Imagine Possible

Breaking the energy curve

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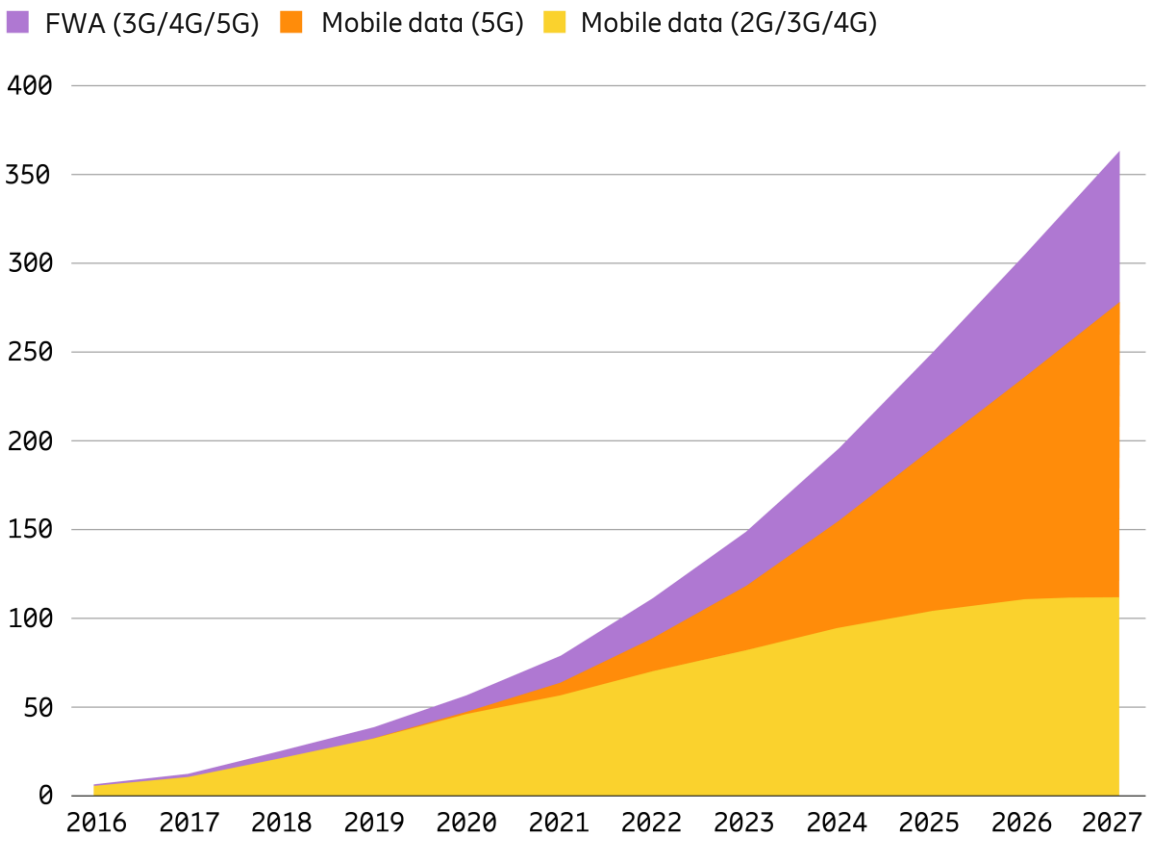
Mobile data consumption continue to grow

Global mobile data traffic (EB per month)



40%

Mobile network data traffic grew 40 percent during the last year

69%

Video accounts for 69% of mobile data traffic, expected to grow to 79% by 2027

130%

By 2027 5G will carry 1.3x more traffic than all 2G/3G/4G mobile networks

2x

FWA connections will double by 2027, traffic in 2022 accounts for 20% of total mobile data

5G measurements with Speedtest®

Source: Ericsson analysis on Speedtest Intelligence® data from Ookla®

2019

5G in numbers

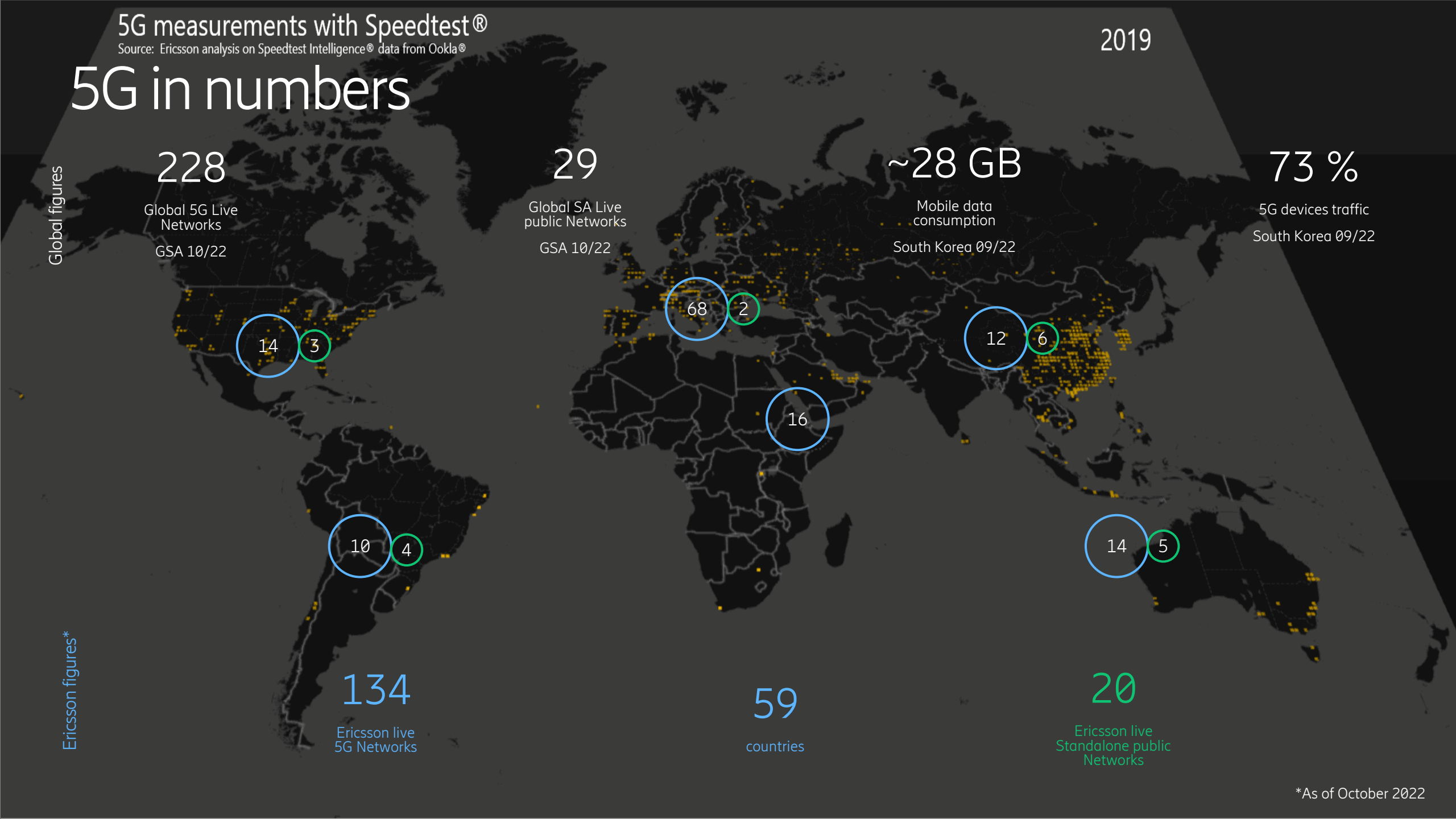
Global figures

228
Global 5G Live Networks
GSA 10/22

29
Global SA Live public Networks
GSA 10/22

~28 GB
Mobile data consumption
South Korea 09/22

73 %
5G devices traffic
South Korea 09/22



Ericsson figures*

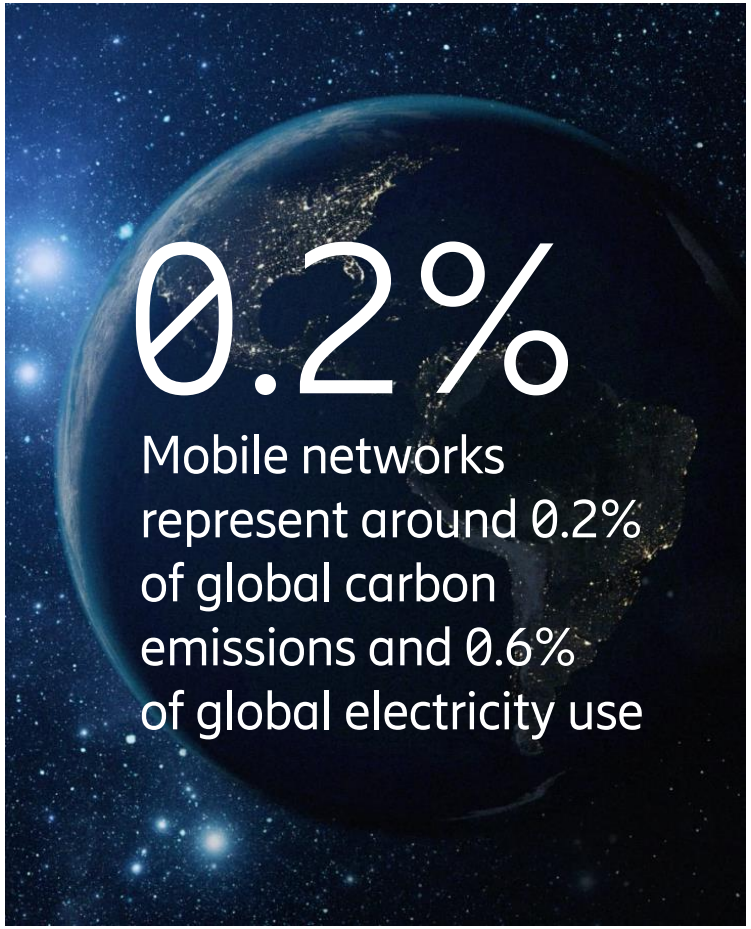
134
Ericsson live 5G Networks

59
countries

20
Ericsson live Standalone public Networks

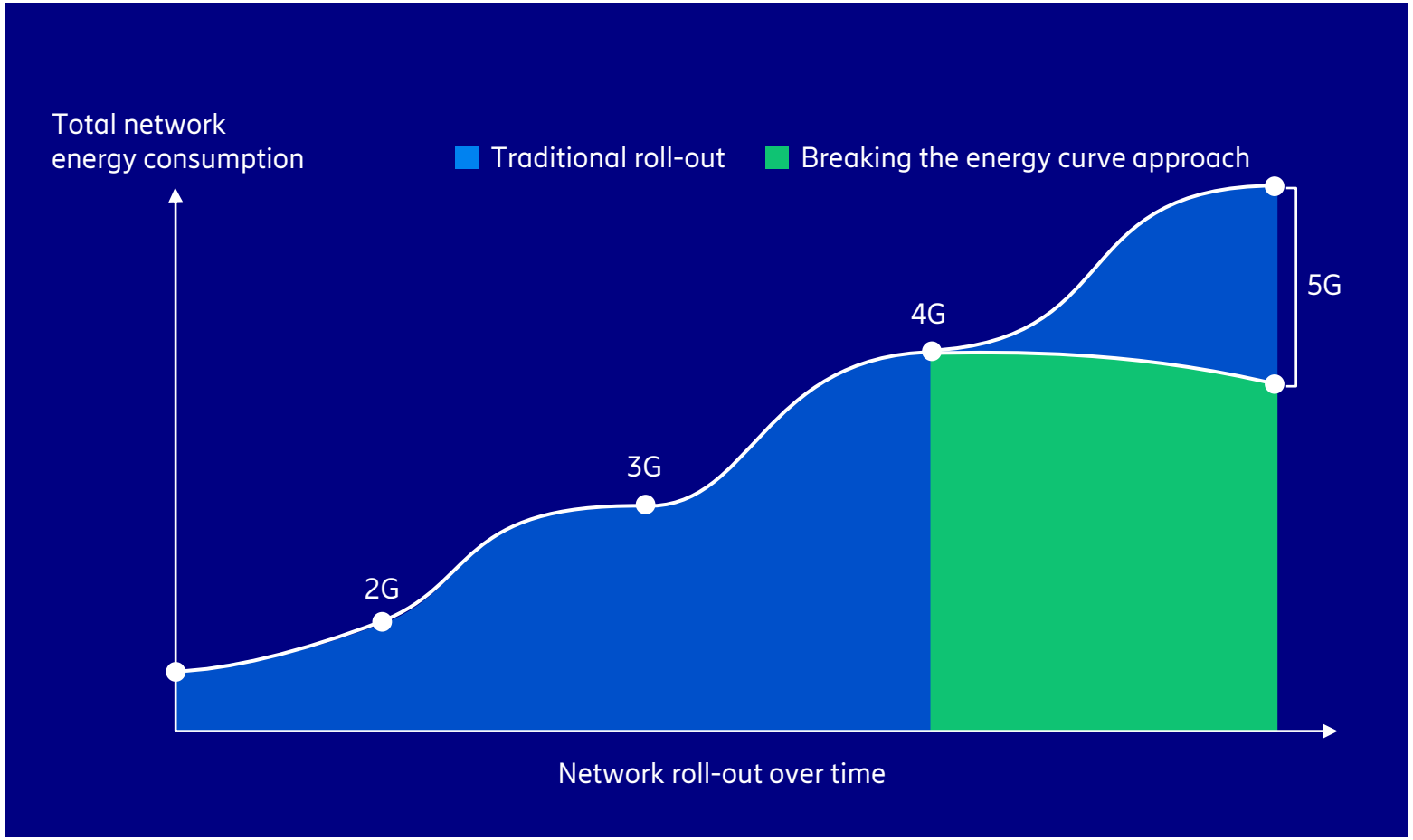
*As of October 2022

Enabling Net Zero



In order to reach Net Zero, it is important to reduce energy consumption and **break the curve**

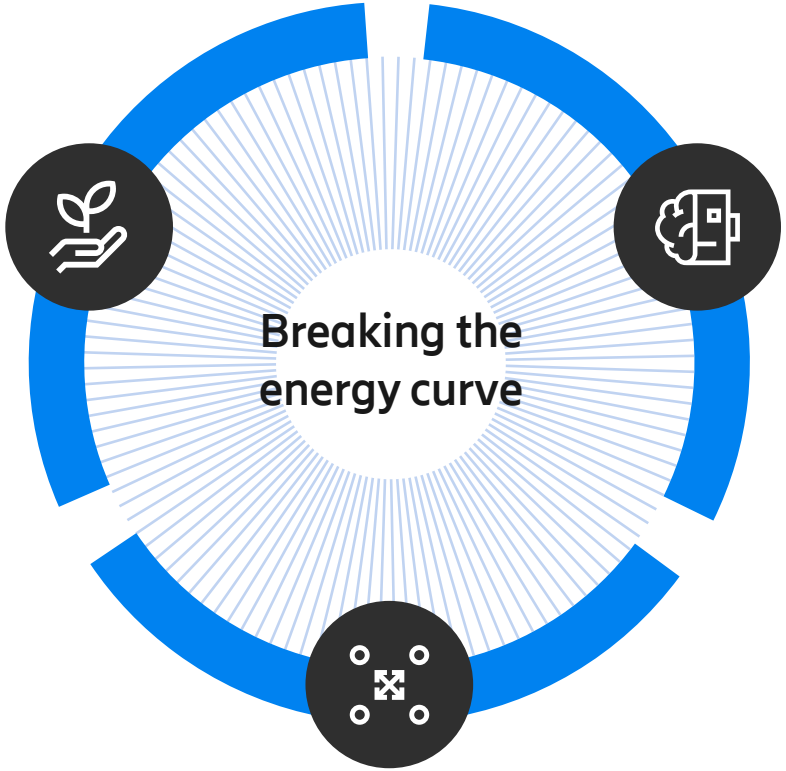
Breaking the energy curve



Ericsson holistic approach

1. Sustainable network evolution

Embrace a holistic view for network planning and operation



2. Operate intelligently

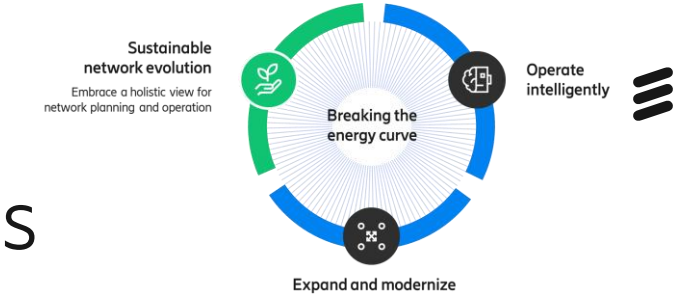
Leverage AI/ML and automation to boost energy savings

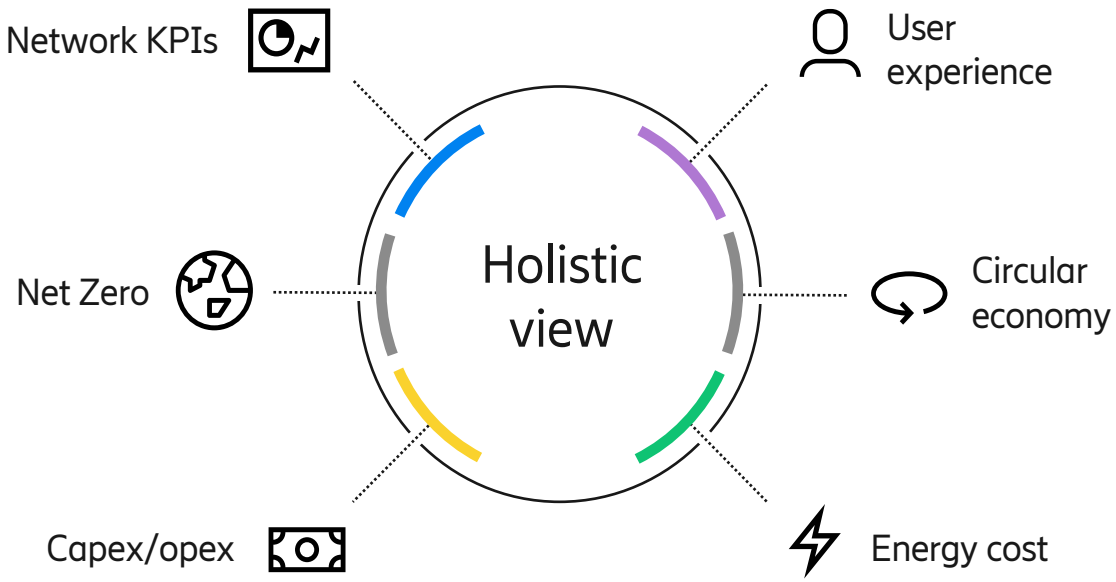
3. Expand and modernize

Modernize existing network while scaling up 5G

Sustainable network evolution

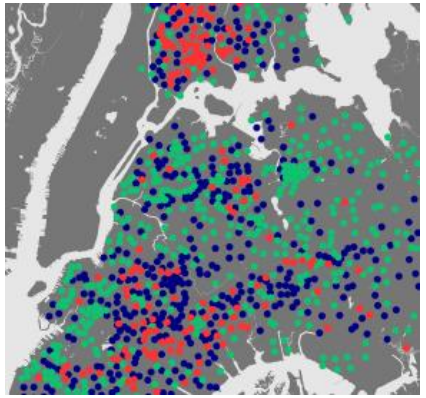
Meeting business targets and sustainability ambitions





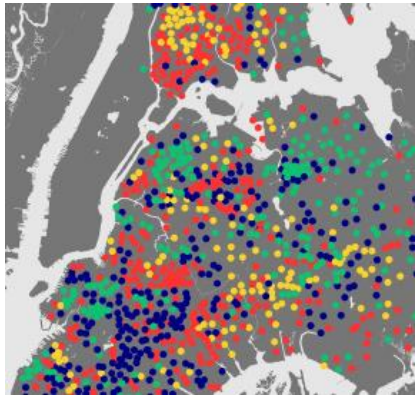
Traffic segment
% total data volume

25% 50% 25%

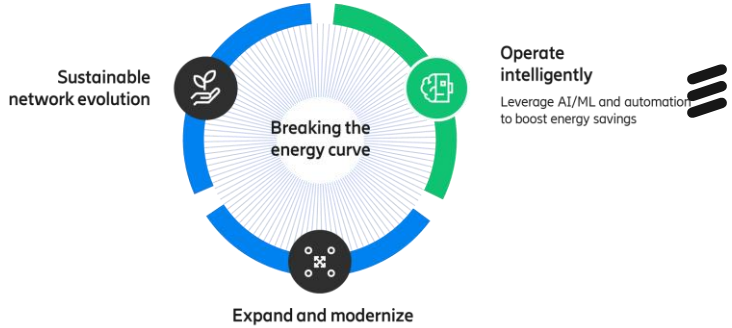


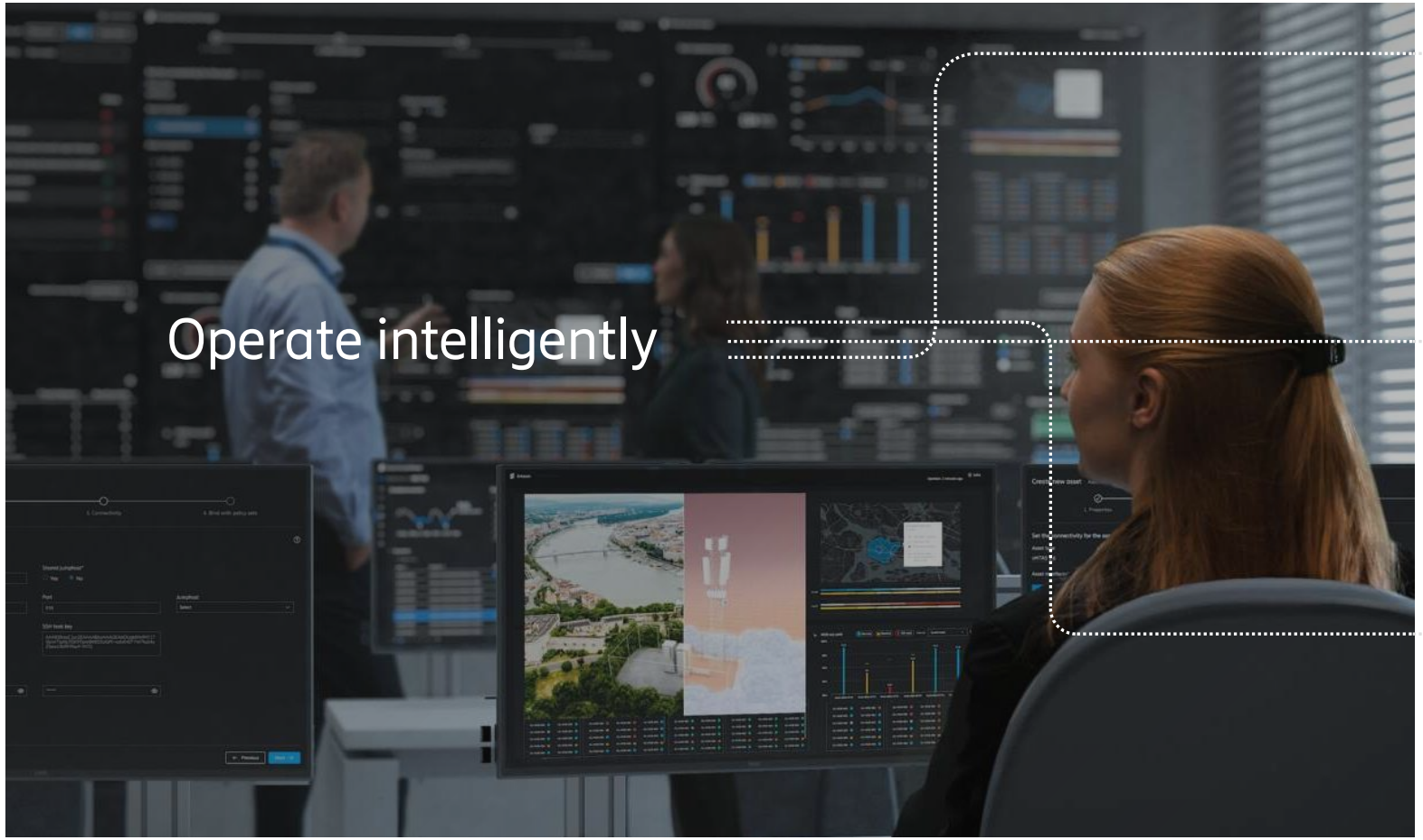
User experience
Time-to-content

Poor Fair Good Great



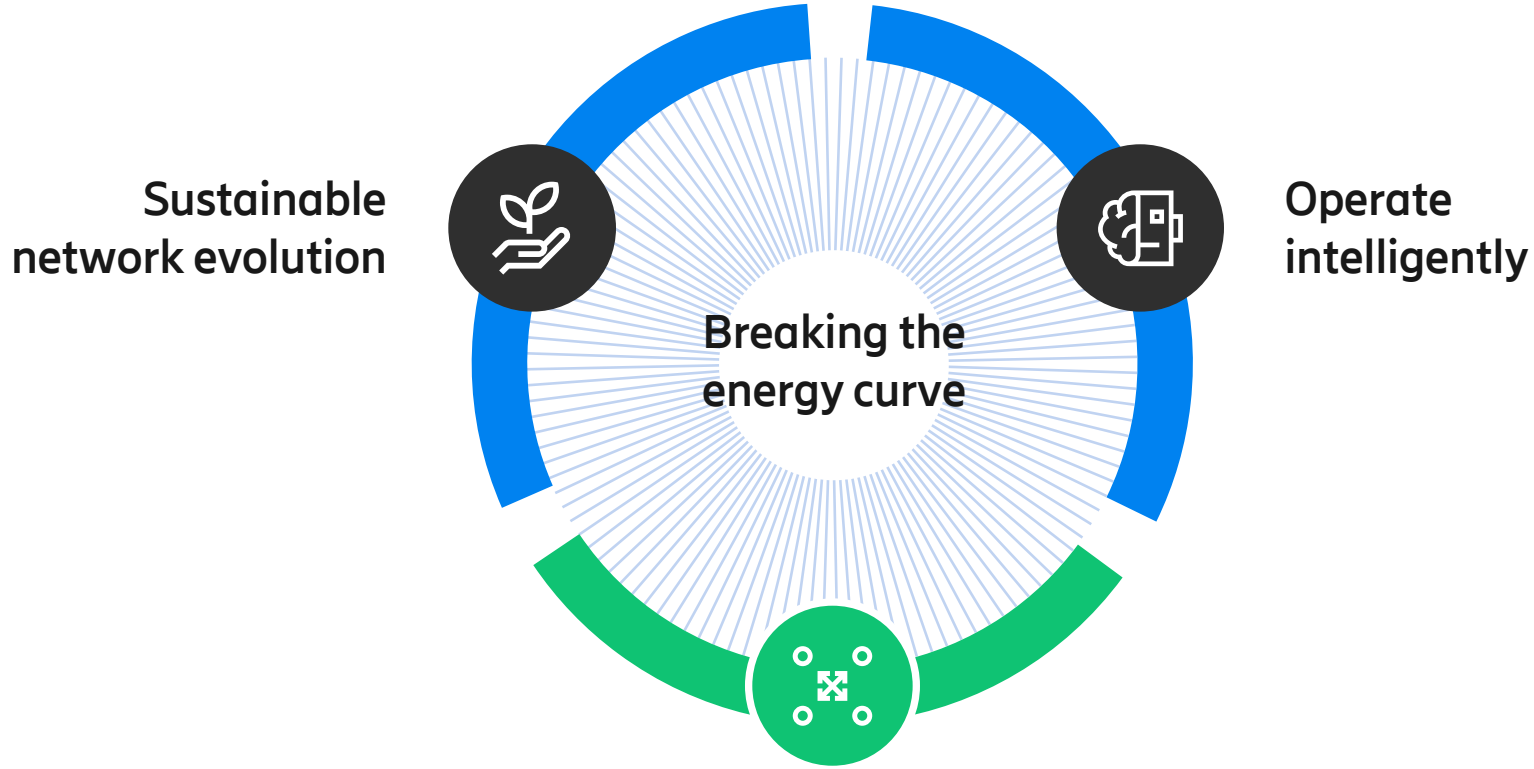
Operate intelligently
3 pillars for sustainable network operation





- Maximizing the power of data to boost automation
- Working holistically on energy-saving actions whilst keeping the user experience at optimal levels
- Achieving sustainable operation through predictiveness, automation and orchestration

Expand and modernize



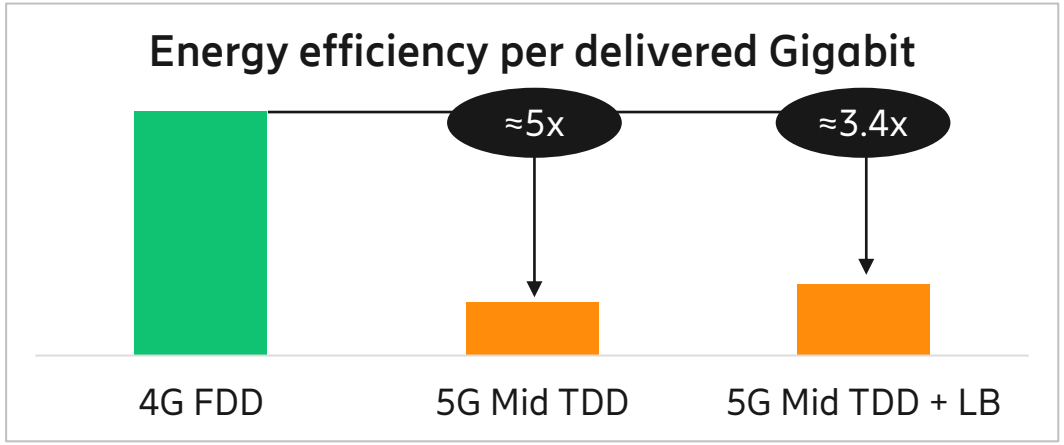
5G is the most efficient 3GPP technology

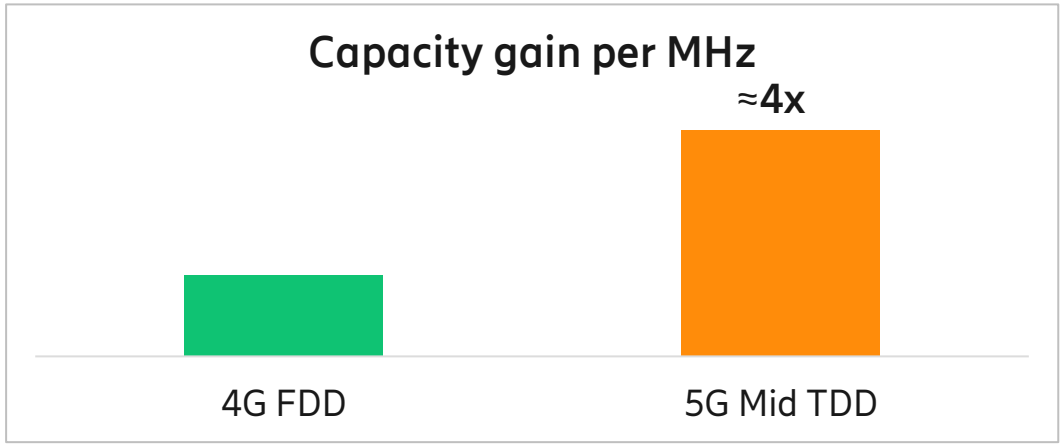
5X

5G TDD with M-MIMO is 5x more efficient than 4G FDD in energy consumption per GB transferred

4X

5G TDD with Massive MIMO carries 4x more traffic per occupied MHz than 4G FDD

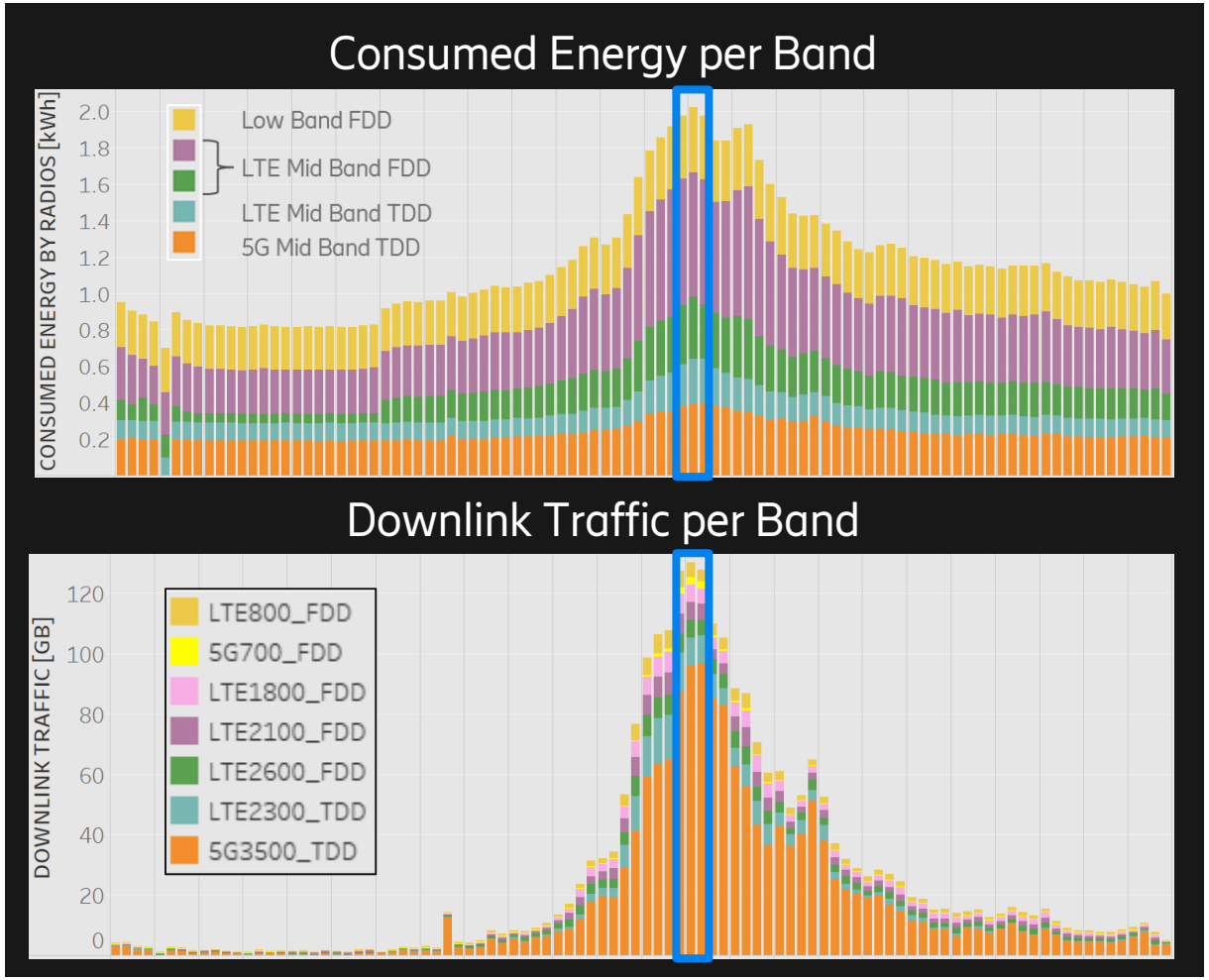


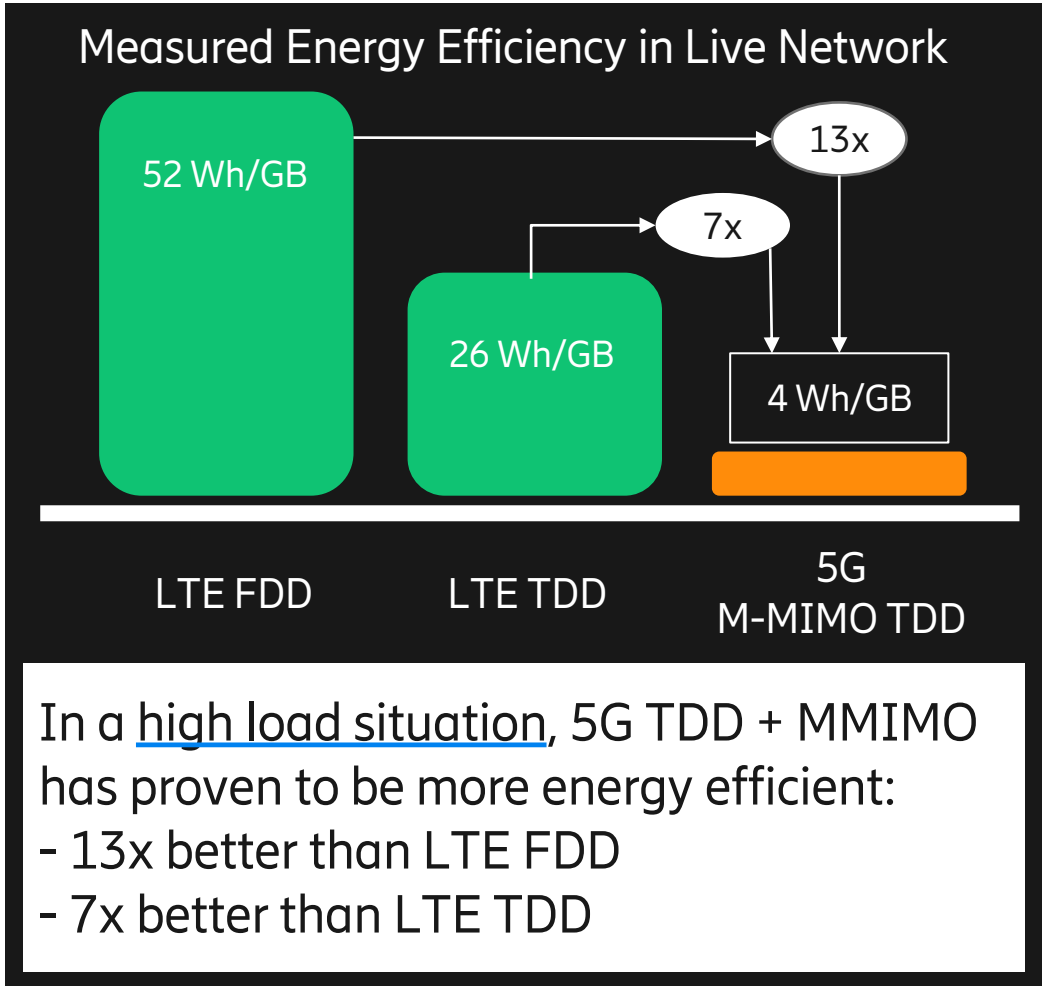


Capacity simulations with min. user throughput of 10Mbps at cell edge and considering ISD=500m, 2T4R radio for Low Band (2462), 4T4R radio for Mid Band (4480) and 32TRX MMIMO for Mid Band TDD 3.5GHz (3227)

Energy Efficiency with 5G TDD + Massive MIMO

Massive live event in Central Europe July 2022 – High Load





In a high load situation, 5G TDD + MMIMO has proven to be more energy efficient:
- 13x better than LTE FDD
- 7x better than LTE TDD

Radio portfolio efficiency on the rise

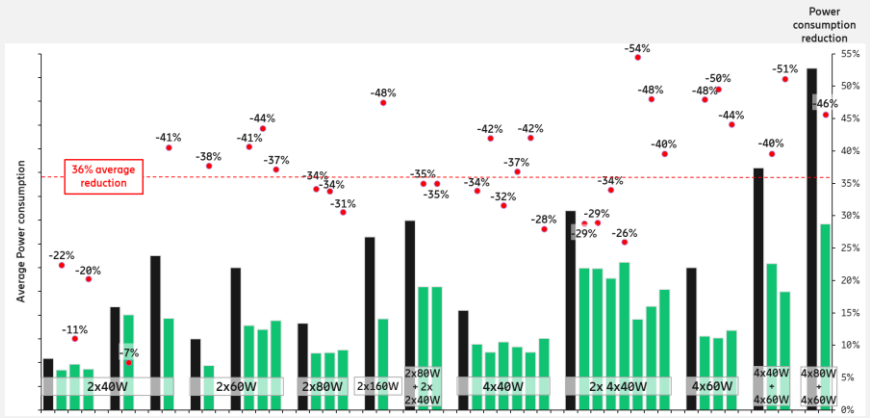
So far …

Targets

36%

Science Based Target

Energy saving in Ericsson Radio System vs. legacy portfolio by 2022. (baseline 2016)



Results

36%

Energy saving

41%

Energy saving with Micro sleep Tx

2025 ambition

Aim to reduce radio site energy consumption by

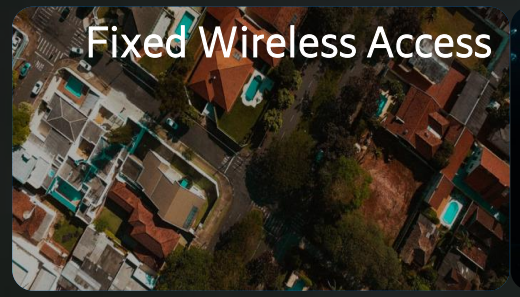
(from 2021)

~40%

By supporting a shift to renewable energy, we anticipate radio site emissions reductions up to

~70%

5G Innovation Platform



Consumer

- Gigabit Broadband (fixed wireless)
- Video
- Connected Car
- AR Gaming
- Interactive (AR/VR) Entertainment

Enterprise

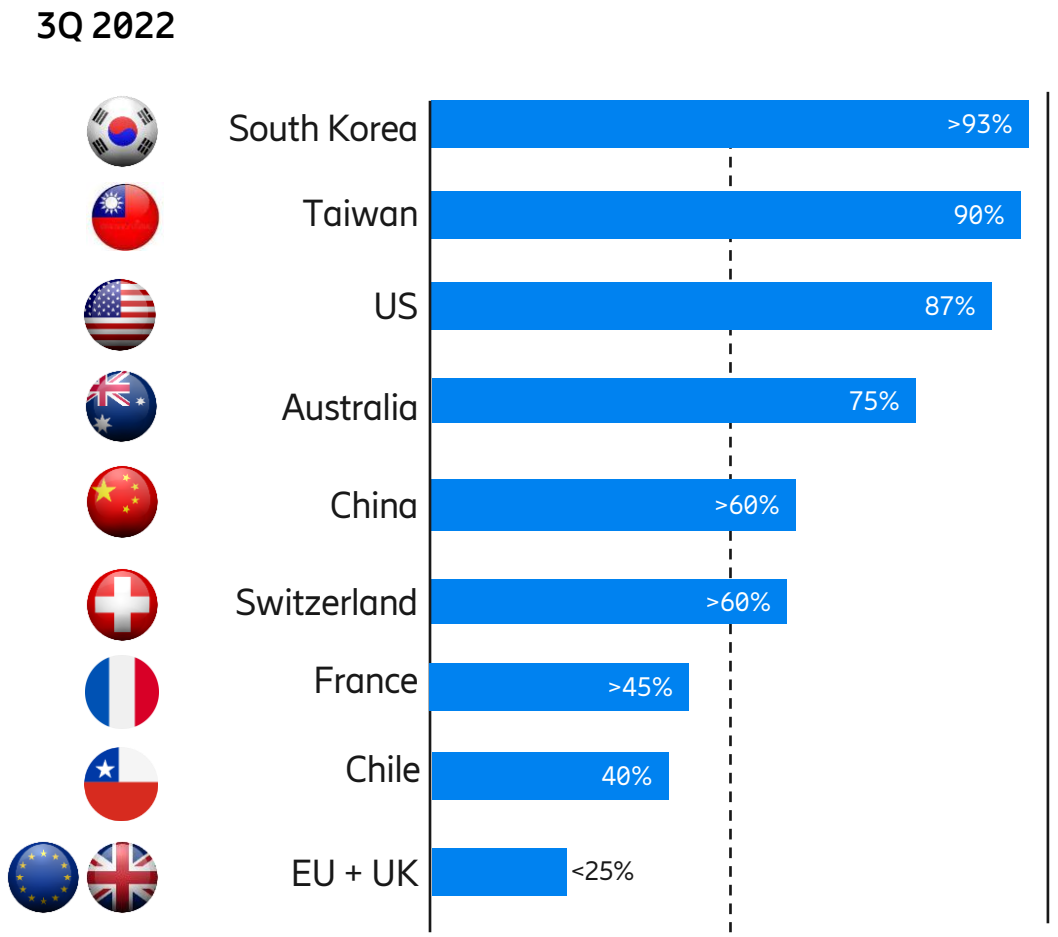
- AR On-Job-Support and Training
- Smart Agriculture
- Industrial Control, Automation, & Robotics
- Video & Drone Surveillance

Mission Critical

- Public safety
- PKD
- Rail
- Utilities

5G mid-band TDD deployment updates

% of covered population



Imagine Possible

"Sustainability and corporate responsibility are integral to Ericsson's strategy and initiatives in this area are underpinned by our strong focus on responsible business across the value chain."

Börje Ekholm
Ericsson President and CEO

ericsson.com/breaking-the-energy-curve