Nachhaltige Digitalisierung @ DTAG

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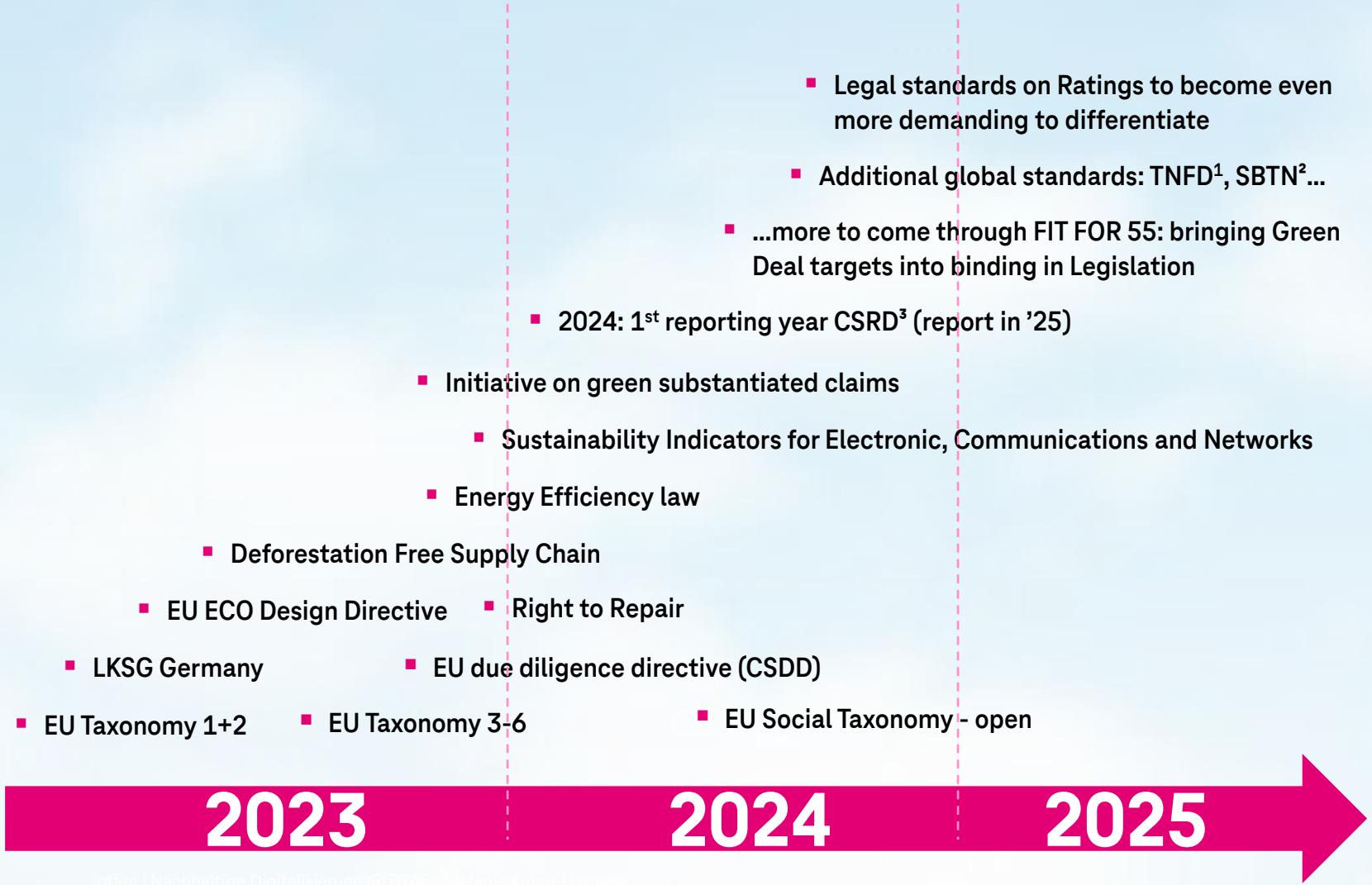
ESG requirements & expectations will gain tremendous momentum 2023-2024

- Climate Crisis and Social Divide are not only showing its effects directly but also in terms of requirements for companies going beyond the EU Green Deal.
- KPIs, reporting demand and depth is growing exponentially in the coming years
- Digital product requirements are tailored to meet green & social needs with overlapping regulations



Leading Digital Telco embraces sustainability

Grow

Lead in digital life & work

Best convergent networks+ & perfect service

Lead in business productivity

Software-defined, secure, global networks, IoT & digitalization

Magenta Advantage

New business models based on DT assets

Build & scale Telco as a platform

Cloud-based customer and network-service platforms

Best-in-class integrated network infrastructure – DT & partners

Save for growth investments

Simplify, digitalize, accelerate & act responsibly

Our ESG-based strategy with our key ambitions

Environment

BUILDING A CLIMATE NEUTRAL FUTURE

Leading the way with **net-zero GHG emissions by 2040** and **enabling customers and society** to follow towards net-zero

STRIVING FOR FULL CIRCULARITY

Becoming **fully circular around technology and devices by 2030 along the whole value chain**

Social

BEING THE BEST TEAM IN THE INDUSTRY

Becoming an **employer of choice, promoting diversity equity & inclusion (DE&I)** in our teams and **investing into future skills**

SHAPING THE DIGITAL SOCIETY

Overcoming the digital divide and enabling society, while **making the digital world a safe and tolerant space for everyone**

Governance

GOOD CORPORATE CONDUCT & INTEGRATED INTO STRATEGY, TARGETS AND GOVERNANCE SYSTEMS

You manage what you measure – constant steering & measuring of progress towards sustainability targets

Our carbon footprint & targets for DT Group

CLIMATE AMBITIONS
(in line with SBTi* requirements)

2021 **Renewable electricity**
as of 2021

2025 Reduce **direct and indirect emissions** from within our company to net-zero (Scope 1-2)

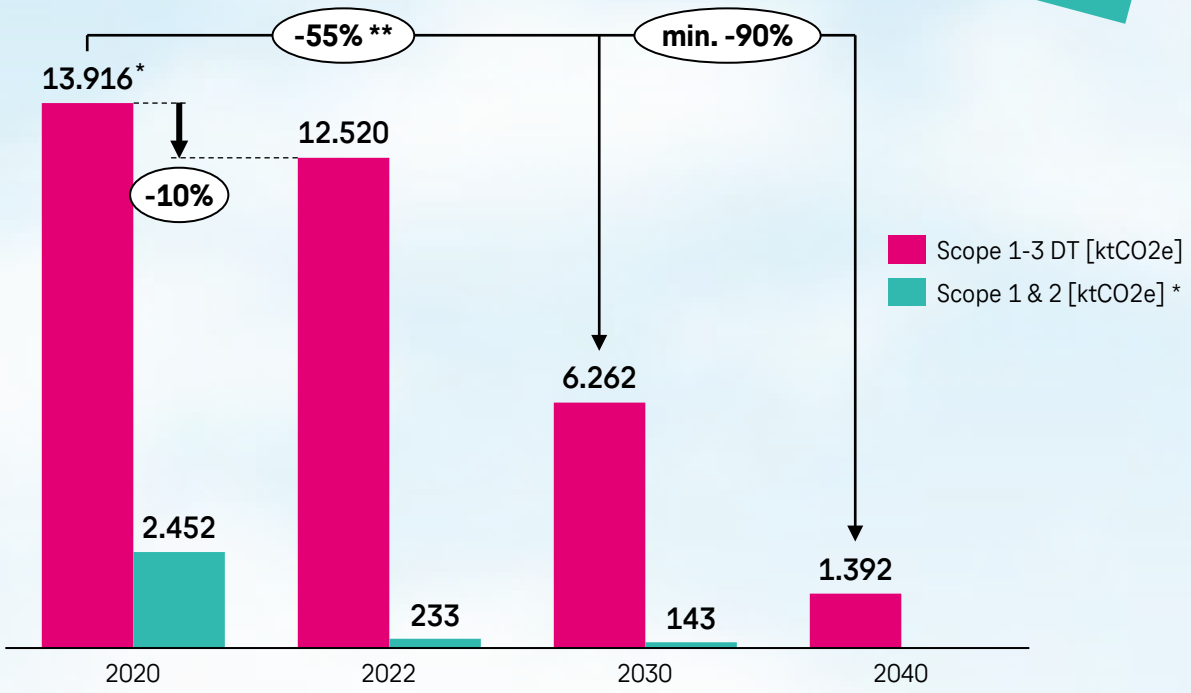
2030 NEW Reduce **Scope 1-3 Emissions by 55%** against 2020 **by 2030**.

2040 **Climate-neutral company**
Reduce **Scope 1-3 Emissions to Net Zero**

NEW (with at least 90% reduction)

NET-ZERO REDUCTION PATHWAY

All Scope 1+2 emissions will be set climate neutral through offsetting from 2025 & Scope 3 as of 2040.



* Interim objective
** excluding emissions generated during the utilization face of our solutions by devices that our customers purchase from 3rd party and not from DT

The climate and resource impact of digitization

Digitization is told to enable significant climate and resource savings

The enabling potential of digitization is estimated to 10% and even 20% on CO_2 savings as well as significant resources and materials reduction.

Smarter 2030 studies show, that digitization is a significant contribution to reach the SDGs (> 50%)

Bitkom climate study: CO2 savings potential through digitization is enormous

But digitization needs to be green within itself to avoid negative impacts and rebounds

- The sector is already at 1,8-3,9% of worldwide energy demand*
- Estimated to be up to 20% of worldwide energy consumption in 2025 for industry due to AI and blockchain**
- Digitization intensifies the need for central and decentral data center architecture (cloud, edge etc.) and drives resource needs for energy, hardware and water
- Waste handling for digitized products still underdeveloped in terms of circularity

Significant technology innovations needed to drive a green digitization

* Overtaking flight sector, place 3 if it was a country– supposed to grow to 8-12% in next years
** climate data news

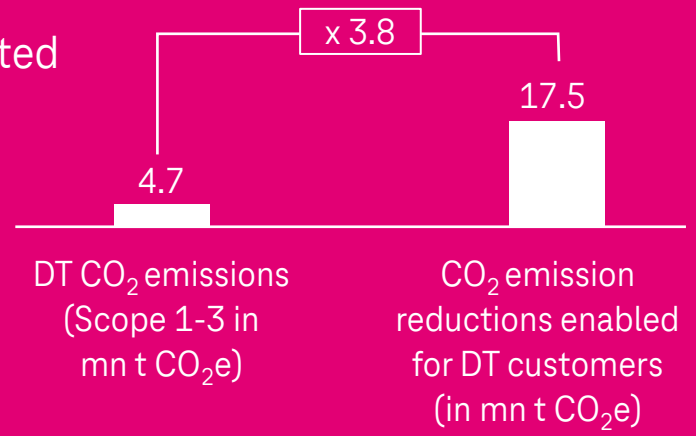
How we measure our impact from digital solutions

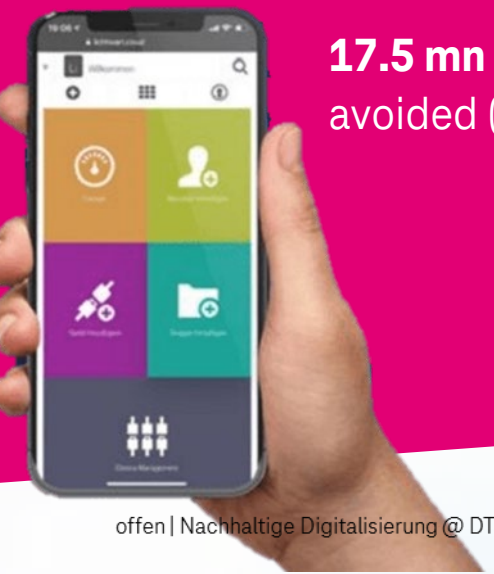
Digitization is a key enabler for sustainability

DT's enablement factor

3,8x more CO_2e
avoided than emitted

17.5 mn t CO_2e
avoided (DE only)





TSI EU DE

DT offers a variety of up to 35 different ICT solutions with dedicated impact measurement, e.g.

Sustainability Management Systems
„Nachhaltigkeitsmanager", Syrah SDG Suite

Industry Solutions
Airport Collaborative Decision Making, Remote Maintenance, Smart Advertising, Videoconferencing

Smart Building & Energy MGT.
Partnering with different solutions on smart metering, waste and other aspects

Using Sustainability Labels & Eco Rating as standards in front of customers:

DT Labels

#GREEN MAGENTA
SAVING RESOURCES THROUGH EFFICIENT TESTING

#GOOD MAGENTA
COMPETENTLY IN THE DIGITAL AGE

Third-party Eco-Labels

BLAUER ENGEL

TÜVRheinland ZERTIFIZIERT
Green Product

Eco Rating

We broaden our B2B portfolio already today

IT AND NETWORKS

Renewable energy/efficient networks

Climate neutral Data Center

DEVICES

Device management

Circular economy

PRODUCTS

Digitital solutions

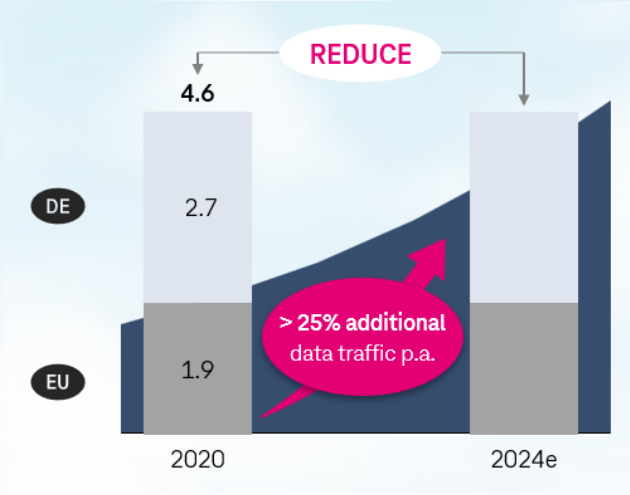
Partners

“Enabling” requires energy efficient networks & green DCs

We will double our energy efficiency!

... to counterbalance effects of data traffic increase of > 25% p.a. and densification

Electricity consumption per region
TWh



RETIRE

Recently PSTN, near-term future SDH, long-term switch from BNG to A4 & potential copper platform retirement

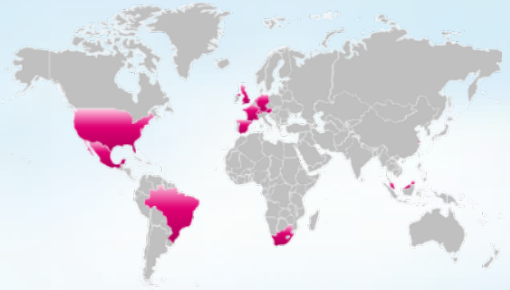
MODERNIZE

- Technology updates
- 3G frequency re-use for 4G/5G
- Cloud transformation in NT/IT

INNOVATE

Network measures, including site sharing & AI steering

Green Datacenter



Reduction of datacenters: from 89 (2012) to 24 (2017) to 16 → savings of 53% CO_2 emissions;	✓
Level Gold LEED[1] certified for manufacturing of datacenters in Biere & Magdeburg	
Member of Climate Neutral Datacenter Pact	
Included in the EU Code of Conduct List; Listing of 75% internal datacenter	

Our most efficient data center with a PUE factor of 1.3 (the average global PUE factor at our T-Systems data centers from 1.85 (2008) to 1.59 (2022)

THANK YOU!

VP GCR

Melanie Kubin-Hardewig