

LIVV HOUSING GROUP

Streamlined Energy & Carbon Report for 2020/21

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Version 4

Version	Date	Changes	Author	Reviewer
V1	22/06/2021	Initial Draft	Anthony Horsley	Keith Maloney BEng
			LCIBSE LCEA	(Hons)
V2	24/06/2021	Internal Peer	Anthony Horsley	Steve Bayfield
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1.0 Executive Summary

As part of the Streamlined Energy and Carbon Reporiting (SECR) framework it has been identified that the total energy use for Livv Housing Group totals **6,254,159 kWh** for the period 1st April 2020 to 31st March 2021. The total energy use includes for building and transport energy.

The total carbon emissions for Livv Housing Group during the reporting period is 947 tCO₂e.

Table 1 provides a summary of the energy usage and the associated carbon emissions. The methodology used to calculate this information has been explained within Section 3 of this report.

Table 1 – Summary of Livv Housing Group Annual Energy Use and Associated Carbon Emissions (1st April 2020 – 31st March 2021).

Scope	Activity	Fuel Use	Annual Energy (kWh)	Annual Carbon Emissions (tCO₂e)
1	Building Energy - Gas (kWh)	2,627,505	2,627,505	483
2	*Building Energy - Electricity Metered Supplies(kWh)	1,849,985	1,849,985	0
3	Building Energy - Electricity Unmetered Supplies	479,210	479,210	112
1	Transport Company Fleet - Litres	127,495	1,280,027	331
3	Transport Grey Fleet - Expensed Mileage	73,240	17,431	21
		Total	6,254,159	947

^{*}Note:Building Energy (metered supplies) have been purchased with a 100% green electricy contract with zero carbon emmisions-associated.

The profile shown in Figure 1 provides a summary of the make-up of Livv's annual carbon emissions for the 2020/21 financial year reporting period. The profile below shows that the main contributor of the Groups carbon emissions is building gas consumption and accounts for 51% of the overall emissions.

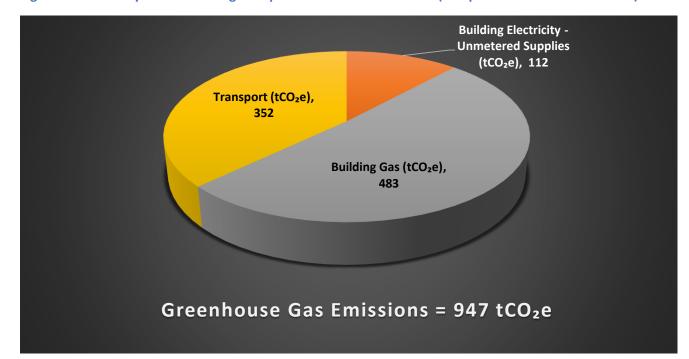


Figure 1 – Summary of Livy Housing Group Annual Carbon Emissions (1st April 2020 – 31st March 2021).

2.0 Organisation Boundary

Livy Housing Group are a multi-faceted community services organisation offering services in housing, construction, charity and facility management. The diverse operations stem from a strong presence in the social housing sector with around 25,000 tenants and 14,000 registered properties.

Livv Housing Group comprises of Livv Homes, Livv Maintenance and Livv Investment.

3.0 Energy and Carbon Emissions Data

3.1 Reporting Period

For the purpose of this report the year is 1st April 2020 – 31st March 2021. This is in line with the Groups financial reporting period.

3.2 Methodology

Livy Housing Group have chosen to report on the following key items within their boundary:

- Scope 1 Emissions
 - Gas consumption
 - Transport Fleet
- Scope 2 Emissions
 - Electricity consumption
- Scope 3 Emissions
 - Transport Grey Fleet

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Livv's building energy data has been calculated using invoices provided by the energy supplier on a monthly basis.

Fuel usage associated with the fleet vehicles has been populated from the use of fuel reports provided by Livv's F&AM System Implementation & Transport Manager.

Grey fleet data has been sourced from mileage claims that have been submitted by employees during the reporting period. This information has also been provided by the F&AM System Implementation & Trasnport Manager for the agreed reporting period.

3.3 Annual Energy and Carbon Emissions

As reported within the Executive Summary, the total energy for Livv Housing Group in 2020/21 reporting period totalled 6,254,159 kWh (building energy including UMS and transport energy).

The associated carbon emissions for this reporting period totals 947 tCO₂e. This is the equivalent to the emissions produced by 123 homes.

Overall Livv Housing Group have achieved a year on year energy & carbon reduction of 913,919 kWh / 760 tCO₂e.

This is a <u>45% reduction</u> in carbon emissions. This significant carbon reduction is due to the number of conservation measures actioned during the reporting period as well as the procurement of green certified electricity.

3.4 Year on Year Energy and Carbon Comparisons

3.4.1 Building Energy Comparisons (Metered & Unmetered Supplies)

The following information has been provided at the request of Livv Housing Group, to provide a comparison between the building energy in the 2019/20 financial year period and the 2020/21 financial year period. This highlights a year on year reduction of **11%** and **7%** for electricity and gas retrospectively.

For UMS electricity which has not been affected by the 'green' tariff, the 19/20 supply was 598,098 kwh and so this shows that there has been a real year on year reduction of 118,888kwh which equates to 19.9%.

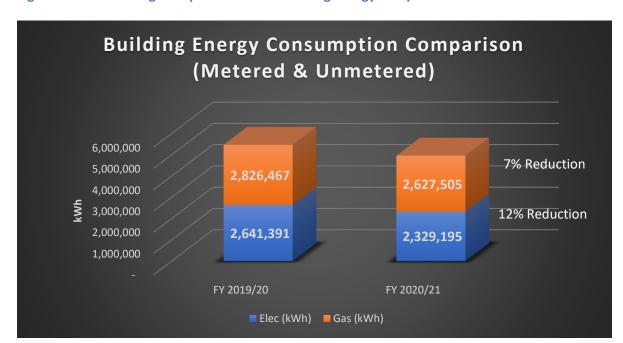


Figure 2 – Livy Housing Group Year on Year Building Energy Comparison

Figure 2 above provides a comparison between the total building energy within 2019/20 and 2020/21 financial year reporting periods. This shows that energy usage has reduced by **9.1%** during the 2020/21 reporting period.

There has been an annual reduction in electricity of **312,196 kWh** which equates to an **11.8% reduction**. There has also been an annual reduction of **198,962 kWh** in gas consumption and equates to a **7% reduction**.

This reflects the Energy conservation measures introduced within the unmetered supply portfolio which was sucessfully renegotiated and aligned following the LED lighting replacement programme. LED lighting has also been installed within the communal areas of Quarry Green and additional improvements completed at the Lakeview Head Office. Further benefits of this action will be realised in the next SECR reporting period. The recent decommisioning of block 4 Gaywood Green has also had a positive impact on Livv's gas consumption. (Meter readings have been obtained following the replacement of a siezed ASSA lock for block 4)

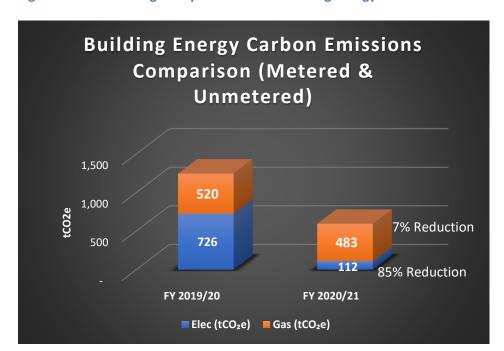


Figure 3 – Livv Housing Group Year on Year Building Energy Carbon Emissions Comparison

Figure 3 above provides a year-on-year comparison of the carbon emissions associated with the building energy usage. This shows the building energy carbon emissions have **reduced by 52%** in 2020/21.

There has been an annual reduction in electricity carbon emissions of **614 tCO₂e** which equals an **85%** reduction. There has also been a **37 tCO₂e** reduction in gas carbon emissions, which equates to a **7%** reduction.

3.4.2 Transport Energy Comparisons

The following has been included within the report to provide a comparison of the year on year transport data, and associated energy and carbon emissions.

Grey Fleet - Expensed Mileage (kWh)

Fuel Card - Petrol (kWh)

Fuel Card - Diesel (kWh)

1,659,285

1,279,407

Figure 4 – Livv Housing Group Year on Year Fleet Energy Comparison

The profile shown above provides a comparison of the energy associated with the Fleet fuel usage for the 2019/20 and 2020/21 reporting period. The energy use associated with the fleet fuel usage totalled 1,700,220 kWh in 2019/20 and 1,297,459 kWh on 2020/21. There has therefore been a year-on-year combined reduction of **24**%. This suggests the reduction in work travel due to the COVID restrictions has had a positive impact on Livv's fuel consumption

2020/21 Energy (kWh)

■ 2019/20 Energy (kWh)

80%

100%

Year on Year Grey Fleet Energy Comparison

45,000
40,000
35,000
25,000
15,000
10,000
5,000
2019/20 Energy (kWh)
2020/21 Energy (kWh)

Figure 5 – Livv Housing Group Year on Year Grey Fleet Energy Comparison

Figure 5 above provides a year on year comparison on the energy usage associated with Grey Fleet mileage. There has been a **57**% reduction in grey fleet energy usage between the two reporting periods. This is expected due to the COVID lockdown restrictions.

The profile shown in Figure 6 provides a comparison of the carbon emissions associated with the Groups transport usage.

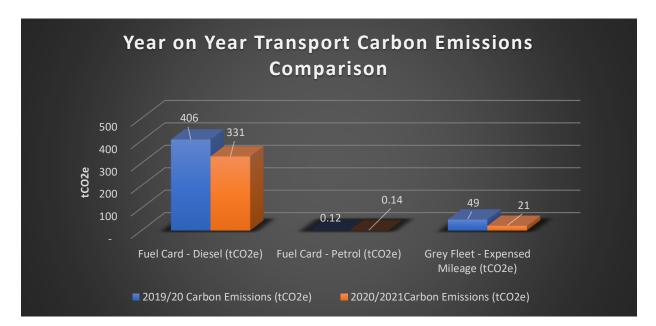


Figure 6 – Livv Housing Group Year on Year Transport Carbon Emissions Comparison

The profile above indicates that there has been a year on year reduction for both diesel usage and grey fleet mileage. The total transport carbon emissions for 2019/20 was 455 tCO₂e, and the total transport emissions for 2020/21 was 352 tCO₂e. There has been an year on year carbon emissions reduction of 23%.

4.0 Intensity Metrics

The intensity metrics that are being used for this current report are energy (kWh) per £'000,000 turnover and carbon emissions (tCO₂e) per £'000,000 turnover. The intensity metrics for the 2020/21 baseline reporting period have been shown within Figure 7.



Figure 7 – Livv Housing Group Intensity Metrics

The profiles above show the following intensity metrics for the 2020/2021 reporting period: This utilises the published financial turnover for the period of £65,575,000

- Overall energy usage is 97,258 kWh per £'000,000 turnover
- Carbon emissions equate to 21 tCO₂e per £'000,000 turnover.

The above metrics include for all Building energy use (metered and UMS) together with business travel.

5.0 Energy Efficiency Measures

Despite the impact experienced by the COVID-19 pandemic, Livv Housing Group have introduced many positive energy and carbon reduction measures during 2020/21. These include the following successful initiatives:

- An Environment and Sustanability Management Group has been proactive. The Sustainability Group is chaired by a member of the Executive Management Team and provides a highly effective forum for championing sustainability strategy improvements throughout the whole Group.
- The switch over ti 100% certified green electricity has resulted in all metered supplied effectiviely now operating with zero carbon emmissions
- Energy reporting data continues to include performance reports on energy use, business travel and renewable energy.
- Livv Housing have taken further strategic strives with a Fuel Poverty Strategy. The progressive asset replacement programme has resulted in the group property portfolio having better measured energy performance ratings than the national Fuel Poverty Strategy energy performance milestones.
- Several low energy LED lighting replacement projects have been implemented. These
 include completed projects within the Lakeview Head Office and communal areas to
 Knowsley Heights, Quarry Green and communal areas of all the "umetered supplies". The
 unmetered supplies have been recalculated to reflect the changes and are accepted by the
 supplier.
- The Group continue to be updating the fleet to lower emission vehicles and continue with focusing on driver training and more efficient vehicle use.
- Several energy and carbon reduction investment projects have been authorised for implementation during 2021/22.
- The group are now striving to achive a Carbon Zero status with a view to introducing renewable technologies such as additional Solar Thermal, Solar Photovoltaics & Air Source Heat Pumps to "future proof" Livy Housing Groups extensive portfolio.
- Investement for new-build and retrofit "Model" projects to include zero/low carbon technology for present and future tenants.