



LEVIN SOURCES

# Environmental Reporting – April 2020 / March 2021



October 2021

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**Company information:** Levin Sources Limited is a company registered in England and Wales with company number 07162292 and registered office at Quern House, Mill Court, Hinton Way, Great Shelford, CB22 5LD

**Reporting period:** 1<sup>st</sup> April 2020 – 31<sup>st</sup> March 2021

# 1. Introduction

## RATIONALE FOR THE STUDY

At Levin Sources, we are deeply concerned by the intra- and inter-generational injustices of climate change, as well as the decline in ecological health and environmental resilience felt across ecosystems and across the planet. Climate change destroys cultures, environments and homes, especially in the world’s most vulnerable places. We understand our privileged position as part of the global north, and our responsibility to take real action. For these reasons, Levin Sources has been monitoring its carbon footprint since 2017 in order to:

- Reduce our energy and resource costs
- Better understand our impact and the exposure to the risks of climate change
- Set meaningful annual emission reduction targets
- Continuously improve our environmental policy
- Demonstrate leadership in the sector to help strengthen our “green” credentials and inspire and enable others to act

**What do we mean by ‘carbon footprint’?**

The ‘carbon footprint’ is a measure of greenhouse gas (GHG) emissions, which include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>). Water vapour is not considered a greenhouse gas because its persistence in the atmosphere is very low (only a few days).

Carbon footprints are measured in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) so that all GHG emissions can be compared. Each GHG has a different global warming potential (GWP), which is a measure of the amount of heat a GHG traps in the atmosphere. A GWP is calculated over a specific time interval, commonly 20, 100 or 500 years, to allow for the fact that GHGs have different persistence times in the atmosphere. In this report, the 100-year GWP will be used, as it is the most widely utilized. Table 1 shows how much each GHG would warm the earth over a period of 100 years compared to CO<sub>2</sub>.

*100-year Global Warming Potential values*

GHG	100-year GWP
Carbon dioxide	1
Methane	25
Nitrous oxide	298
Sulphur hexafluoride	22800
Hydrofluorocarbon-23	14800
Hydrofluorocarbon-32	675
Perfluoromethane	7390
Perfluoroethane	12200
Perfluoropropane	8830
Perfluorobutane	8860
Perfluorocyclobutane	10300
Perfluoropentane	13300
Perfluorohexane	9300

In 2012 (no more recent data found), the average British carbon footprint was around 9 tCO<sub>2</sub>e per person<sup>1</sup>, which had fortunately decreased since 2006 (around 10 tCO<sub>2</sub>e per person)<sup>1</sup>. However, if we want to keep the increase in average temperature to below 2 degrees, we need to achieve zero net emissions by 2050. And if we take into account our historical emissions, we most likely do not have the rights to emit anymore. Therefore, Levin Sources as a business should aim to have a **carbon neutral** footprint.

## 2. Quantification and Reporting Methodology

In order to align with our CEO Carbon Neutral Challenge commitment, we have followed the 2020 UK Government environmental reporting guidance and also used the GHG Corporate Standard, but we are not as yet able to report on all categories. We have used 2020 UK Government Conversion Factors for Company Reporting and have calculated emissions from the GHGs covered by the Kyoto Protocol.

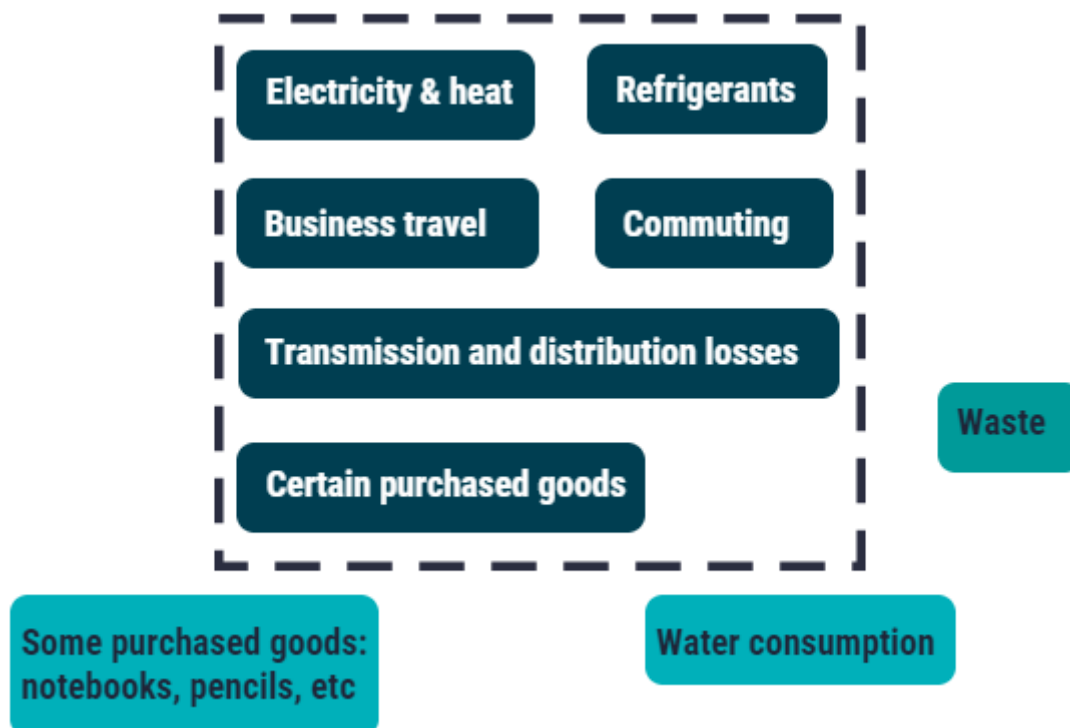
We have taken into account all scopes 1, 2 and 3 emissions:

<sup>1</sup> <sup>\*</sup> The average British carbon footprint is the total emissions generated in the UK divided by the country’s population therefore it includes emissions at work.

- **Scope 1** emissions relate to direct emissions: activities owned or controlled by Levin Sources that release emissions straight into the atmosphere. These include emissions from controlled boilers, furnaces, company vehicles, emissions from controlled process equipment.
- **Scope 2** emissions relate to energy indirect emissions being released into the atmosphere associated to Levin Sources consumption of purchased electricity, heat, steam and cooling.
- **Scope 3** emissions relate to other indirect emissions that are consequence of Levin Sources actions. Examples of these emissions are business travel, waste disposal or purchased materials.

## BOUNDARIES

Levin Sources has tried to include as much items as data available (e.g. emissions from certain purchased items/stationary). The main Levin Sources emissions are related to employee business travel. The figure below shows the boundaries of this reporting (dark blue are elements included in the analysis). Elements in light blue have not been included because of the lack of data and the relatively smaller impact compared to the other included elements. Meals emissions have been excluded for this reporting year because it is not a requirement of the GHG Corporate standard or cited in Defra's guidance.



## DATA COLLECTION AND DATA ANALYSIS

Levin Sources collected business travel data from our travel agency Key Travel (travels made by departure date from 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2021), electricity consumption comes from electric meter readings, stationary bought was tracked via receipts and refrigerants emissions were estimated using the Screening Method laid out on page 98 of the 2019 UK Government environmental reporting guidance.

Levin Sources has used the operational control consolidation approach to report emissions. Scope 2 emissions were calculated using the location-based approach.

Targets have been set following the Science Based Targets setting Initiative (SBTi) tool using the absolute contraction approach. Base year is 2017, and target year is 2030.

### 3. 2020 Carbon Emissions

Scope 1, 2 and 3 emissions are outlined in the table below.

Activity	2020	Specific exclusions % this represents for relevant scope	% of activity data that is estimated
<b>Scope 1 (tCO<sub>2</sub>e)</b>			
Fugitive emissions (refrigerants)	0.24	None	Estimated 4 months usage of AC during winter and 4 months of AC usage during summer once a week only (both on for 4 h/day)
<b>TOTAL Scope 1</b>	<b>0.24</b>		

<b>Scope 2 (tCO<sub>2</sub>e) (location-based approach)</b>			
Electricity and heat	2.10	None	None, electric readings
<b>TOTAL Scope 2</b>	<b>2.10</b>		

<b>Scope 3 (tCO<sub>2</sub>e)</b>			
Air travel	0.00	None	None
Rail travel	0.25	None	30%
Staff commuting	0.50	None	20%
Purchased goods	NA	All stationery and cleaning products	None
Purchased services	NA	100% because we do not purchase many services and it would be very costly to calculate	
Transmission & distribution	0.18	None	None
Water	NA	100% because of lack of data on water consumption	
Home office	0.38		100% - based on laptop usage by the team
<b>TOTAL Scope 3</b>	<b>1.31</b>		

<b>TOTAL Emissions</b>	<b>3.66 tCO<sub>2</sub>eq</b>
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## COMPARISON WITH BASE YEAR

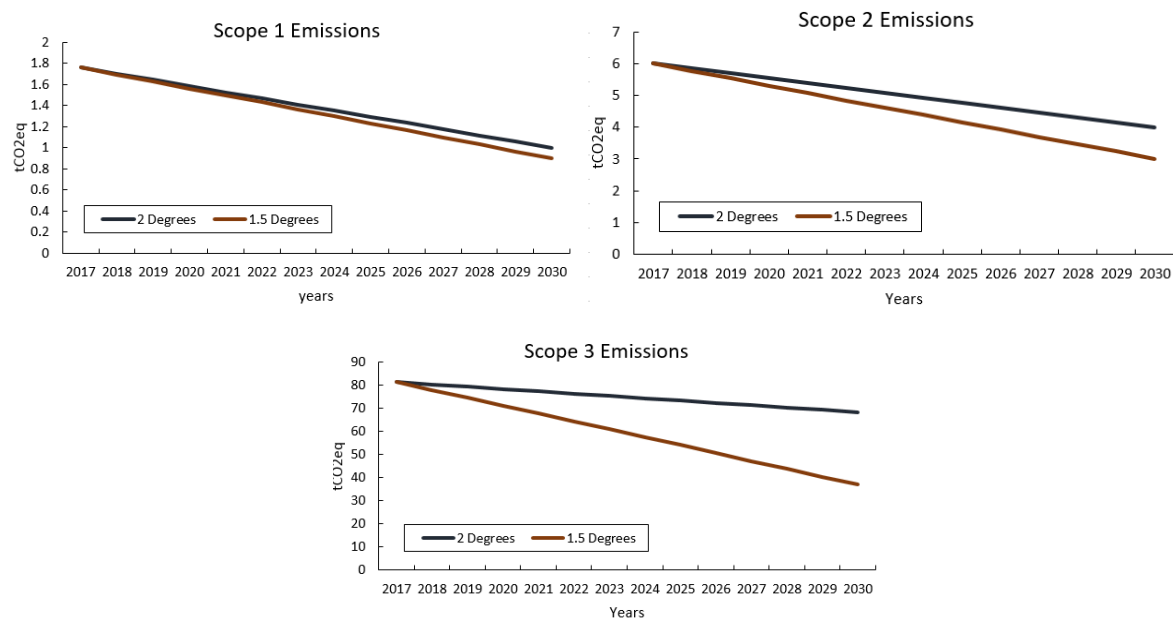
Activity	Base year (2017/18)	Current (2020/21)	Change (%)	Base year normalised against staff (tonne/staff)	Current year normalised against staff (tonne/staff)	Change (%)	Base year normalised against financial turn over 2017/18 (tonne/1M £)	Current year normalised against financial turn over 2019/20 (tonne/1M £)	Change (%)
<b>Scope 1 (tCO2e)</b>									
Fugitive emissions	1.76	0.24	-86	0.1	0.0	-84	1.4	0.2	-87
<b>TOTAL Scope 1</b>	1.76	0.24	-86	0.1	0.0	-84	1.4	0.2	-87
<b>Scope 2</b>									
Electricity & heat	6.33	2.10	-67	0.5	0.2	-61	5.0	1.6	-68
<b>TOTAL Scope 2</b>	6.33	2.10	-67	0.5	0.2	-61	5.0	1.6	-68
<b>Scope 3</b>									
Air travel	75.59	0.00	-100	5.4	0.0	-100	59.5	0.0	-100
Rail travel	0.59	0.25	-58	0.0	0.0	-51	0.5	0.2	-59
Staff commuting	4.96	0.50	-90	0.4	0.0	-88	3.9	0.4	-90
Transmission & distribution	0.21	0.18	-14	0.0	0.0	0	0.2	0.4	-17
Home office	NA	0.38							
<b>TOTAL Scope 3</b>	81.4	1.31	-98	5.8	0.1	-98	64.1	1.0	-98
<b>TOTAL emissions</b>	89.4	3.66	-96	6.4	0.2	-96	70.4	2.4	-97

Normalisations have been done against staff and against financial turn over, in the period of April 2017 – March 2018 Levin Sources had 14 staff, in April 2020 – March 2021 Levin Sources had 12 staff. Financial turn-over is of 2017-2018 was £ 1,269,948, whereas in 2020-2021 was £ 1,508,840. The table above shows the normalised values and percentages of emissions increases or decreases.

In absolute terms Levin Sources scope 1, 2 and 3 emissions have decreased greatly, mainly due to people working from home and international travel being restricted.

## 4. Emission reduction targets

Based on the SBTi tool, in order to contribute to keeping planetary warming below 2 degrees scope 1 and 2 emissions should be reduced by 32.5% by 2030. To stay below 1.5 degrees, a 54.6% reduction is necessary. For scope 3 emissions, based on SBTi tool the reduction should be 16% in order to stay below 2 degrees, and 54.4% to stay below 1.5 degrees based on SBTi tool. See emission reductions targets for the three scopes needed yearly in the graphics below.



Levin Sources has already managed to achieve the end target for scope 2 emissions, but not for scopes 1 and 3. Emissions have increased for scope 3. It is important to understand that the SBTi tool's absolute contraction approach does not take into account the amount of emissions generated in the base year, it always asks for the same reduction percentages independently of the actual carbon intensity.

	Base year (2017)	Target year (2030)	% Reduction Necessary	Aim 2020	Achieved in 2020 ?
<b>Scope 1 (tCO<sub>2</sub>e)</b>					
Below 2 degrees	1.8	1.0	32.5	1.5	Yes – achieved 2020 & end target
Below 1.5 degrees	1.8	1.0	54.6	1.5	Yes – achieved 2020 & end target
<b>Scope 2 (tCO<sub>2</sub>e)</b>					
Below 2 degrees	6.0	4.0	32.5	5.5	Yes – achieved 2020 & end target
Below 1.5 degrees	6.0	3.0	54.6	5.0	Yes – achieved 2020 & end target
<b>Scope 3 (tCO<sub>2</sub>e)</b>					
Below 2 degrees	81.4	68.4	16.0	79.0	No – achieved 2020 & end target
Below 1.5 degrees	81.4	37	54.6	70.0	No – achieved 2020 & end target

## 5. Towards Zero Carbon and Offsets

### REDUCTION OF EMISSIONS

Although we are aligned with SBTi reduction emissions targets, we need to ensure that emissions do not ramp up after Covid. The main reductions in emissions at Levin Sources are mainly due to people working from home and restrictions in international travel.

### CARBON OFFSETS

Levin Sources has been contributing £1000 per annum to the Wildlife Trust for more than 2 years as a corporate member, but we have not yet contributed to a specific carbon offset scheme. The Wildlife Trust is currently building an offset scheme, the Great Fen Project, but it won't be ready to accept payments this year. Given that we are signatories of the CEO Carbon Neutral Gucci Challenge, we are committed to become carbon neutral by the end of 2021, therefore, we need to offset our emissions with another accredited scheme this year and when the Wildlife Trust scheme is ready, offset emissions through them. This year, we will also be remediating for Levin Sources historical emissions.

Offset costs vary, but approximately around the area of 15 £/tCO<sub>2e</sub>, offsetting costs for this reporting year (2020/21) are therefore £ 55.

Offset costs for last reporting year (2019/20) were £ 1,480. With £1000 paid to the Wildlife Trust as interim coverage, we have underspent £480 for 2019/20.

Offsetting costs for historical emissions of Levin Sources is difficult because we do not have accurate data on historical emissions, but given that air travel is the highest contributor to Levin Sources emissions we can assume the following:

- Estimation of Flights 2015 until 2017 (2 years) = base year emissions (75.6 tCO <sub>2eq</sub> ) x 2 = 151 tCO <sub>2eq</sub>
- Estimation of Flights from 2014 until 2015 (1 year) = base year emissions (75.6 tCO <sub>2eq</sub> ) / 14 staff x 5 staff = 27 tCO <sub>2eq</sub>
- Estimation of Flights from 2011 until 2013 (2 years) = 75.6 tCO <sub>2eq</sub> / (15 staff x 1 staff) x 2 y → 10 tCO <sub>2eq</sub>
- Estimation of Flights from 2010 until 2011 (1 year) = barely travelled due to ELN having young children, if we assume 1 long-haul flights per year and 1 short-haul flight x 1 years = approx. 5 tCO <sub>2eq</sub>
- Base year (2017/18) = 75.6 tCO <sub>2eq</sub>
- Estimation (2018/19) = base year emissions (75.6 tCO <sub>2eq</sub> ) x 1 year = 75.6 tCO <sub>2eq</sub>
<b>Total estimation of emissions from flights:</b>
<b>151 tCO<sub>2eq</sub> + 27 tCO<sub>2eq</sub> + 10 tCO<sub>2eq</sub> + 5 tCO<sub>2eq</sub> + 75.6 tCO<sub>2eq</sub> + 75.6 tCO<sub>2eq</sub> = 345 tCO<sub>2eq</sub></b>
<b>Total estimation of historic emissions (given that flights contribute to 90% of total emissions)</b>
<b>345 tCO<sub>2eq</sub> x 100 / 90 = 383 tCO<sub>2eq</sub></b>

<sup>1</sup> years are calendar years

Therefore, Levin Sources' carbon debt is estimated to be 383 tCO<sub>2e</sub>, offsetting costs of historical emissions up to and including 2017 and 2018 using the Wildlife Trust scheme would be £ 5,750.



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