



Delivering mobile connectivity and reducing carbon

Carbon Reduction Roadmap 2021



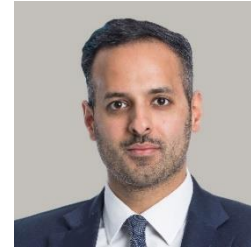
Helios Towers team today



Kash Pandya
Chief Executive Officer



Tom Greenwood
Chief Operating Officer/
CEO-Designate



Manjit Dhillon
Chief Financial Officer



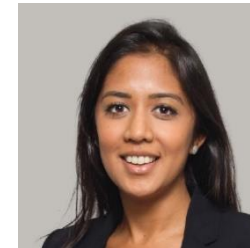
Allan Fairbairn
Director of Operations
and Technology



Lara Coady
Group Head of Performance
Engineering



Nick Summers
Director of Sustainability
and Property



Sima Varsani
Group Sustainability
Manager

Agenda

- 1 Executive summary
- 2 Helios Towers at a glance
- 3 Sub-Saharan Africa:
the opportunity and the challenge
- 4 Our 2030 target and roadmap
- 5 Our carbon reduction strategy
- 6 Looking ahead to net zero by 2040
- 7 Q&A



Executive summary

We are proud that by driving the growth of mobile communications, we are improving lives and livelihoods and contributing to economic growth in Africa.

To decouple our business growth – which we believe is paramount to enable connectivity for millions more people – from emissions is a major challenge in our markets. However, we are committed to reducing our carbon footprint, and in this roadmap we share our 2030 carbon target, strategy and ambition for net zero.

Our 2030 target

46%

CO₂e reduction per tenant

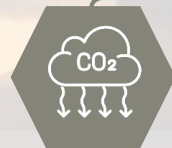
This equates to maintaining absolute emissions at 2020 levels

Our carbon reduction strategy

Project 100
\$100m investment in:



Colocation
growth



Carbon Reduction
Programme



Carbon Reduction
Innovation

Our long-term ambition

Net zero
carbon
emissions
by 2040

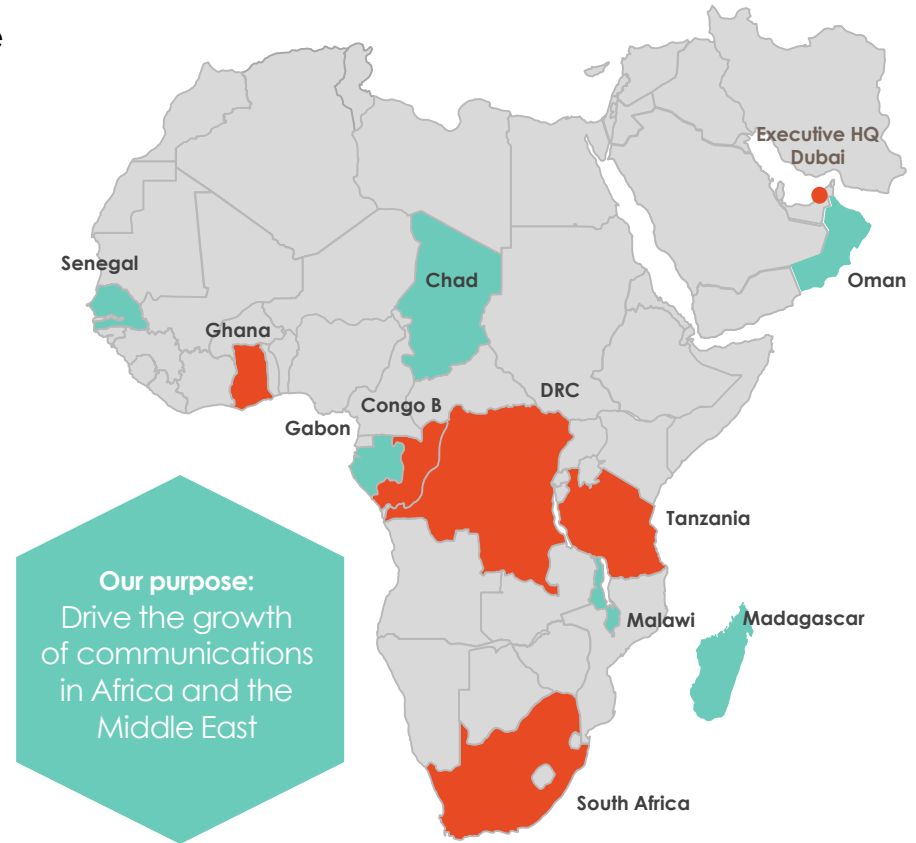
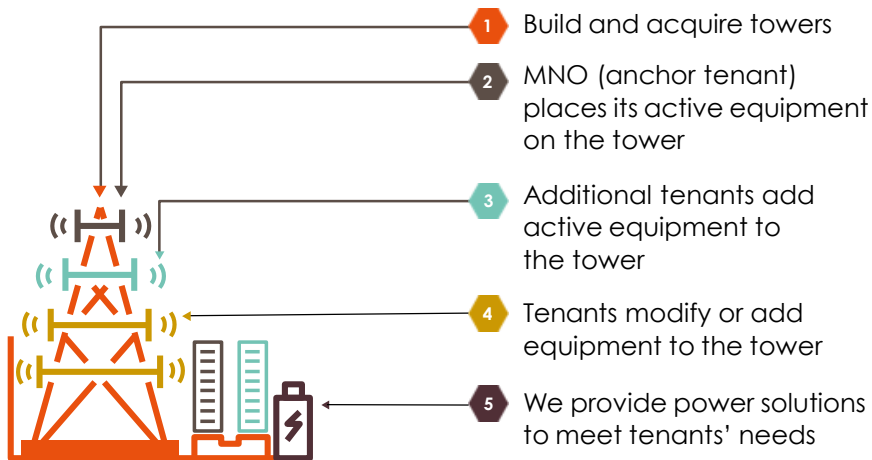
Helios Towers at a glance



Helios Towers at a glance

We promote infrastructure sharing by having multiple mobile network operators (MNOs) on tower sites, delivering cost benefits as well as reduced environmental impact.

What we do



Our customers include:



2020 markets included in this roadmap

New markets to be included after a year of being operational

For more information see our [Results, reports and presentations](#)

Sustainable business strategy

Network access and sustainable development

- Growing our business and helping more people connect to a mobile network.

Business excellence and efficiency

- Maximising delivery of a continuous network service while **minimising our environmental impact**.

Empowered people and partnerships

- Promoting a safe, diverse, talented team and working to the highest ethical, social and environmental standards.

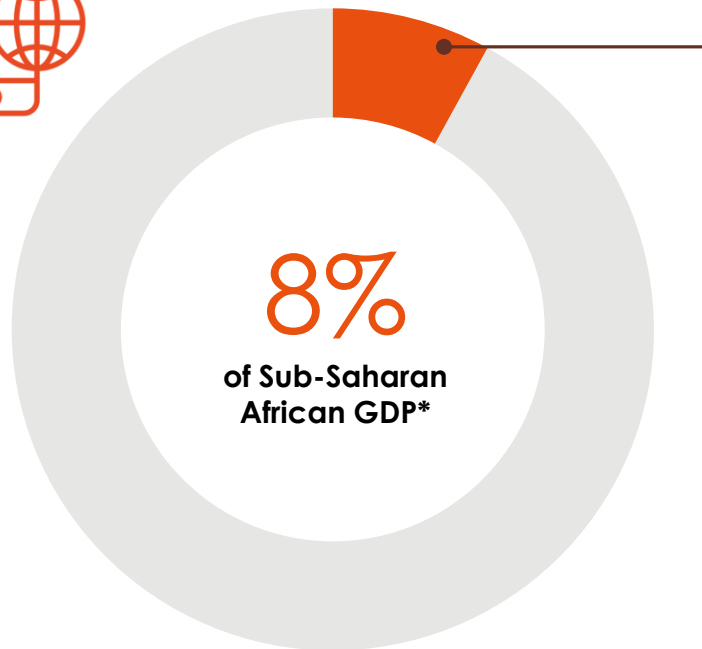


For more information see our [2020 Sustainable Business Report](#)

A young woman with dark, curly hair is smiling and looking down at her smartphone. She is wearing a grey blazer over a black top. The background is a blurred city street with cars and buildings. The image is overlaid with several semi-transparent hexagonal shapes in shades of grey and brown.

Sub-Saharan Africa: the opportunity and the challenge

The mobile market in Sub-Saharan Africa



Mobile industry contribution to GDP¹

2020

\$132bn

* Compared to mobile contributing 5% to global GDP²



Public funding¹

2020

\$15bn

Mobile ecosystem contribution to public funding (before regulatory and spectrum fees)



Employment¹

2020

300,000

Jobs formally supported by the mobile ecosystem

1.1m+ informal jobs

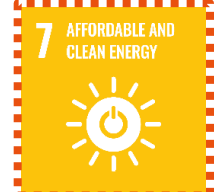
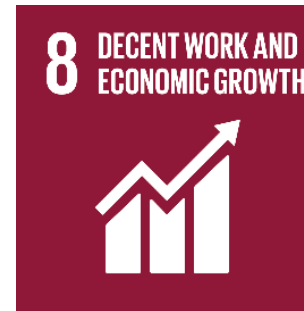
1: [GSMA, Mobile Economy Sub-Saharan Africa 2021](#)

2: [GSMA, The Mobile Economy 2021](#)

Mobile supports all 17 SDGs

Mobile technology remains at the centre of how we address the SDGs (Sustainable Development Goals) – and its impact on all Goals is increasing every year¹.

As well as enabling mobile technology, we contribute to SDGs 8 and 9 and support a number of other Goals.²



1. [GSMA 2021 Mobile Industry Impact Report: Sustainable Development Goals](#)
 2. [Helios Towers: Supporting the UN Sustainable Development Goals](#)

Mobile technology drives emissions reductions

Mobile network-enabled technologies form an important part of the decarbonisation solution, enabling rapid emission reductions in other sectors while improving quality of life and supporting economic growth.

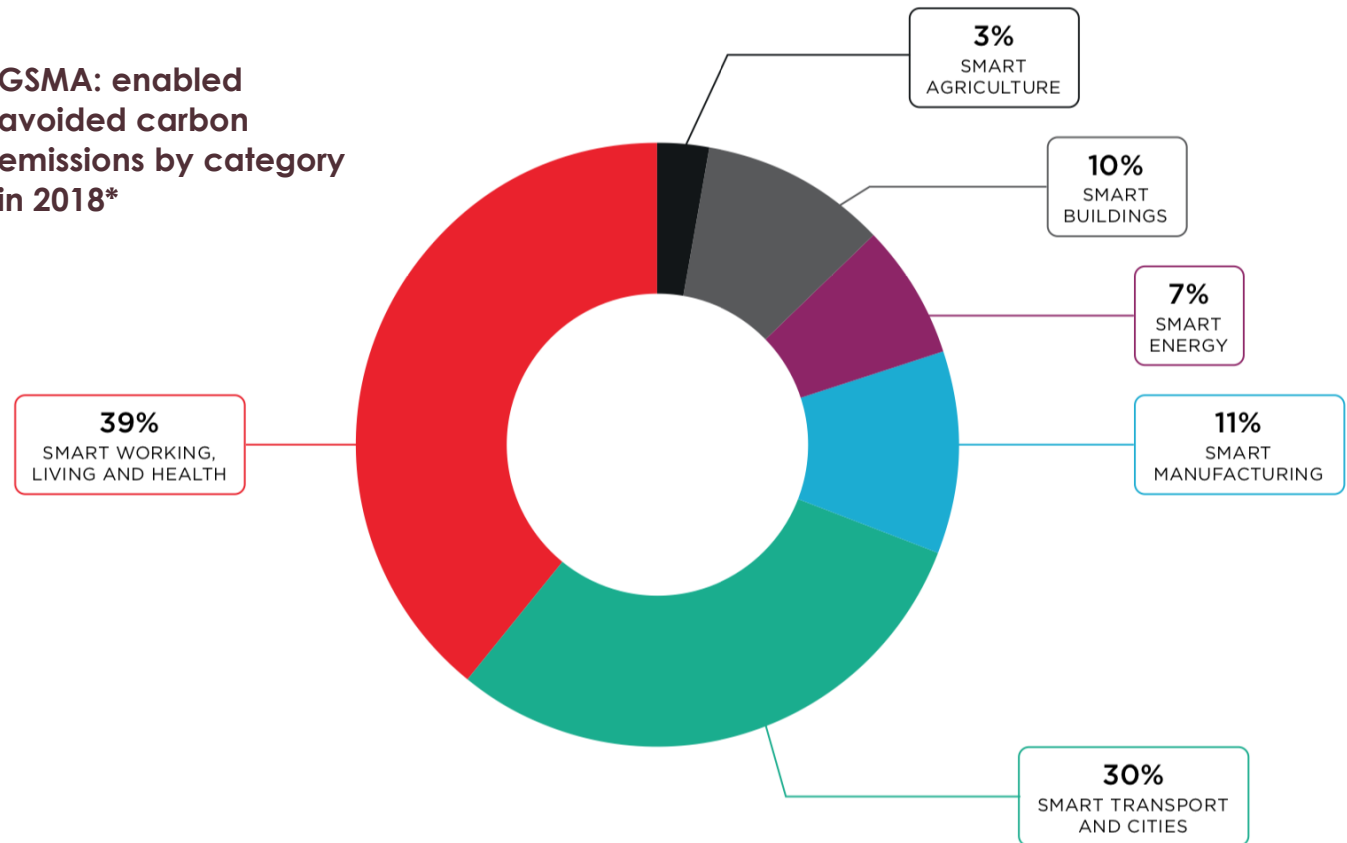
Mobile technology can avoid

10x

the carbon footprint of mobile networks themselves*

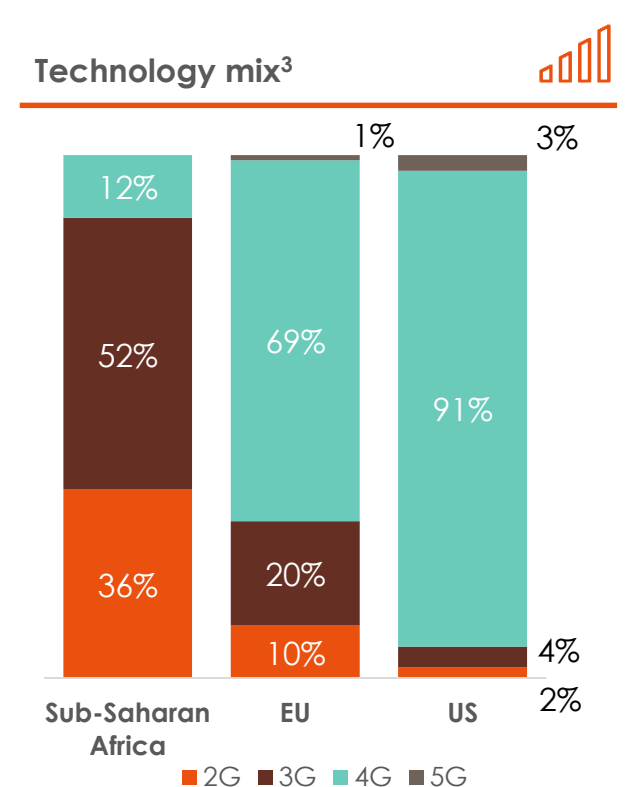
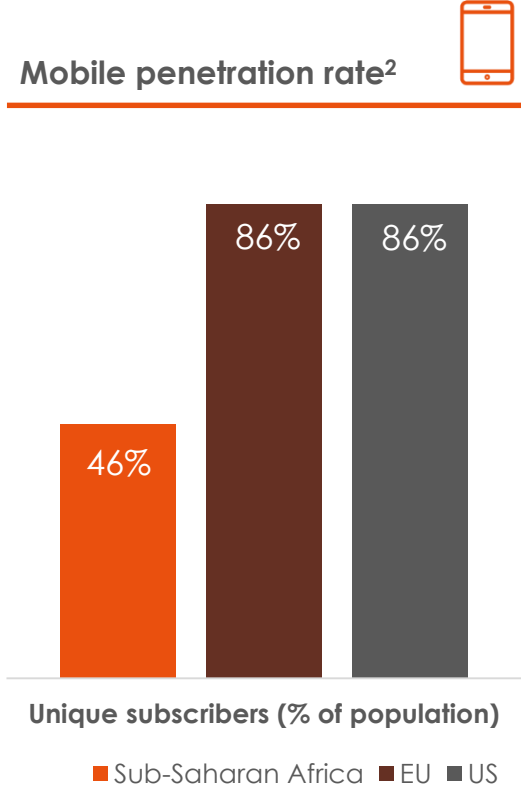
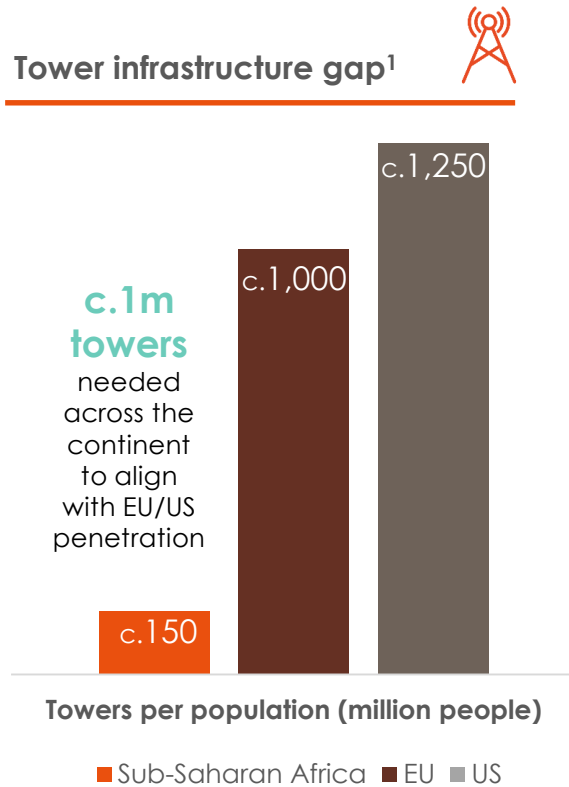
To enable this level of digitisation in Africa, and avoid emissions from other sectors, we must expand our infrastructure.

GSMA: enabled avoided carbon emissions by category in 2018*



* GSMA, The Enablement Effect

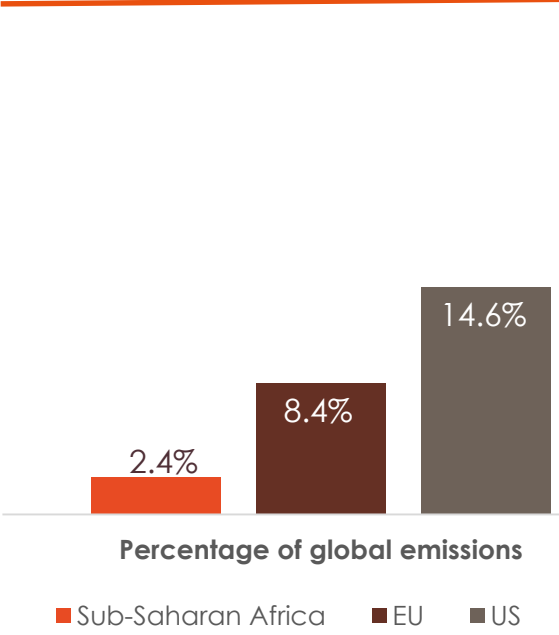
There is a vast infrastructure gap in our markets



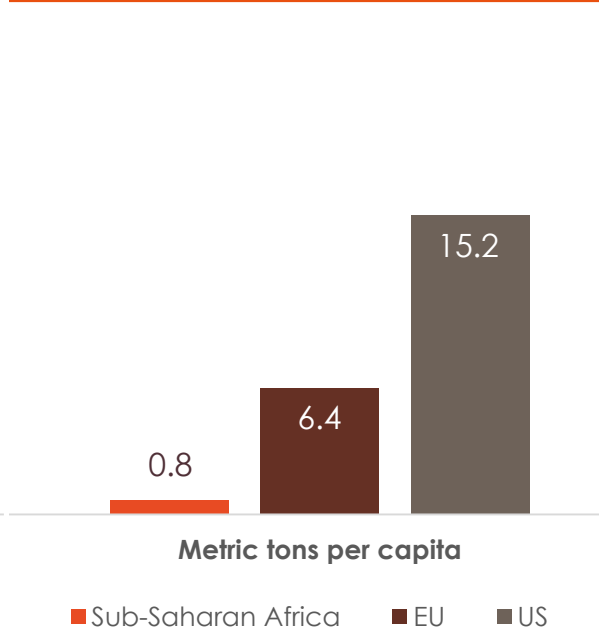
1: GSMA database, UN World Population Prospects, TowerXchange, Statista
 2: GSMA database (accessed November 2021), UN World Population Prospects
 3: [GSMA The Mobile Economy 2021](#), [GSMA The Mobile Economy, North America 2021](#)

Sub-Saharan Africa: Low emissions and limited access to electricity

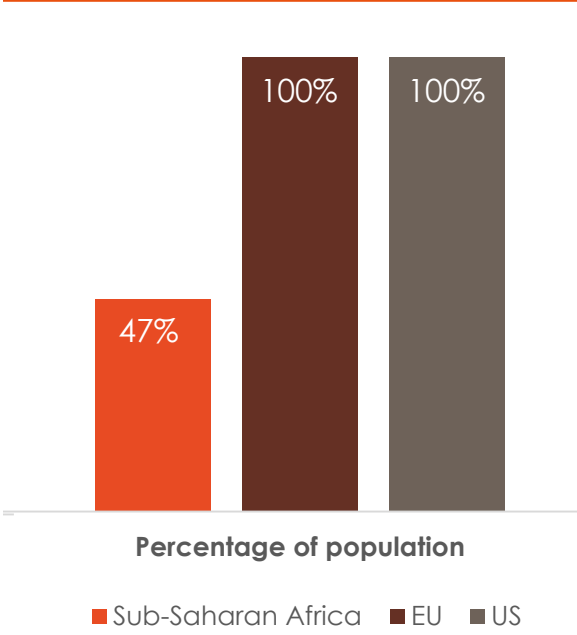
CO₂ emissions by region¹ 



CO₂ emissions per capita² 



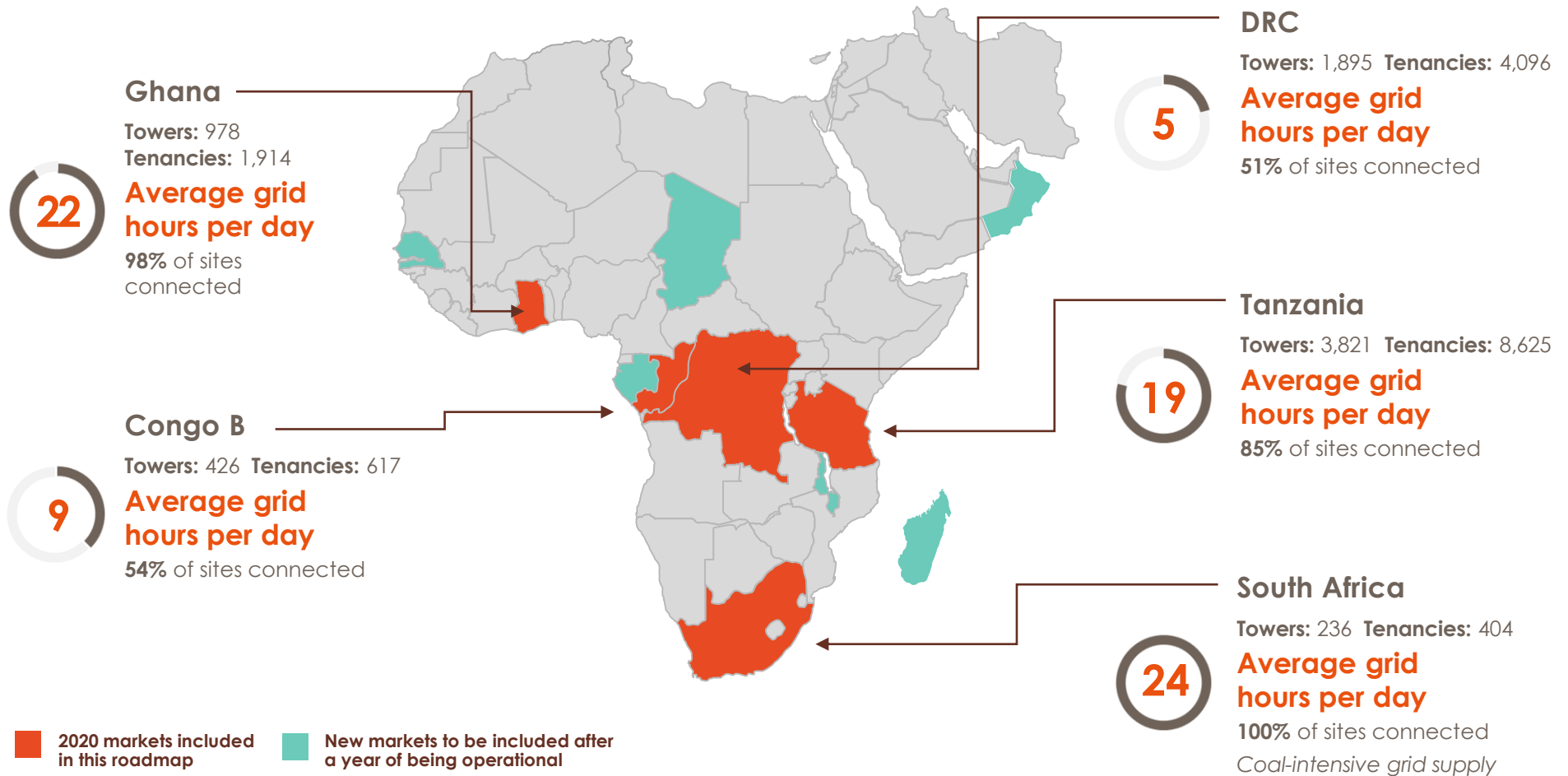
Access to electricity³ 



GDP per capita ⁴		
\$1,486	\$34,114	\$63,544

1: [World Bank Database](#)
 2: [World Bank Database](#)
 3: [World Bank Global Electrification Database](#)
 4: [World Bank National Accounts Data](#)

Grid connectivity varies between our markets



Data on this slide reflects our 2020 position; the baseline for our carbon target.



Our 2030 target and roadmap

Our carbon footprint

Our 2030 carbon target initially focuses on **scopes 1 and 2**, where we can make the most material impact



Scope 1

Includes generator diesel and vehicle petrol/diesel

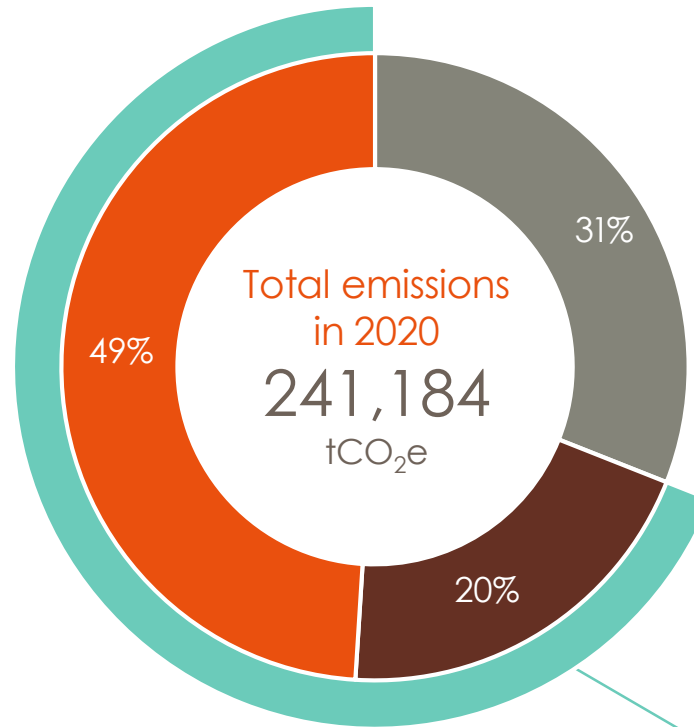
98.8%
of our scope 1
is fuel for our towers



Scope 2

Includes tower grid electricity and office electricity

99.6%
of our scope 2
is tower electricity



Scope 3

Includes Well-to-tank/ Transport & Distribution; Purchased Goods and Services; Downstream Leased Assets; Freight and Business Travel

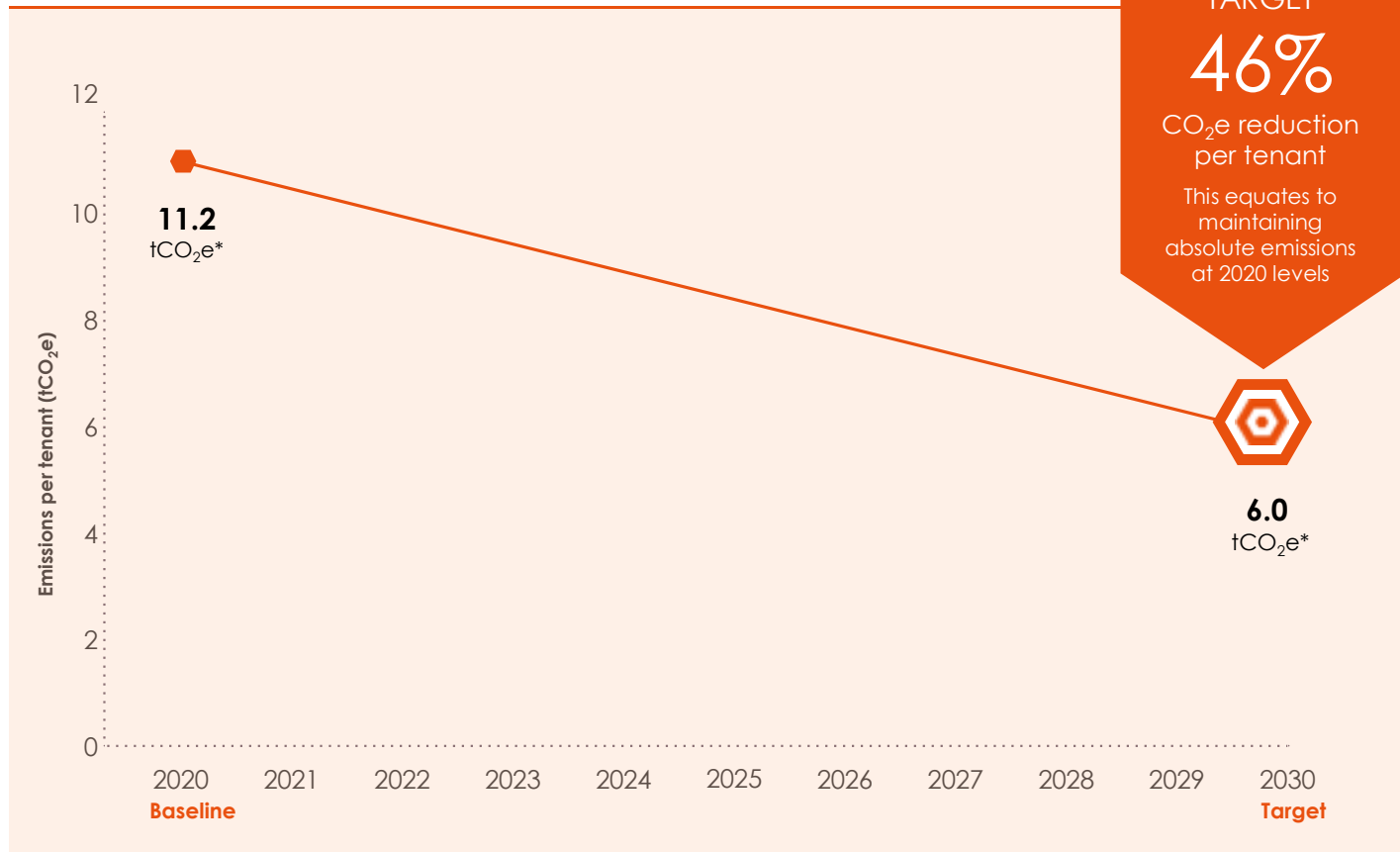
68.5%
of our scope 3 is from
the production and
processing of fuel for
our towers

Total scope 1 and 2
emissions:

166,467 tCO₂e

Our 2030 target

Our carbon reduction intensity target per tenant



Annual target review

Our current target covers Tanzania, DRC, Ghana, Congo B and South Africa¹.

As we expand into new markets and collect operational data for a full year, we will review the baseline for our target.

We will also continually reassess our target as guided by the science to transition towards a low-carbon future.

* The five markets where we were operational for the full year of 2020. Our 2030 carbon target initially focuses on scope 1 and 2 emissions.

Our roadmap

Our journey so far



2016 to date

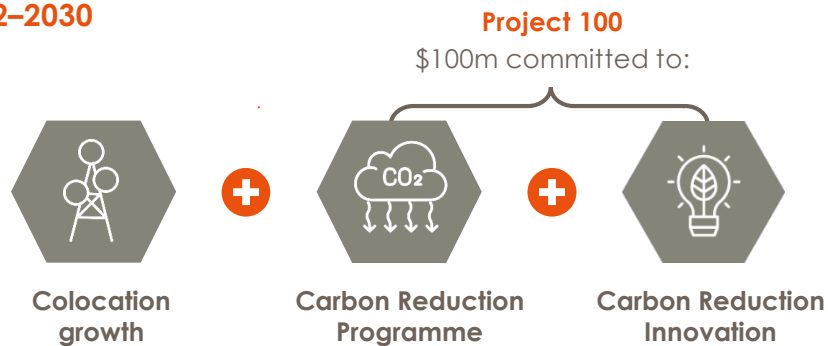
- Roll-out of hybrid, solar and grid connectivity projects.
 - Carbon footprint data analysis and reporting for 2018–2020.
- 2021:
- Board and business-wide engagement on carbon reduction.
 - Identified climate risks and opportunities.
 - First response to the CDP climate questionnaire.



How we will achieve our target



2022–2030



Strategic partnerships
with our customers and suppliers for low-carbon solutions

Enablers

Supportive policy environment



Proliferation of grid electricity



Innovation in battery and solar solutions

Our long-term ambition

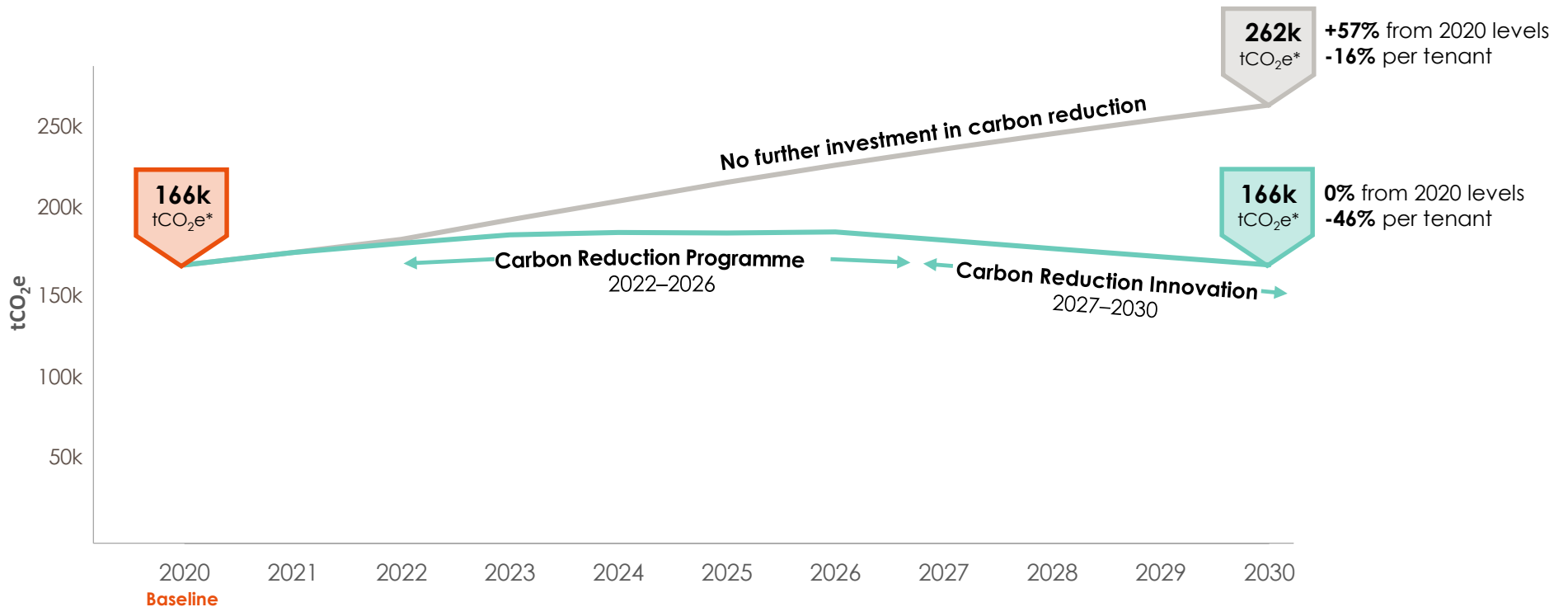


2040

Net zero carbon emissions

Maintaining absolute emissions while growing our business

Absolute emissions (scope 1 and 2)



* This is the total of our 2020 scope 1 and 2 emissions.

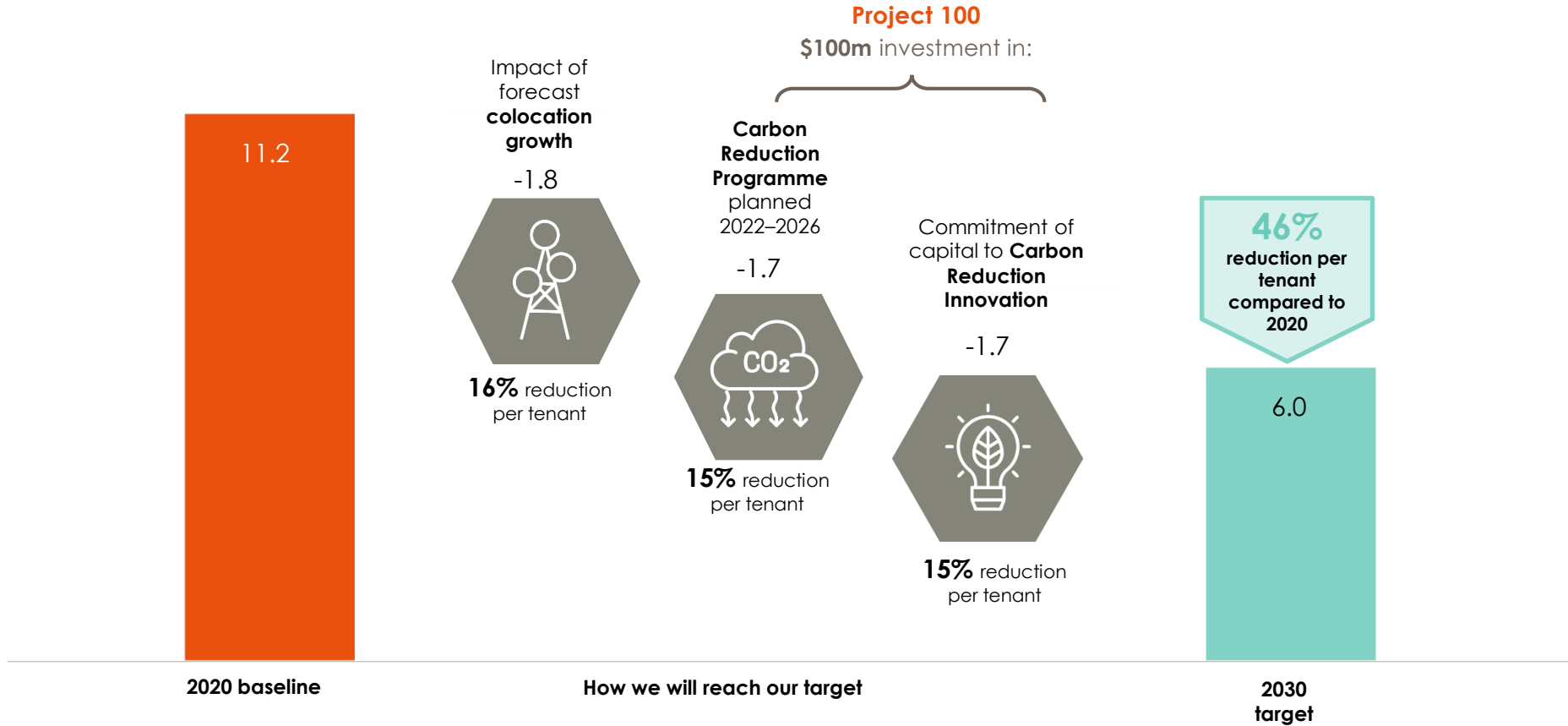
The data on this page is based on five established markets which were fully operational in 2020. Baseline emissions forecast should not be construed as a financial forecast.

Our carbon reduction strategy



Carbon reduction pathway

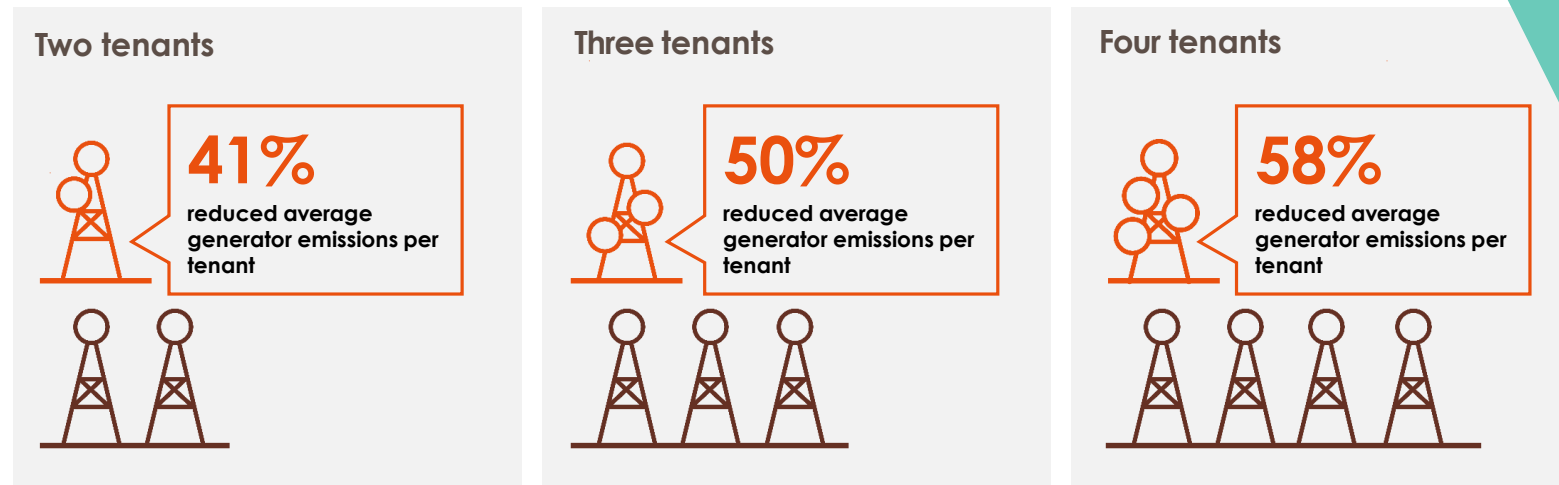
Emissions per tenant tCO₂e



Increasing collocation at our towers

Collocation means that only one generator or power supply is needed to cater for multiple tenants, minimising maintenance visits and saving thousands of kilometres driven a month.

The more tenants per tower, the lower the emissions per tenant:



■ Collocation basis ■ One tenant per tower basis

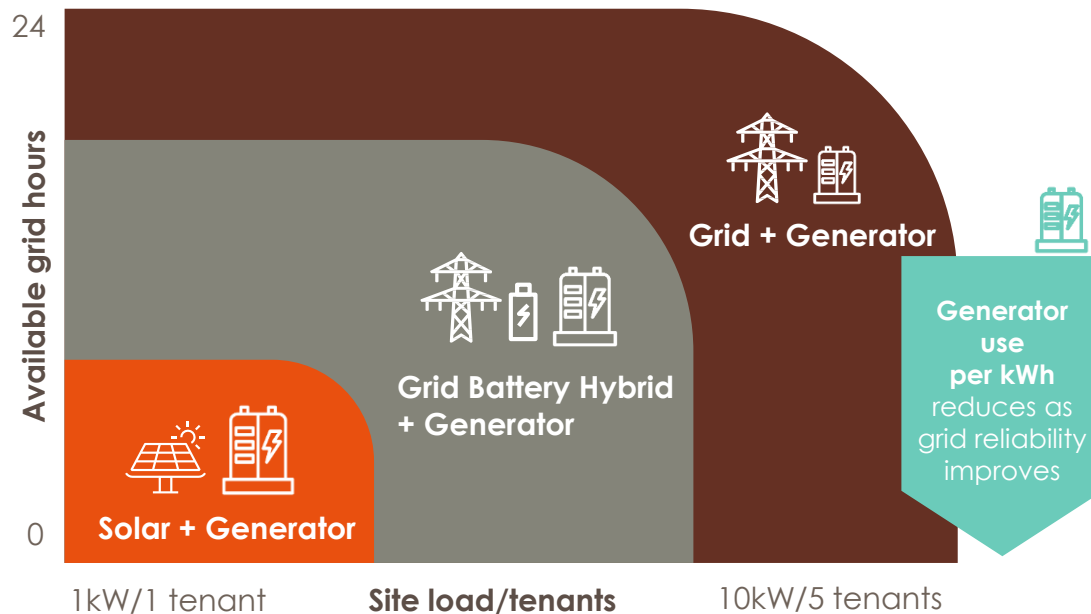


By reducing emissions from our towers, we are helping our customers to reduce their indirect emissions.

Power solutions on our sites

Our dedicated Performance Engineering team continually reviews the most environmentally friendly and cost-effective solutions for each site – balancing site design and power needs.

We aim to maximise use of grid, hybrid and solar solutions wherever possible and reduce our fuel consumption.



Solar solutions are optimal at single tenant sites in rural, off-grid sites

Powering a **two-tenant site** with solar would require the space equivalent to a **tennis court**



Project 100: Carbon Reduction Programme (2022–2026)

Underpinned by our Business Excellence Programme



Optimising grid utilisation

Improving usage of the grid at our sites where the grid is unstable.



Increase battery usage

At off-grid and limited-grid sites, longer-life lithium-ion batteries reduce generator run time.



Connecting to the grid

Connecting off-grid sites to grid supply through national grid providers and private electricity companies.



Using solar solutions

Solar solutions are optimal for off-grid and limited-grid tower sites.



>70%

sites will have hybrid and solar solutions by 2026

(31% in 2020)

Project 100: \$100m investment in carbon reduction and innovation from 2022-2030

Project 100: Carbon Reduction Innovation (2027–2030)



Hydrogen fuel cells



New technologies
e.g. super capacitors



Alternative fuels



Large-scale solar farms



Wind technology



Mini-grid community projects



Bloomberg forecasts that by 2030 the cost of lithium-ion batteries will decrease by **62%***

Project 100: \$100m investment in carbon reduction and innovation from 2022-2030

[*S&P Global Market Intelligence](#)

Helios Towers plc



Looking ahead to net zero by 2040

Key activities in 2022



Strategy and reporting

Rebaselining target to include Senegal footprint.

Build on our first response and use CDP as a framework for developing our strategy.



Stakeholder engagement

Engage with our customers and suppliers on their reduction strategies and targets.

Explore offsetting projects which support underserved tower communities.



Risk and climate scenario analysis

Evaluate future opportunity and risk to our operations from climate change.



Renewable energy

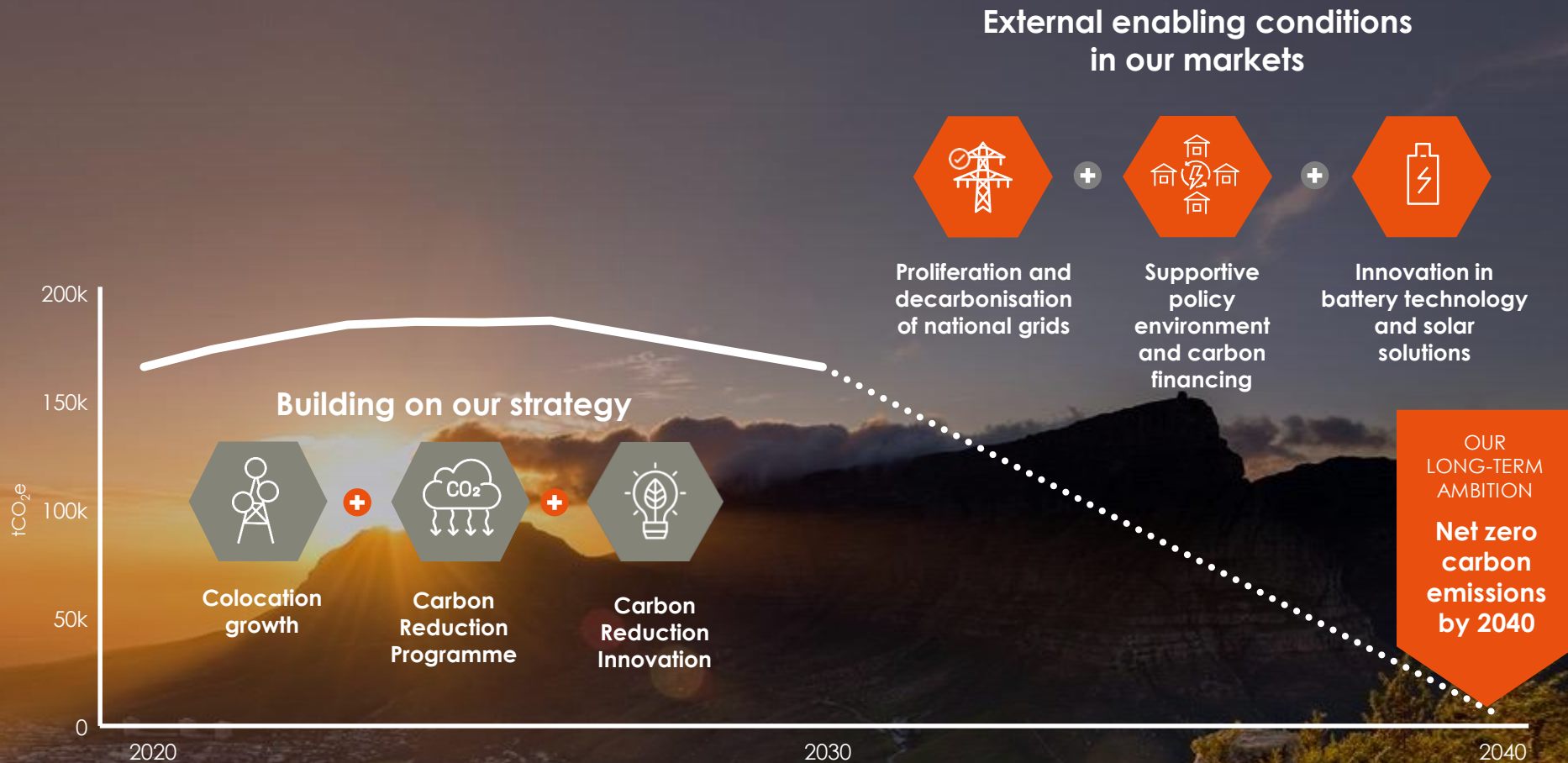
Assess the options to decarbonise the electricity we consume and encourage more renewable energy production in our markets.



SBTi Net-Zero Standard

Assess requirements and feasibility for the SBTi's first global standard for net zero.

Looking ahead to net zero by 2040





Q&A

We look forward to sharing our progress and developments on our carbon reduction journey.

Thank you



www.helios Towers.com