Stonewater

SHIFT Sustainability Report

2022

SHIFT

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Welcome to your 2022 sustainability report

This report details your current environmental impacts, together with a comparison against what good looks like. The safe levels are science-based targets that have been derived by government institutions and reflect limits that, if attained, will have positive benefits for long term human wellbeing.

A lot has happened in the sector since SHIFT 2021 and it is all looking positive.

- ESG finance continues to drive improvements in the sector
- The roadmap to “net zero” homes and buildings is maturing which allows the development of workable strategies
- Banks now require environmental performance metrics for loans
- Most landlords have at least analysed the costs of transforming their stock to net zero
- Biodiversity metrics are emerging in response to the Environment Bill
- Decent Homes and the Welsh Housing Quality standards are under review

As ever, the best way to deal with these drivers is to take a strategic approach and embed sustainability into an organisation. Having an experienced third party review the impacts each year helps ensure that the strategy is being adhered to so that the benefits can be realised.

In addition, SHIFT’s unique environmental scoring system provides a standard to attain. It serves two purposes:

1. Provide a holistic and organisation-wide target that unites all directorates
2. Demonstrates to external stakeholders your success and enables you to encourage them to improve

As well as detailing your organisation’s environmental performance, this report also shows how you compare against peers and science-based targets. It also gives you recommendations on how you can improve.

As always, we look forward to supporting you on your journey to sustainability.

SHIFT Team

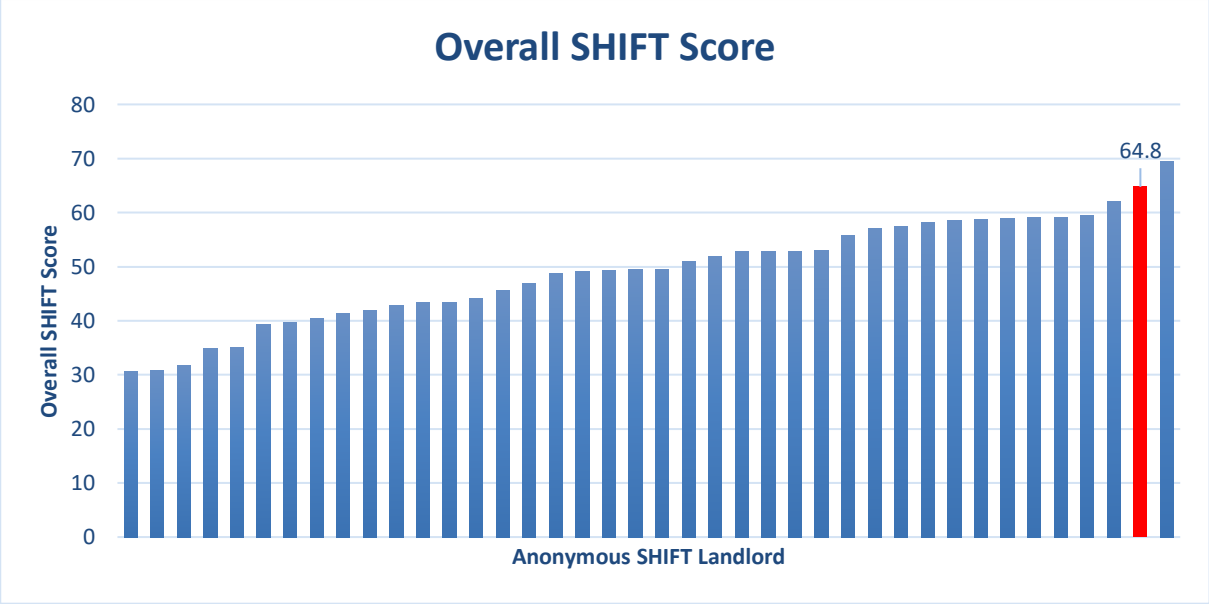
Contents

Executive summary

This report presents the sustainability performance of Stonewater from 1st April 2022 – 31st March 2023 across strategy and leadership, existing homes and offices, supply chains and operations and new builds. It spans energy and resource use, transport and travel, resident engagement, climate risk, biodiversity and responsible sourcing, thereby providing a comprehensive overview of your organisation's environmental footprint.

Stonewater is one of the largest social housing providers in the UK, owning and managing around 36,000 homes for more than 78,000 customers. 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 standard, with a score of 64.8. 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 2022[3]	Long term intensity target (by 2050 unless otherwise stated)
Individually heated homes, regulated emissions Scope 3	72,300.89 tonnes CO_2e	SAP 72.95 2,519 kg CO_2e /home managed	SAP 73.7 ×	SAP 85
Communal heating systems metered data Scope 1 metered data Scope 2 [4]	2,447.78 tonnes CO_2e 0 tonnes CO_2e	10,166 kWh / home managed	5,370 kWh yr / home managed ×	3,600 kWh yr / home managed
Other landlord supply Scope 1 Scope 2 [4]	338.83 tonnes CO_2e 2,123.42 tonnes CO_2e	86 kg CO_2e / home managed	113 kg CO_2e / home managed ✓	0 kg CO_2e / home managed
Offices Scope 1 Scope 2 [4]	15.21 tonnes CO_2e 25.42 tonnes CO_2e	25.28 kg CO_2e /m^2	54.0 kg CO_2e /m^2 ✓	0 kg CO_2e / m2
Business mileage Scope 3	159.6 tonnes CO_2e	5.56 kg CO_2e / per home managed	9.5 kg CO_2e / per home managed ✓	0 kg CO_2e / home managed
Maintenance activities DLO Scope 1 Supply chain Scope 3	0 tonnes CO_2e 1,334 tonnes CO_2e	46.47 kg CO_2e / per home managed	34.0 kg CO_2e / per home managed ×	0 kg CO_2e / home managed

Other environmental performance

Environmental issue	Absolute[1]	Intensity[2]	Intensity target for SHIFT platinum 2022[3]	Long term intensity target (by 2050 unless otherwise stated)
Water – homes	3.1 million m^3	129.2 lpd	139.6 lpd ✓	130 lpd by 2030
Water – offices	644 m^3	12.14 m^3/employee/yr	7.8 m^3 / employee/yr ×	3 m^3/employee/yr by 2030
Waste generated (sent to landfill) – homes	12,727 tonnes	6% increase in residents diverting waste from landfill	6.4% increase in residents diverting waste from landfill ×	17.6% increase in residents diverting waste from landfill
Waste generated – offices	5.3 tonnes	95% of waste diverted from landfill	72.0% waste diverted from landfill ✓	100% diverted from landfill
Promotion of sustainable transport facilities – homes	0.39 / 5 SHIFT score	7.9% increased likelihood of resident use	TBC	100% increased likelihood of resident use
Responsible materials – maintenance & capital works	56.64%	56.64%	47.7% responsibly sourced ✓	100% responsibly sourced
Responsible materials - offices	36.5%	36.5%	59.4% responsibly sourced ×	100% responsibly sourced
Adaptation to climate change – homes protected from flooding	27,021 homes	94.14% of homes adapted to flood risk	83.9% adapted to flood risk ✓	100% adapted to flood risk
Adaptation to climate change – homes protected from overheating	23,163 homes	80.7% of homes adapted to overheating risk	78.8% adapted to overheating risk ✓	100% adapted to overheating risk
Biodiversity value	2,112.02 tonnes biomass above ground	2.2 tonnes biomass per hectare	10.4 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 – 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 – 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.

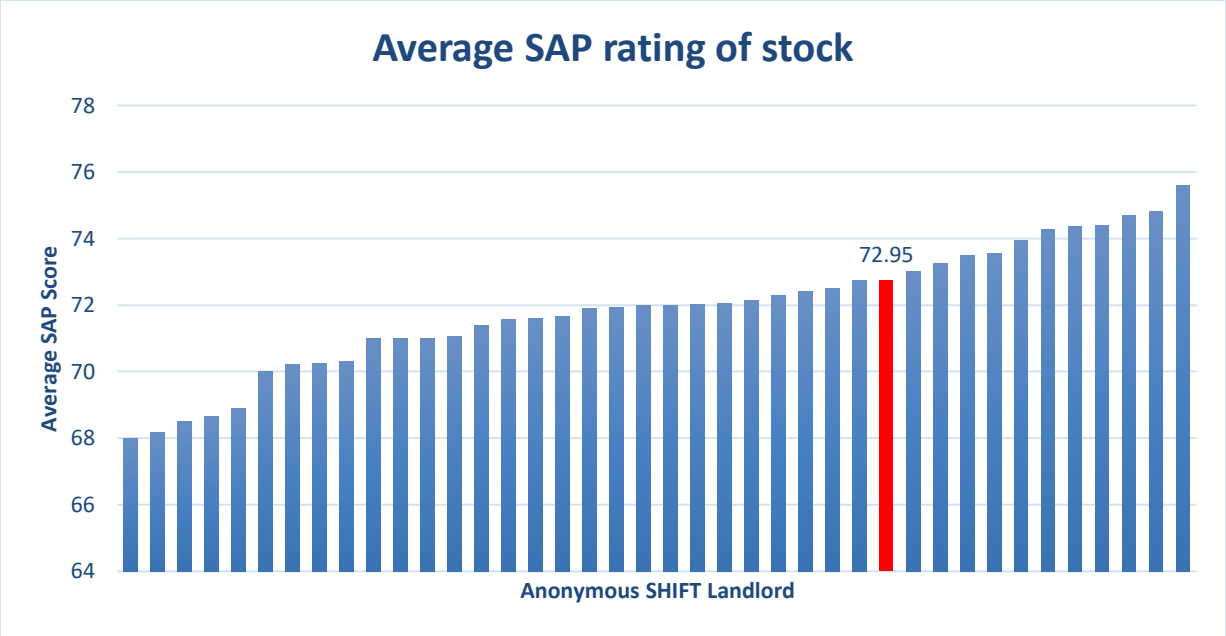
Existing Homes

Most of the homes that exist now will be in use in 2050. Therefore, it is essential to ensure that existing homes have safe levels of environmental impact. 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. Even though it is not a direct assessment of CO_2e it is a very good surrogate. 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 TV's. 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 72.95 has been achieved across their housing stock.



Recommended improvements:

- Ensuring a full dataset will assist 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).
- For detailed guidance on net zero, download the "Net Zero carbon roadmap roundtable summary" from here: https://shiftenvironment.co.uk/publications/ . There are still lots of issues to iron out (e.g., "hard to treat", hydrogen fuel etc), but the broad pathway is:
    - All current homes brought up to EPC C (i.e., well insulated)
    - Switching to electric heating
    - Grid decarbonised to net zero
    - All new homes to be net zero
- When designing annual plans, factors worth considering:
    - Tackle worst homes first
    - Use a triggers approach – 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

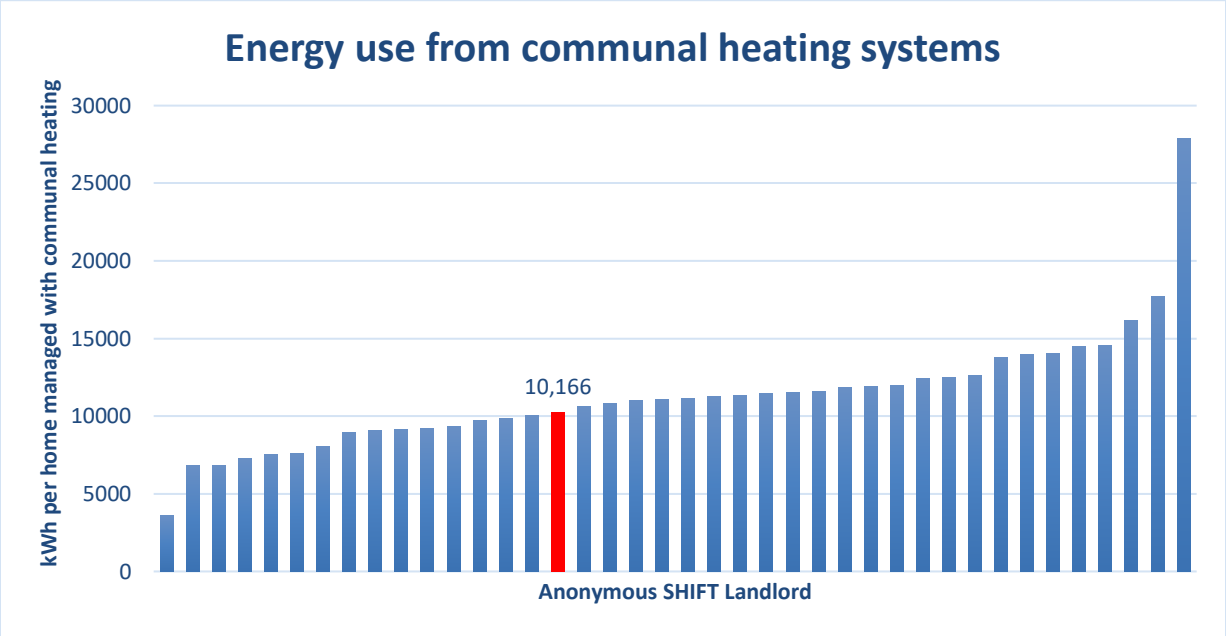
transforming the way your repairs and maintenance teams work and may take some time to change processes within your organisation. Triggers to consider:
        - Component replacements
        - Disrepair claims
        - Voids
    - Resident engagement opportunity – some highly visible interventions 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 'steppingstone' 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. See the later sections in this report for more details on these issues.
- 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 API's 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 1,319 communally heated properties. Stonewater were unable to determine the majority of the kWh usage data for these communal heat networks (SHIFT default was applied for 93 properties). These should be clearly documented under the requirements of the Heat Networks (Metering and Billing) Regulations 2020. With a combination of SHIFT defaults and Stonewater's data an intensity ratio of 10,166 kWh/ home managed was calculated. This totals 2,447.78 tonnes CO_2e from communal heating systems. The table below shows the average kWh values per communally heated home from other SHIFT landlords.



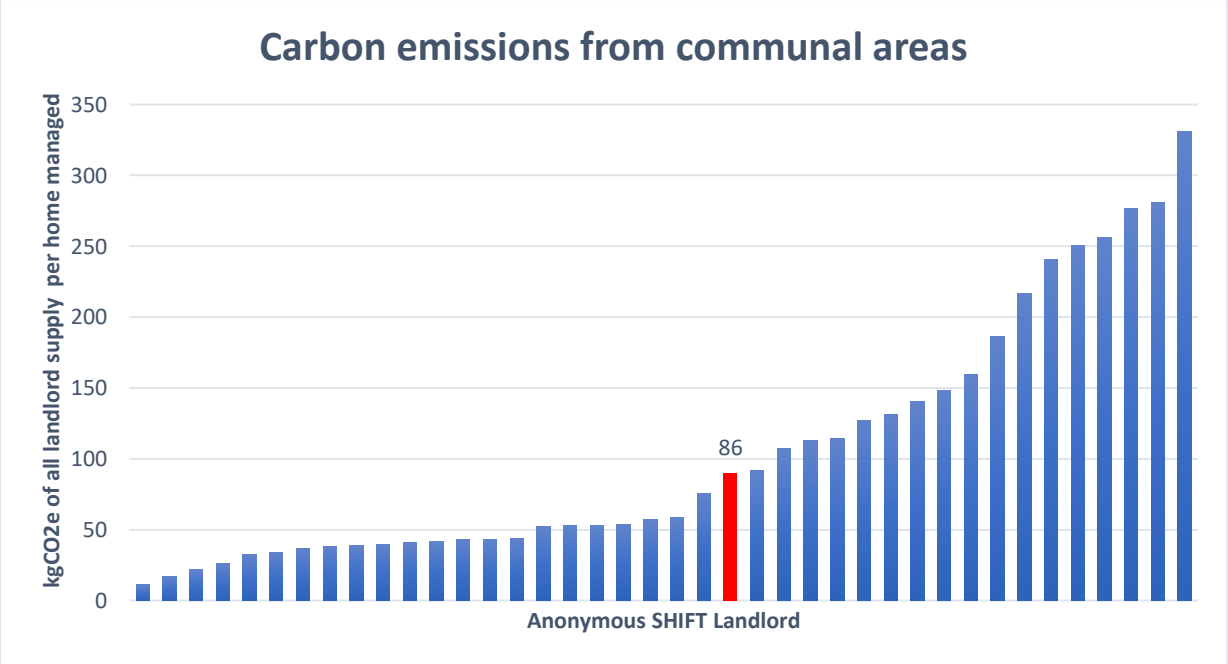
Recommended improvements:

- Stonewater were unable to provide data for 93 communally heated properties (14 blocks) this should be investigated. A list of properties with missing data has been uploaded to the SHIFT 2022 Portal (Q1.1) titled "MWJ_Historic Consumption Gas-Monarch Customer Zone Reports".
- Ensure full compliance with the Heat Networks (metering and billing) regulations and install individual meters where viable.
- Review all communally heated networks for inefficiencies in heating demand.
- 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.
- Consider calculating the actual 12-month energy use for each flat and feeding this back into the asset management database. This will for allow better CO2 emission calculation.

Other communal area energy

Stonewater also assessed premises and homes that use communal energy. For SHIFT 2022 this is made up of communal areas in homes as well as 'other landlord supply' such as community centres. This totalled 2,462 tCO_2e or 86 $kgCO_2e$/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.



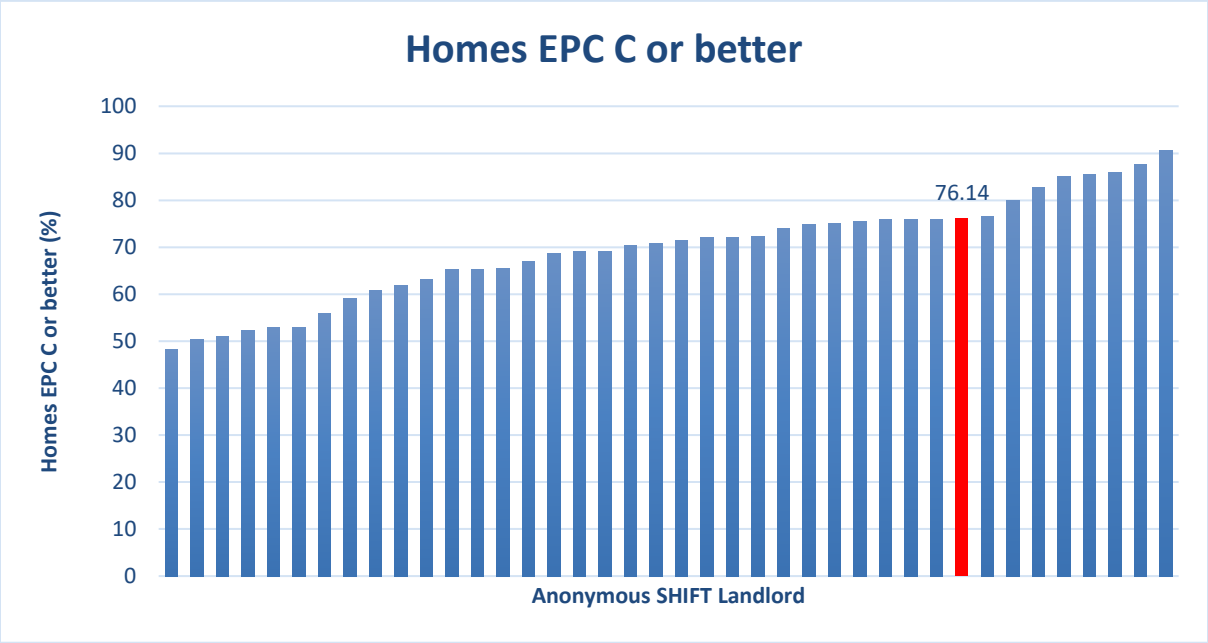
Recommended improvements:

- 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

Homes with the lowest SAP scores are those most difficult to heat, so to minimise the risk of fuel poverty it is particularly important to tackle these least efficient homes. This SHIFT question aligns with the Government's fuel poverty strategy. the strategy aims for all homes to be EPC C (equivalent to SAP 69) or better by 2030.

Consulting Stonewater's asset management database, 21,854 properties are believed to be EPC C or above, this equates to 76.14% 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.

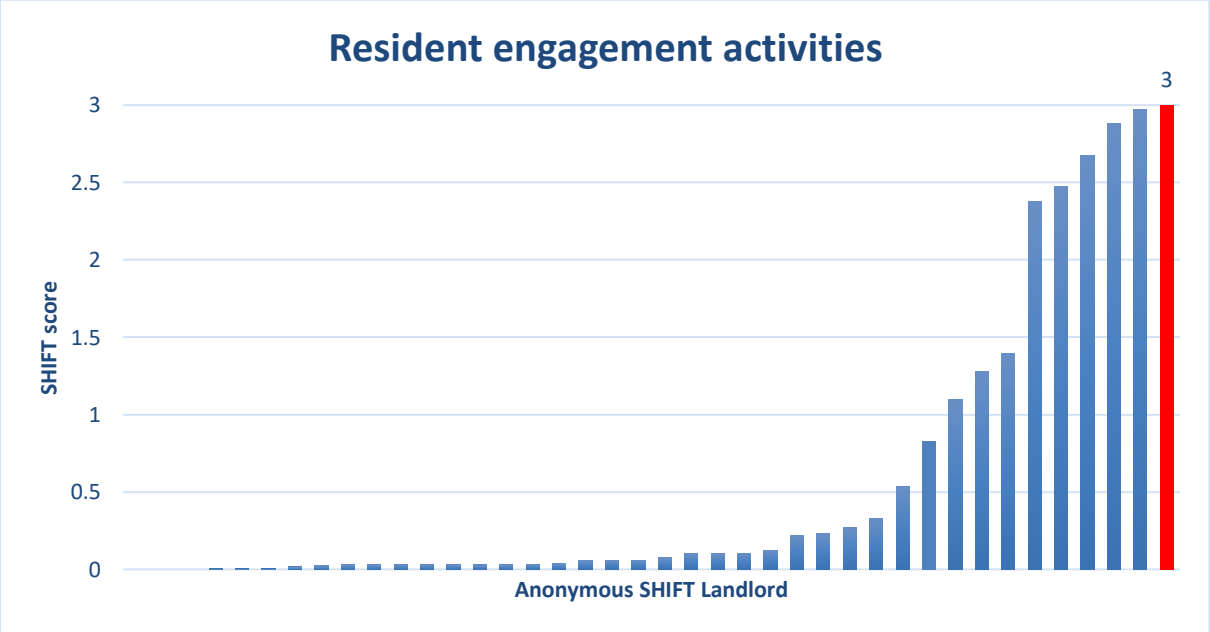
Resident engagement

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 40% of Stonewater's residents had been actively engaged on energy efficiency. With residents being offered energy efficiency advice via the 'Customer Energy Hub' as well as conversations had with residents during retrofit works, this included an in-person conversation as well as a demonstration of the new technology (heating systems) installed. This does also include webpage and video views which is not usually classed as active engagement; however, Stonewater have requested this is included as active engagement for their SHIFT 2022 assessment with the aim to increase their two way conversations with residents over the next 12-months to counteract any downfall in score for future reporting.

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:

- Stonewater's webpage and video views have been accepted as active engagement for their SHIFT 2022 assessment however for future reporting this will not be categorised as active engagement as it does not involve a two-way conversation. A view count is

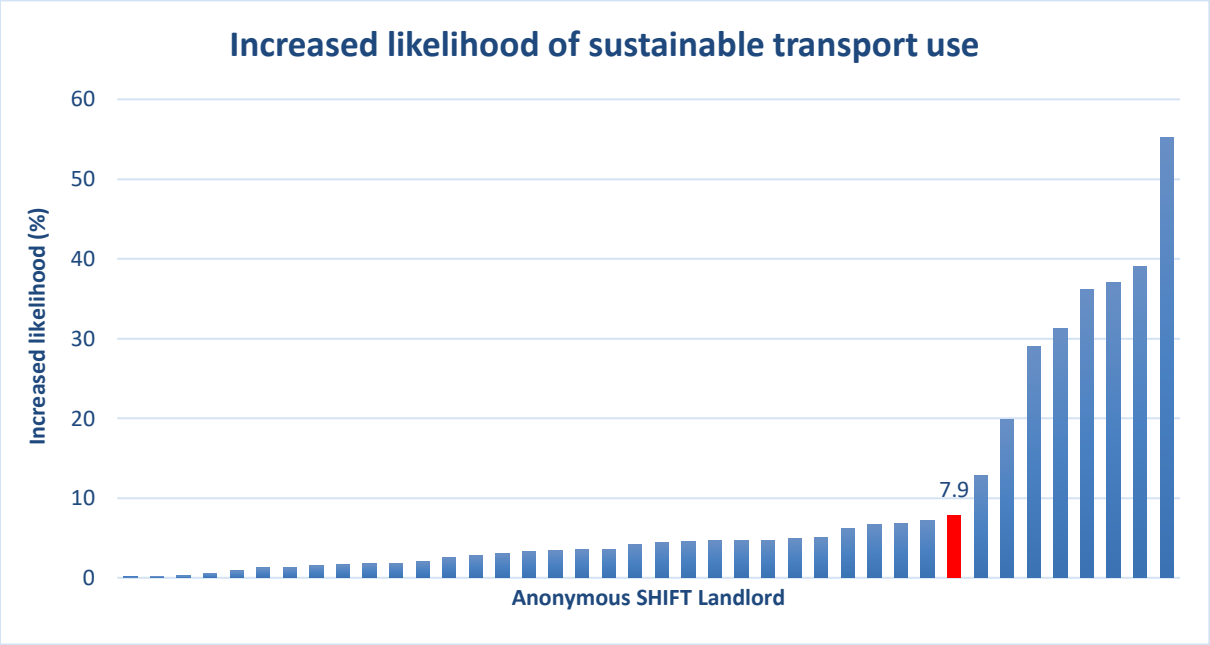
helpful to quantify passive engagement however is still not completely accurate due to the inability to know if the view is a resident or if one person has viewed the page multiple times.

- Environmental pages or similar on your website will be an easy way to refer residents to top tips and also for staff to refer to. Ways to use heating systems efficiently should be included, especially for newer types of systems. This may also be an ideal space to advise on water saving, waste recycling, adapting to climate change and sustainable transport. The pages will need to be promoted to residents to ensure engagement.
- Include energy advice in all contact with residents – gas safety checks, refurbishments, heating upgrades, rent arrears activities, new sign-ups.
- 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.

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 has been recognised that poor air quality is an issue to residents across the UK and that inequalities exists that 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 it has been estimated that 26.6% of Stonewater's homes have cycle storage facilities provided based on build date assumptions. Stonewater currently have electric vehicle charging infrastructure at 1.72% of homes, evidence was not provided outlining which addresses have chargers installed. Stonewater have provided address specific sustainable transport information to 10.3% of their residents as part of their new tenancy packs, this includes a map which shows address specific transport links. As a result of Stonewater's sustainable transport interventions, the increased likelihood of residents using sustainable transport is 7.9%.



Recommended improvements:

- For future reporting Stonewater should provide a list of addresses at which EV charging points are installed at.
- Address specific transport advice could be provided via new tenancy packs for example and should include the service provided and proximity of public transport links to the specific address.
- 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.
- EV charging points should be adequate for the majority of users. The type 2 plug is recommended as the minimum standard, as this allows for three phase, fast charging, and is more widely compatible with modern electric cars.

- 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.
- 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.
- Include links to Sustrans cycle maps and other sustainable travel options on the environmental pages on your website.
- 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.
- 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.

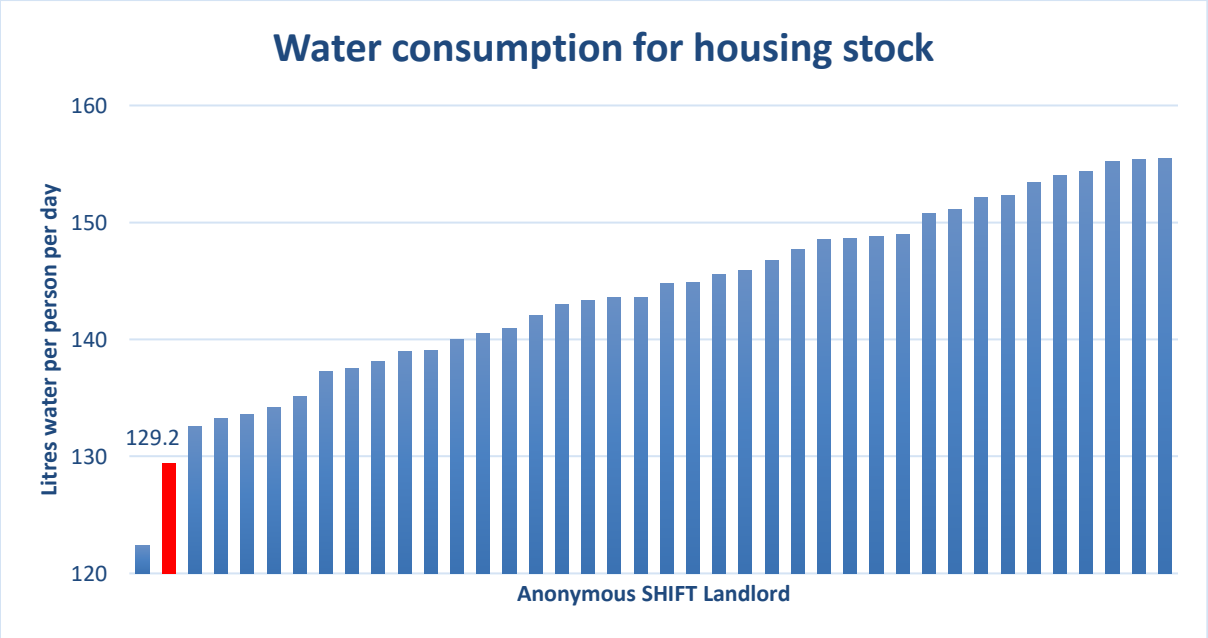
Water

Environment Agency research suggests that UK domestic water efficiency should be 130 litres per person per day by 2030 to adapt to forthcoming climate change. 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. Therefore, the SHIFT water efficiency estimator tool has been used. The estimator uses build age data to identify the likely water efficiency measures in Stonewater's stock. Using build date information and bathroom refurbishment dates, the percentage of homes with each water efficient feature is:

- Smaller than 180L bath: 70.97%
- Low flow taps: 70.97%
- Low flow showers: 70.97%
- Dual flush toilets: 70.97%
- Flats (representing less water usage in garden): 43.95%
- Water butts: 0%
- Water meters: 65.92%
- Greywater/rainwater harvesting systems: 0%
- Residents given information on water efficiency: 1.32% based on Youtube video views

Stonewater reported high % of water efficiency measures installed however there is no evidence for this and these figures are all based on estimations. This gave a result of an estimated 129.2 litres per person per day (lpd) using the SHIFT water efficiency calculator tool.



Recommended improvements:

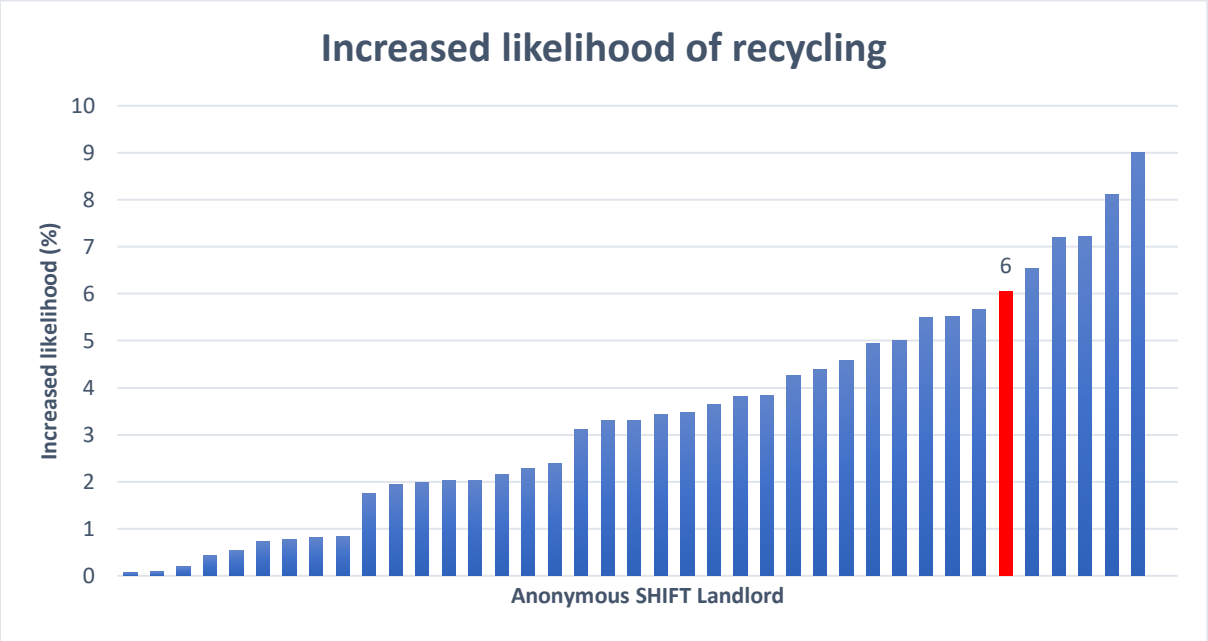
- Stonewater have performed very well within this section, however no evidence has been provided for which water efficiency measures are installed at each property. Ideally stock condition surveys should confirm the measures installed but it is recommended for future SHIFT assessments Stonewater should provide evidence for the estimations, e.g. policies which outline the date at which 'low flow showers' became part of the design specifications/refurbishment specifications.
- Consider including 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.
- Consider whether 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.

66.8% of Stonewater's homes are believed to have internal recycle bins fitted using build date and kitchen refurbishment date assumptions. 4.72% of residents were passively engaged in domestic or bulky waste advice over the reporting period during 'Recycling Week'. A further 0.22% were actively engaged on waste initiatives during 'Recycling Week'. These measures encouraged an estimated 6% increase in the likelihood of residents diverting waste from landfill.



Recommended improvements:

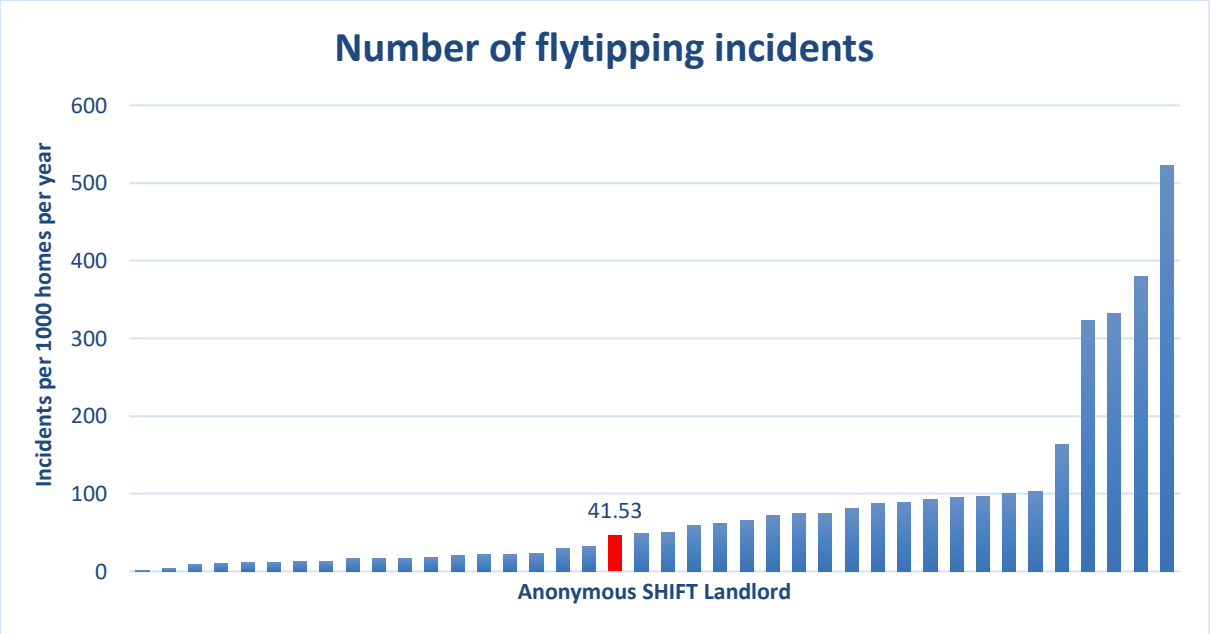
- Consider installing internal recycling bins into kitchen refurbishment works for resident recycling ease.
- Include a new field on asset management databases to show recycling facilities. This will make easier environmental reporting.
- Liaise with new builds colleagues and ensure that all homes have internal recycling facilities and ensure this remains a standard in all new builds.

- Ensure 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 ups involving residents and staff.
- Improvements to facilities may include increasing communal bin capacity, install CCTV in fly tipping hotspots, purchasing internal recycle bins for residents etc.
- 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 also 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 quarterly. Over the reporting period, 1,192 fly tipping incidents were recorded over the 12-month reporting period equating to 41.53 per 1,000 homes.



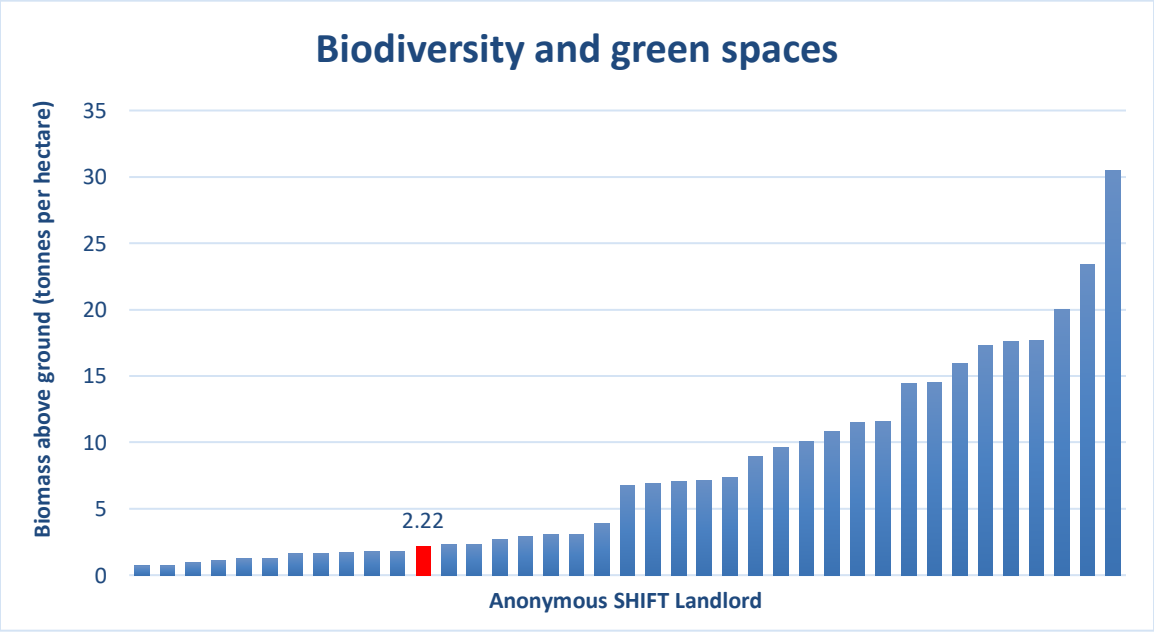
Recommended improvements:

- 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.

Biodiversity and green spaces

Access to 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 provided a GIS summary extract of the communal 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 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.
- 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.
- Consider conducting tree surveys and ensure they include crown spread data. 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 growing gardens, tree planting and introducing wildflower planters are potential projects.

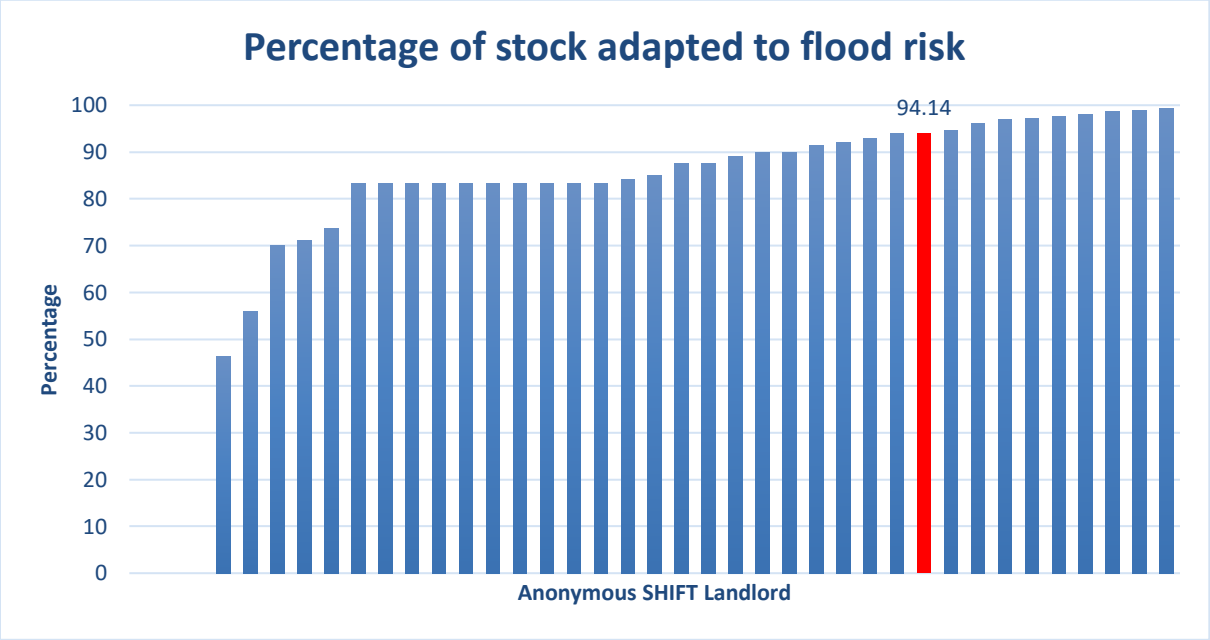
Homes adapted to risk of flooding

Met Office projections indicate more flood events and more heatwaves. 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 climate change.

Flood risk data was provided at individual property level for both fluvial and surface flood risk assessments, this flood risk report considers 94.14% of homes are at low risk to flooding.

Stonewater also have responsive actions in place for homes at risk of flooding such as:

- Households signed up to early flood alerts: Yes
- Property Flood resilience surveys: Yes
- Emergency flood plans in place: Yes
- Proactive property level flood resilience measures: Yes
- Temporary defence available: No



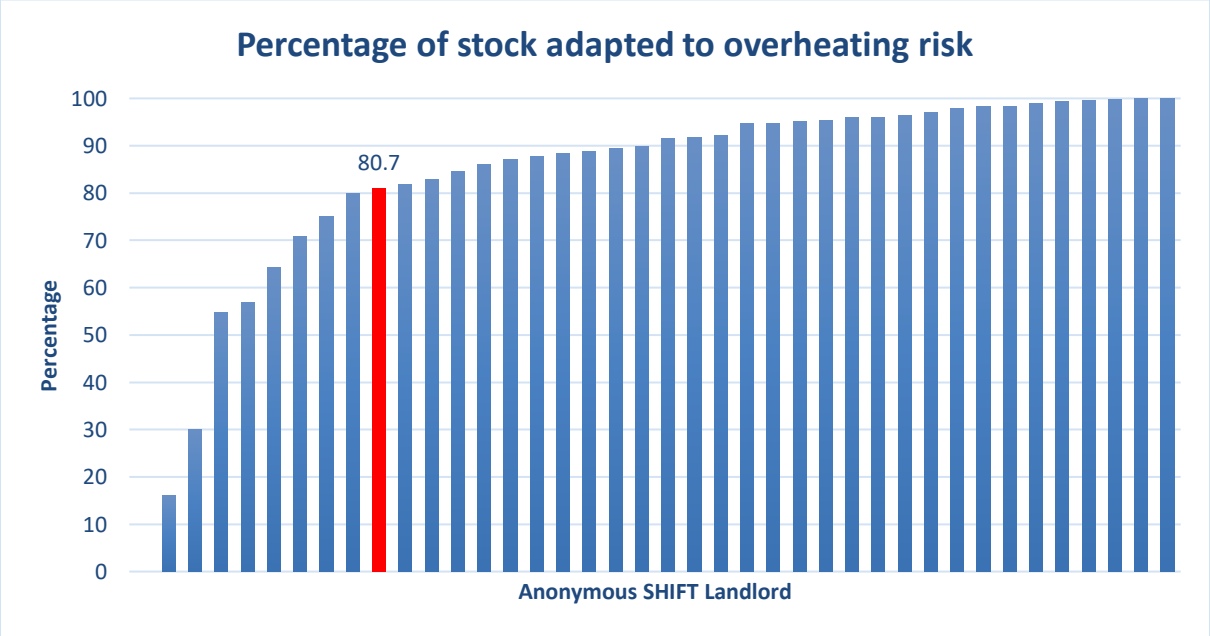
Recommended improvements:

- Ensure future flood risk assessments are assessed annually. Use the Environment Agency's long term projection maps which are updated regularly.
- Include both fluvial and surface water run-off.
- Consider including flood risk levels in asset management databases for easier management and reporting.
- Devise an internal "standard" for flood resilience and ensure that the degree to which each home is resilient can be assessed against the standard and recorded on the asset management database. You may decide to include simple measures such as ensuring residents in medium or high flood risk areas are signed up for EA flood warnings. The standard may include:
    - Ensure homes and residents at medium or high risk are notified of actions necessary in flood events. These may include turning off the gas, water and electricity mains, gathering emergency supplies or evacuation protocols. This may be communicated to residents in a resident welcome pack/handbook or on the "Green Pages".
    - Residents should be encouraged to take up contents insurance if their homes are at risk.

    - Ensure that responsive procedures are in place and rehearsed (e.g., sandbag stores are stocked, dehumidifiers and other drying equipment is available)
    - Ensure electrical fittings and meters are above design flood levels. This may be easier in new builds and you may decide that you will re-wire after a flood, rather than aa a preventative action.
    - In areas of surface water flooding liaise with the relevant drainage authority to ensure drains are fully functional and maintained.
- 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.
- Ensure good quality green areas (see biodiversity above).

Homes adapted to risk of overheating

Information provided from Stonewater's asset management database was used in the SHIFT overheating risk assessment tool to estimate that 80.7% 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 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.



Recommended improvements:

- Ensure any overheating risk assessments cover the risk factors addressed in the SHIFT overheating estimator tool – especially using projected summer temperature data

- 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.
- 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 (see biodiversity above).
- Devise an internal "overheating adaptation standard" and record the degree to which each home meets the standard. Record this in asset management systems. The standard may state for example, that all homes with 3 or more risk factors are:
    - On an alert system for heatwaves
    - Have access to cooling fans
    - Provide affected residents advice on how to keep cool during heatwaves
    - Are retrofitted with adequate ventilation and/or external shading – although landlords may wish to do this as a response rather than preventative

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.

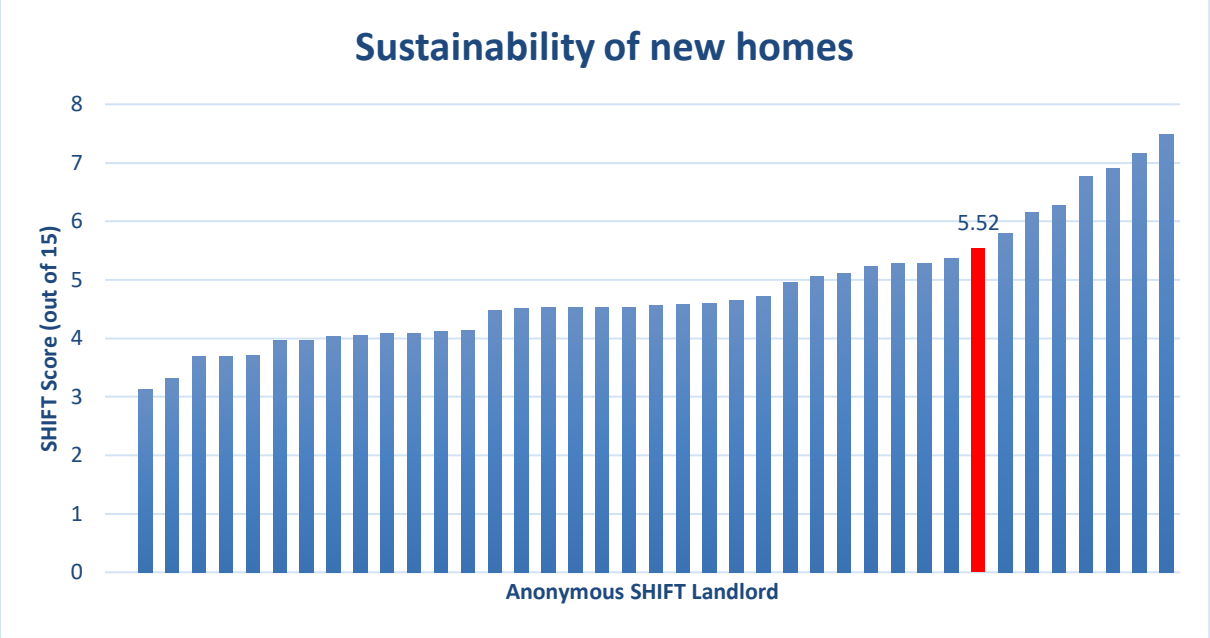
The SHIFT metric factors in a range of measures to determine the sustainability of new builds, including energy efficiency, above ground biomass, flood risk, overheating risk, recycling support, use responsibly sourced materials and sustainable transport support. We also encourage the use of some form of third-party verification to ensure that the so-called "performance gap" between design and final home, is minimised.

Figures provided for this assessment by Stonewater's Environmental and Sustainability Business Partner which indicated that 4.4% of homes achieved an EPC A (SAP 92+), 8.1% achieved a high EPC B (86 – 91), 83.5% were rated low EPC B (SAP 81 -85) and 4% were rated EPC C (SAP 69 – 80). It is highly recommended that Stonewater builds more homes to an EPC Grade A (SAP 92+ minimum). It is recognised that this will help Stonewater 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. Assuming Stonewater's current build rate of continues up to 2050 and that all new homes achieve EPC A in this time, a significant proportion of your stock would be built to EPC A which will contribute massively to achieving SAP 85 average across all your stock and cheaper than retrofitting to the same result.

Data was also collected for additional sustainability measures for all new homes. All sites were reported as being low risk to flooding and 75.7% were assessed as low risk of overheating. 47.56% of homes have internal recycling bins installed and 52% have access to cycle storage facilities. 100% of homes have sufficient biomass and ecological enhancements and it has also been reported that 19% of the materials are responsibly sourced.

Stonewater have also confirmed that 100% of new homes have part-verification, this includes energy surveys as well as confirmation the additional sustainability measures are installed. This has been categorised as part verification and not full 3rd party verification as it is conducted by the Development Team.

Using the SHIFT calculator for new build and the data above, the sustainability score for Stonewater's new build homes was 5.52 out of 15.



Recommended improvements:

- Ensure the verification process in place is conducted by a member of staff external of the Development Team, this would be categorised as 'Full 3rd Party Verification'.
- 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 and have additional sustainability features: internal recycling bins, cycle storage, used responsible materials, low risk of flood and overheating, maximise biodiversity in green spaces.
- 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 is working with major building materials suppliers to standardise an approach to monitoring this. In the meantime, we recommend surveys of your building partners.
- Consider excluding gas boilers from new homes now, well in advance of Future Homes Standard.

Offices

Although offices 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.

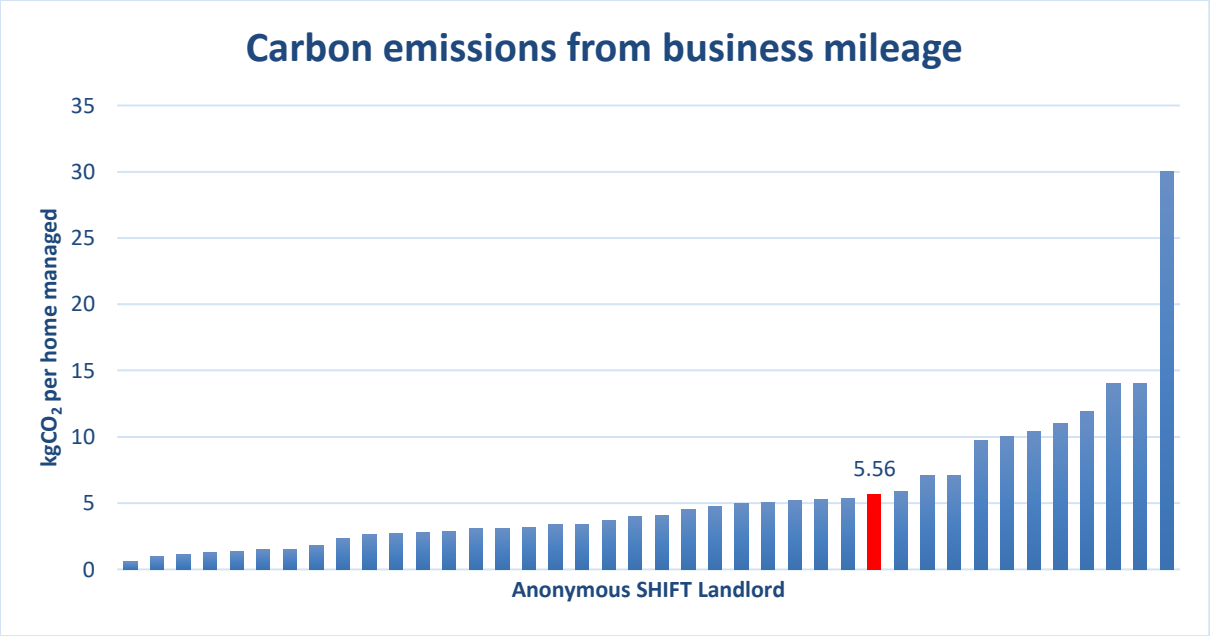
COVID Note: During the COVID period many offices were vacated. This may result in lower impacts than in previous years. No corrections have been made for this in this report, so subsequent years may show higher impacts as offices begin to get re-occupied. Also note, that impacts from offices may now be transferred to homes where staff are working from home. E.g., more energy, water and waste impacts will happen at home. These are not recorded in SHIFT as they are out of the normal scope.

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).

Data was collected by Stonewater's Environmental and Sustainability Business Partner for the total carbon emissions from business mileage from 1st April 2022 – 31st March 2023. Grey fleet mileage was provided along with a fuel split; £ spent on rail travel, bus travel and taxi travel was also provided. However no primary data was uploaded to verify these figures.

The appropriate conversion factors DEFRA conversion factors were used to calculate CO_2e emissions and an estimated to have emitted 159.6 tonnes CO_2e or 5.56 kg CO_2e per home managed through business travel.



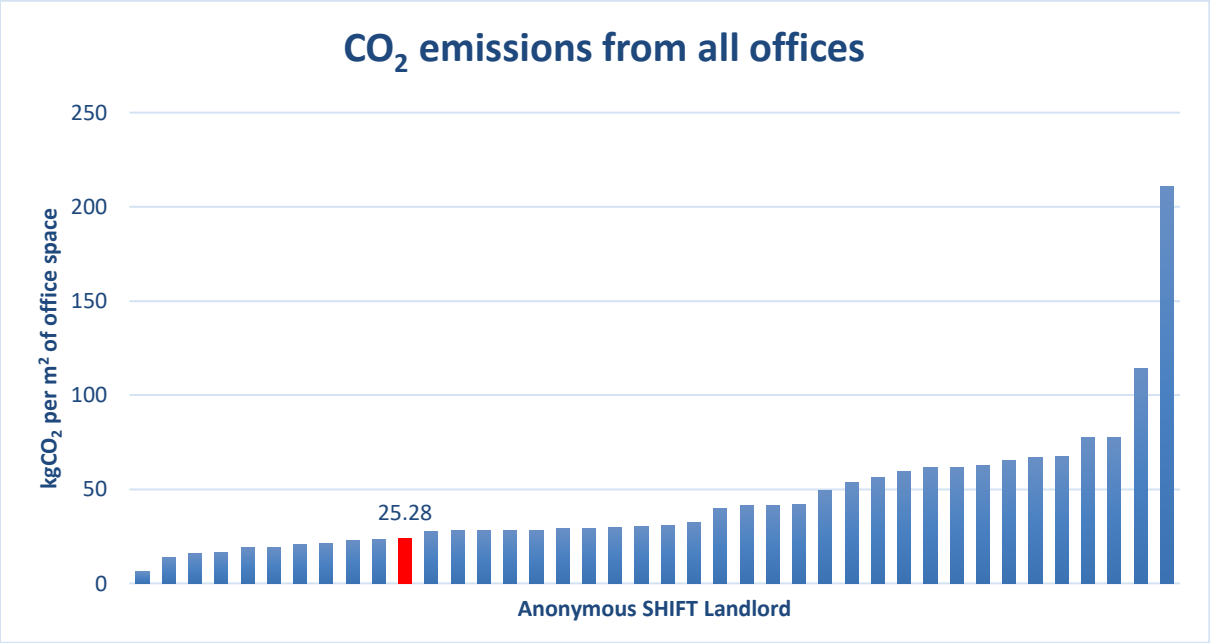
Recommended improvements:

- Stonewater provided evidence of business mileage for Q4 only, for future reporting it is important to ensure primary data is provided for each quarter to ensure final figures are verifiable.
- Continue to 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, it is possible this will also emphasise the emissions implications of this 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. Not only will this reduce fuel costs, but it will allow for the diversion of investment into properties. Additionally, it may 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.

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.

Stonewater documented the energy use at the 4 office spaces. The Bournemouth Office was the only site with gas consumption, Leicester, Coventry and Reading Office's are all powered by electricity only. In total, 40.6 tonnes of CO_2e were emitted in the assessment period which equates to 25.28 kg CO_2e per m^2 of office space.



Recommended improvements:

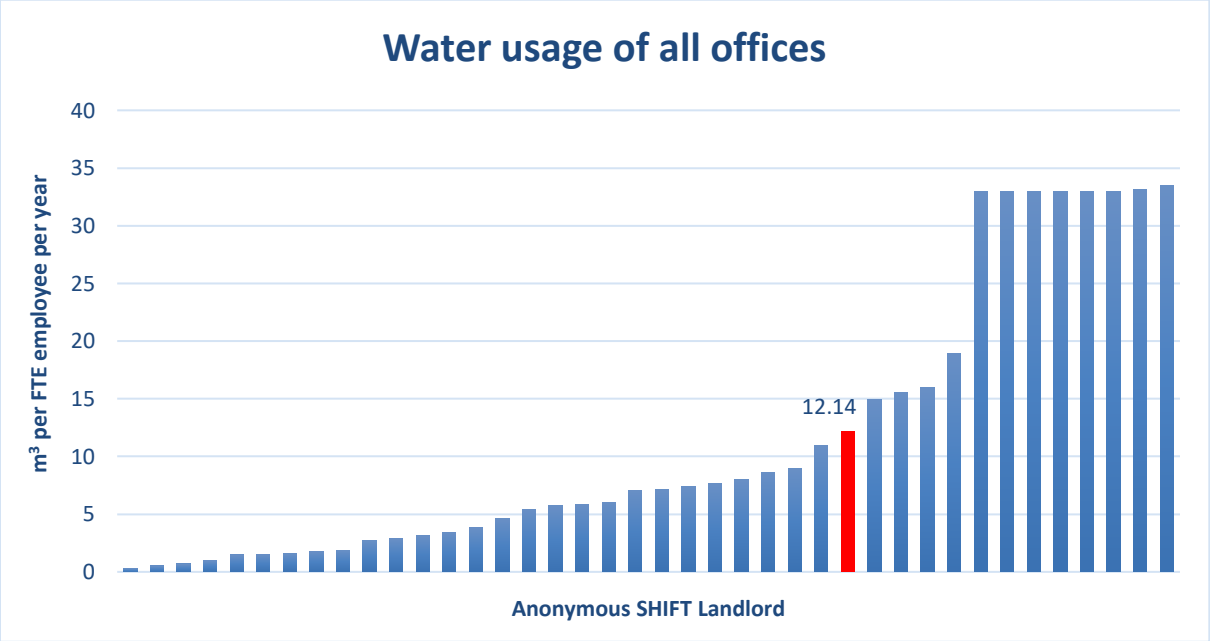
- Due to complications with Broker data, Stonewater were unable to get a full 12-months of data. Therefore, for the missing 5-months of data was taken from previous years data. Future reporting should include an unbroken 12-months data.
- Ensure multiple datasets are combined into one source document, this should include one kWh figure of consumption per meter.
- 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) could be made. The methodology for this is limited at present.
- 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.

Water

Water figures have been verified from Stonewater's quarterly reporting. Water use was reported as 89.38 m^3 at the Leicester Office and a further 165.59 m^3 was recorded at the Bournemouth Office.

Water consumption data was not available for Coventry or Reading office spaces therefore the intensity ratio from the data provided was applied to the number of employees at these office spaces. It is estimated 145.7 m^3 of water was used at the Coventry Office and 242.83 m^3 at the Reading Office.

Overall, for all office spaces the water consumed is estimated to be 643.5 m^3 which equates to 12.14 m^3 per employee.



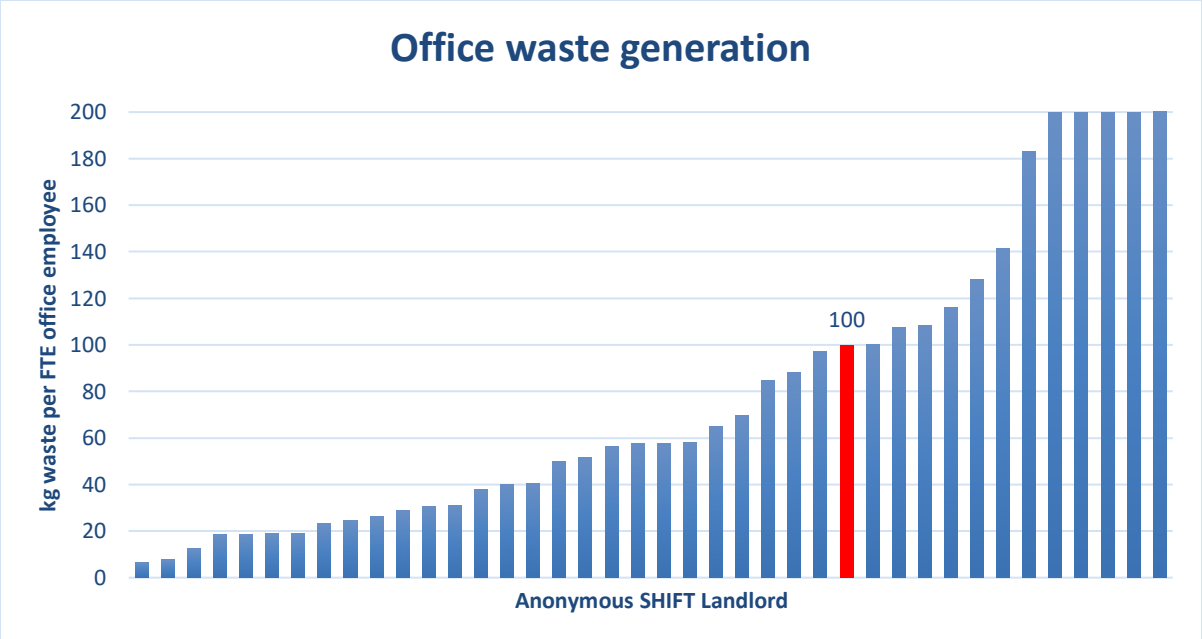
Recommended improvements:

- Stonewater were unable to provide data for either the Coventry or Reading office spaces, it is recommended that this is investigated and provided for future reporting.
- 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.

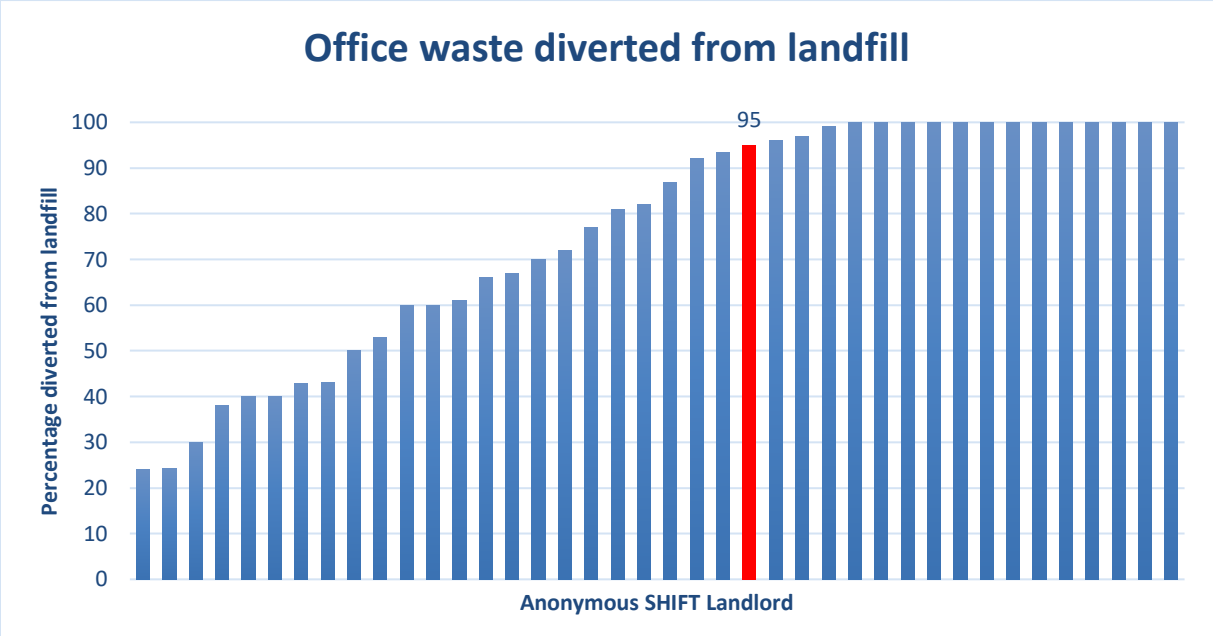
Waste

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 does not currently record office waste therefore the assumption from previous reporting has been applied of 100kg waste per full-time equivalent employees, in total this estimates 5.3 tonnes of general waste was collected by over the reporting period.



Stonewater were unable to report a recycling rate for their offices this year, therefore last year's figure of 95% has been applied.



Recommended improvements:

- Stonewater were unable to provide waste data for any of their offices, this should be investigated and reported in the future.
- Consider requiring the waste contractor to provide a breakdown of waste flows (landfill, recycling). Having these reviews is likely to help develop waste reduction targets. This will also help with future SHIFT assessments.
- 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.
- Investing in good quality and clearly labelled/information on bins to encourage the correct recycling, making it easy for staff members and visitors.

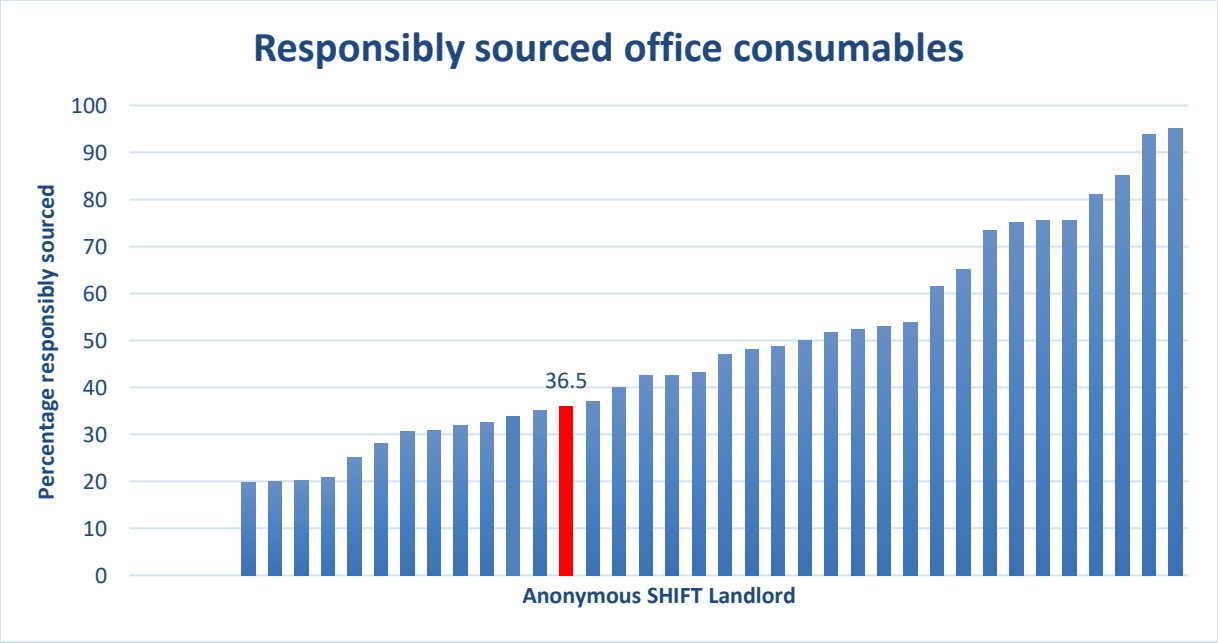
Office consumables

Stonewater do not have an office consumables eco/green report. However, did report all paper at the Leicester Office (largest office) is FSC certified, during the office visit conducted by the SHIFT Assessor to the Coventry Office it was observed not all paper purchased had the FSC accreditation therefore this has been reduced to 90%. During the office visit some cleaning products (dishwasher tablets, disinfectant, Kleenex) were observed to have responsible sourcing accreditations (TRECOS, A.I.S.E and FSC), estimating that 37.5% of cleaning products

are responsibly sourced. The SHIFT Assessor also observed the tea purchased is certified by Rainforest Alliance, the sugar is FSC certified as well as oat milk being provided, it is therefore estimated that 55% of staff amenities are responsibly sourced.

Printer cartridges were reported as recyclable which although is positive this does not relate to the sourcing of the materials but to the afterlife therefore has not been captured within this section. Documentation should be provided for the cartridges use of eco-material in their products, or exclusion of dangerous chemical substances for example. 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. No information was available for janitorial or other products. In total, 36.5% of office supplies are responsibly sourced.



Recommended improvements:

- Ensure FSC certified paper is purchased at all office spaces.
- Investigate the sourcing of printer cartridges, request documentation from the supplier to provide information on eco-material use or exclusion of dangerous chemical substances.
- 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 of each office and identified that all office spaces are at low risk to flooding.

No official overheating survey of Stonewater's office has been conducted, but it is documented that all offices are at low risk to overheating with air conditioning installed to regulate temperature.

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 or may be installed in the future, ensure it is the most efficient available, low-emission and that it is well maintained.
- Make considerations for staff overheating on particularly hot days. Consider providing refillable water bottles for staff to stay hydrated and consider the potential for flexibility of working hours.
- 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. Points for this section are therefore awarded 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.

A strong organisational commitment has been evidence by a foreword within the strategy from the Chief Executive along with full public accountability with the strategy available on the website. Clear responsibilities have been outlined within the "Appendix 3 Environmental Strategy Action Plan" which shows which member of the senior management team is directly responsible for each objective.

Sustainability targets and objectives cover all environmental areas assessed in SHIFT including energy efficiency, flood risk, overheating risk, waste, water, materials etc. SMART targets allow for interim and long-term ambition to be monitored and analysed, SMART targets for each environmental area has been included within the "Stonewater Sustainability Framework" document.

Recommended improvements:

- Stonewater should develop their fly-tipping SMART target to include an overall long-term target e.g., X-number of incidents by 2025, or X% reduction in fly-tipping incidents by 2025.
- 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.
- 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/

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.

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

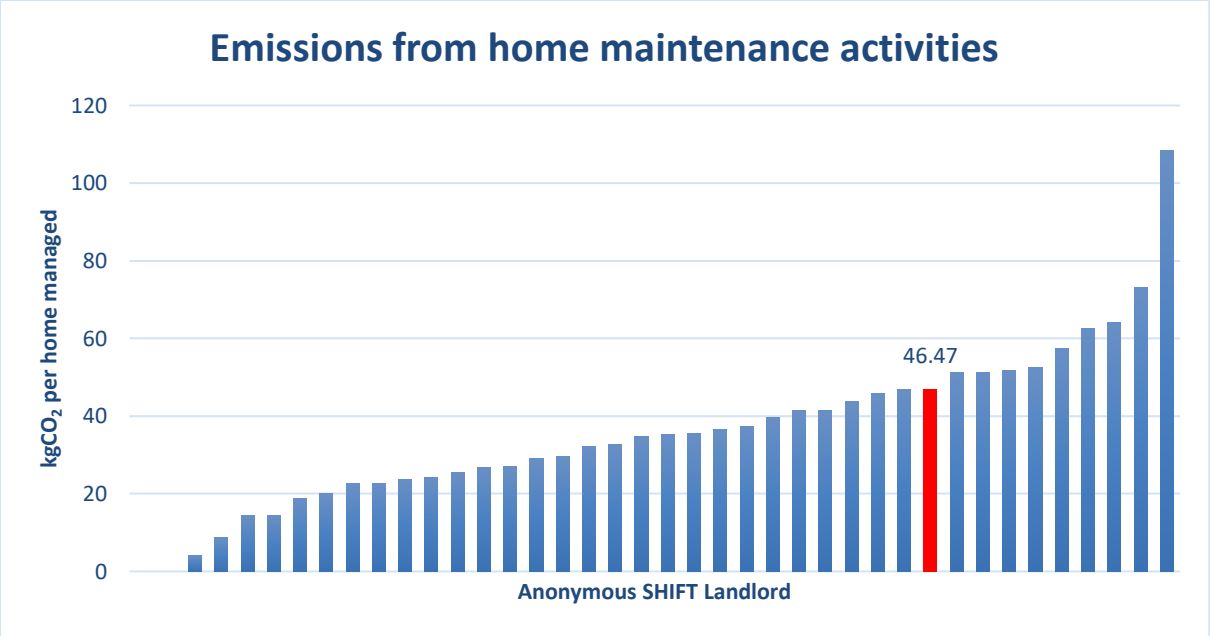
In-house and subcontracted maintenance teams emit CO_2e from their fleets, offices and other operations. Importantly, maintenance fleets also emit air pollutants which contribute to localised poor air quality and consequential health issues.

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 no have their own DLO, therefore all information provided for this section is for external contractors. Stonewater have received engagement for 100% of their supply chain with quarterly reporting from each, which is a huge achievement. The data provided shows that 1,334 tonnes of CO_2e or 46.47 kg CO_2e per home managed was attributable to Stonewater's repairs and maintenance activities.

The below graph shows how Stonewater compares to the other SHIFT landlords however it is important to note not all landlords have been able to provide 100% of their repairs and maintenance emissions due to lack of engagement with supply chain.

This means that for many landlords emissions have been excluded with a proportion of emissions have not been captured; resulting in Stonewater's intensity ratio being one of the higher kgCO_2e/home. The excluded emissions will be captured in SHIFT 2023 either by improved engagement with the supply chain, or by extrapolating emissions based on the proportional spend.



Recommended improvements:

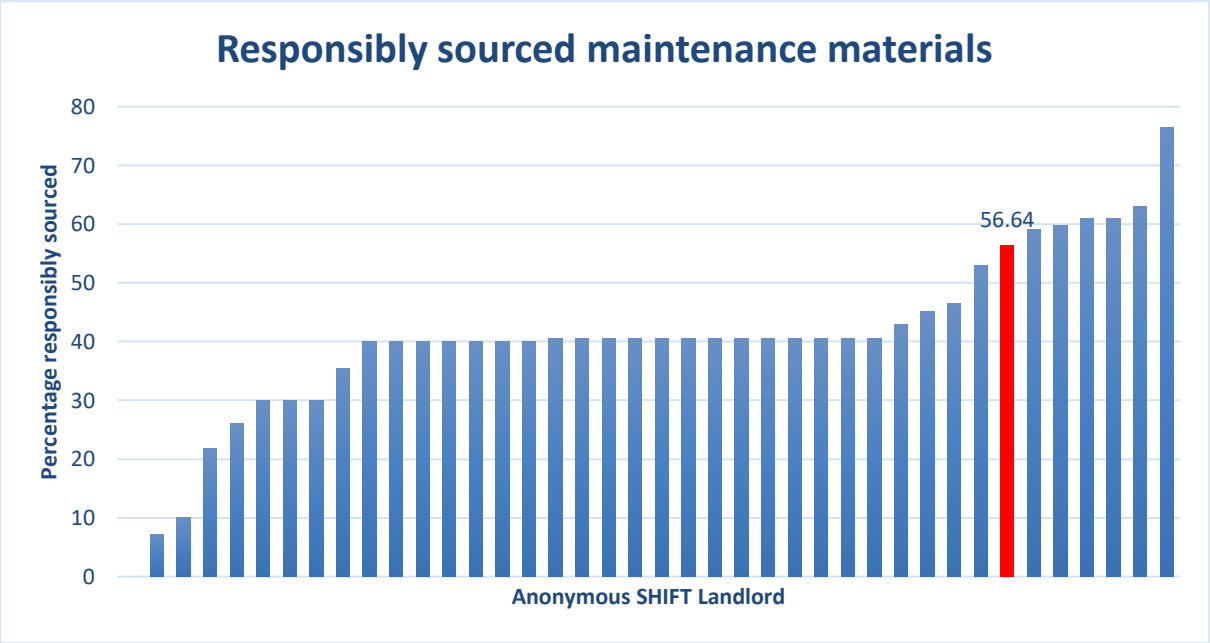
- We recommend putting the onus of environmental reporting onto the supply chain in a proportional manner. It is likely they are already being pressured to improve environmental performance and, by adding to that pressure, landlords can encourage the supply chain to improve.
- We recommend identifying your top suppliers via a Pareto analysis or similar and then surveying them for scope 1 and 2 emissions. In addition, you can ask embodied carbon of materials. In addition, you can ask for the embodied carbon of materials. 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 £1000 contract value can be a good way of identifying anomalies – where a contractor's CO_2e per £1000 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. At the moment, 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 received data from the majority of their repairs and maintenance suppliers with regards to responsible sourcing, however where evidence was not provided by the supply the SHIFT default was applied. Evidence was provided for BSW, Fortem, Hereford Heating as well as Wates therefore their reported % of responsibly sourced materials were accepted. Overall, the percentage of responsibly sourced material engagement was calculated as 56.64%.



Recommended improvements:

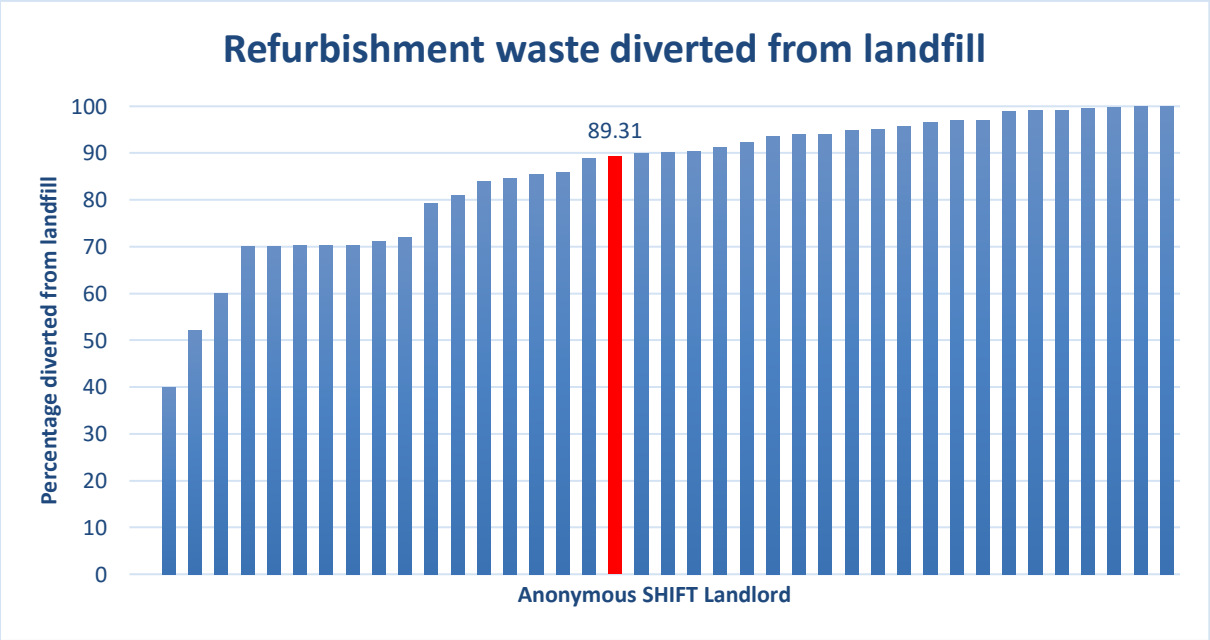
- Ensure evidence is provided for the suppliers who claim a high % of responsibly sourced materials to ensure they have a process in place to measure this.
- To gain further the detail from all suppliers, it may be useful to host supply chain 'engagement' days focussing on sustainability – they provide 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.

Stonewater sourced data from their all of their external supply chain, reporting that overall 89.31% of waste is 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 e.g., ESG 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

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