

Carbon Footprint Report

Prepared for



Game Changer (Marketing) Company Ltd

Prepared by

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Game Changer Marketing CO₂e Report April 2024

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All reasonable measures have been taken to ensure the accuracy of this report and any errors in data used for footprint calculations are the responsibility of the grant recipient named in this report.

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1 Executive Summary

This report details the carbon footprint of Game Changer Marketing and provides recommendations to reduce and off-set its footprint.

The activities included in the carbon footprint measurement were agreed in consultation with Game Changer Marketing. The calculation of the footprint was undertaken after a desk-top review of data provided by Game Changer Marketing.

This report meets the reporting requirements of the Green House Gas (GHG) Protocol Corporate Standard

Footprint boundary: All activities under operational control, covered under Scopes 1 and 2 of the Green House Gas (GHG) Protocol Corporate Standard as detailed in this report.

The report covers the period 01/01/2023 to 31/12/2023. The activities /Emissions included in the assessment include Energy, Fuel, Water, and Business Travel, The GHG Protocol Corporate Standard requires reporting a minimum of scope 1 and scope 2 emissions.

The baseline carbon footprint of Game Changer Marketing is 3.19tCo₂e/M²

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1. Introduction to Game Changer Marketing:

Game Changer (Marketing) Company Ltd is an events and marketing company located At Local Production Studios, Supersport Complex, Jamhuri Road, Nairobi

2. Carbon Footprint

2.1 Scope 1 - Direct Green House Gas (GHG) Emissions:

Scope 1 (direct emissions) emissions are those from activities owned or controlled by an organization. Direct emissions are principally the result of the following types of activities:

- Generation of electricity, heat, or steam. These emissions result from the combustion of fuels in stationary sources, e.g. boilers, furnaces, turbines
- Transportation of materials, products, waste, and employees. These emissions result from the combustion of fuels in company-owned/controlled mobile combustion sources (e.g. trucks, trains, ships, airplanes, buses, and cars)
- Fugitive emissions. These emissions result from intentional or unintentional releases, e.g., equipment leaks from joints, seals, packing, and gaskets; methane emissions from coal mines and venting; hydrofluorocarbon (HFC) emissions during the use of refrigeration and air conditioning equipment; and methane leakages from gas transport.
- Physical or chemical processing. Most of these emissions result from the manufacture or processing of chemicals and materials, e.g. cement, aluminum, and waste processing

Scope 1 Emissions data supplied and included in footprint:

- Generator Consumption in kWh

2.2 Scope 2 - Indirect GHG Emissions:

Scope 2 (indirect) emissions are those released into the atmosphere that are associated with the consumption of purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of an organization's energy use but occur at sources not owned or controlled.

Scope 2 Emissions data supplied and included in footprint:

- Total Electricity imported from the National Grid, in kWh :

2.3 Scope 3 - Other Indirect GHG Emissions:

Scope 3 (other indirect) emissions are a consequence of actions that occur at sources not owned or controlled and not classed as Scope 2 emissions. Examples of Scope 3 emissions are business travel by means not owned or controlled by an organization, waste disposal, or materials or fuels an organization purchases. Deciding if emissions from a vehicle, office, or factory are Scope 1 or Scope 3 may depend on how operational boundaries are defined.

Scope 3 Emissions data supplied and included in footprint:

66% of the employees carpool/ use public transport to travel to the office while the other 34% uses private transport.

2.4 Footprint Calculation Method:

The most common approach for calculating GHG emissions is through the application of documented and approved GHG emissions conversion factors. These factors are calculated ratios that relate GHG emissions to a proxy measure of activity at an emissions source.

The activity data or amount of 'resources' used are multiplied by the relevant emissions factors to calculate total Greenhouse Gas equivalent (CO₂e) emissions.

$$\text{GHG emissions} = \text{activity data} \times \text{emission conversion factor}$$

There are seven main GHGs that contribute to climate change, as covered by the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). Different activities emit different gases, and an organization should report on the Kyoto Protocol GHG gases produced by its activities.

CO₂e is the universal unit of measurement to indicate the global warming potential (GWP) of GHGs, expressed in terms of the GWP of one unit of CO₂. The GWPs used in the calculation of CO₂e are based on the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) over a 100-year period (this is a requirement for inventory/national reporting purposes).

All conversion factors used in this report are in units of kilograms of carbon dioxide equivalent (kg CO₂e).

2.5 Emissions factors used in footprint calculation:

Activity Type	Emissions Factor	Source
Grid Electricity	0.4037	https://cdm.unfccc.int/sunsetcms/storage/contents/stored-file-20201230125121808/ASB0050-2020_PSB0055.pdf

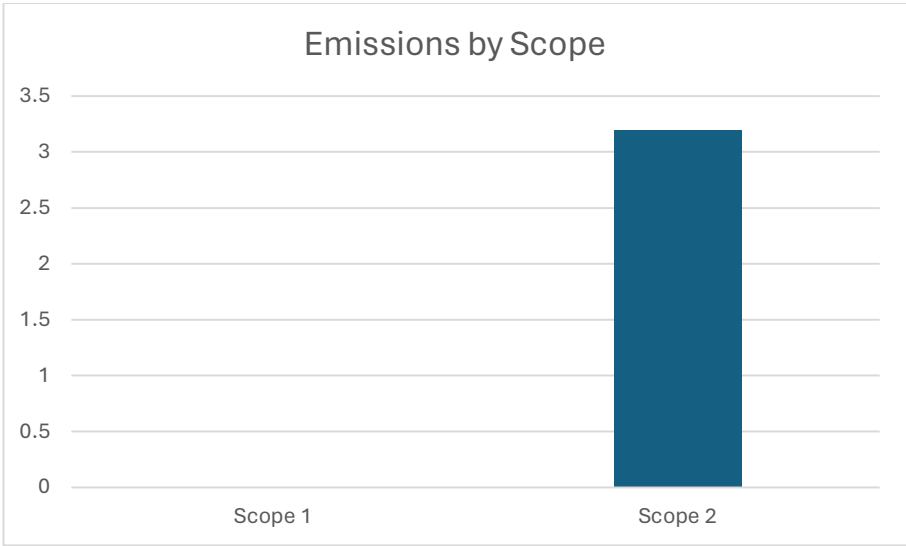
2.5.1 Assumptions and/or Omissions:

- Grid Electricity factor in Kenya is 0.4037.

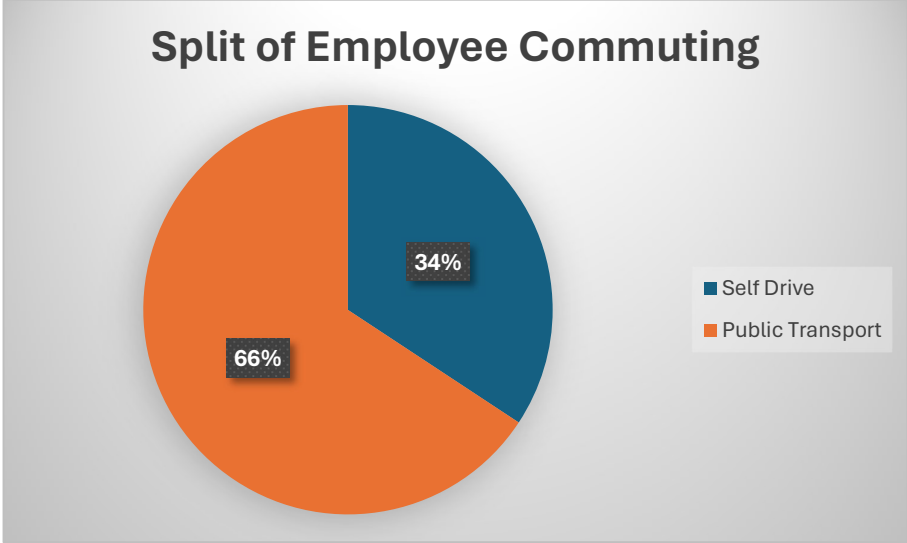
2.5.2 Carbon Footprint:

The Total Carbon Footprint of the activities measured = 3.19 tonnes CO₂e.

2.5.3 Sources of CO₂e emissions by GHG Protocol Scope



2.5.4 Sources of CO₂e by Indirect Emissions (Scope 3)



2.5.5 Carbon Footprint Reduction Recommendations

The most significant sources of CO₂e emissions identified is: the Emissions arising from electricity consumption from the grid

Game Changer Marketing actively assesses and implement opportunities to reduce emissions especially through sensitizing staff to switch off lights and other energy consuming appliances when not in use.

Behavior plays a big role in energy management, thus staff sensitization is commendable and continual review of opportunities for further emission reduction is needed.

To build on the data quality of emissions from water and purchased goods and services Game Changer Marketing could discuss with their core suppliers if carbon footprint data specific to their service delivery/products is available. This is generally available from transportation providers, or it could start with suppliers of products with the highest carbonfootprint/revenue, such requirements could be built into contract specifications.

Procurement of goods and services is an important mechanism available to support in delivering the Game Changer Marketing decarbonisation objectives. This can be achieved through engagement with key stakeholders to discuss the Game Changer Marketing sustainability objectives to identify where supply chain partners can support in delivery of these. This action has already been started by Game Changer Marketing which is commendable. The most important stage within the procurement process is to undertake a review of the need for procurement in the first instance and to question if alternative procurement routes should be considered.

- Regarding the use of vehicles, a transition to hybrid and electric vehicles when operationally and financially appropriate to do so should be considered and planned.
- When not required all appliances should be shut down where appropriate.
- High efficiency LED lighting with integrated lighting sensors and controls should be rolled out where appropriate.
- Use of alternative/renewable energy sources e.g., solar PV.
- Consider continued development and roll-out of a staff energy and environmental

awareness programme.

- Consider tracking the footprint of the events held away from the offices and aim to reduce the carbon footprint of the events by seeking innovative ways.

To effectively monitor the Carbon Footprint of Game Changer Marketing over time, it is also recommended that a relevant performance indicator is chosen e.g. Kg CO₂e per M²

- $319 \text{ KgCO}_2\text{e} / 500\text{M}^2 = 0.5325 \text{ Kg CO}_2\text{e per M}^2$.

Other performance indicators could also be used, such as those based on financial data e.g. KgCO₂e per employee

These recommendations are non-exhaustive and are designed to provide guidance only.

3 Scope kg CO₂e Summary Table

Activity	Total kg CO ₂ e	Total Tons CO ₂ e
Scope 1	0	0
Scope 2	3190	3.19
Scope 3	0	0
Total	3.19	3.19

Class & UOM kg CO₂e Summary Table

Class & UOM	Total kg CO ₂ e	Total Tons CO ₂ e
Electricity: Kenya kWh	3190	3.19