



## **Network Homes**

# **SHIFT Sustainability Report**

**2020**

Powered by



## Welcome to your 2020 sustainability report

This report is a gap analysis between your current environmental impacts and safe levels of impact. The safe levels are science-based targets which have been derived by government institutions and reflect limits that, if attained, will have positive benefits for long term human wellbeing.

There is still a fair way to go before we have a truly sustainable social housing stock. However, over the last year there have been lots of changes that can help drive action:

- Legal commitment to net-zero carbon by 2050
- Emerging low interest loans in return for high environmental performance
- New energy reporting legislation
- New technologies for retrofit and new build
- Increased requirements for biodiversity and biodiversity off-setting in planning processes
- All landlords now recognise their responsibilities for transforming their assets into a sustainable housing stock
- Emerging financial benefits for landlords by pursuing environmental strategies

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.

SHIFT's unique environmental scoring system provides a standard to attain. Bronze, silver and gold reflect the level of environmental performance, whilst the platinum level signifies a landlord that is on a trajectory to reach sustainable environmental impacts. Attaining any SHIFT standard helps landlords demonstrate to stakeholders that they are "doing the right thing" and doing the best for staff and residents alike.

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

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

**SHIFT Team**

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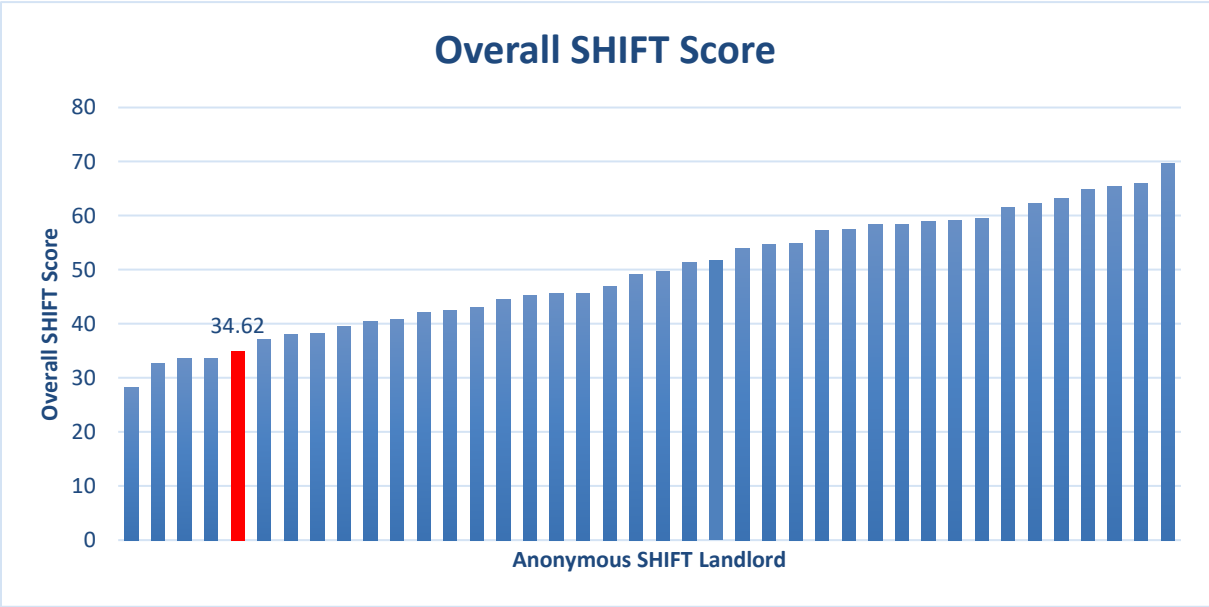
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# Executive summary

This report presents the sustainability performance of Network Homes 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.

Network Homes are one of the largest providers of affordable housing in London with over 500 employees managing around 16,000 social housing rental properties. The results of this assessment will show, as best as the data allows, the gaps between Network’s current environmental performance and environmentally safe levels of impact.

Network has achieved the SHIFT Bronze standard with a score of 34.62. It ranks 35th out of the 40 most recent SHIFT assessments. Over the next sections you will see the breakdown of the score and recommendations. A snapshot of key performance areas is given below:



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.

SHIFT drives sustainability performance improvement through reporting and benchmarking. This report offers suggestions on how these improvements can be made.

## Overall performance

Environmental issue	Absolute <sup>1</sup>	Intensity <sup>2</sup>	Intensity target for SHIFT platinum 2020 <sup>3</sup>	Long term intensity target (by 2050 unless otherwise stated)
CO <sub>2</sub> - homes	41,717 tonnes CO <sub>2</sub>	SAP 72	SAP 72.89 ✖	SAP 86
CO <sub>2</sub> – communal heating systems	n/a	n/a	5500 kWh yr / home managed ✖	3500 kWh yr / home managed
CO <sub>2</sub> – communal areas	n/a	n/a	n/a	n/a
CO <sub>2</sub> – resident engagement	0 tonnes CO <sub>2</sub> saved	0 kg CO <sub>2</sub> saving / home	n/a	n/a
CO <sub>2</sub> – offices	556.1 tonnes CO <sub>2</sub>	73.88 kg/m <sup>2</sup>	81.19kg/m <sup>2</sup> ✔	25kg/m <sup>2</sup>
CO <sub>2</sub> – business mileage	133.3 tonnes CO <sub>2</sub>	8.42 kg CO <sub>2</sub> / per home managed	n/a	n/a
CO <sub>2</sub> – maintenance activities	426 tonnes CO <sub>2</sub>	26.93 kg CO <sub>2</sub> / per home managed	n/a	n/a
Water – homes	1.9 million m <sup>3</sup>	143.6 lpd	142 lpd ✖	130 lpd by 2030
Water – offices	5,814 m <sup>3</sup>	12.06m <sup>3</sup> /employee /yr	9.03m <sup>3</sup> /employee/yr ✖	3m <sup>3</sup> /employee/yr by 2030
Waste to landfill – homes	7,458 tonnes	5.5% increase in resident recycling rates above local authority rates	4.64% increase in resident recycling above local authority rates ✔	45% increase in recycling
Waste to landfill – offices	59.3 tonnes	100% of waste diverted from landfill	70.03% waste diverted from landfill ✔	100% diverted from landfill
Responsible materials – maintenance	35%	35%	43.95% responsibly sourced ✖	100% responsibly sourced
Responsible materials - offices	0%	0%	56.45% responsibly sourced ✖	100% responsibly sourced
Adaptation to climate change – homes protected from flooding	n/a	n/a	30.73% protected from flooding ✖	100% protected from flooding

<b>Adaptation to climate change – homes protected from overheating</b>	n/a	n/a	30.73% protected from flood and overheating ✖	100% protected from overheating
<b>Biodiversity value</b>	199.65 tonnes of biomass	Equivalent of 0.38% land “protected”	8.1% of land protected ✖	19% of land ‘protected’ 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<sup>2</sup> 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.

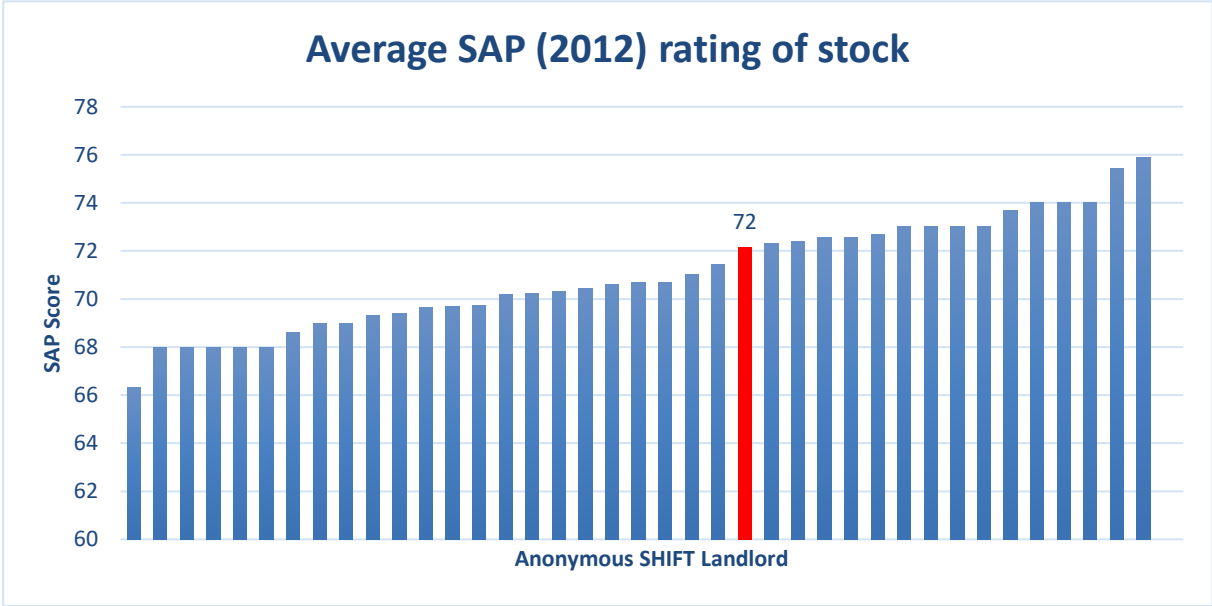
# Existing Homes

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 on each of these areas is presented below.

## Energy and average SAP

Average SAP standard way of assessing energy efficiency in homes. Even though it is not a direct assessment of CO<sub>2</sub> it is a very good surrogate. For information, the SAP rating refers to the cost per m<sup>2</sup> 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 suggests that an average SAP of 86 correlates with and 80% reduction against 1990 levels. We recommend using this as a long-term target, with the intention of offsetting any remaining emissions.

Network's Stock Investment Analyst provided data that had been extracted from their asset management database and showed an average SAP of 72 at the time of the assessment.



Recommended improvements (if not done already):

- Stock analysis and establishing address level plans is a detailed exercise but there are consultancies and other resources that can help
- Prepare detailed plans to achieve SAP 86 average (not minimum) by 2050 – these should include fabric improvements as a priority, followed by solar PV. There should also be liaison

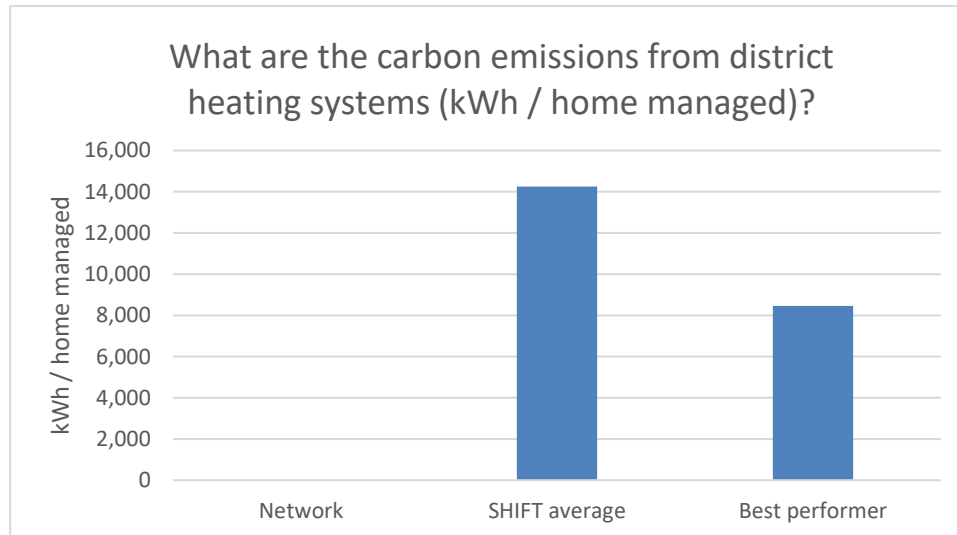
with new build colleagues to ensure that high SAP homes are built (new build don't currently build to SAP ratings)

- Explore and experiment with new technologies and finance mechanisms to see how they can help with improvements
- Find further guidance in our Housing 2050 report which gives suggested annual activities - <https://www.susshousing.co.uk/publications>

## District and communal heating

This is a new analysis for SHIFT 2020. Energy for communal and district systems is a huge cost to landlords and 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. Our research indicates that an efficient communal heating system, comparable with a SAP 86 home, is that a landlord would have to buy 3500 kWh of energy per home. Any more than that means wastage in either the heating system itself or poor fabric in the home.

Network were not able to provide the number of homes or consumption figures for communally heated homes. The table below shows the average kWh values per communally heated home from other SHIFT landlords.



Network were not able to source the number of homes with communal areas or the associated emissions. However, any landlord supplied energy purchased for these locations will have been more broadly reported in Network's Streamlined Energy and Carbon Report 2019/20.



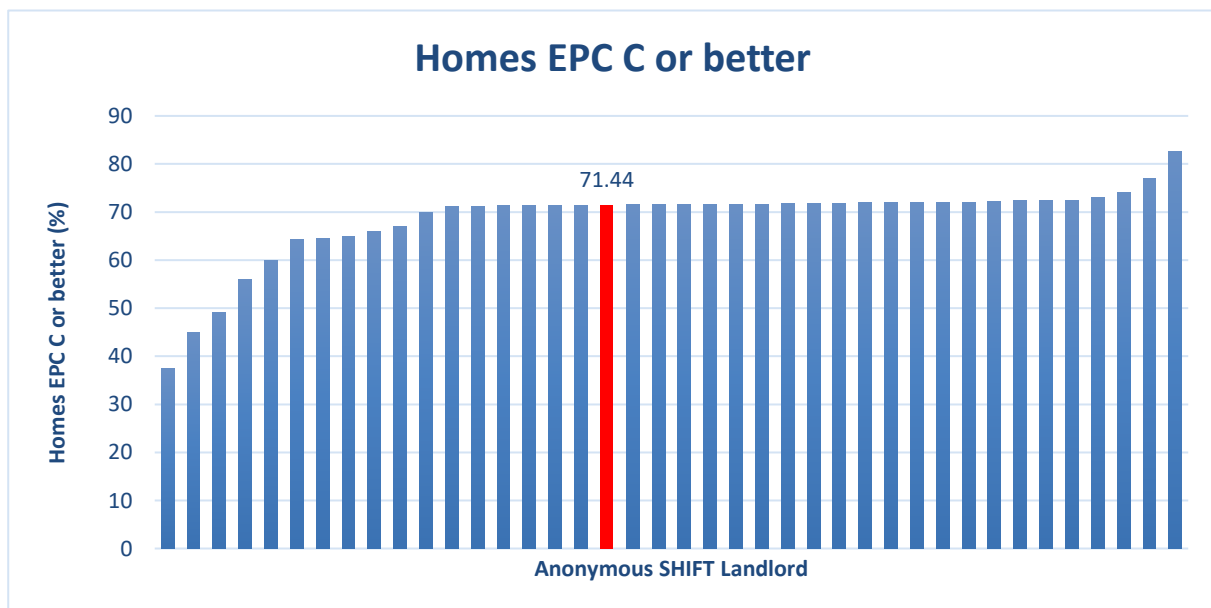
Recommended improvements (if not done already):

- Survey housing stock to identify homes with communal heating systems and start collating consumption values for these systems.
- Conduct a review of all communal systems in your stock. The review should include control settings and boilers and pumps and by-pass valves
- Ensure that replacement systems are not oversized – this can lead to excess maintenance, poor use of space and overheating in flats
- Consider installing submetering in landlord supply properties in order to gauge efficiency and energy use.
- Ensure that new build colleagues specify systems correctly – try to get input into new schemes at an early stage.

## 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. In essence, the strategy aims for all homes to be EPC C (equivalent to SAP 69) or better by 2030.

71.44% of Network’s homes are EPC C or better. This data was extracted by the Research and Policy Analyst via Network’s asset management database. In order to meet Government Fuel Poverty targets, 100% EPC C or better by 2030 needs to be achieved. SHIFT research has also identified that Network’s housing stock needs to average SAP 86 in order to achieve net-zero carbon emissions by 2050.



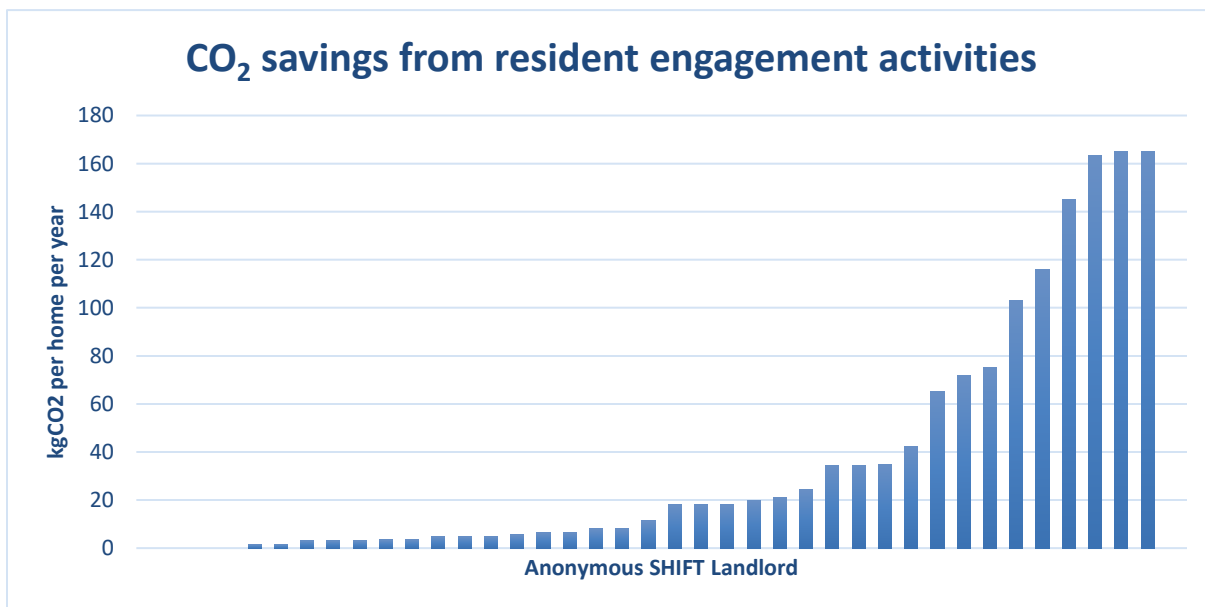
Recommended improvements (if not done already):

- Similar plans to improving average SAP except target is minimum SAP 69 by 2030
- Beware, 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 the ways they can make a difference and empowering them to save both energy and money.

Network do not currently engage with resident on energy efficiency or other sustainability areas, but it is an area they are working on improving. The pandemic has certainly limited interaction opportunities this year, but SHIFT landlords have found the most effective way to encourage changes to habits is with active, ongoing engagement beyond passive measures such as website and leaflet information. This can include resident groups, face-to face meetings and roadshows.



Recommended improvements (if not done already):

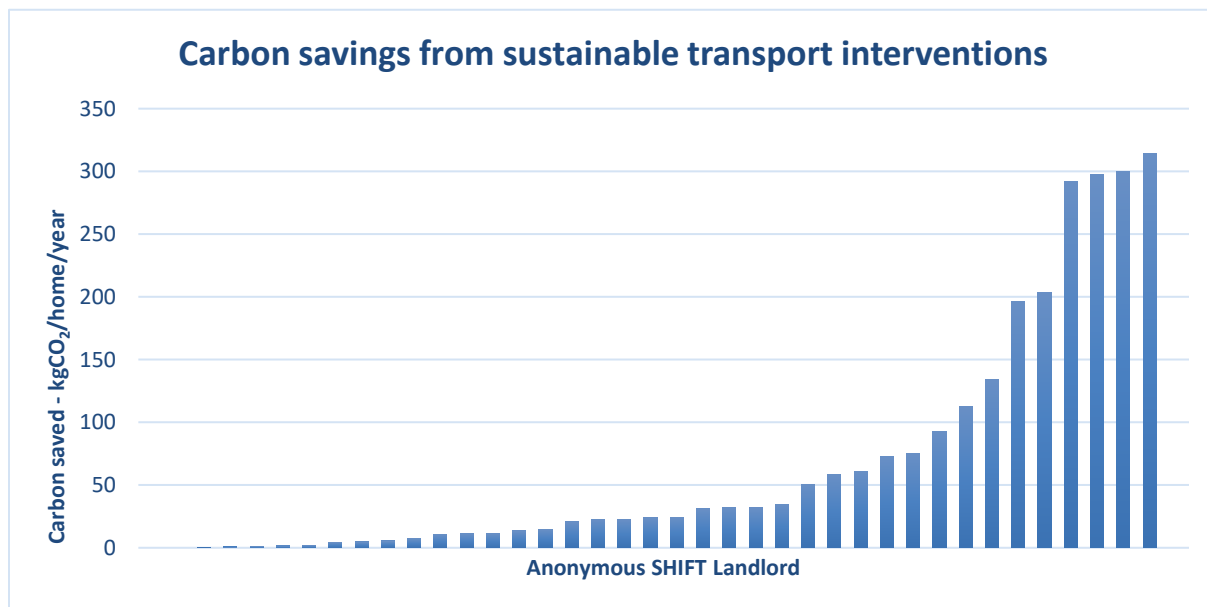
- Set up “green pages” on your website, giving tips on environmental improvements (energy, water, gardening, transport, recycling, transport, buying sustainably) and promote these pages in newsletters and other media to residents
- Include energy advice in all contact with residents – gas safe checks, refurbishments, heating upgrades, rent arrears activities, new sign-ups

- Consider having a dedicated programme of engagement and homes visits – sometimes this helps identify other issues in the home

## 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.

Network were not able to identify homes with cycle storage, electric vehicle charging or address specific sustainable transport advice. It has been noted that Network are intending to send out Sustainable Transport Plans to hundreds of residents but that this will be captured within SHIFT 2021. Below you can see how the performance of other SHIFT landlords.



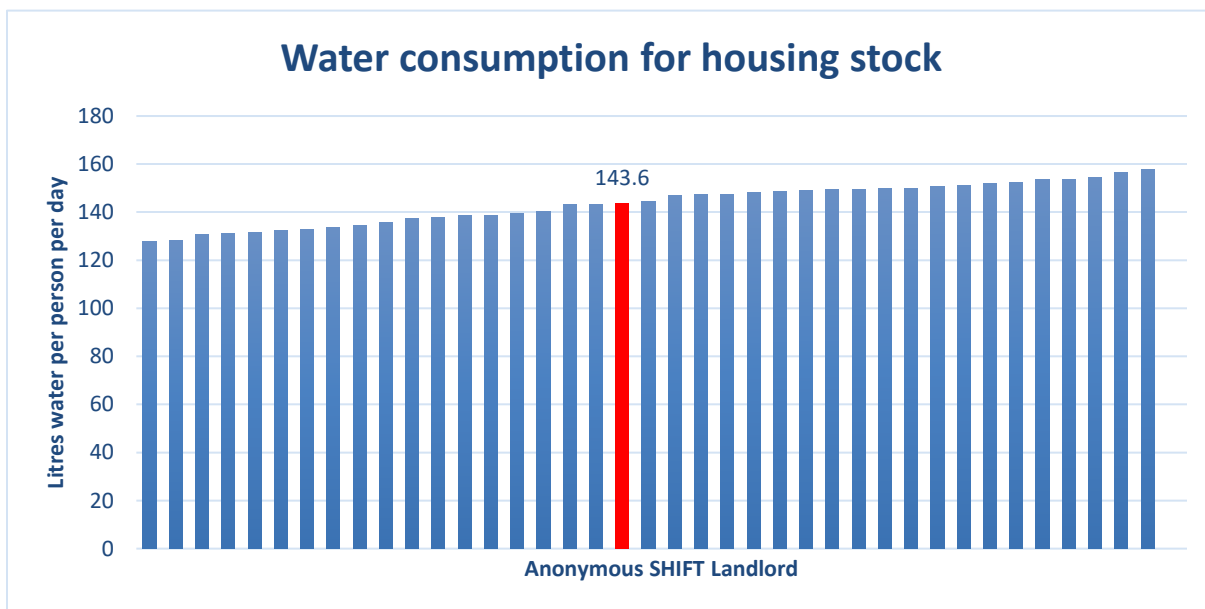
Recommended improvements (if not done already):

- Include links to Sustrans cycle maps in green web pages
- Ensure that address specific Sustrans information is provided to all new lets
- Work with new build colleagues to ensure that cycle storage is include in new builds
- Consider installing EV charging points at places where staff can use then during the day, but out of hours these can be used by residents (for a fee)

## 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 Network's stock. Therefore, the SHIFT water efficiency estimator tool has been used. The estimator predominantly uses build age data to estimate the water efficiency of Network's stock. Figure's were repeated from Network's SHIFT 2019 assessment as no further information was available during the assessment period. The build age data showed that 31% of properties were constructed or refurbished since 2008 to Code Level 3 water standards so the installation of dual flush toilets, low flow taps, low flow showers and baths smaller than 180l has been assumed. 73.76% of Network's properties have water butts or are flats which do not use water for external purposes which has been captured in the tool. Water meters were estimated to be in 31% of general needs using the 2008 build age assumption. No resident engagement on water efficiency was available in this assessment. This gave a result of 143.6 litres per person per day (lppd) using the SHIFT water efficiency calculator tool.



Recommended improvements (if not done already):

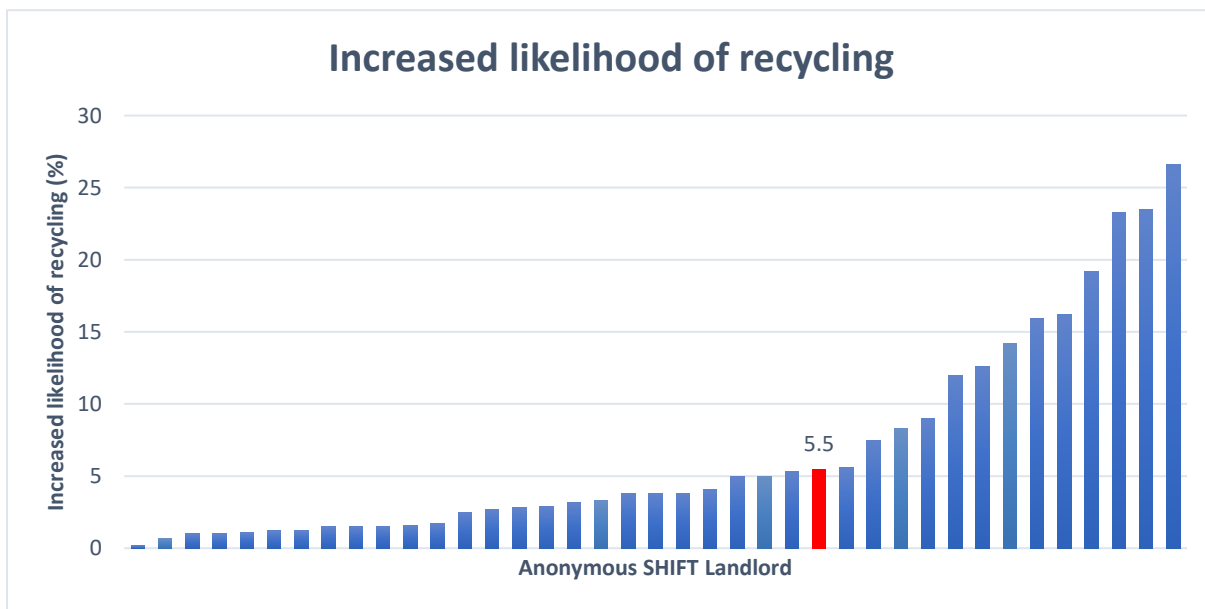
- Introduce a void specification that includes easy to fit water efficiency devices
- Collate refurbishment specification documentation to estimate water efficiency measures installed in your managed stock.

- Ensure bathroom replacements use efficient fittings and install water meter at the same time
- Contact water companies to see how they can help with water efficiency information provision or the supply/installing of water saving devices

## 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.

Network consulted the SHIFT estimate guidance to report that 22% of their homes are likely to have had internal recycling bins fitted during the Code for Sustainable Homes era of house building. No further information was available for either passive or active engagement with residents on waste and recycling issues or improvements. These measures encourage an estimated 5.5% increase in recycling over and above local authority average.



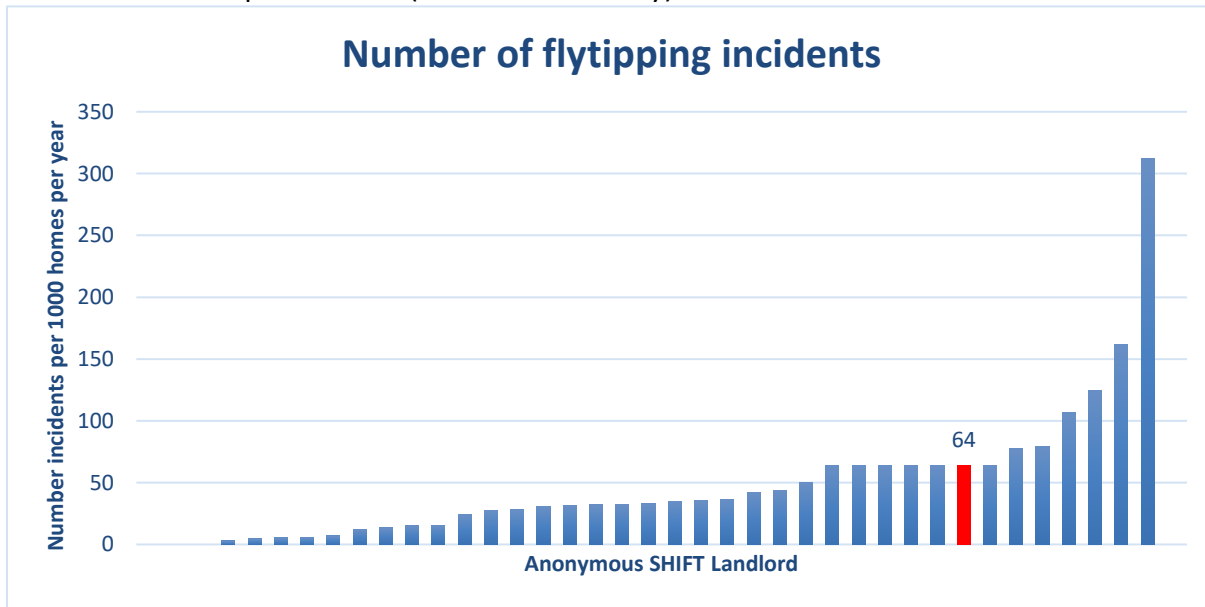
Recommended improvements (if not done already):

- Include internal recycling bins in kitchen replacements
- Liaise with new build colleagues to ensure all new builds have internal recycling bins
- Engage with residents during estate clean-ups

## Fly tipping

Fly tipping is unsightly, presents a potential fire hazard and is costly for landlords to deal with. Network were not able to report on the number of flytipping incidents so SHIFT default data was used to estimate 1011 incidents across the 12-month reporting period equating to 64 per 1000 homes.

Recommended improvements (if not done already):



- Leave notices on fly tipped waste to show you are investigating the source (sometimes local residents know who does it and report them)
- Signpost residents to correct ways to deal with waste

## Ecology

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 the equivalent of 19% of landlord land should be protected by 2043. SHIFT has updated its methodology to reflect this new target and new data will be presented after completion of SHIFT 2020.

Network has used SHIFT estimates for garden and communal garden spaces area sizes to calculate that 0.38% of land total land owned by Network is “protected”. This equates to an estimated 119.65 tonnes of biomass across Network’s stock and 0.96 tonnes per hectare.

Recommended improvements (if not done already):

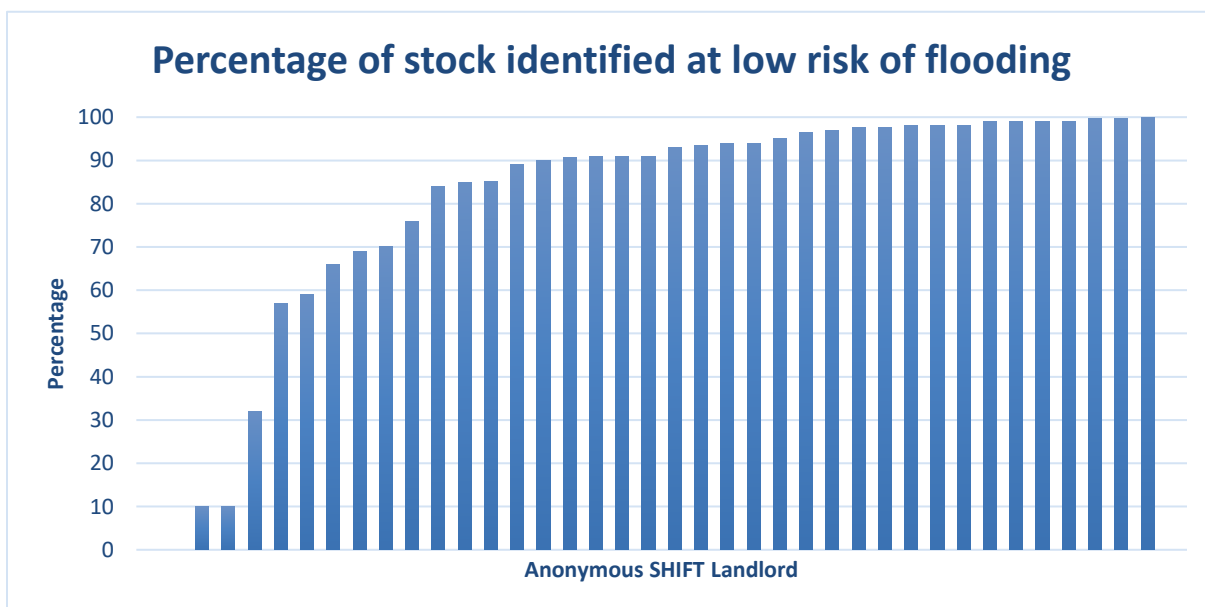
- Consider planting higher density biomass areas in existing green spaces

- Liaise with new build colleagues to ensure that at least 19% of land on new sites is equivalent of “protected”. Pointing out forthcoming biodiversity ambitions may help with this.
- Consult with estate management team/contractors to seek more comprehensive data on types and sizes of green spaces.
- Derive efficient measurement of green spaces quality as this issue is increasingly being assessed by lending institutes as part of their ESG requirements
- Encourage residents to do wildlife planting

## Homes at risk of flooding and overheating

Met Office projections indicate more flood events and more heatwaves. The ideal is to have 100% of homes at low risk or adapted to climate change.

Network has previously used their insurance report to assess flood risk, but this was not available during this assessment so no accurate figure could be derived. However, using information from insurers may only project flooding for 1 year and not the next 30 years which is more useful for planning and gives a more robust sense of the long-term flood risk to your housing stock. It is especially important in urban areas that the GIS work carried out to identify flood risk also includes surface water run-off as well as fluvial and tidal as it is projected to be the most likely form of flooding.

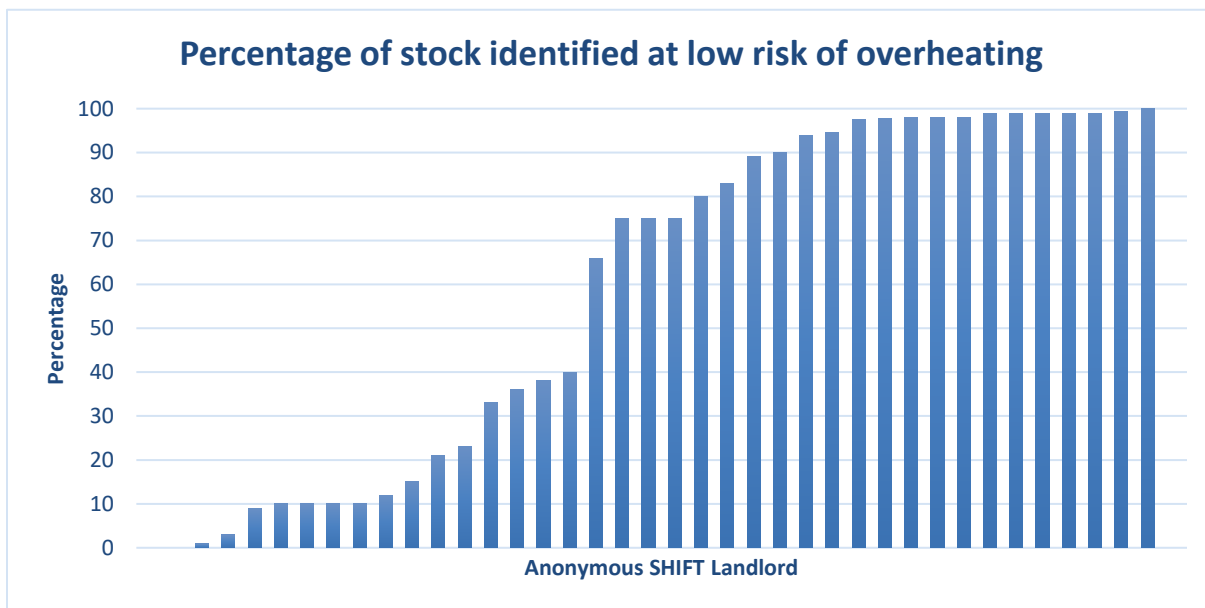


Recommended improvements (if not done already):

- Ensure flood risk assessments use long term projections and include fluvial and surface water run-off risks

- Engage with local geography/GIS students to get this assessment carried out for free/small research fee
- Any homes at medium or high risk, ensure they are signed up to early flood alerts and ensure responsive actions are in the event of flooding
- In areas of surface water flooding liaise with the relevant drainage authority to ensure drains are fully functional and maintained
- Confirm with new build colleagues that all homes are low flood risk
- Ensure good quality green areas (see biodiversity above)

Network were unable to provide the information required to assess overheating risk so no figure could be derived for this section. The SHIFT overheating risk assessment would have used 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 Network's housing stock.



Recommended improvements (if not done already):

- Provide necessary data to complete SHIFT overheating risk assessment.
- Ensure any overheating risk assessments cover the risk factors addressed in the SHIFT overheating estimator tool
- Liaise with new build colleagues to ensure that all new homes address all risk factors
- For homes identified at high risk, and have condensation issues, install adequate ventilation measures
- Ensure good quality green areas (see biodiversity above)
- Design reactive actions in the event of heatwaves (e.g. sourcing fans)



## 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. 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, ecological enhancements, 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.

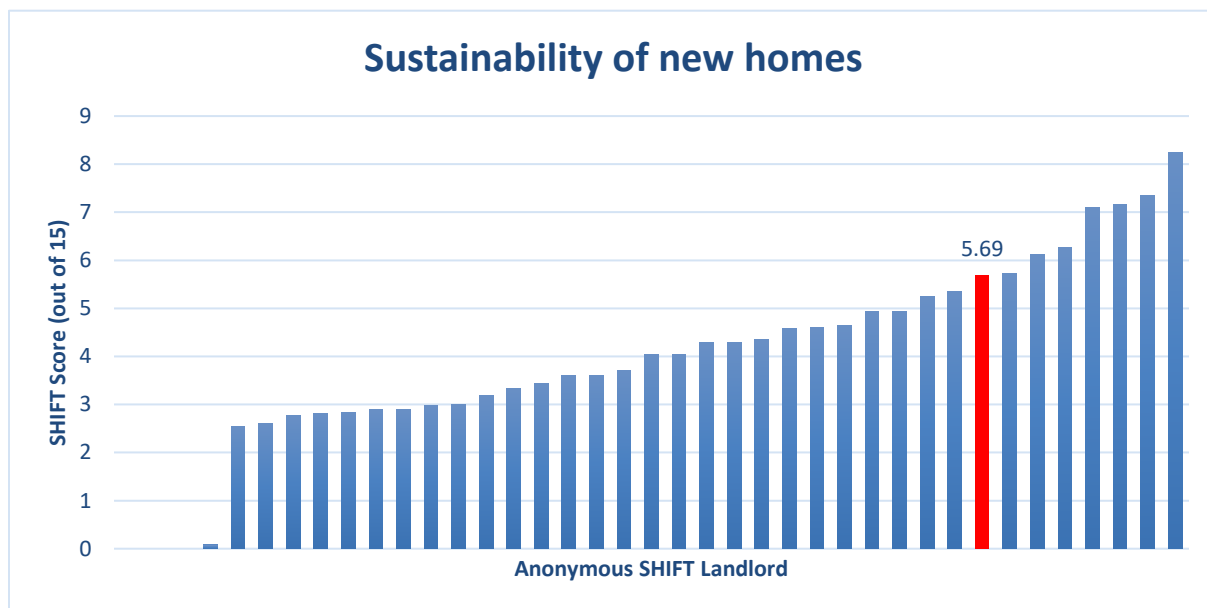
Figures provided for this assessment by the Development Manager indicated that 30% of new homes achieved a high EPC B (SAP 86 – 91) and the remaining 70% complied with building regulations minimum energy requirements of a low EPC B (SAP 81-85). Specifying a minimum EPC Grade (e.g. “A”) or SAP rating (e.g. SAP 92+ minimum) will help Network bring up its average energy efficiency closer to environmentally safe levels and reduce the level of investment needed in their existing stock in order to achieve the net-zero 2050 target. It is encouraging to see a significant proportion of Network’s new developments going beyond building regulation requirements for energy efficiency.

Data was also collected for additional sustainability measures. All sites have had flood risk checks completed and are assessed to be at low risk of flooding. 100% of new homes receive overheating risk assessments as per Appendix P of building regulations, but these assessments do not consider projected summer temperature increases due to a warming climate, the urban heat island effect or the risks associated with communal heating heat leakage. 54% of new developments have received a range of ecological enhancements including complete sustainable urban drainage systems, tree planting, blue/green roofs and bat boxes. 70% of Network’s schemes were reported to received internal recycle bins and 87% received cycle storage. Network’s development department reported that 100% of materials were responsibly sourced across all schemes but this figure has not been verified with evidence.

Verifying that the expected energy performance and sustainability measures of new homes is essential otherwise Network runs the risk of creating a “performance gap” between what they are expecting from their new homes and what is actually being achieved. As no verification takes place currently, it is recommended that Network considers a scheme such as the Home Quality Mark (HQM) or developing a verification process for other sustainability measures such

as having a representative sample of post-occupancy energy performance monitoring within new schemes and have the sustainable requirements signed off by asset management before handover is completed.

Using the SHIFT calculator for new build and the data above, the sustainability score for Network's new build homes was 5.69 out of 15.



Recommended improvements (if not done already):

- Ensure new builds are EPC A rated and have additional sustainability features: internal recycling bins, cycle storage, used responsible materials, low risk of flood and overheating, 19% of area (or equivalent) high value green space
- 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.
- It would be beneficial to gather further information from development contractors on their responsible sourcing practices and whether they follow any responsible sourcing frameworks such as BES 6001 or ISO 20400.
- Experiment with new technologies and finance mechanisms to ensure that high quality new build can be achieved cost effectively.

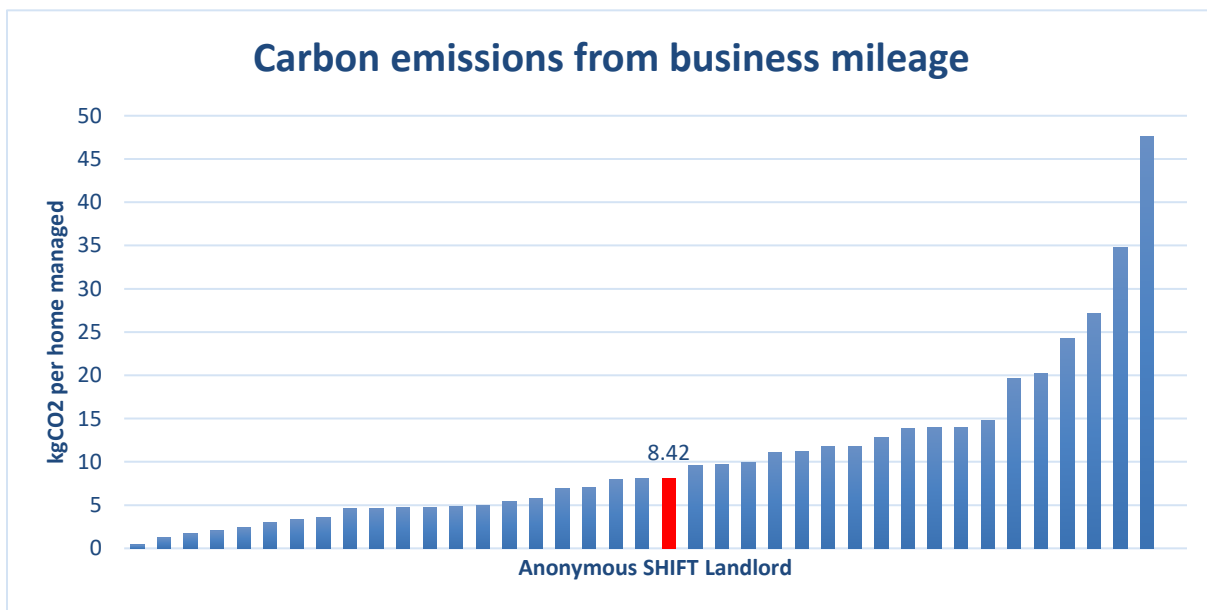
# Offices

Although offices have a minor impact on the organisations overall environmental performance there are several advantages from 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.

## 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 from Network's Human Resources department for total carbon emissions from business mileage in the 12-month reporting period using their expenses database. Travel claims were collected from train travel and car mileage claim forms. Using DEFRA conversion factors to calculate CO<sub>2</sub> emissions Network are estimated to have emitted 133.3 tonnes CO<sub>2</sub> or 8.42kgCO<sub>2</sub> / home managed through business travel.



Recommended improvements (if not done already):

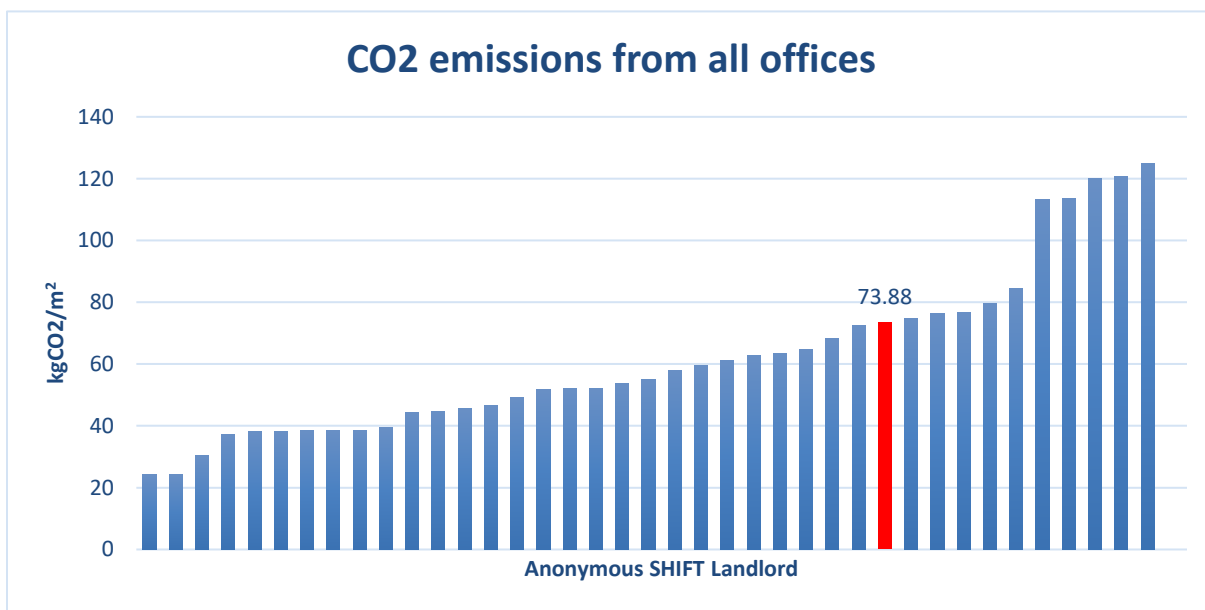
- Review mileage claims processes to ensure perversions do not exist that encourage staff to drive more
- Identify if further information can be added to mileage claim form such as mode of transport and/or if their vehicle is petrol, diesel or electric
- Expand on existing electric vehicle charging infrastructure

- Encourage increased use of video conferencing

## Energy usage

SHIFT research indicates that emissions of 25 kg CO<sub>2</sub>/m<sup>2</sup> of office space correlate with 80% reduction against 1990 levels.

Data was collected by the Research and Policy Analyst which enabled a calculation of Network's office emissions. In total, 556 tonnes of CO<sub>2</sub> were emitted in a 12-month period which equates to 73.88kgCO<sub>2</sub>/m<sup>2</sup> of office space. Network are still some way off achieving the long-term target so may want consider an energy audit to see if inefficiencies can be identified.

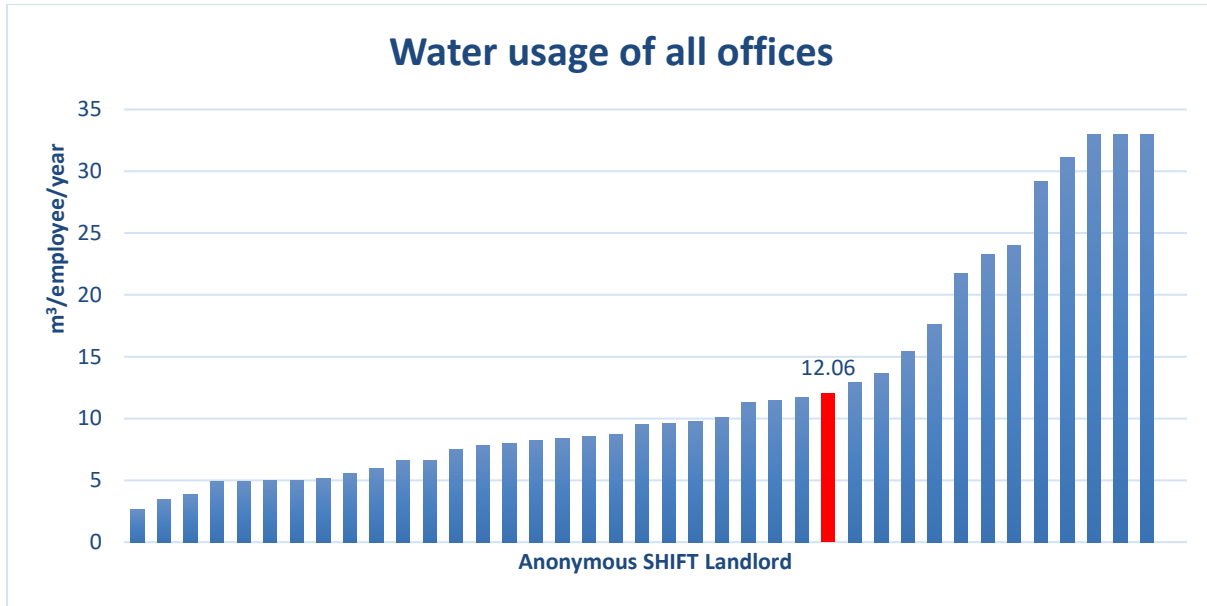


Recommended improvements (if not done already):

- Encourage staff to carry out good housekeeping such as turning off lights and computers
- For leased offices try to arrange sub-metering with the landlord. Minimum Energy Efficiency Standard (MEES) and Heat Metering Regulations may help with these discussions.

## Water

Water utility data was sourced from the office's utility contract which indicated that 5,814 m<sup>3</sup> of water were used by Network's office employees in the 12-month reporting period. Water use per employee equates to 12.06 m<sup>3</sup> per employee which requires improvement as the long-term target is 3m<sup>3</sup> per employee by 2030.



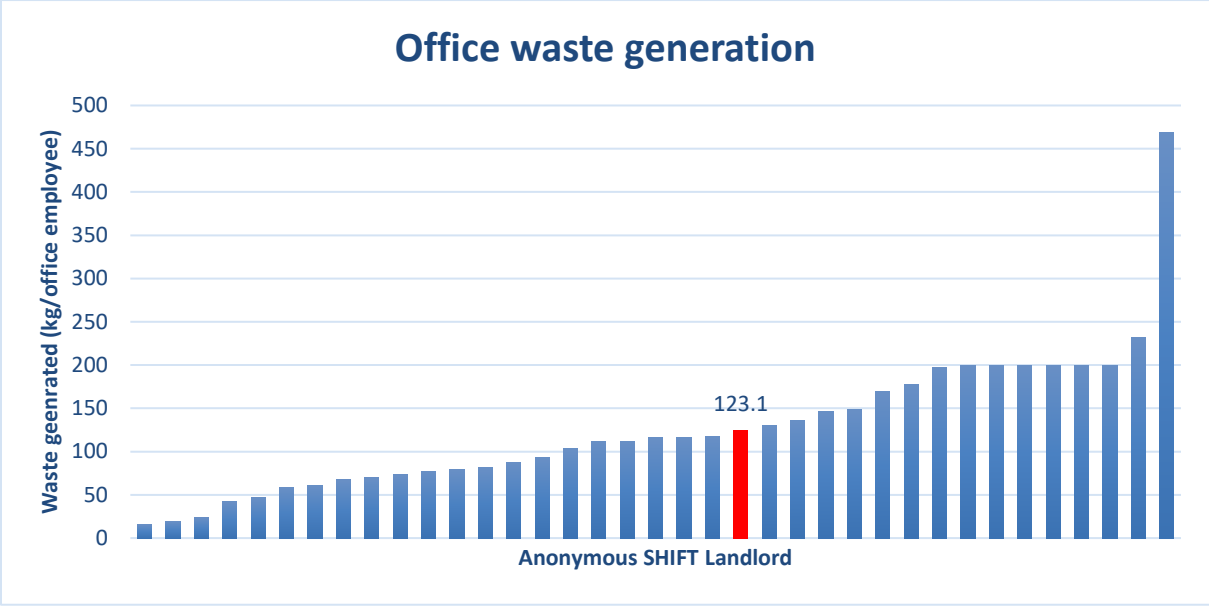
Recommended improvements (if not done already):

- Carry out a water audit and implement water saving measures. Where water facilities are already efficient but usage is high, check for leaks or incorrect billing.

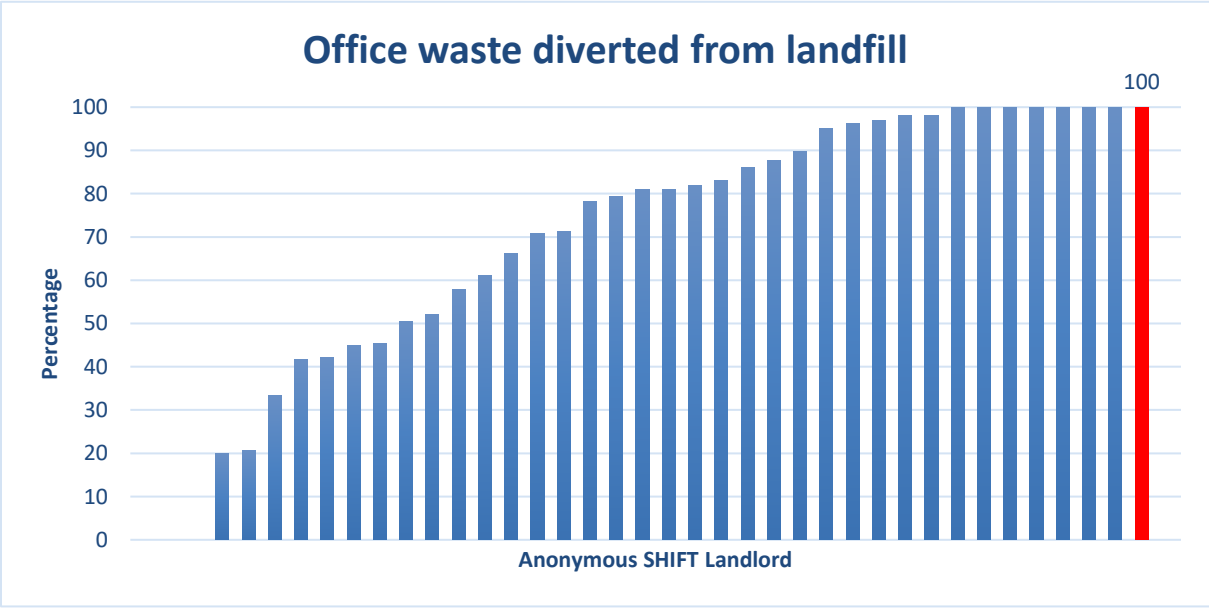
## Waste

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

The waste generated by Network’s office-based employees was provided by the Research and Policy Analyst from 1<sup>st</sup> April 2019 – 31 March 2020. Using confidential waste data and general and recycled waste reports it is believed that total waste was around 59.3 tonnes (123.1 kgs per employee).



Recycling data was also collected through the local council who claim that 100% of waste recycled or diverted from landfill as non-recycled waste is used as RDF (Refuse Derived Fuel).

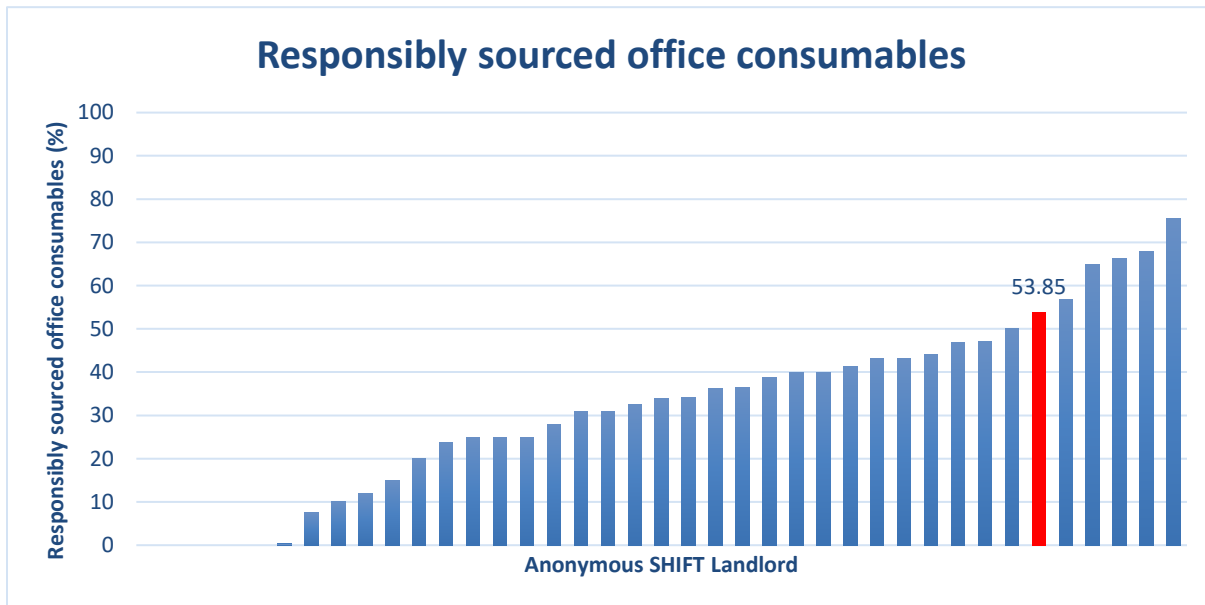


Recommended improvements (if not done already):

- The ideal first step is to reduce the amount of waste generated. Review systems to see what functions can be made paperless.
- Install “follow me” printers
- Reduce disposable cups and other utensils
- Work with office waste contractors to increase waste recycling rather than relying on energy-from-waste option.

## Office consumables

No information was available from Network for the responsible sourcing of office consumables so a figure could not be derived for this assessment. Data was not forthcoming during Network's SHIFT 2019 assessment so it is highly recommended that Network's facilities manager considers the recommendations for this section.



Recommended improvements (if not done already):

- Liaise with suppliers to ensure they increase the supply of responsibly sourced consumables e.g. FSC paper, toner cartridges with high recyclate content
- Request environmental spend report from office suppliers as this often can provide a % of responsibly sourced goods

## Offices at risk of flooding and overheating

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.

Network's Corporate Project and Administration Director analysed Environment Agency flood data for their office and found that their offices are considered at partial risk of flooding from fluvial sources due to two of their offices being located in Flood Zone 3.

Network's office has undergone an overheating risk assessment and was found to be at low risk with multiple risk mitigation solutions in place such as openable windows, blinds and TRV's on radiators.

Recommended improvements (if not done already):

- For hot offices install passive measures such as brise soleil and reflective glass coatings. If air conditioning is installed ensure it is the most efficient available.
- Check Environment Agency flood maps and install adequate protection, 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.

Network are in the processes of developing their sustainability strategy and will be using the findings and recommendations from this SHIFT assessment to assist with setting targets and focussing on areas to improve. This strategy will be assessed in Network's next SHIFT assessment and we look forward to seeing what Network's sustainability ambitions are.



Recommended improvements (if not done already):

- Ensure strategies have all the items listed in the SHIFTS scoring matrix. You can use the detail in the overall performance data to help establish KPIs for your organisation.

# 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 organisations. 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<sub>2</sub> emissions per home between organisations that do their own maintenance, with organisations who subcontract out all maintenance.

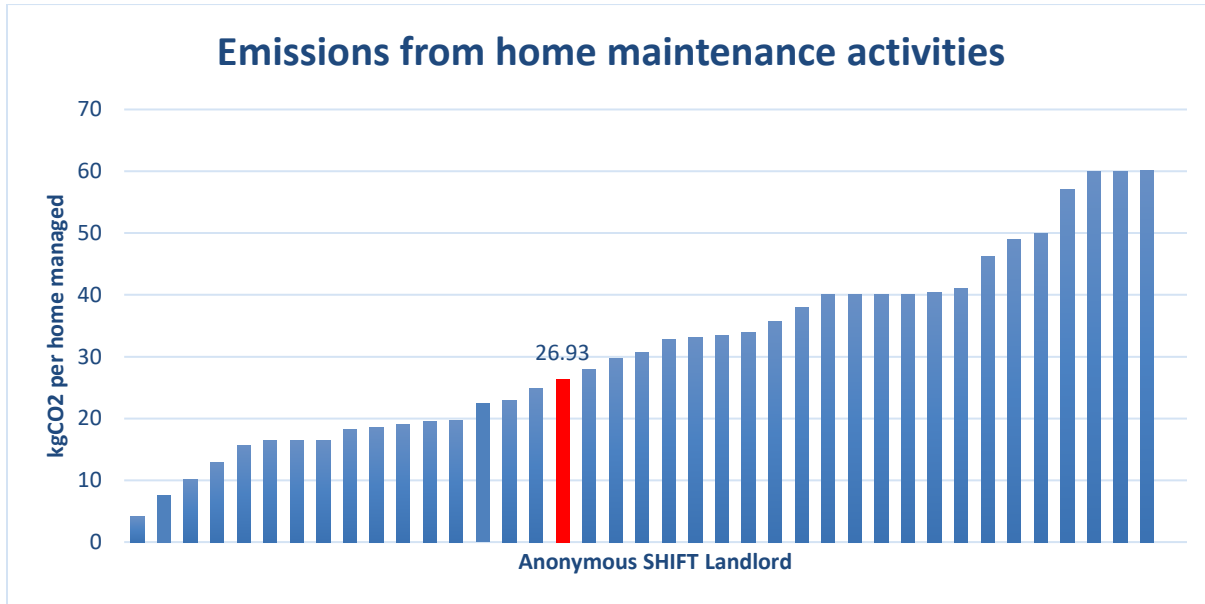
## Maintenance CO<sub>2</sub> emissions

In-house and subcontract maintenance and development teams emit CO<sub>2</sub> from their fleets, offices and other operations. Importantly, 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 as well these figures are included too. This metric indicates the total CO<sub>2</sub> emitted due to maintenance activities.

Data was collected by the Research and Policy Analyst for three of Network's largest homes maintenance contractors. Using DEFRA conversion CO<sub>2</sub> conversion factors, a figure of 426 tonnes of CO<sub>2</sub> or 26.93kgCO<sub>2</sub> / home managed was identified.

Some of these figures have been recalculated using official DEFRA conversion factors but this overall the response from contractors was good for this section. Network should look to expand the contractors they survey in following assessments to gain a better understanding of the CO<sub>2</sub> emissions from their supply chain.



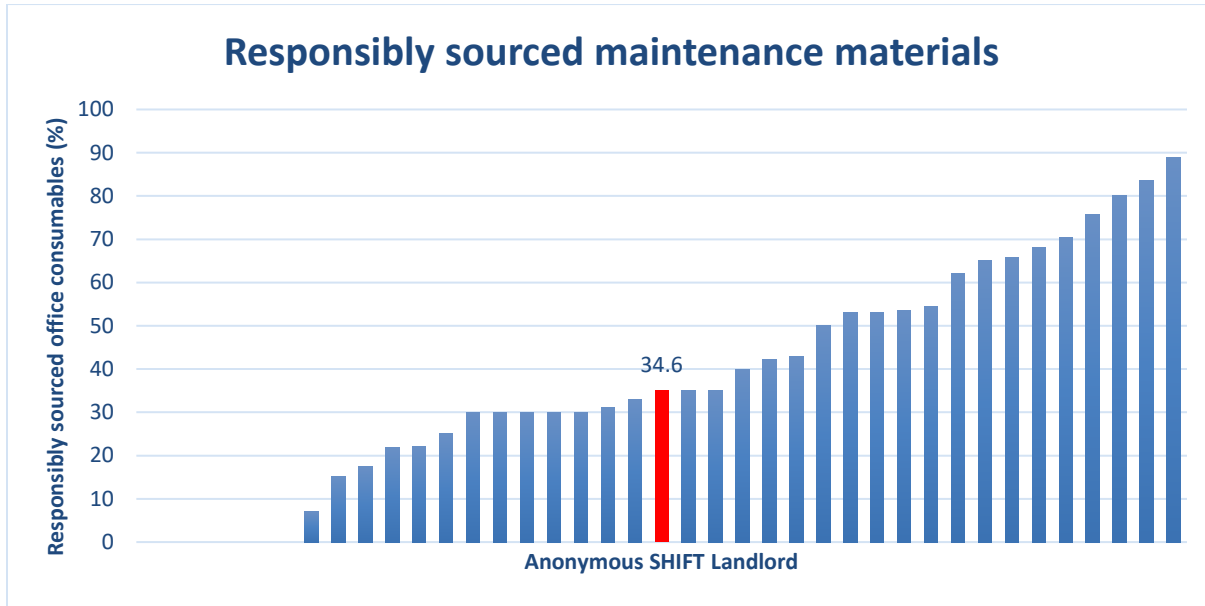
Recommended improvements (if not done already):

- Require larger contractors to respond to your environmental surveys – after a while they will see that their customers take this seriously and will start to reduce emissions
- 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

### 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 building materials, this still remains a difficult area to assess. Nevertheless, SHIFT encourages maintenance teams and contractors to devise ways to assess this themselves using a methodical approach.

Data was limited for this section with many of Network's contractors struggling to provide clear, comprehensive and accurate data. It has therefore been estimated that overall, 34.6% of Network's homes maintenance materials are responsibly sourced. Some contractors referred to ISO14001 systems and 'supplier commitments' but were not able to identify the proportion that these responsibly sourced materials represented in the purchases Network made through them. It is recommended that Network uses the suggested improvements made below to extract information more from their supply chain in SHIFT 2021 to increase the confidence in their environmental performance in this area.



Recommended improvements (if not done already):

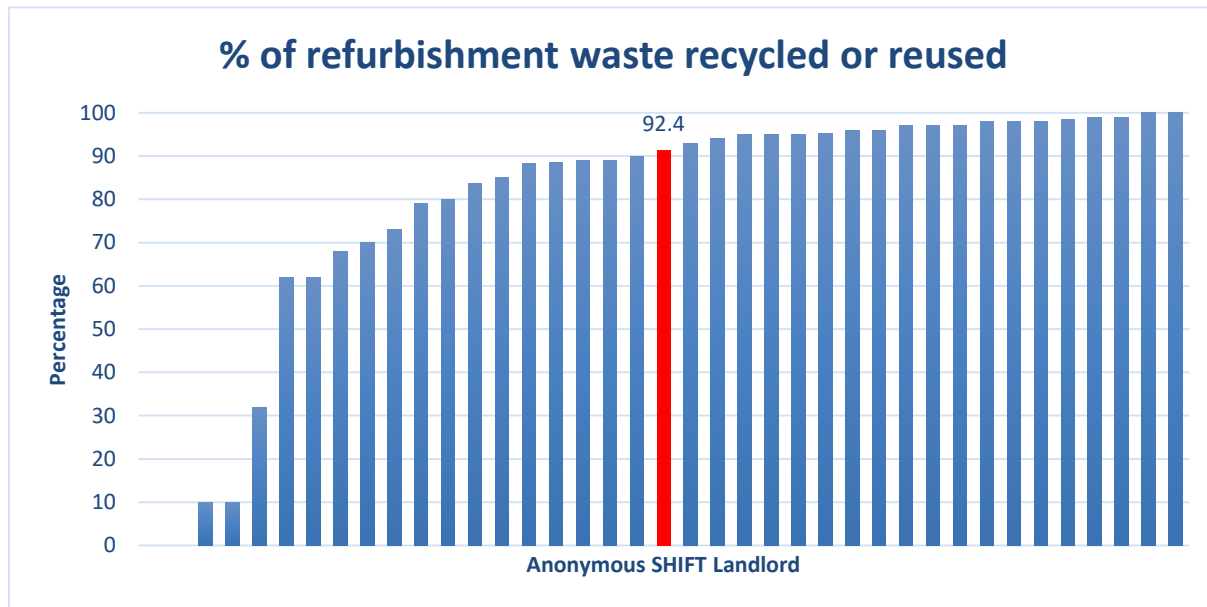
- For your own maintenance team devise simple ways to establish the degree to which your main maintenance materials are responsibly sourced
- Require subcontracted maintenance and development firms to devise their own responsible materials scoring methodologies and report them to you. A suggested method for contractors is:
  - Identify the responsible sourcing accreditations that relate to the materials and products they use (e.g FSC/PEFC for timber, BES6001 for plastics / windows / tiles / flooring etc) – probably achieved through a survey of their own suppliers
  - Start tracking responsibly sourced products in their stock databases/purchase logs
  - Make it possible for Network (and others) to either request % of materials responsibly sourced or include responsible sourcing information within the invoices for materials so that Network can easily track this information within its own systems.
- Examples of eco-labels include BRE Green Guide to Specification, ISO14001, BES6001, FSC and PEFC

## 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.

Waste data was collected by Network's Research and Policy Analyst with waste recycled/diverted from landfill estimated at 92.4%. Information on tonnes or recycled material and other waste initiatives was made available by most contractors which demonstrated a

commitment to reducing waste and maintaining good recycling practices. It is recommended that Network seek waste reports from all their contractors that cover the full reporting period in their SHIFT 2021 assessment to increase the confidence in their environmental performance in this area.



Recommended improvements (if not done already):

- For your own maintenance team carry out waste audits and implement plans to reduce waste
- Require subcontracted maintenance firms to report their recycling rates to you. Eventually these will improve once the supplier sees the importance of recording high recycle rates to your organisation
- Consider implementing subcontractor KPIs for this impact

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