HOW WE CALCULATE EMISSIONS

We have calculated and published our carbon footprint for the seventh time this year. Our emissions are composed of 'scope 1' emissions, which include the diesel consumed in our generators, the fuel used in our fleet vehicles and the fugitive emissions associated with our air-conditioning systems, 'scope 2' emissions, which are the indirect emissions associated with our consumption of purchased electricity, and 'scope 3' emissions, which include other indirect sources, such as air travel and taxi hire. We have expressed our emissions as 'Tonnes of carbon dioxide equivalent' (tCO_2e), which is the standard for comparing different greenhouse gases 'relative to one unit of CO_2 '.

We have calculated our carbon footprint using the Greenhouse Gas Protocol (Revised edition). Our consolidation approach for calculating our emissions is operational control. The latest electricity emission factor for Kenya published by the International Energy Agency (IEA) has been used. For the other energy sources, air travel and refrigerant gases; we used the 2018 tCO₂e Emission Factors from the UK Governmental Departments for Environment, Food and Rural Affairs (DEFRA). Further information about our carbon footprint is available in the main section of this report.

Safaricom reports on its CO_2 emissions for all its scope boundaries i.e. scope 1, 2 and 3 as follows:

- Scope 1 GHG emissions as a result of direct activities which include:
 - Fuel used in generators;
 - Fuel used in cars leased/owned by Safaricom (Fleet); and
 - Refrigerant gases used in air conditioners (Fugitive emissions).
- Scope 2 GHG emissions from the third-party generation of electricity purchased by Safaricom which include:
 - Purchased electricity from the country's Grid power (e.g. Kenya Power).
- Scope 3 GHG emissions from indirect activities which include:
 - Air travel; and
 - Cabs (taxis)

Biogenic CO₂ emission are not applicable for Safaricom. Safaricom rely on stationary combustion (diesel generators) and purchased electricity (national grid) for their energy requirements.

Safaricom operations in Kenya rely on national electricity that is distributed centrally, by the national utility distributor KPLC. Safaricom therefore only report on Scope 2 location-based CO_2 emissions. There is no market-based scope 2 CO_2 emissions applicable for Safaricom.

Total carbon footprint across the different scopes was 59 811 tCO₂e. The breakdown was as follows:

Emission boundary	Emissions (tCO ₂ e)
Scope 1	28 311.3
Scope 2	28 881.1
Scope 3	2 618.6
Total	59 811.0

