

Carbon Reduction Plan

Supplier name: ...Education Policy Institute.....

Publication date:30th October 2023.....

Commitment to achieving Net Zero

Education Policy Institute is committed to achieving Net Zero emissions by 2050.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2021	
Baseline year emissions:	
EMISSIONS	TOTAL (tCO2e)
Scope 1	<p>0</p> <p>Education Policy Institute (EPI) has no Scope 1 emissions as the organisation does not own or control any activities that result in direct emissions into the atmosphere. EPI does not own its premises and does not control any boilers or furnaces. It does not own any vehicles.</p>
Scope 2	<p>21tCO2e</p> <p>Education Policy Institute’s office is on the Lower Ground Floor of 150 Buckingham Palace Road (BPR), SW1W 9TR.</p> <p>In 2021, there was 150,000kg of estimated building CO2 emissions for 148-150 BPR. EPI has a 14% share of 148-150 BPR therefore our share of the emissions is</p> <p>$150,000 \times 0.14 = 21,000\text{kg of CO}_2$</p>
Scope 3 (Included Sources)	<p>Total = 2.28tCO2e</p> <p>Please find the breakdown below.</p> <p><u>4. Upstream production, transportation and distribution</u></p> <p>IT equipment = 0.45tCO2e</p>

According to [Circular Computing](#), average CO2e emissions during the production of a new laptop is 331kgs.

According to [RecommerceIT](#), the carbon footprint of a refurbished laptop is 75kg.

In 2021, we bought 6 refurbished laptops, therefore the carbon emissions are estimated at 450kg of CO2.

If we had bought 6 new laptops, there would be 1,986kg of CO2 emissions. This is a saving of 77.3%.

According to the [Royal Mail](#), the average parcel delivery generates 221g of CO2. Therefore it is estimated that the delivery of 6 laptops in 2021 produced 1.33kg of CO2.

5. Waste generated in operations

Printing = 0.0796tCO2e

We have two printers which, since May 2018, have printed 228,542 sheets of paper (as of July 2022).

Per employee (based on 20 employees) = 11,427.1 sheets

Per annum per employee (over 4 years) = 2,856.78 sheets

We also produced 20 reports in 2021 which were printed externally. The average number of pages is approximately 60 and 15 copies were produced.

The reports were then delivered. Using the Royal Mail figure above, the delivery of the 20 sets of reports generated 4.42kg of CO2.

According to [this source](#), a page printed with a laser printer produces approximately 1g of CO2.

Therefore, in 2021, we produced 75.14kg of CO2 through printing and 44.2kg of CO2 through delivery of printed reports. In total, this is 79.6kg of CO2

6. Business travel

0.1826tCo2e

In 2021, there were no flights taken by EPI staff.

Our staff occasionally travel to conferences and events. The journey is always made by train.

In 2021, 5 EPI staff travelled to 5 conferences outside of London, 3 in Birmingham and 2 in Manchester.

According to [Thrust Carbon](#), the carbon emissions of London Euston to Birmingham New Street by train is 5.85kg of CO2e (161 km travelled per passenger) while the

	<p>carbon emissions of London Euston to Manchester Piccadilly by train is 9.48 kg of CO2e (259km travelled per passenger).</p> <p>182.55Kg of CO2 was produced during these journeys.</p> <p><u>7. Employee commuting</u></p> <p>1.568tCO2e</p> <p>1. According to TfL, 33g Co2 per Km travelled per passenger. 2. 1 hour journey (example return trip Brixton to Kings Cross) in km = 18km. 3. x 3 (number of commutes per person per week) x 20 = 35,640g per week</p> <p>Estimated 35.64kg Co2 emissions per week. Per year (based on working 44 weeks of the year) = 1,568.16kg of CO2</p> <p><u>8. Downstream transportation and distribution</u></p> <p>The aim of Education Policy Institute is to produce research and provide evidence to inform policy and promote high-quality education outcomes for all children and young people, regardless of social background.</p> <p>Our research outputs are published on our website and distributed online. We have no physical outputs that result in external storage or transportation beyond a limited number of printed reports. The carbon emissions resulting from the printing of our reports can be found above in the 'printing' section. Beyond the printed reports, we do not create any outputs that generate carbon emissions.</p>
Total Emissions	23.28tCO2e

Current Emissions Reporting

Reporting Year: 2022	
Baseline year emissions: 23.28tCO2e in 2021	
EMISSIONS	TOTAL (tCO2e)
Scope 1	<p>0</p> <p>Education Policy Institute (EPI) has no Scope 1 emissions as the organisation does not own or control any activities that result in direct emissions into the atmosphere. EPI does not own its premises and does not control any boilers or furnaces. It does not own any vehicles.</p>
Scope 2	<p>21tCO2e</p> <p>Education Policy Institute's office is on the Lower Ground Floor of 150 Buckingham Palace Road (BPR), SW1W 9TR.</p>

	<p>In 2021, there was 150,000kg of estimated building CO2 emissions for 148-150 BPR. EPI has a 14% share of 148-150 BPR therefore our share of the emissions is</p> <p>150,000 x 0.14 = 21,000kg of CO2</p> <p>The building owner has not updated their Building Performance Survey for 2022. They have confirmed there have been no changes so EPI will carry forward the 2021 figure for scope 2 emissions in 2022.</p>
<p>Scope 3 (Included Sources)</p>	<p>Total = 2.866tCO2e</p> <p>Please find the breakdown below.</p> <p><u>4. Upstream production, transportation and distribution</u></p> <p>IT equipment = 0.903tCO2e</p> <p>According to Circular Computing, average CO2 emissions during the production of a new laptop is 331kgs. The same source highlights that the carbon footprint of a laptop during its lifetime, assuming 4 years of life and 8hrs of usage per day, is 61.5kgCO2eq.</p> <p>According to RecommerceIT, the carbon footprint of a refurbished laptop is 75kg.</p> <p>In 2022, we bought 12 refurbished laptops, therefore the carbon emissions are estimated at 900kg of CO2.</p> <p>If we had bought 12 new laptops, there would be 3,972kg of CO2 emissions. This is a saving of 77.3%.</p> <p>According to the Royal Mail, the average parcel delivery generates 218g of CO2. Therefore it is estimated that the delivery of 12 laptops in 2022 produced 2.62kg of CO2.</p> <p>This marks a 99% increase in CO2 outputs from IT equipment since 2021. This is due to an increase in the number of employees in EPI and a short term spike as we moved to all staff using EPI-owned laptops, rather than personal devices. We expect a typical year to be just over half of this number.</p> <p><u>5. Waste generated in operations</u></p> <p>Printing = 0.046tCO2e</p> <p>We have two printers which, since July 2022, have printed 44,515 sheets of paper (up to July 2023).</p> <p>Per employee (based on 21 employees) = 2,119.76 sheets</p> <p>In 2021, we printed 2,856.78 sheets per employee which marks a 26% reduction in printing since last year.</p>

We printed 18 posters for our party conference programme in 2022. 12 of these posters were A4 and 6 were A2. This is the equivalent of 36 A4 pages.

Finally, we printed 5 copies of a 52-page [report](#) in 2022 which were printed externally. $5 \times 52 = 260$ pages.

The reports and posters were then delivered. Using the Royal Mail figure above, the delivery of the 5 reports and 18 posters in 4 parcels generated 0.872kg of CO₂.

According to [this source](#), a page printed with a laser printer produces approximately 1g of CO₂.

Therefore, in 2022, we produced 44.81kg of CO₂ through printing and 0.872kg of CO₂ through delivery of printed reports and posters. In total, this is 45.68kg of CO₂.

This marks a 42% reduction in CO₂ outputs from our printing since 2021.

6. Business travel

0.121tCO₂e

In 2022, there were no flights taken by EPI staff.

Our staff occasionally travel to conferences and events. The journey is always made by train.

In 2022, EPI staff travelled to 5 conferences outside of London, 1 in Liverpool, 1 in Manchester, 1 in Birmingham, 1 in Colchester and 1 in Newcastle.

According to [Thrust Carbon](#), the carbon emissions of the following journeys are:

London Euston to Liverpool Lime Street = 62.35Kg of CO₂ (284km for 6 passengers)

London Euston to Birmingham New Street = 29.25Kg of CO₂ (161km for 5 passengers)

London Euston to Manchester Piccadilly = 9.48Kg of CO₂ (259km for 1 passenger)

London Liverpool Street to Colchester = 5.78Kg of CO₂ (79km for 2 passengers)

London Kings Cross to Newcastle = 14.45Kg of CO₂ (395km for 1 passenger)

121.31Kg of CO₂ was produced during these journeys.

This marks a 43% reduction in CO₂ outputs from our business travel since 2021.

7. Employee commuting

1.796tCO₂e

	<ol style="list-style-type: none"> 1. According to a Transport for London FOI request, travelling by London underground creates 40.5g of Co2 per passenger Km. 2. Exemplar journey: return trip from Tooting Bec to London Victoria = 16km. 3. x 3 (number of commutes per person per week) x 21 = 40,824g per week <p>There is an estimated 40.82kg Co2 emissions per week produced from employee commuting.</p> <p>Per year (based on working 44 weeks of the year) = 1,796.26kg of CO2</p> <p>This is an increase of 14.56% since 2021 due to an increased number of employees and an increase in Tfl's figures on the level of emissions per journey (In 2021, the reported 33g Co2 per Km travelled per passenger).</p> <p><u>8. Downstream transportation and distribution</u></p> <p>The aim of Education Policy Institute is to produce research and provide evidence to inform policy and promote high-quality education outcomes for all children and young people, regardless of social background.</p> <p>Our research outputs are published on our website and distributed online. We have no physical outputs that result in external storage or transportation beyond a limited number of printed reports. The carbon emissions resulting from the printing of our reports can be found above in the 'printing' section. Beyond the printed reports, we do not create any outputs that generate carbon emissions.</p>
Total Emissions	<p>23.866tCO2e</p> <p>This is an increase of 2.5% since 2021.</p>

Emissions reduction targets

Our office is located in a shared building owned by an external company. The building owner is committed to reaching net zero carbon by 2030 and is part of the Better Building Partnership Climate Change Commitment. In our 2021 carbon reduction plan, we highlighted that renewal commitment to carbon reduction was one of the criteria by which we would assess a renewal or new office space. In March 2023, we renewed our tenancy for the next five years following reassurance from the building owner that they were on track to meet their net zero carbon commitments by 2030.

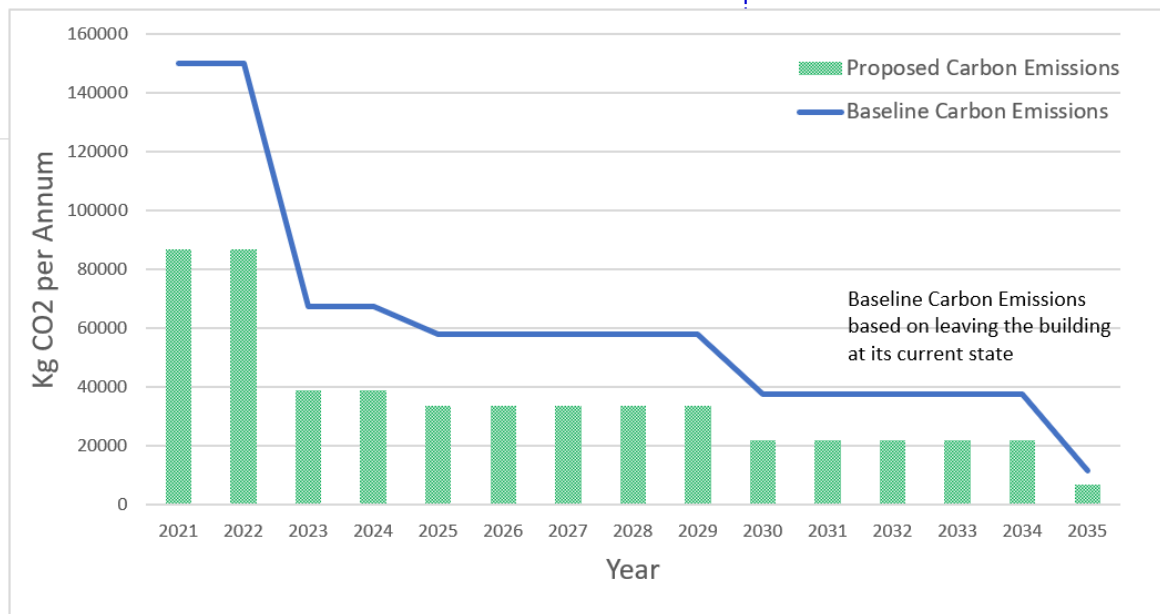
Given we are in a shared building, our carbon reduction targets are based largely on the projections of the building owner. As stated above, the building owner have not renewed their Building Performance Survey since 2020 so the projections below are carried through from EPI's 2021 carbon reduction plan.

Since the [Building Performance Survey](#) was completed in 2020, the building owners have replaced gas boilers and heaters with electric ones and installed double glazing on all the windows. The building owners project, that with their completed renovations and further proposed changes, Scope 2 carbon emissions will decrease to 40,000 kg of CO2e by 2024. Our share of these emissions would be 5,600kg. This is a reduction of 73.33%.

Please find details in the graph below:

(This graph comes from [Grosvenor's 148-150 Buckingham Palace Road - BPE D2.xlsx](#))

15 Year Carbon Emission Matrix



Carbon Reduction Projects

Completed Carbon Reduction Initiatives

Travel

We are already committed to reducing the environmental impact of travel and transport by minimising the use of private vehicles and reducing unnecessary travel. Employees are encouraged and incentivised to use public transport, or walk or cycle to work through the operation of a season ticket loan and a cycle to work scheme. The use of private transport is only permitted in exceptional circumstances and is not routinely used for travel to and from the EPI office. We exploit technology so that employees are able to use video conferencing software rather than travel to meetings unnecessarily.

We have very minimal international travel, only where strictly necessary. In a typical year international travel amounts to no more than two flights.

Building

Our premises are located in a shared building owned by an external company. The building owner is committed to reaching net zero carbon by 2030 and is part of the Better Building Partnership Climate Change Commitment. The building owner has invested £90m into retrofitting existing buildings, including the building EPI is located in, to reduce their emissions through smart energy use and renewable energy supplies. For example, gas boiler and heaters were recently removed from the building and the building now runs with only electricity, with an aim of this becoming renewable energy. All windows were also replaced with double glazing to reduce energy consumption.

Waste management and recycling

Our shared building has a centralised bin store. By using the services of First Mile, we ensured that nothing went to landfill and we recycled 71% of our waste. The waste that cannot be recycled is sent to an Energy from Waste facility where it is safely incinerated. The process generates heat and electricity that is used in UK homes and by-products residues are used in the construction industry.

According to First Mile, the waste disposal company, the whole terrace saved 17 tonnes of CO2 and 83 trees from October 2022 to September 2023 through recycling. There are 32 buildings in the terrace including 148-150 BPR of which we have a 14% share as detailed above. Our share of the savings is $((1/16) \times 0.14) \times 17,000 = 148.75\text{kg}$ of CO2. Please see the First Mile certificate [here](#).

We have well established recycling procedures inside the building for paper products, cardboard, cans, plastic, batteries and toner cartridges. We also have procedures in place for food waste composting.

In the future we hope to implement further measures such as:

Waste management and recycling

We are aiming to reach 80% of waste recycled by 2024 and receive the Gold Standard of Recycling Award.

Supply Chain

We use carbon-balanced suppliers where possible. We are committed to re-using IT equipment and buy refurbished devices, rather than purchasing new equipment, unless necessary. We are also committed to using recycled equipment in the future, where such purchases need to be made.

We are committed to reducing our hard copy printing and have drastically reduced the usage of printing over the past two years and will continue to actively encourage staff to only print when absolutely necessary. Where printing is required, we use recycled paper.

We are committed to using electronic copies of our research outputs and will only print reports by exception. When we do so, we will only work with suppliers who consider environmental impacts for printing in the future.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard³.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:



Natalie Perera

Chief Executive, Education Policy Institute

Date: 30th October 2023

¹ <https://ghgprotocol.org/corporate-standard>

² <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

³ <https://ghgprotocol.org/standards/scope-3-standard>