



Airtel Africa plc

# Towards a net zero future



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# We are committed to achieve net zero emissions by 2050

When we published our sustainability strategy in 2021, we stated our commitment to achieving net zero greenhouse gas (GHG) emissions by 2050. Since we made that commitment, we have been focusing on understanding the sources of our emissions, measuring and establishing our baseline calculations, and identifying the initiatives and interventions we can put in place to reduce our emissions. We have been working closely with the Carbon Trust, a globally recognised expert in the development of decarbonisation programmes.

As a result of this work, we are setting an ambitious near-term target of a 62% reduction in our emissions intensity by 2032. While we are confident of meeting this near-term target, the challenges we face in doing so should not be underestimated. We deliver services to customers in 14 African markets, where electricity grid and infrastructure are underdeveloped. In addition to reducing the emissions from our existing assets, we will incorporate our decarbonisation strategy into our growth ambitions. We recognise that this will require significant work but remain committed to fulfilling our purpose of transforming lives while combating climate change and minimising our impact on the environment.

**Pillar 4 Our environment**

Our ambition is to address and minimise the impact of our operations on the environment. This is critical for the world in which we live.

**Commitments**  
Reduction of GHG emissions  
Environmental stewardship

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**

**SDG 12 – Responsible consumption and production.** Our work to reduce our GHG emissions (scope 1, 2 and 3), apply responsible consumption measures and technologies, and eliminate hazardous waste

**CARBON TRUST**

Since 2022, we have been working with the Carbon Trust to establish baseline emissions and develop effective programmes and interventions

**2022**

We published our baseline emissions in our inaugural Sustainability Report 2022

baseline emissions **2022**

**2032**

Our near-term target is to reduce our scope 1 and 2 emissions intensity by 62% from our baseline

**62%**  
reduction by **2032**

**2050**

Our long-term target is to achieve net zero emissions by 2050

**net zero**  
ambition by **2050**

# Our baseline emissions

We published our detailed baseline emissions in our Sustainability Report 2022 which can be downloaded from [www.airtel.africa](http://www.airtel.africa)

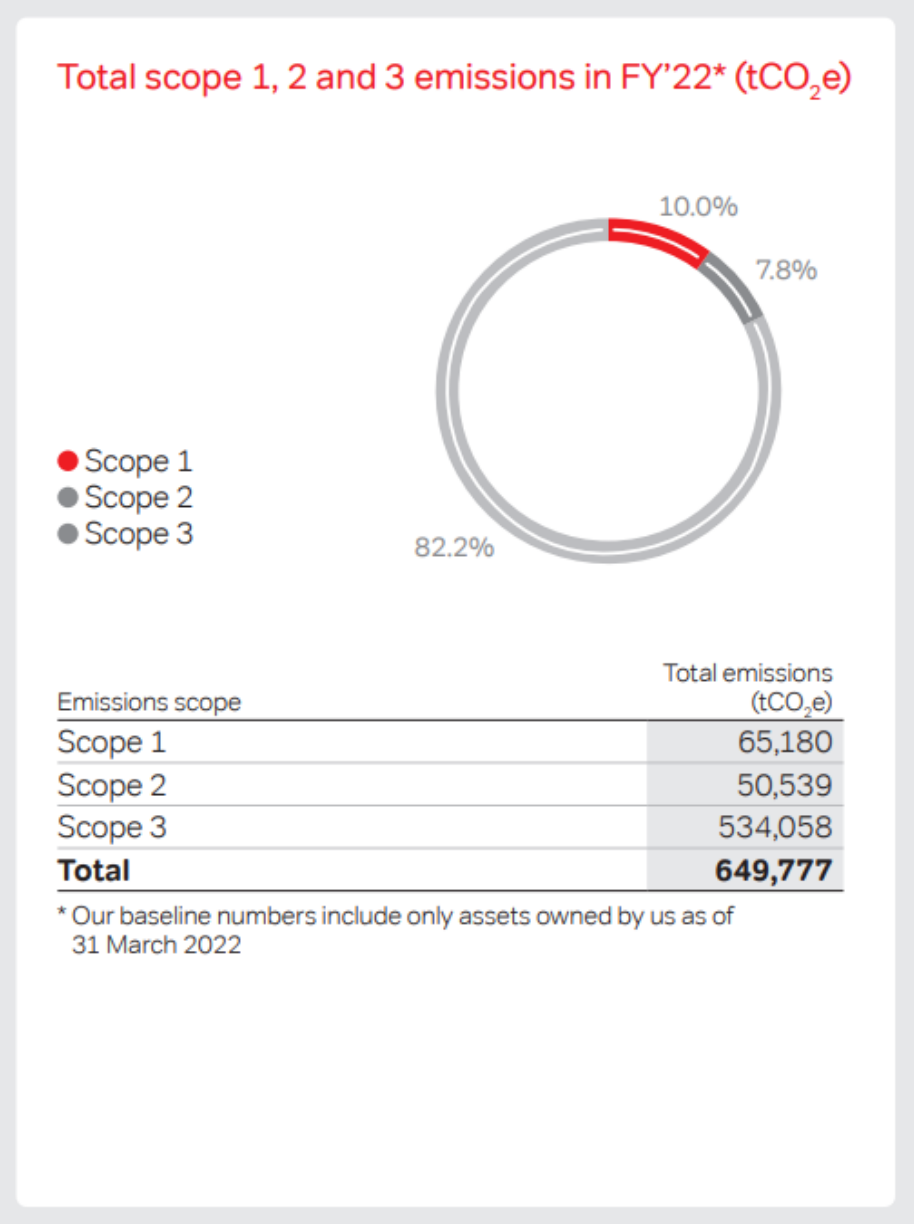
Our baseline emissions

# Our scope 1, 2 and 3 baseline emissions

In 2022, we took a big step forward in understanding our impact on the environment by developing a carbon footprint model for our Group. This model helped us to calculate our baseline carbon emissions for both the sources we directly control (Scope 1 and 2) and those in our value chain (Scope 3). We published our carbon emissions baseline footprint in our Sustainability Report 2022.

For our Scope 1 and 2 emissions, we identified and categorised the assets and regions that contribute to these emissions. The Carbon Trust then modelled the outcome based on our findings. We also ranked our markets by the scale of emissions. For Scope 3, which involves assets we don't control, we worked closely with our partners and used published data to get a reliable calculation of our baseline emissions.

In total, Scope 1 and 2 emissions (which are under our direct control), accounted for 17.8% of our total baseline emissions. The remaining 82.2% relating to Scope 3 emissions, arise predominantly from telecommunication towers that our partners own and operate, equipment we deploy across our network and air travel in Africa.



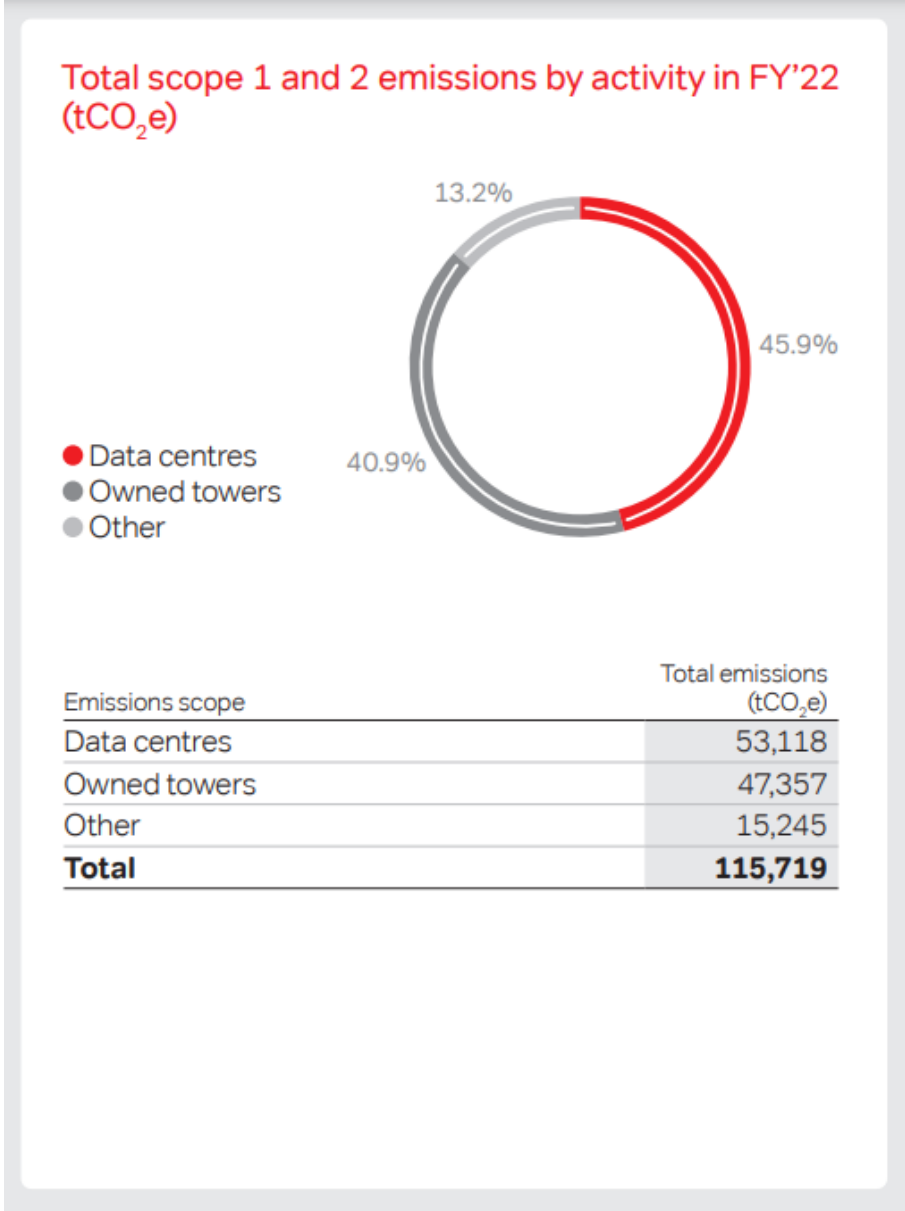
Our baseline emissions

# Our scope 1 and 2 emissions by activity

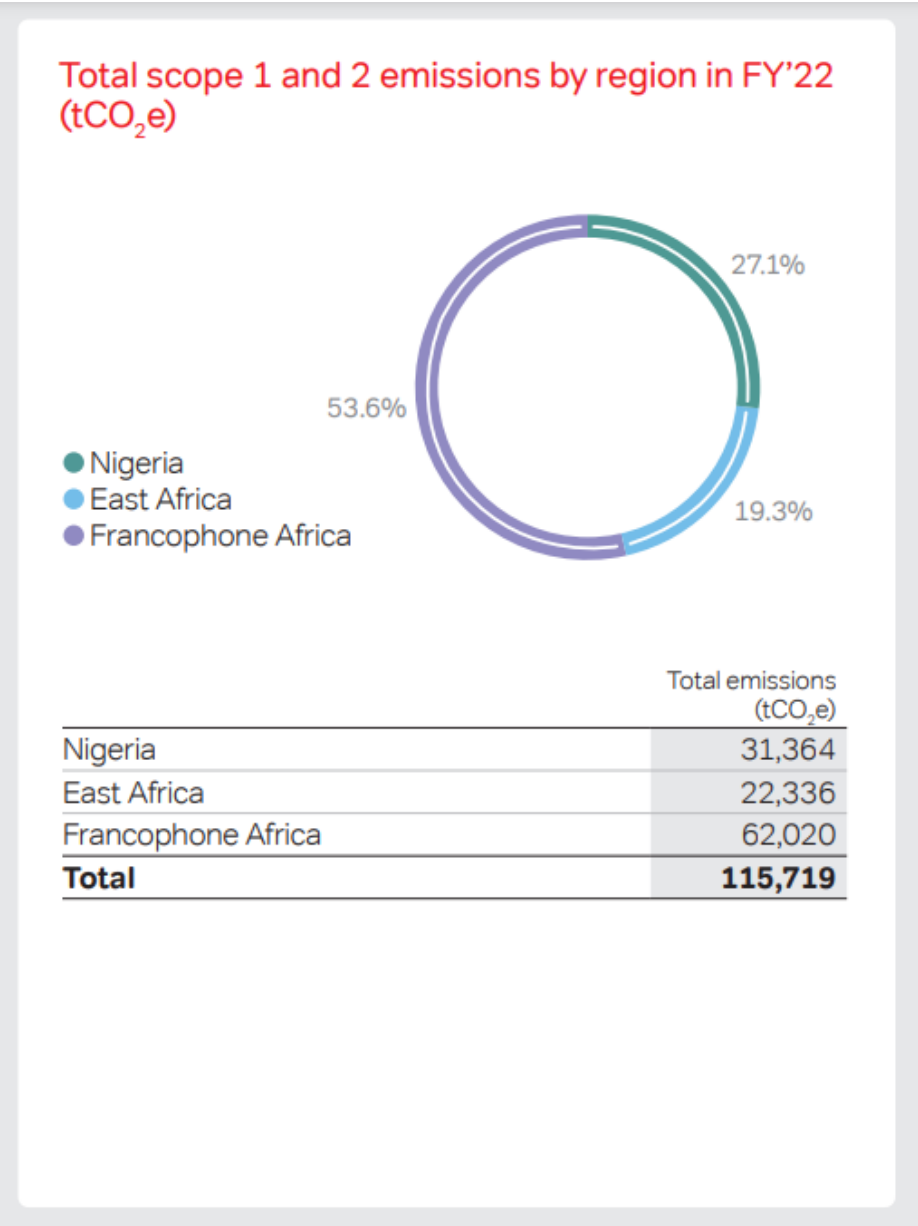
When it comes to our own operations, data centres and mobile switching centres are the biggest contributors to our emissions. These facilities require a reliable supply of power and temperature control, which can be a challenge in markets where electricity grids aren't always available or reliable. But we remain committed to finding ways to reduce these emissions.

Even though we've sold a majority of our previously owned tower infrastructure, towers still account for nearly 41% of our scope 1 and 2 emissions.

Other sources, such as our shops, buildings and fleet contribute 13% of our emissions.



# Our scope 1 and 2 emissions by region



In addition to understanding how our operations and assets contribute to our emissions, it was important for us to also identify the emissions profile of each of our regions. This information ensures we are able to deploy emission-reducing interventions strategically for the most effective results.

Francophone Africa is the largest contributor to our overall Scope 1 and 2 emissions – this is because we still own a number of towers and the inefficiency of the electricity grid in certain markets.

Nigeria is our second largest emitter accounting for 27% of our emissions driven by data centers and mobile switching centers due to scale of the business and demand for data in this market.



# Decarbonisation strategy for our scope 1 and 2 emissions

We developed a detailed approach  
and methodology to support our  
journey to net zero

# Our strategic approach



**Comprehensive asset audit**  
To identify each assets' contribution to GHG emissions

We completed a comprehensive asset portfolio analysis to identify each asset's contribution to our Scope 1 and 2 emissions. This involved the completion of a bespoke asset register for all 14 OpCos to allow the detailed modelling of carbon emissions.

**Identify applicable interventions**  
Personalised to each OpCo and function

Adopting the information from the asset audit, we developed a detailed decarbonisation analysis, tailored to each OpCo to identify the opportunities for carbon emission reductions and the potential deployment timeline.

**Feasibility modelling**  
Detailed study to understand investment and timelines

Working together with the Carbon Trust, we developed a detailed feasibility model for decarbonisation interventions to assess the impact of various carbon reduction initiatives across all 14 OpCos. Further modelling was carried out to incorporate our ambitious growth strategy.

**Implementation**  
Initiate decarbonisation initiatives

We communicated the interventions through interactive workshops with each OpCo to highlight the initiatives and timeline for deployment. We also engaged with various business functions to embed GHG emissions into our strategy for growth.

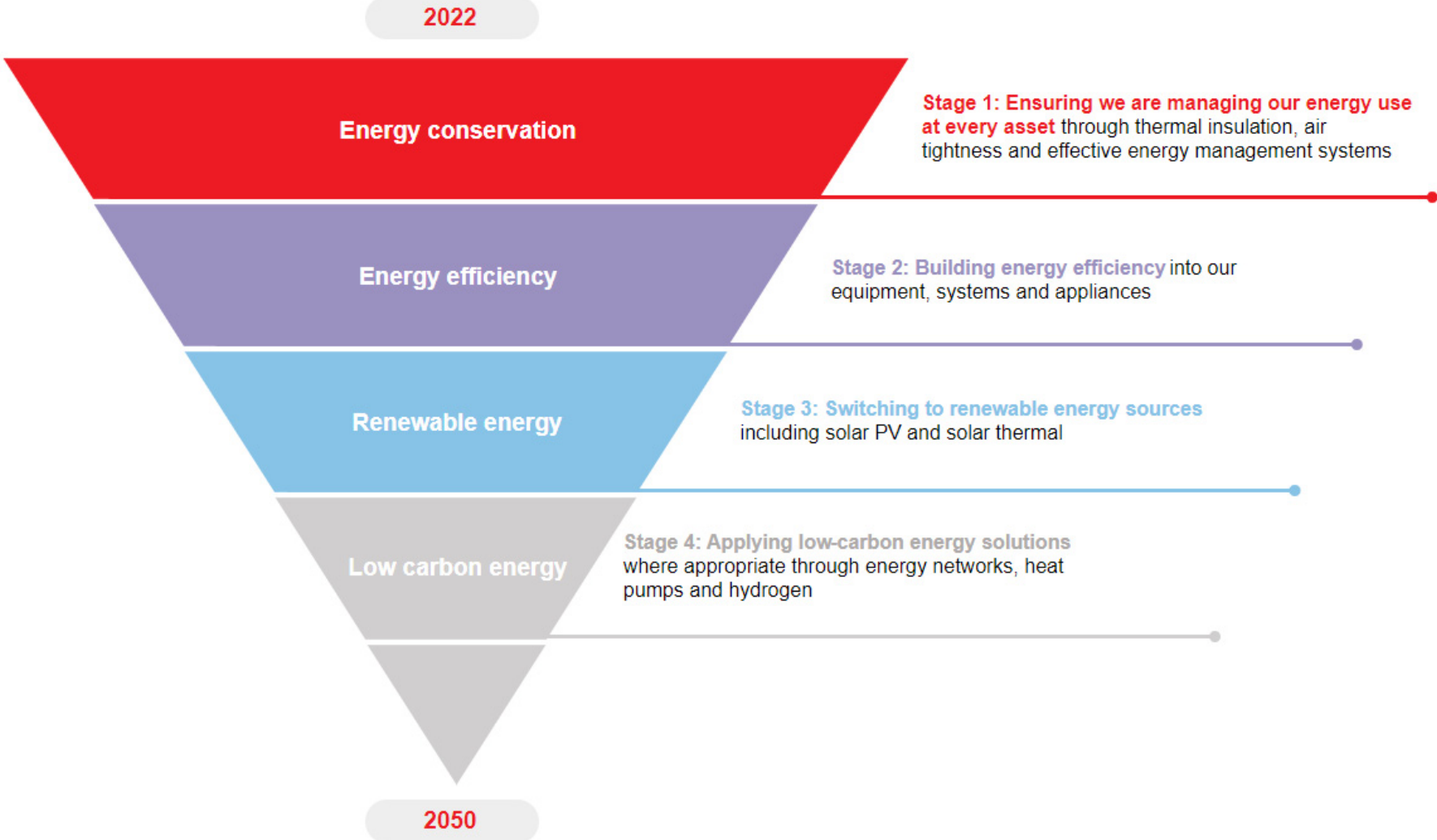
# How we prioritise our interventions

Reducing our energy use and improving our energy efficiency has two key benefits: it reduces costs across our operations and, critically, it reduces our emissions. For example, optimising our data and switching centres will lead to reduced energy demand and lower operating costs.

We're also committed to sourcing renewable energy wherever possible to reduce our GHG emissions. In Chad, for example, we've successfully migrated 47 infrastructure sites (8% of our total sites) to hybrid energy sites in 2022, which has reduced our reliance on diesel generators from 18 hours a day to just six hours a day. We know, however, in some of our markets the deployment of renewable energy solutions can be challenging due to space constraints, restrictions on land use or security issues. In these markets, we're exploring partnerships with Energy Service Companies (ESCOs) that can help us source and deploy clean energy more efficiently.

As the renewable energy market evolves, we'll continue to explore new mechanisms and technologies that can help us further reduce our environmental impact. We're committed to finding innovative solutions that help us achieve our sustainability goals while also providing the best possible service to our customers.

While we continue to explore how **new and emerging technologies** can help us reduce emissions across our network, there is a range of actions available to us now to improve our **energy efficiency**.



# Our decarbonisation scenario

We're confident that we can achieve a 62% reduction in scope 1 and 2 emissions intensity\* by 2032.

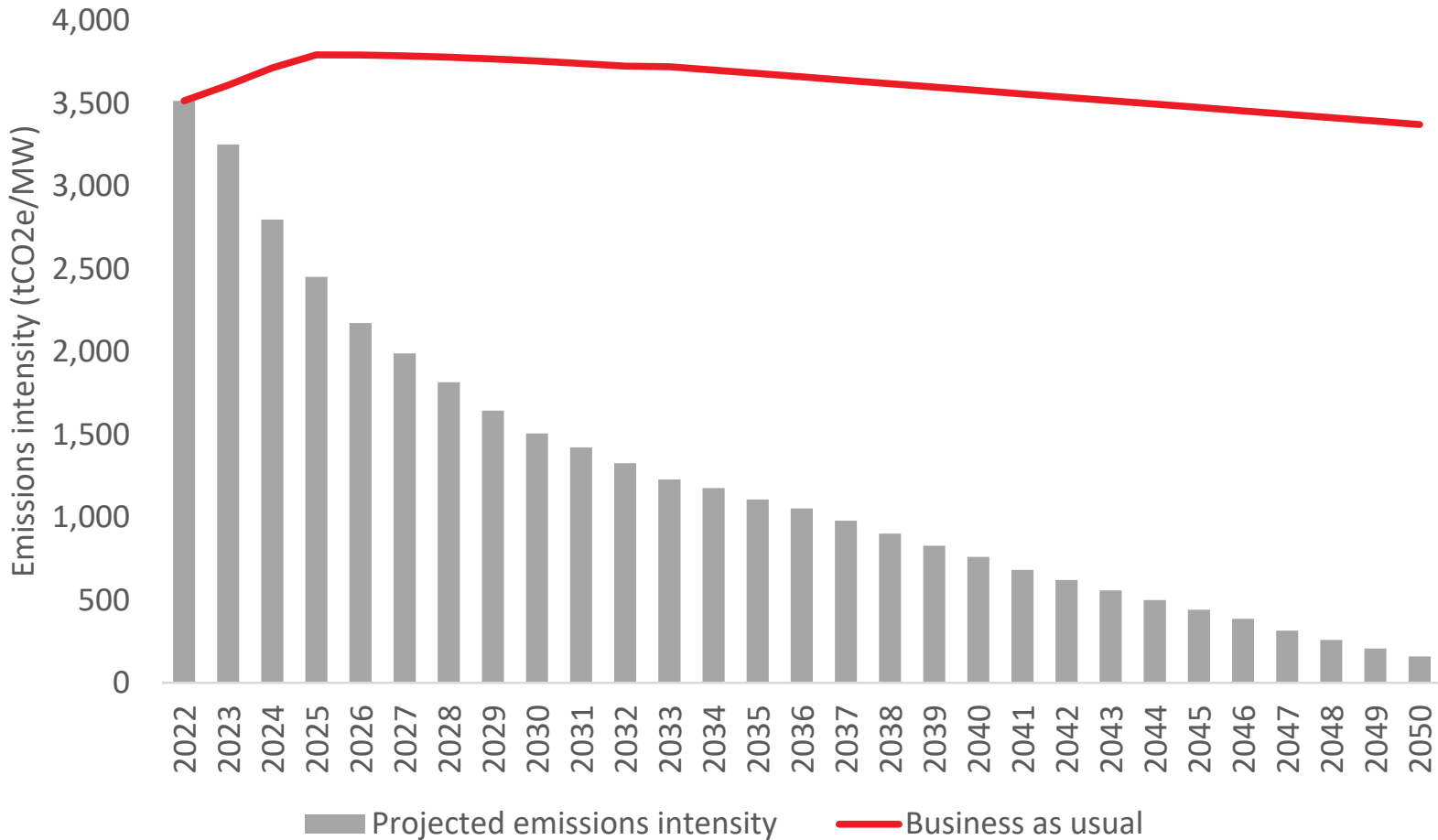
Our near-term ambition is to focus on energy efficiency improvements and cost-effective renewable energy solutions. In the long term, we plan to explore the renewable energy market mechanisms.

Our strategic approach to identifying potential decarbonisation interventions has concluded that despite our ambitious growth expectations, we can reduce our emissions intensity by 62% in the near-term by 2032 and by 95% in the long-term by 2050. This chart shows the projected trend in our reduction strategy and the impact it will have on our scope 1 and 2 emissions intensity. This also reflects the planned optimisation of our assets:

- In the near-term (by 2032) our strategy relies on optimising energy performance of our existing assets and implementing renewable energy solutions, where available, for the deployment of new assets.
- In the long-term (by 2050) we will continue improving our energy efficiency while sourcing renewable energy market mechanisms.

We will also consider alternative routes for investing in accredited carbon reduction initiatives to offset any residual emissions in the long term.

Our projected emissions intensity pathway



\* tCO<sub>2</sub>e/MW of installed capacity

# Reduction of our absolute emissions

The rollout of interventions will result in a **54% reduction** to our existing assets' baseline emissions by 2032

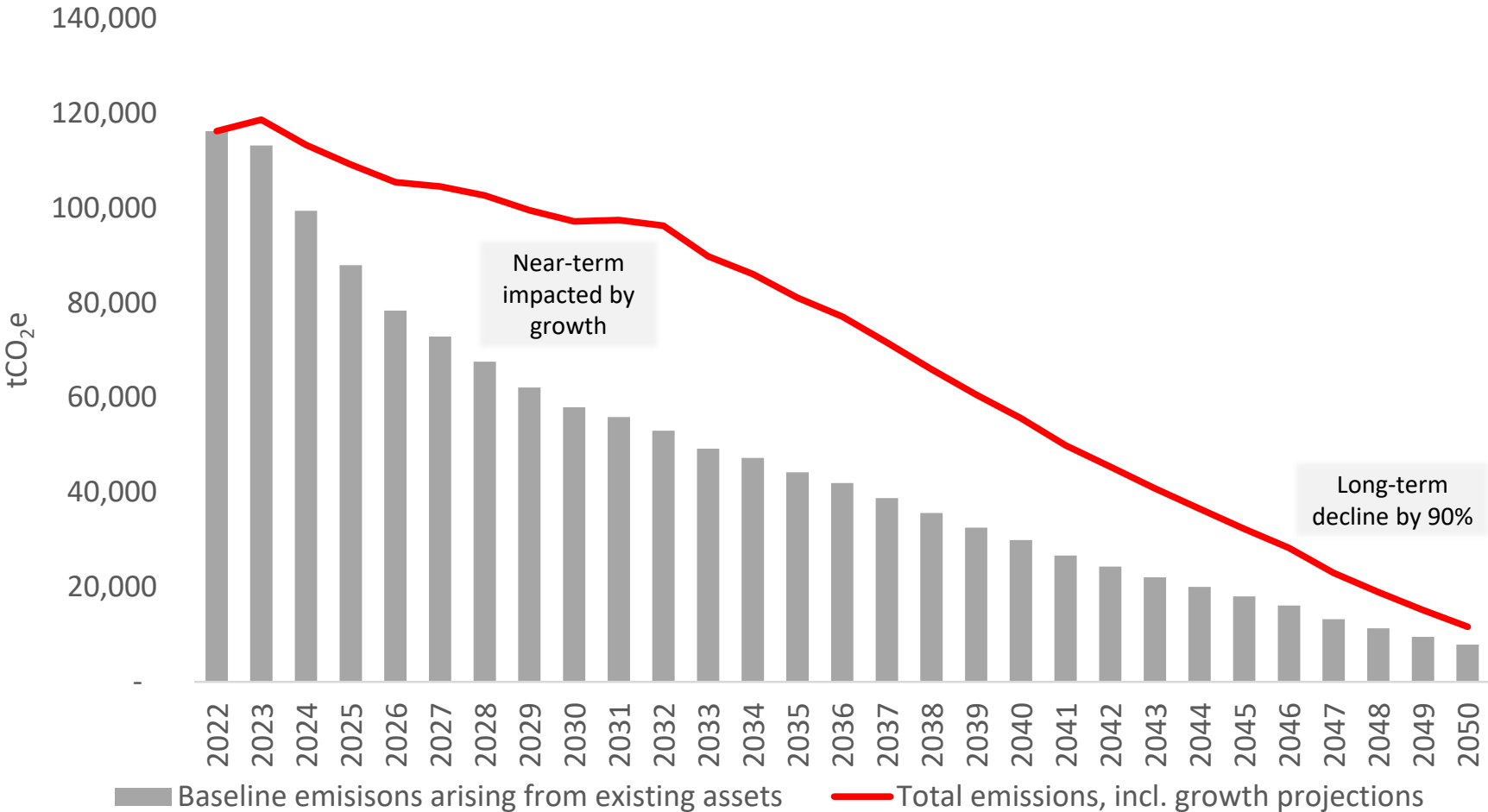
Despite our **ambitious growth** strategy, we still see the **opportunity to reduce** our absolute carbon emissions.

We remain committed to reducing our absolute emissions both in the near term and long term to achieve our ultimate net zero ambition. Our modelling is focused on two key elements:

- **Existing assets** – we will implement decarbonisation programmes across our existing asset portfolio using a combination of renewable energy solutions and energy efficiency measures.
- **New assets** – for the deployment of new assets, we will adopt best practice energy management systems and continue exploring the market for alternative energy solutions. However, given the challenging markets we operate in across African continent, our growth is likely to have an impact of our scope 1 and 2 emissions.

Nevertheless, for our existing assets we estimate the reduction of absolute emissions by 54% in the near term and aim at the reduction by over 90% in the long term. Our total emissions, including growth, will be reduced by 90% with the remaining 10% offset using accredited market schemes.

Our projected reductions in absolute emissions



# Focus areas for near-term reduction target

2022-2032

Our modelling gives us real insight into how the interventions we have identified will help us reduce our emissions intensity significantly. There is no single initiative, but rather a range of solutions that take account of our growth and the specific situation in each of our 14 markets.

## Energy efficiency

We are always looking for ways to reduce our environmental impact, and improving energy efficiency is a key focus. We are implementing best practices to make our data centres and switching centres more energy-efficient, and we are applying the same principles to our remaining tower portfolio.

Our aim is to move off-grid sites to on-grid where possible to maximise efficiency. We are also focusing on energy efficiency gains in our buildings and shops, as well as our fleet management. By making these improvements, we can reduce our carbon footprint and ensure that we are doing our part to protect the environment.

## Renewable energy

We are committed to reducing our environmental impact by exploring renewable energy solutions. We are currently exploring solar PV deployment at sites with available space, as well as battery installation to further reduce energy demand. In addition, we are looking into renewable energy market mechanisms and partnerships with Energy Service Companies (ESCOs) to help us source and deploy clean energy solutions for sites facing deployment challenges.

By investing in these renewable energy solutions, we hope to reduce our reliance on assets that emit high levels of greenhouse gases and make a positive impact on the environment.

## Efficient growth

To ensure our growth is both efficient and sustainable, we are committed to implementing the latest technologies to maximise energy efficiency across our operations. We are also exploring alternative fuel sources for markets with less reliable electricity grids to reduce our reliance on high-emission energy sources.

Furthermore, we carefully consider the location of our sites to ensure that renewable energy solutions can be easily deployed, allowing us to reduce our impact on the environment and contribute to the growth of sustainable energy practices

# Targeted interventions by asset class

Each asset has specific initiatives to reduce emissions. Our priority is to focus on the markets with the highest emissions. As energy efficiency initiatives are rolled out, renewable energy solutions will be incorporated to further reduce emissions across our network.



### Data centres and mobile switching centres

Our data centres and mobile switching centres account for almost half of our emissions. To tackle this efficiently, we will focus first on the markets with the highest emissions. Site optimisation will be fundamental and may enable us to reduce our footprint resulting in reduced energy consumption requirements.

We will install the latest energy-efficient equipment like airflow management, HVAC solutions and ventilated racks to reduce energy use.

Investment into renewable energy solutions will remain a key priority to reduce our emissions. Solar deployment will be supported by continued exploration of alternative energy solutions as technologies mature.



### Base transceiver stations (BTS) and infrastructure sites

Energy consumption across our tower infrastructure portfolio accounts for 41% of our baseline emissions. For our base transceiver stations and infrastructure sites, we'll start by modernising our sites to reduce energy consumption. We'll install dynamic energy management systems with cooling efficiency and explore converting off-grid sites to on-grid.

We'll prioritise solar PV deployment where grid availability is low and heavily reliant on fossil fuels. In addition, for our tower portfolio which runs off carbon intensive electricity grids, we will prioritise the rollout of solar or explore partnering with energy service companies (ESCOs) to reduce our emissions. Battery storage solutions will also help reduce our reliance on diesel backup generators.



### Our offices, shops and fleet

Our offices, shops, kiosks and fleet of vehicles account for 13% of our Scope 1 and 2 baseline emissions. For these assets, we will upgrade all facilities to incorporate the latest energy efficiency measures like lights and HVAC sensors. For replacing end of life equipment, we will deploy the latest, more energy efficient equipment to limit our emissions.

The installation of telematic technology into our fleet to track journeys and environmental performance will allow us to more closely monitor our emissions. Where possible, we'll install rooftop solar panels, and gradually move our entire fleet to hybrid vehicles - and in the long-term migrate to EV.

# Governance and next steps

Progress and implementation of our net zero strategy is supported by a robust governance structure. Our journey to a net zero future continues...

# How we manage the implementation of our strategy

We place great emphasis on simple, yet effective governance of our decarbonisation strategy.

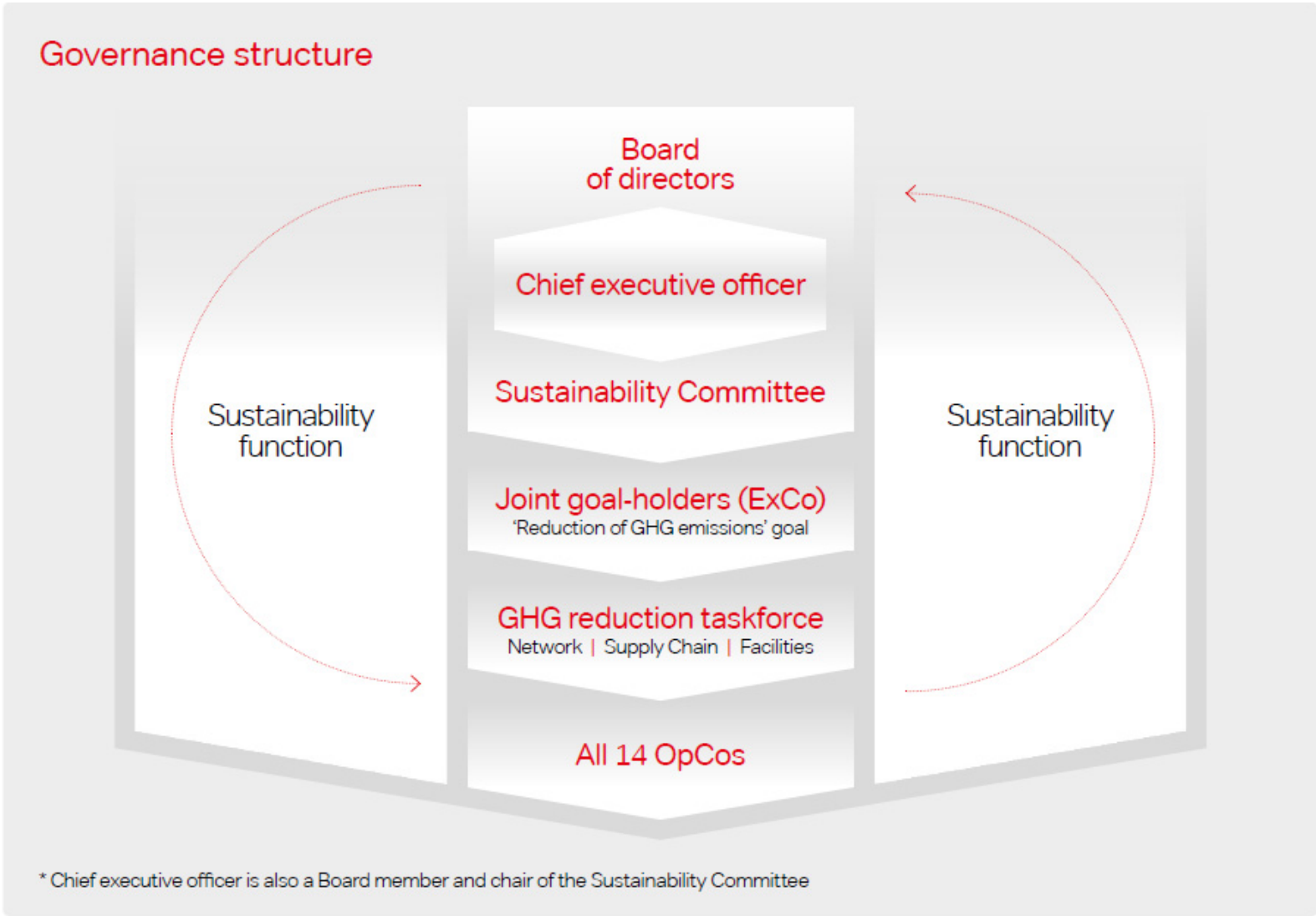
To ensure we execute our strategy to achieve net zero by 2050, we have developed a specific governance oversight structure that complements our existing sustainability governance.

**The Board of directors** has ultimate oversight of the delivery of our sustainability strategy, implementation across the business, and integration of sustainability metrics into Airtel Africa’s remuneration policy. The Board is updated on progress on a quarterly basis and approves actions as appropriate. The Board also has overall responsibility for the management of our climate-related risks and opportunities (CROs).

**The Sustainability Committee** is responsible for overseeing the implementation of our sustainability strategy and is chaired by the CEO. It oversees progress in reaching our operational targets and goals, including reduction of GHG emissions, recommends updates and improvements, defines the actions and measurements necessary to achieve our goals. It provides regular updates to the Board of directors – all while acting as a point of contact for external bodies. The Sustainability Committee meets monthly and works closely with the Executive Committee (ExCo).

**The joint goal-holders** are responsible for deploying the decarbonisation strategy in all 14 markets and managing the respective workstreams that follow from this.

**The sustainability function** is responsible for integrating and embedding the decarbonisation strategy across our business. This includes coordination of workstreams across functions and markets, collection and analysis of data and the overall delivery of our sustainability reports. The function is also in charge of developing, implementing and monitoring environmental strategies across the Group.



# Next steps on our journey to a net zero future

We have undertaken a significant amount of work to identify, develop and launch our decarbonisation strategy across all 14 markets. Our efforts do not stop here, and we will continue to update on the progress of our net zero ambition.

## Scope 3 strategy

Based on our reported baseline emissions, over 80% of our total emissions arise from scope 3 categories – these are assets outside of our direct operational control.

It is vital that we work together with our supply chain partners to develop robust programmes and initiatives for decarbonisation across the industry. In March 2023, we completed ‘deep dive’ consultations with our top tier partners, who account for 78% of our scope 3 emissions.

The continued engagement and further analysis of our scope 3 emissions data will allow us to develop a more comprehensive scope 3 emissions reduction strategy. We will be updating our stakeholders on the progress of our work.

## Feasibility analysis

Based on the work completed to-date, we have a comprehensive list of initiatives and programmes to drive our decarbonisation strategy forward to our near-term target and the reduction of our impact on the environment.

We plan to undertake a rigorous feasibility assessment of our priority initiatives – specific to each market – to support the financial and operational impact of deployment.

Renewable energy market mechanisms are becoming increasingly important for the telecoms industry. Given the early stage of development of these mechanisms in our markets, we have not incorporated such mechanisms in our near-term strategy. This feasibility analysis will allow us to explore these mechanisms and may allow us to accelerate our reduction of GHG emissions strategy.





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