrofitting sub-standard homes at a later date incurs higher whole life costs for the landlord. Welsh landlords have done considerable research on this due to their unique funding system. They find that the uplift to build to EPC A is far cheaper than the costs to upgrade the same home to net zero at a later stage. 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. Ask you SHIFT assessor for effective ways on carrying out "Post-Occupancy Evaluation".

Figures provided for this assessment by Stonewater's Environmental and Sustainability Business Partner indicated that 16.09% of homes achieved an EPC A (SAP 92+), 19.53% a high EPC B (SAP 86-91), 56.60% of homes were rated as a low EPC B (SAP 81 – 85) rating, and 7.78% 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.

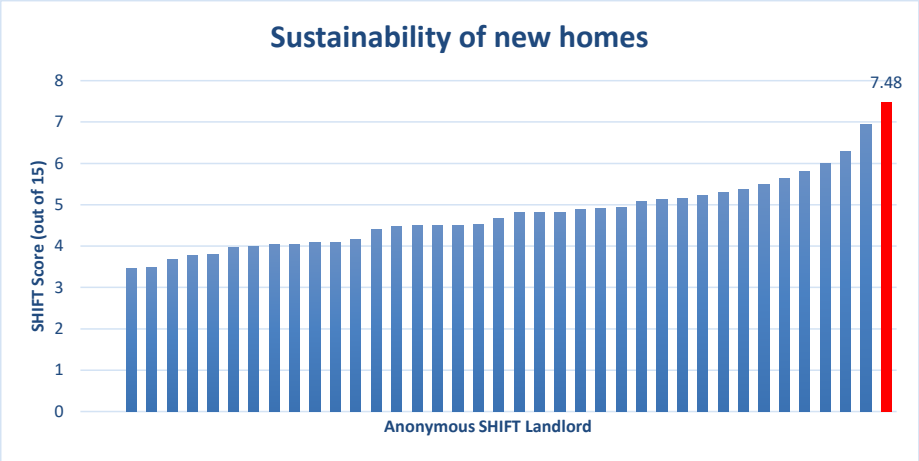
Data was also collected for additional sustainability measures for all new homes. The percentage of homes with each sustainability feature is:

- Internal recycling bins: 80.38%
- Low risk of flooding: 94.85%
- Low risk of overheating: 98.10%
- Sufficient biomass/biodiversity: 99.55%
- Cycle storage: 65.19%
- Responsibly sourced materials: 63.56%

Stonewater were not able to provide detail regarding the embodied carbon of their new build homes, therefore the SHIFT default of 35,196 kg CO_2e per home has been applied to estimate a total of 38926.78 tonnes CO_2e for the 1106 homes built.

Stonewater do currently carry out some post-occupancy verification of their new builds to determine whether the above sustainability features have been installed as expected by the developers. 48.64% of new builds had full third part verification, and 51.36% were part verified.

Using the SHIFT calculator for new build and the data above, the sustainability score for Stonewater's new build homes was 7.48 out of 15.



Recommended improvements:

- Create your own design specification- picture how you want your homes to perform by 2050. Some SHIFT landlords are developing their own technical specifications for new developments which will consider sustainable building, heating, insulation, ventilation, travel, greenspace, waste, responsible materials and adaptation to flooding and overheating.
- SHIFT recommends that you ensure all new builds that are on land-led schemes are EPC A rated, have non-fossil fuel heating systems ahead of the anticipated 2025 building regulations, and have additional sustainability features. Stonewater should continue to increase the proportion of new builds built to EPC A.
- Obtain full documentation of above ground biomass and other sustainability features to ensure new builds meet your expected standards. Design specifications may provide evidence for this in the absence of post-occupancy verification.
- Homes built today are going to have at least one heating system renewal before net zero (2050) targets, so it is recommended that building design considers what this heating system will likely be. For example, providing a storage space now that could then be used for a water cylinder as part of an air source heat pump system could save time and money in the future.

- Establish third party checks on sustainability features. You can use existing sustainability standards, carry out Post-Occupancy Evaluation (particularly good to influence future design), or arrange for asset management to sign off on sustainability features.
- Experiment with new technologies and finance mechanisms to ensure that high quality new build can be achieved cost effectively.
- For homes where 3rd party verification may be more difficult such as Section 106 acquisitions asset management could arrange to sign off on sustainability features that are easier to identify/install such as cycle storage and internal recycle bins.
- We have found that landlords are having more success with smaller and medium sized builders when preparing for the future. These builders are keen to explore readiness for forthcoming building standards.
- Very few schemes have verifiable responsible sourcing information available so it would be beneficial to gather further information from development contractors on their responsible sourcing practices and whether they adhere to any responsible sourcing frameworks such as BES 6001. SHIFT has developed an environmental survey that can be used for this purpose – please ask your SHIFT assessor for the "Supply chain environmental survey".
- Consider excluding gas boilers from new homes now, well in advance of Future Homes Standard.

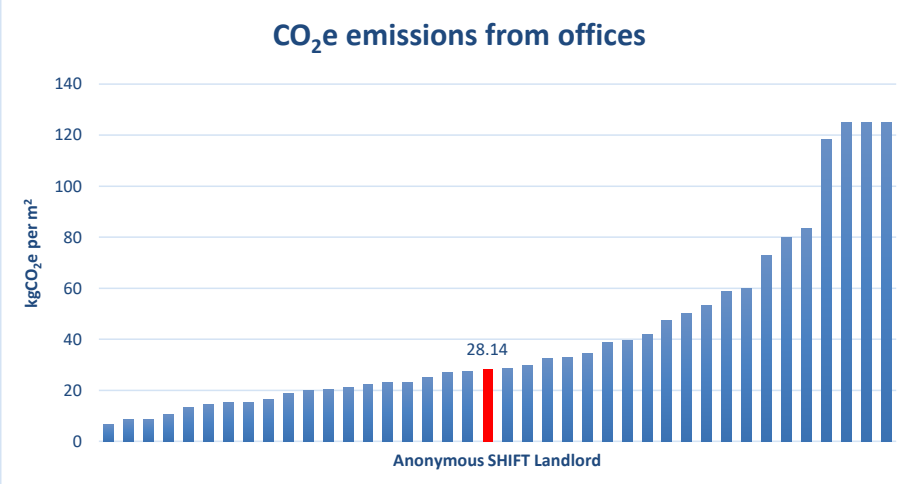
Offices & Operations

Although offices and operations have a minor impact on the organisation's overall environmental performance 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.

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 24,833 kWh of energy (a reduction from previous years), the Bournemouth office consumed 138,636.03 kWh (an increase from previous years), the Coventry office consumed 44,071 kWh (a slight increase from previous years), and finally the Leicester office consumed 13,824 kWh (a slight increase from previous years. In total, 45.22 tonnes CO_2e were emitted in the assessment period which equates to 28.14 kg CO_2e per m^2 of office space.



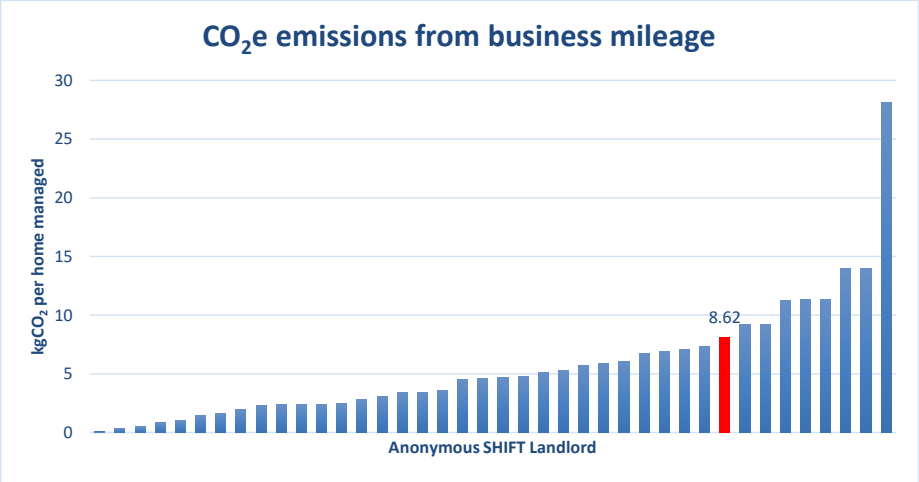
Recommended improvements:

- Investigate the 25,595.51 kWh increase in gas consumption at the Bournemouth office.
- Depending on the uptake of home working, consider restructuring office space in the future. A new hybrid working environment is likely to show a reduction in energy demand at the Head Office but a consideration for home working emissions (Scope 3) should be made.
- Consider the installation of solar PV and battery storage at large offices. Switching to LED lighting will also help reduce consumption.
- Encourage staff to carry out good housekeeping such as turning off lights and computers. It is important that energy demand is reduced to accompany the renewable energy provision.
- Smart systems are a possibility in office spaces monitoring and providing usage of appropriate lighting and heating in certain areas.

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 23/24 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, bus, and taxi. Appropriate Defra carbon conversion factors were used to calculate that 257.73 tonnes CO_2e or 8.62 kg CO_2e per home managed was emitted through business travel.

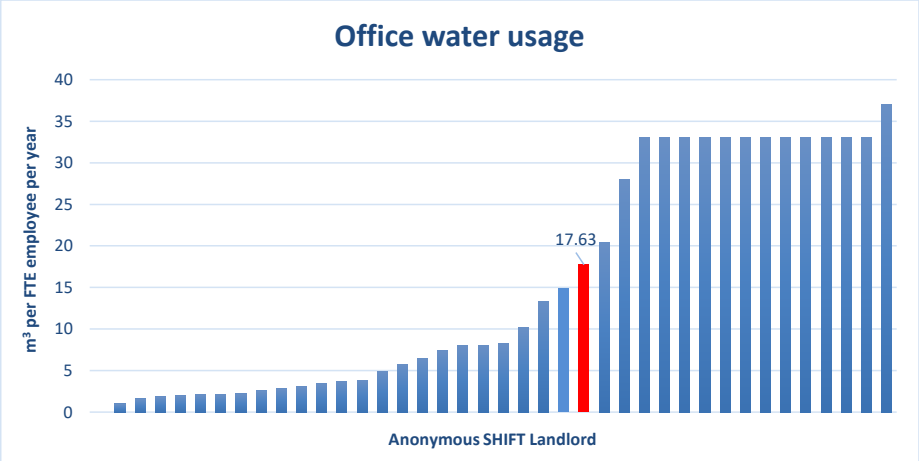


Recommended improvements:

- Some business mileage via employee-owned vehicles was of an unknown fuel type. SHIFT recommends that landlords fully document the split of diesel, petrol or any hybrid/electric vehicle use so the appropriate conversion factor can be used for calculating carbon emissions.
- Consider different budget codes for petrol/diesel/hybrid. Review this regularly to ensure that only essential journeys are taking place. This may also emphasise the emissions implications of each form transport.
- Setting mileage targets for teams and individual drivers, not to prevent staff from doing their jobs, but to help them work in a cost-effective and environmentally aware way.
- 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.
- Incentivising use of other modes of transport through engagement with cycle to work schemes or salary sacrifice car schemes to encourage more fuel-efficient or electric vehicle use.

Water

Water use was reported as 172.39m^3 at the Reading office, a further 132.3m^3 was recorded at Bournemouth, 85.45m^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. Therefore, it is estimated that 33m^3 was used at the Coventry office. Combined, water usage was recorded as 423.14m^3. This equates to 17.63m^3 per employee.



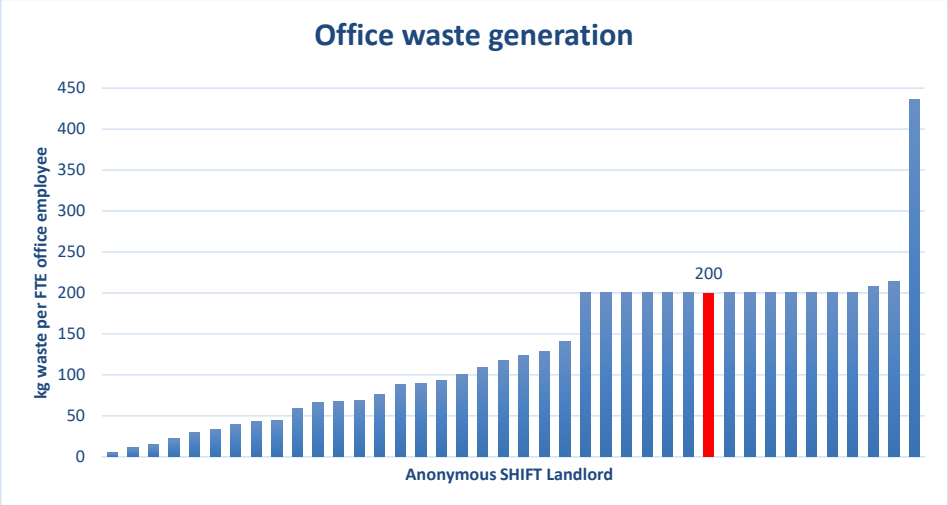
Recommended improvements:

- Improve data availability at Coventry office.
- Consider setting 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.
- Carry out a water audit as this could identify further environmental and cost savings.
- Engage staff on water efficiency initiatives and water saving measures. Incorporating these into water savings policies and procedures i.e., ensuring the dishwasher is full before turning it on.
- Incorporate a 'water champion' to regularly check meters and monitor water use into an organisational role.

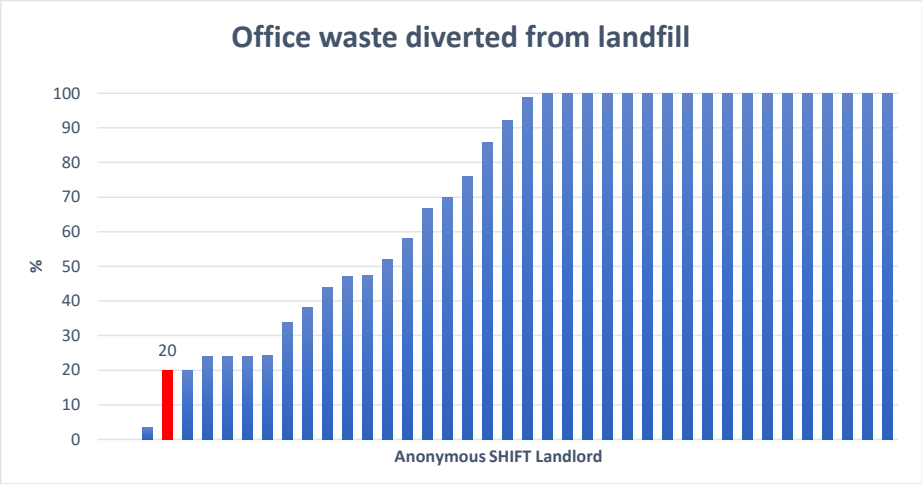
Waste

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 were unable to obtain data on waste collected from their offices. Therefore, the SHIFT default of 200kg/FTE employee was applied. In total, it is considered that 4.80 tonnes of general waste was collected by over the reporting period.



Stonewater were also unable to obtain data on the proportion of waste recycled/diverted from landfill. Therefore, the SHIFT default of 0% was applied.



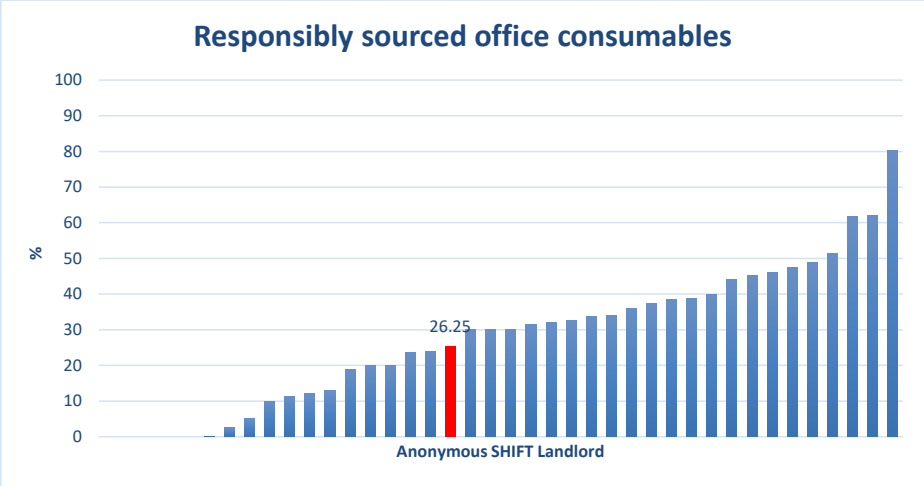
Recommended improvements:

- Your waste contractors should provide a breakdown of waste flows (landfill, recycling) as a minimum requirement.
- Develop your own waste monitoring system to begin developing waste reduction targets across various teams.
- Some office waste is likely to be related to employee lunch and office food and drink facilities. Providing team members with reusable cups and lunch boxes may limit single use items and reduce the amount of waste in the office. Encouraging staff to bring their own lunches rather than single use packaged products may assist in reducing waste. This is also an opportunity to improve staff wellbeing.
- If printing is necessary, consider double sided printing.
- Provide clearly labelled/information on bins to encourage the correct recycling, making it easy for staff members and visitors.

Office consumables

Stonewater do not have an office consumables eco/green report. However, the Environmental and Sustainability Business Partner did provide some information on the environmental credentials of some office consumables. 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 26.25% of office consumables are responsibly sourced.



Recommended improvements:

- Document all office consumables purchased and any environmental accreditations.
- Certain suppliers are committed to providing easily identifiable green alternatives through clear labelling when ordering products. They can also provide a breakdown of spend for green/eco-label purchased products compared to those that are not. Increasing the use of these products over the next few years should be incorporated into your strategy. You can also request this from their current provider or consider a switch of suppliers if it is financially suitable.

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 ith air conditioning units.

Recommended improvements:

- Consider if additional passive measures for mitigating overheating risk could be included (i.e., the addition of Brise soleil, additional film glazing on windows).
- Additional shading is also possible through urban greening. Street trees are known to contribute to a reduction in air temperatures. Consider the possibility of intensifying tree planting around the office space.
- If air conditioning is installed ensure it is the most efficient available, low-emission and that it is well maintained.
- Make considerations for staff overheating on particularly hot days.
- Continue to monitor Environment Agency flood maps and install adequate protection, if necessary, especially for surface water run-off which is often neglected and yet projected to increase.

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 likely effectivity 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. In addition, senior level commitment and defined responsibilities help ensure the likely efficacy of the strategy.

Stonewater have scored 15 out of 15 for an effective strategy. Stonewater's Environmental Strategy ensures that sustainability runs throughout their organisation including their homes and office and other organisational activities. 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 targets were provided in their "23-24 Customer Engagement Plan v2.xlsx" uploaded to section 5.1 of the SHIFT portal. Although these targets do not fully meet the SMART criteria, they have been accepted for the purposes of this assessment on the basis that Stonewater recognises these targets will not be accepted in future years. They also recognise that targets that explicitly meet the SMART criteria should be developed in these areas and integrated into their main environmental strategy for future reporting.

Recommended improvements:

- Develop SMART targets for water efficiency, waste management, and resident engagement and integrate these into the environmental strategy.
- Continue to monitor the progress of existing actions within the strategy. Use the findings from this SHIFT assessment to establish new measurable long-term and interim targets. Interim targets may assist with keeping progress on track.
- Clear communication of targets across the organisation to staff and residents, accompanied by educational support, will ensure that people understand the importance of these strategies and the clear commitment to meeting net zero targets. It is hoped that those who understand the importance of these environmental targets will be more willing to contribute and make changes towards their attainment.
- In the existing homes section, we have made several recommendations for including sustainability data on asset management databases. This data will significantly improve regular sustainability reporting.
- Consider quarterly scorecard style reporting of environmental metrics to Senior Management Teams. By adapting the advice given in earlier sections to include data in asset management systems, this may become an easier task.
- Further advice on developing an environmental strategy can be found by downloading "Developing an environmental strategy for social landlords" from here: https://shiftenvironment.co.uk/publications/
- When we develop corporate environmental strategies for clients, we tend to split the strategy into directorate areas and then actions relevant for all environmental areas are listed. We also make reference to the overall corporate strategy.

DLO & Supply Chain

Engaging with your supply chain is a way to encourage improved environmental performance. As well as bringing an enhanced local environment for 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. We have also noticed that more clients are saying that ESG investors are 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. For example, we can compare maintenance CO_2e emissions per home between organisations that do their own maintenance, with organisations that subcontract out all maintenance.

Maintenance CO_2e emissions

In-house 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 do not have a direct labour operative/in house maintenance team, and therefore no DLO mileage was reported. In addition to this, several of Stonewater's external contractors, accounting for 95.2% of Stonewater's repairs and maintenance budget, replied to the supply chain survey. They provided carbon emission figures attributable to Stonewater totalling 1449.44 tonnes CO_2e. When the emissions are scaled up to represent 100% this equates to 1522.51 tonnes CO_2e or 50.94 kgCO_2e per home managed.

In previous assessments this intensity ratio has been calculated for the CO_2e emissions provided. However, this intensity ratio aims to provide an indication of the energy consumption for 100% of the repairs and maintenance budget. Due to this change in methodology, intensity ratios from previous SHIFT assessments are not available to provide comparison graphs for SHIFT 2023.

As part of SHIFT 2023 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 were unable to provide their suppliers detailed waste report data to 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. In the absence of data, the SHIFT default of 39kg/home managed has been applied. This equates to 1165.71 tonnes CO_2e.

Recommended improvements:

- We recommend putting the onus of environmental reporting onto the supply chain in a proportional manner. It is likely they are already being pressured to improve environmental performance and, by adding to that pressure, landlords can encourage the supply chain to improve.
- To encourage engagement, we recommend including a clause in procurement contracts to the effect that suppliers must answer the annual environmental survey. This will ensure Stonewater continues to have a high response rate from suppliers to annual surveys. At SHIFT we believe it is currently far too early to start imposing CO_2 targets on the supply chain, but with better data, this may become a reality in the near future.
- We recommend identifying your top suppliers via a Pareto analysis or similar. Include responsive repairs, planned maintenance and any other refurbishment suppliers. Then surveying them for scope 1 and 2 emissions plus embodied carbon of materials they have used in maintaining your homes. It may take some time for the supply chain to respond, but, at the time of writing, there are ~60 SHIFT landlords asking the supply chain for this information and there is evidence that this pressure is beginning to work.
- Additionally, some SHIFT landlords have found that benchmarking contractors' carbon emissions per £1,000 contract value can be a good way of identifying anomalies – where a contractor's CO_2e per £1,000 spend is much lower or higher than the average, you can seek that their calculations are verified.
- Explain to your contractors the importance of carbon emission reductions and identify if they are partaking in SECR (Streamlined Energy and Carbon Reporting). This should ensure that you receive whole business carbon emission data.
- For your own fleet, vehicle tracking, benchmarking between drivers and fuel-efficient driving training have been shown to reduce emissions.
- Some landlords are experimenting with small electric vans. Currently, these seem suitable for densely populated areas where range isn't an issue. Trial the experience of drivers with various journey times and different frequencies of travel during the day.

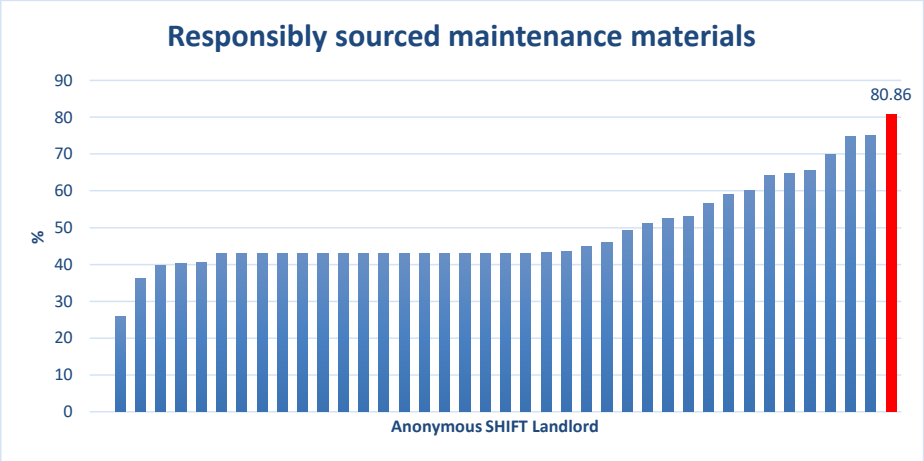
This will ensure you gather knowledge on the successes and challenges. To note, some landlords have experienced difficulties when emergency call outs are required, and drivers were restricted by EV use.

- Some landlords have arranged with suppliers to have dispersed stores of materials which means drivers do not have to waste time/fuel queuing at central depots.

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 major suppliers on their responsible sourcing of materials. The percentage of responsibly sourced material engagement was calculated as 80.86%. The Online Risk Assessment covers environmental, carbon, waste, water, packaging, health and safety, timber, natural material extraction, conflict minerals, human rights, anti-slavery, anti-bribery, anti-corruption, quality assurance, chemical management, and quality management. In the absence of further additional details of scoring for individual materials, this figure will be taken as an indication of engagement involved with improving the supply chain performance. Minimum requirements for suppliers to ensure a responsible supply chain have been developed and suppliers can achieve a Bronze to Gold. The development of this service will be beneficial to a whole sector improvement.



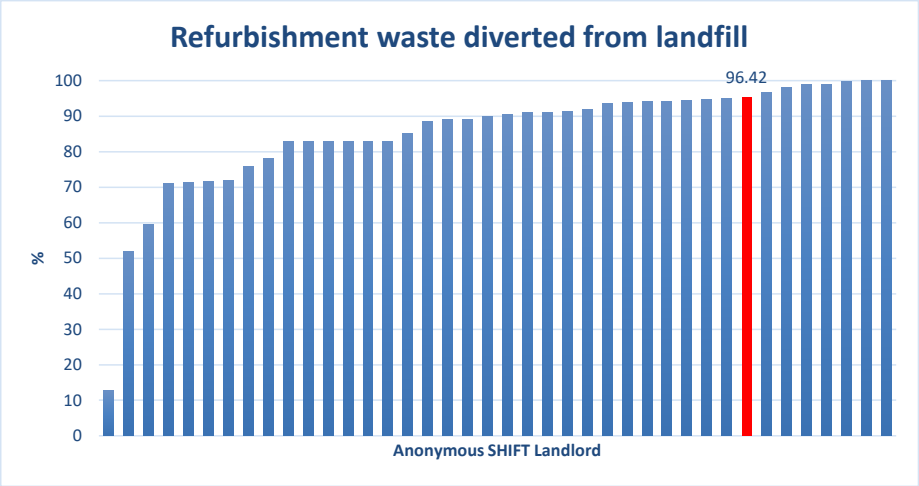
Recommended improvements:

- To gain further detail from all suppliers, it may be useful to host supply chain 'engagement' days focussing on sustainability – they provide a great opportunity to clearly explain the environmental data required for SHIFT and your own monitoring strategy. Establishing a point of contact within each supplier/contractor for sourcing this data will save you time and frustration during the data collection process.
- Consider making it a requirement within contracts for suppliers to devise their own responsible materials scoring methodologies. At SHIFT we are exploring a metric along the lines of "the degree to which BES6001 is met". BES6001 is a catch all standard that deals with both environmental and social aspects of the supply chain. Note, we will not require formal accreditation on this, but each supplier should demonstrate how they believe they are achieving this, even if it is on a voluntary basis. Examples of verification include monitoring visits to suppliers to ensure they are operating responsibly.

Refurbishment recycling

Detailed breakdowns of waste treatment are normally available from contractors and DLO's. 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. Our thought process is that if a tonne of waste is generated, e.g. from a roof replacement, then approximately a tonne of new materials is used, e.g. in the replacement of that roof. From this data we can begin to approximate embodied CO_2 of materials used in maintenance.

Stonewater sourced data from most of their waste contractors and on average reported that 96.42% of waste is recycled/diverted from landfill.



Recommended improvements:

- Require subcontracted maintenance firms to report their recycling rates to you and provide supporting evidence in the form of waste reports. Eventually these will improve once the supplier sees the importance of recording high recycle rates to your organisation. Organising more frequent reporting will embed this much more quickly in these organisations.
- Consider implementing subcontractor KPIs for this impact aiming for 100% diverted from landfill by 2050.

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
- Post-Occupancy Evaluation – comparing actual performance in retrofit and new build with design performance
- 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
- Related consultancy and compliance e.g., ESG, ESOS and SECR reporting

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

SHIFT is run and managed by Suss Housing Ltd

www.SHIFTenvironment.co.uk

The Exchange, Brick Row, Stroud, GL5 1DF
www.SHIFTenvironment.co.uk 07718 647117 info@SHIFTenvironment.co.uk