

ITU-WBA webinar: Greening Digital Companies, Monitoring Emissions & Climate Commitments

23 June 2022

Session One:

9:00 - 10:15 CEST/15:00 - 16:15 CST

Session Two:

18:00 - 19:15 CEST/12:00 - 13:15 EDT

The two sessions are to accommodate different time zones.

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Greening digital companies:
Monitoring emissions and
climate commitments



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Framework

Companies

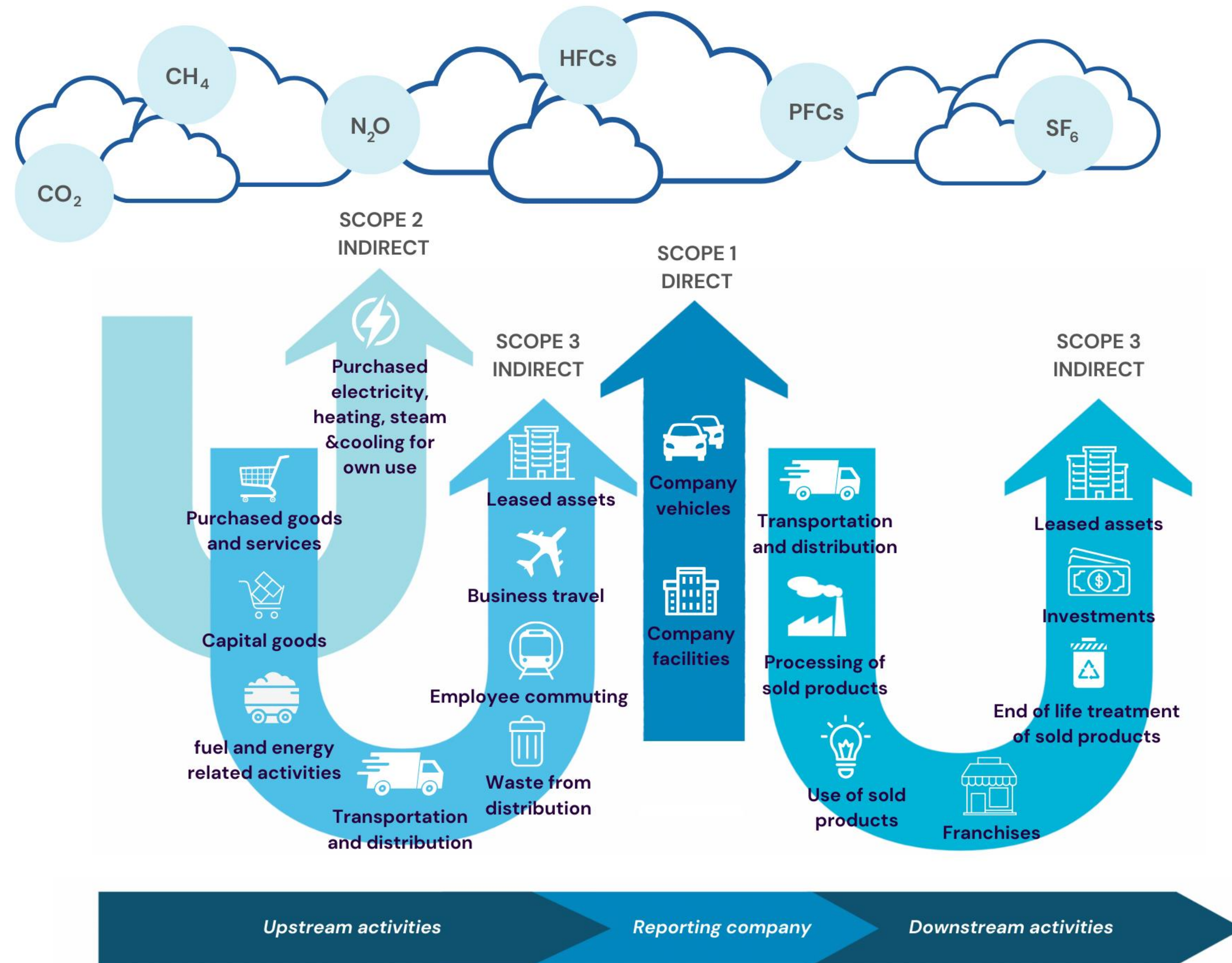
Headquarters	Hardware	Telecom services	IT Services	Total
East Asia	13	18	17	48
Europe	4	25	4	33
North America	14	8	24	46
Other*	0	17	6	23
Total	31	68	51	150

World Bank classification. * Latin America & Caribbean, Middle East & North Africa, Pacific, South Asia and Sub-Saharan Africa

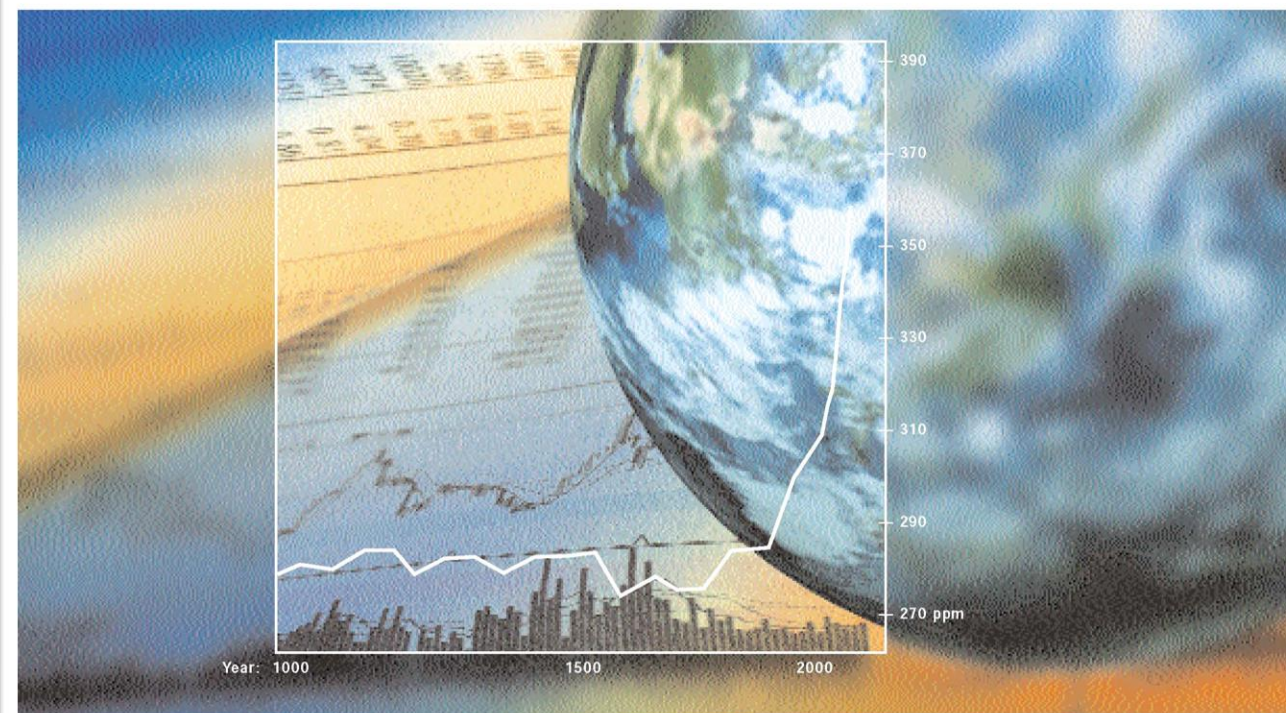


Framework

Methodology



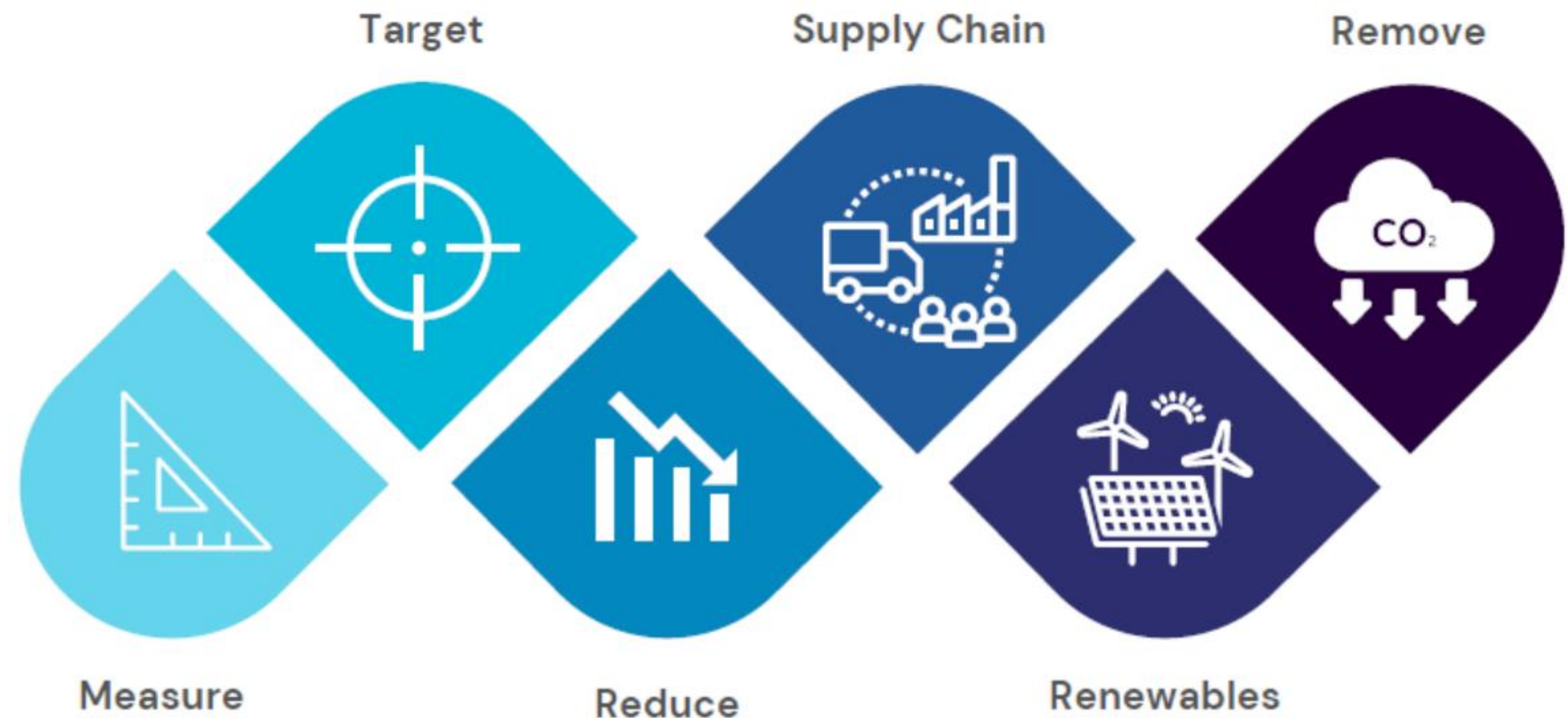
The Greenhouse Gas Protocol



A Corporate Accounting and Reporting Standard
REVISED EDITION



Decarbonization practices of digital companies



Measure

Gap in the availability, depth and transparency of emissions and energy data

- 21 companies report no emissions data
- Scope 2:
 - Some only report market-based Scope 2 emissions.
 - Others report a single Scope 2 figure without specifying if it is market- or location-based
- Scope 3:
 - Some companies not reporting it at all (32/129)
 - Some report only a total
 - Some report only a few categories
 - Some use non-standard terminology
- Sometimes unclear about the use of renewables
- Reporting of offsets is often vague
- Assurance of emissions data increases transparency, comparability and reduces errors

2020 Swisscom climate report
in accordance with ISO 14064

Direct and indirect climate
impact of Swisscom's
activities
(Scope 1, 2 and 3 emissions and
savings)

Climate strategy of Swisscom

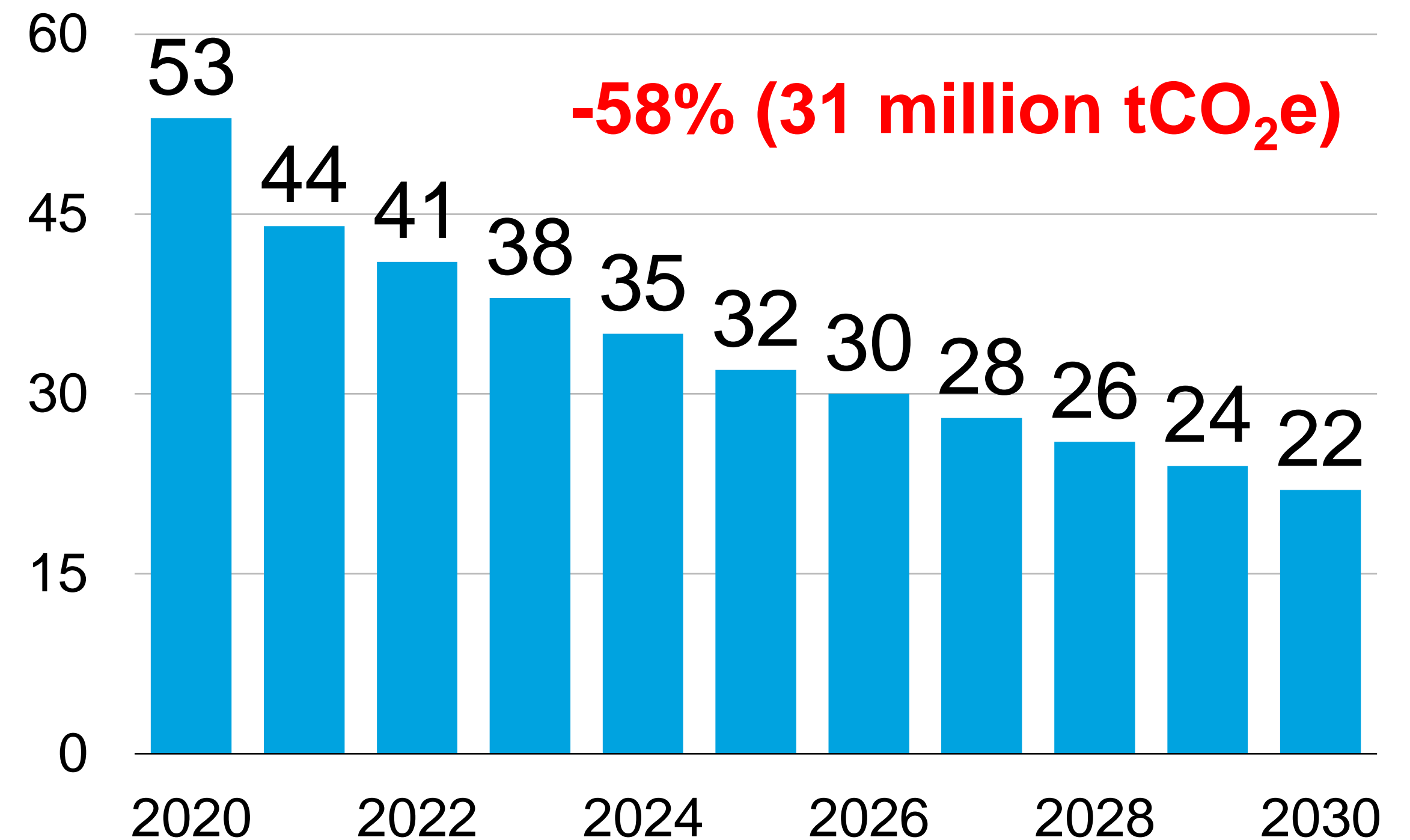


Targets

Vary widely in ambition, scope and measurement

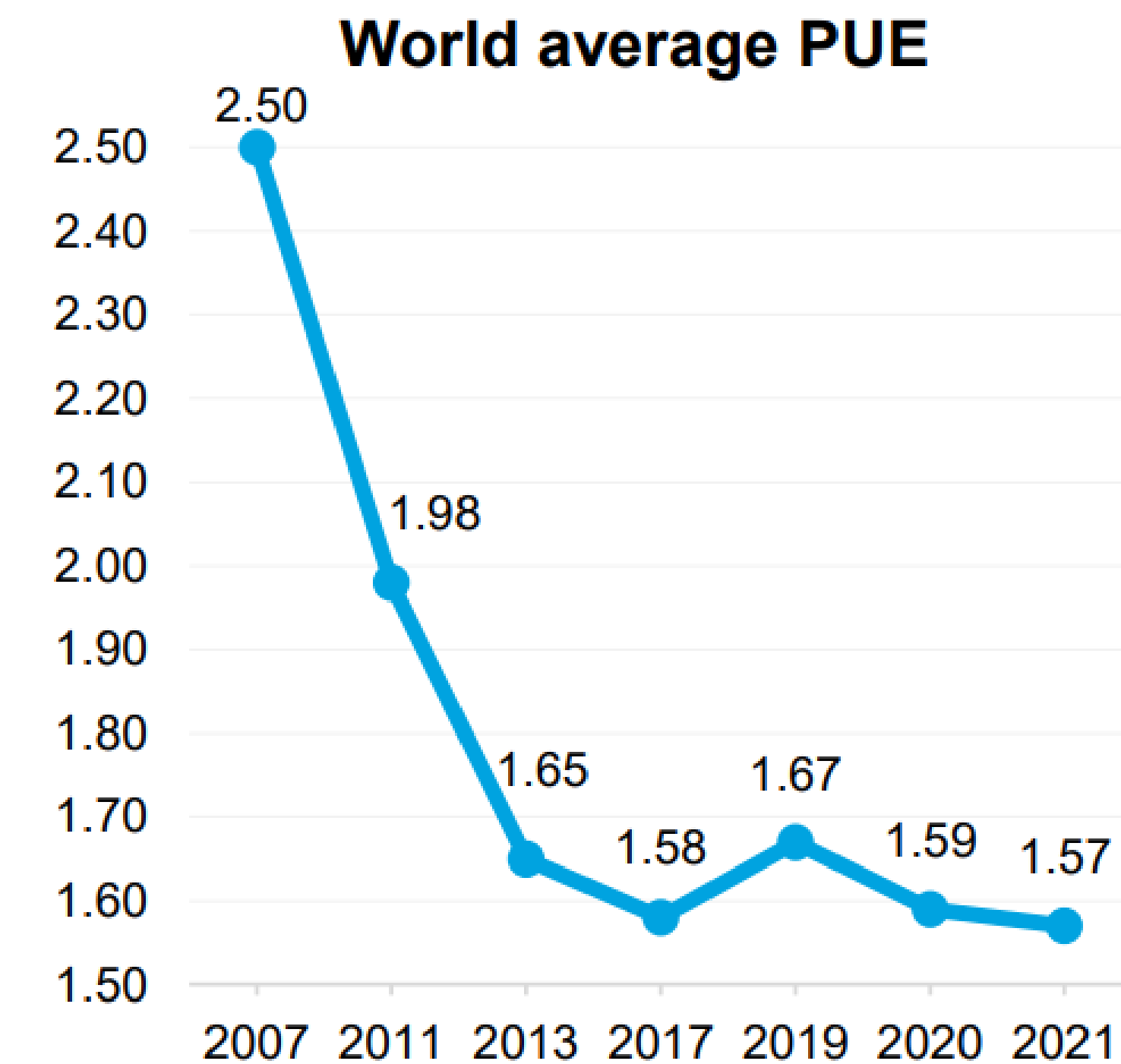
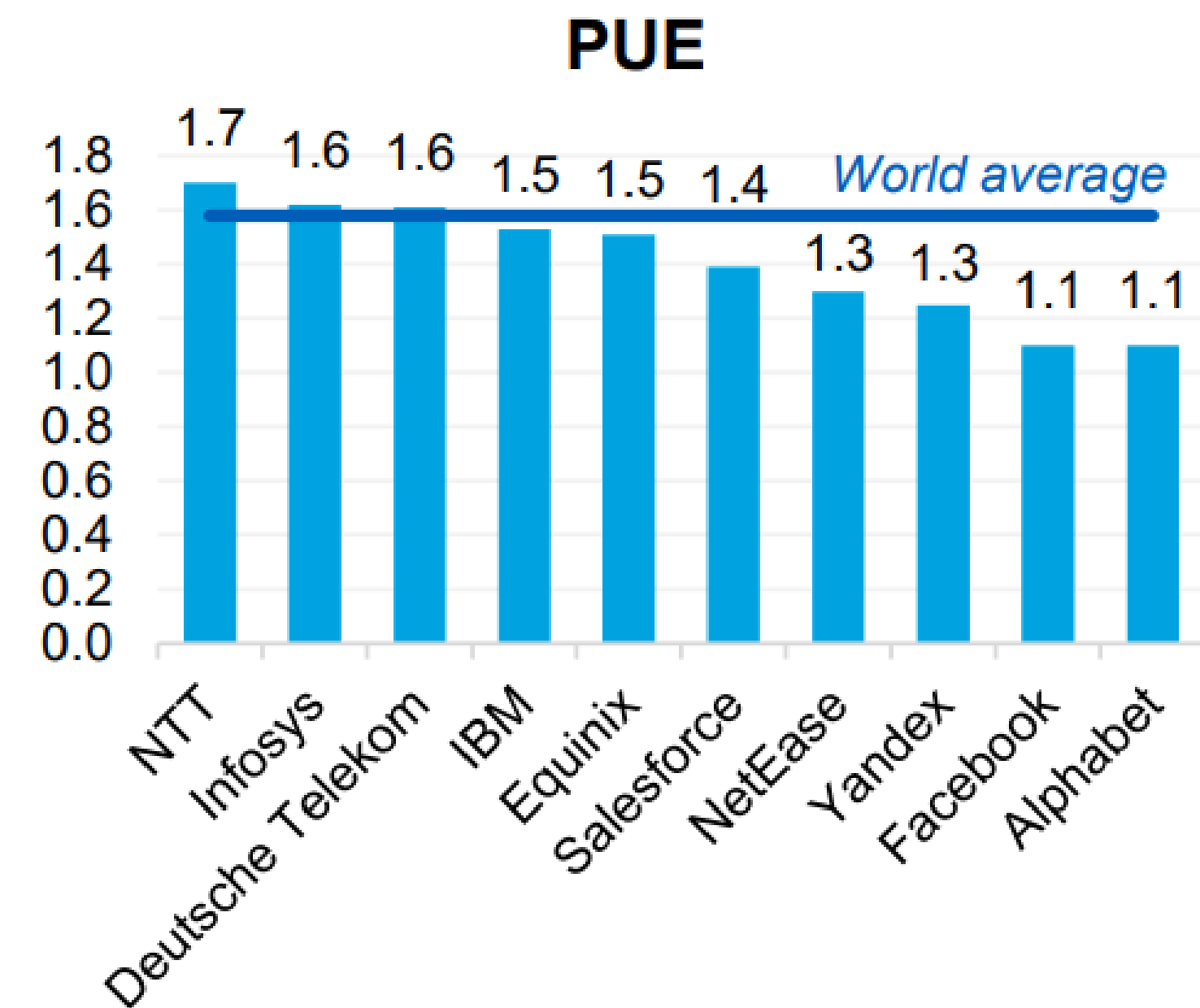
- 86 have established an emissions reduction target
- 58 are based on the Science Based Targets initiative (SBTi)
- Some companies aim to eliminate their entire footprint by 2030 while others plan to eradicate their operational emissions by 2030. Other companies are less ambitious with longer term targets.
- Intensity-based targets are used by some companies making forecasting their future impact impossible and can result in higher emissions.
- While SBTi calls for also establishing Scope 3 targets if they account for at least 40% of a company's total footprint, not all have.
- Some companies have set dates by which they will be procuring 100% renewable electricity.
- By 2030, 38 tech companies plan to be carbon neutral

GHG operational emissions (market-based) target reduction
60 companies representing 30% of Scope 1 & 2 emissions
Millions tCO₂e



Reduce energy use

- Facility wide energy savings mainly through smart metering
- Big improvement in telecom equipment
 - 5G 6.6 times more energy efficient than 4G
 - Fiber optic 100 times more energy efficient than copper wire
- Mixed picture for data centers
 - PUE flatlined in older data centers



Supply chain

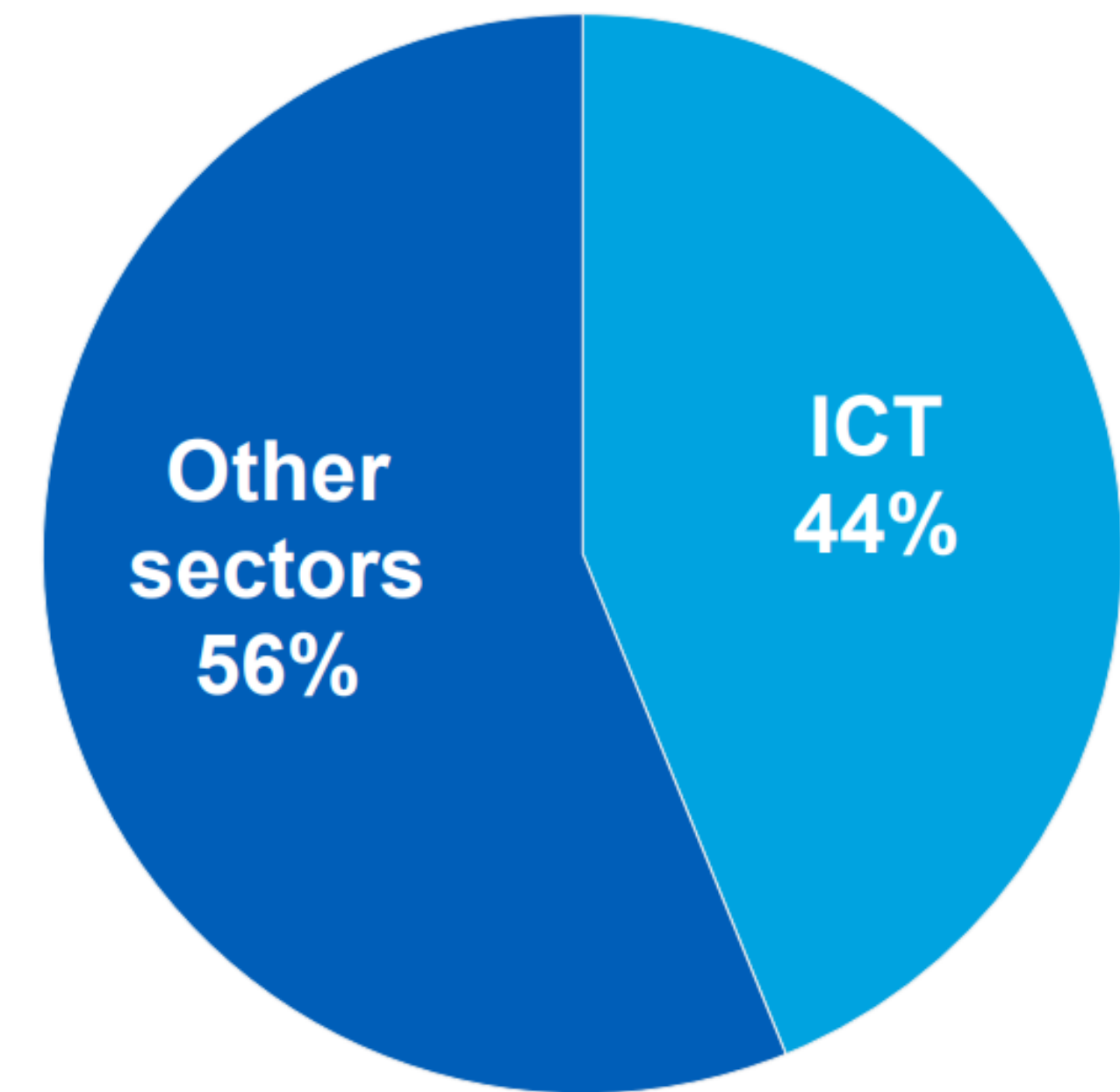
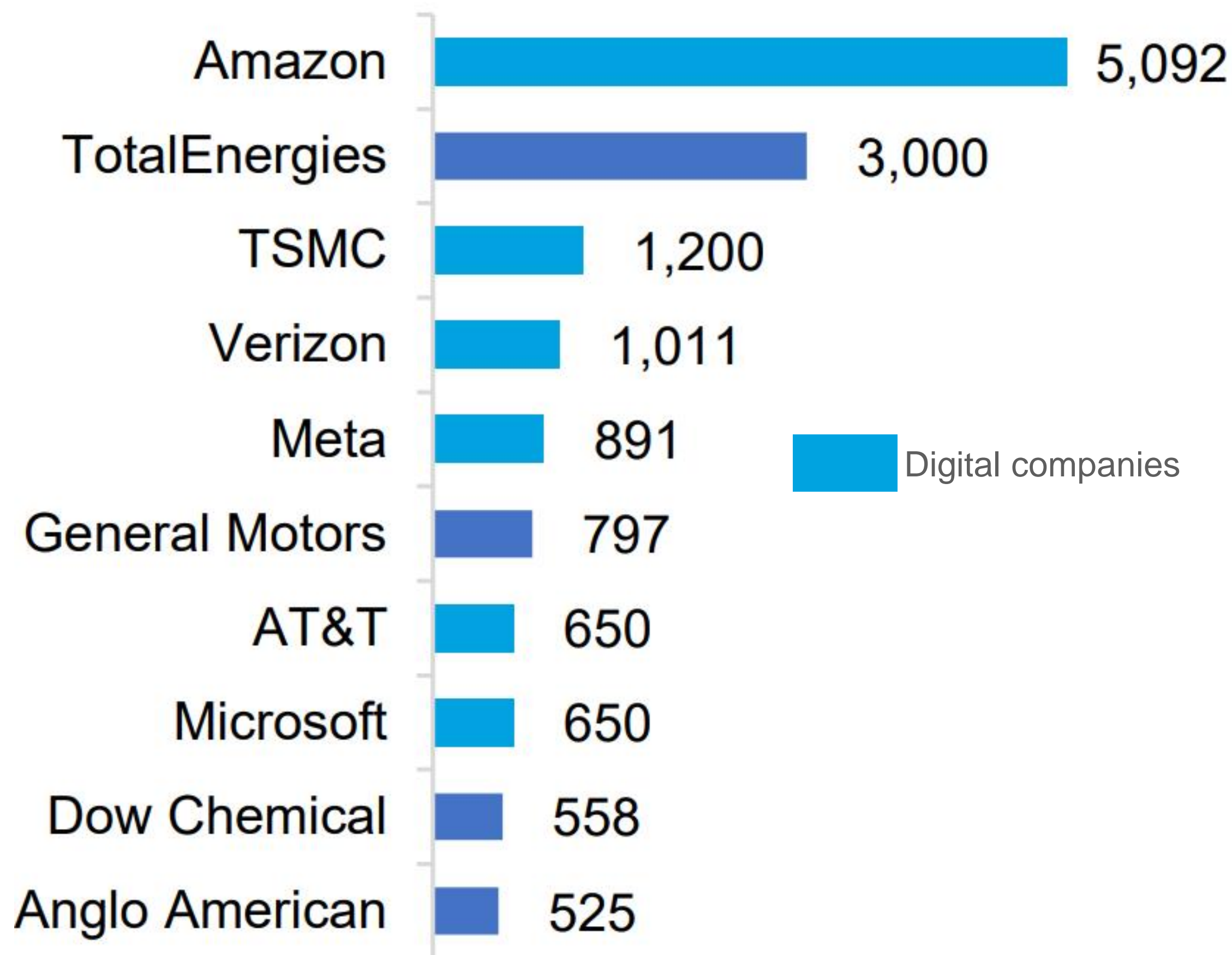
Companies working with suppliers

- Disclose emissions data
- Procure renewables
- Adopt targets



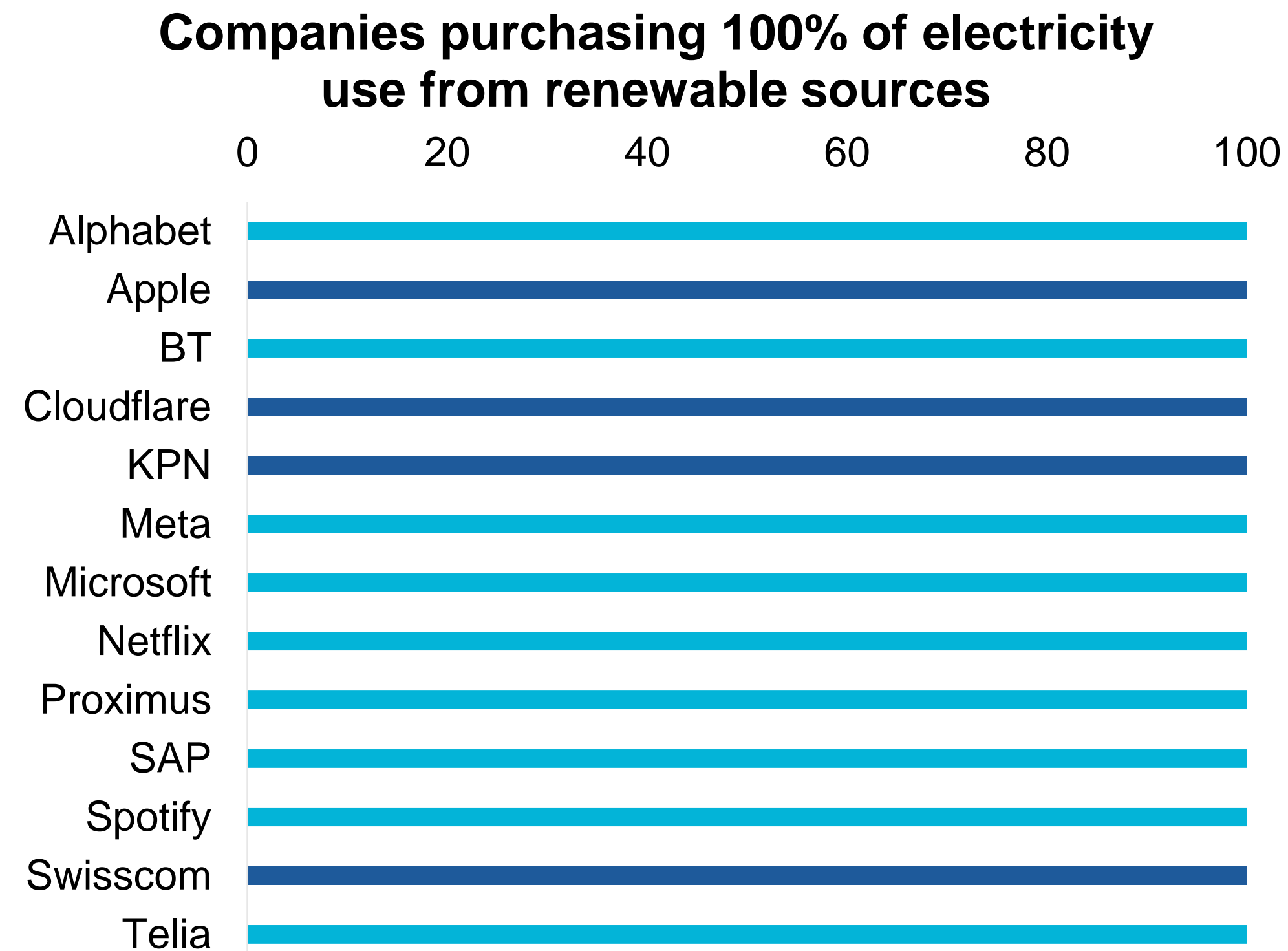
Renewables

Top 10 corporate purchases of renewable electricity, MW, 2020



Source: IEA.

Renewables




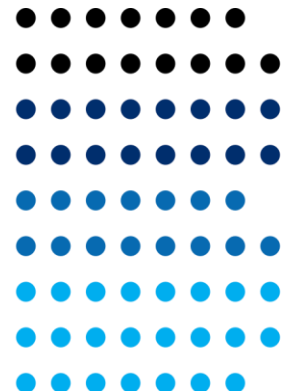

CALL TO ACTION

24/7 Carbon-free Energy Compact to Accelerate the Decarbonization of Electricity Grids

7 AFFORDABLE AND CLEAN ENERGY

A banner with a blue background on the left and a yellow background on the right. The blue background features a city skyline and solar panels. The text 'CALL TO ACTION' is in large white letters. Below it, the text '24/7 Carbon-free Energy Compact to Accelerate the Decarbonization of Electricity Grids' is in smaller white letters. On the yellow background, there is a white icon of a sun with a power button symbol in the center, and the text '7 AFFORDABLE AND CLEAN ENERGY' above it.

Companies reporting carbon neutrality, 2020

Alphabet   **BOOKING**
HOLDINGS  **CLOUDFLARE**

elisa Infosys  **kpn**  **Microsoft**

 **Meta**  **proximus**  **salesforce**

 **Spotify**  **swisscom** **TELE2**

 **Telstra**

 **Telia Company**

Implications for low- and middle-income economies

- 46 companies headquartered in LMIs
- Many others have operations in LMIs
- Bulk of emissions in LMIs from Chinese headquartered companies
- Grid access and reliability challenges
- Restrictive energy markets
- Energy policy increasingly an investment decision

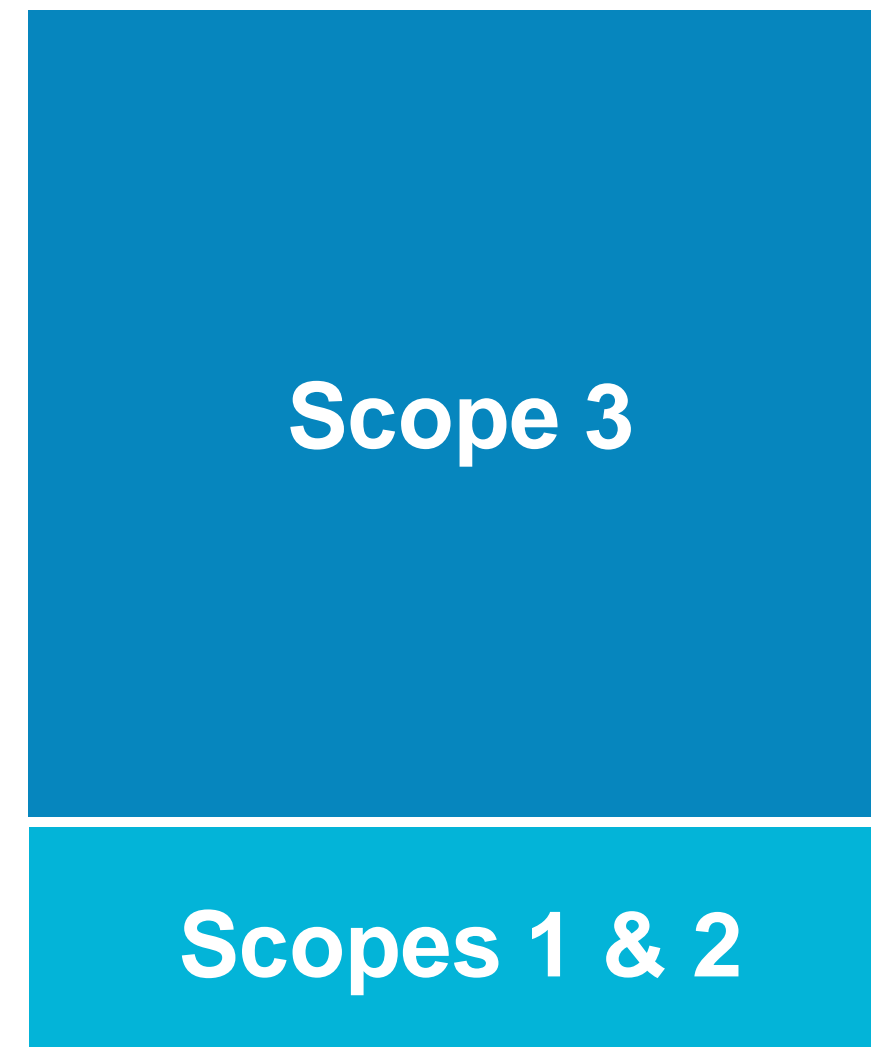
Digital technology driving emissions reductions

- IoT and big data applications
- Blockchain
- AI and cloud-based platforms
- Robotics
- Mobile apps, online and collaborative platforms

Scope 4: Enablement?

Nine telecommunications operators, 2020

Total footprint
Enablement = 1.6 times more



Enablement = 2 times more

Enablement = 7 times more

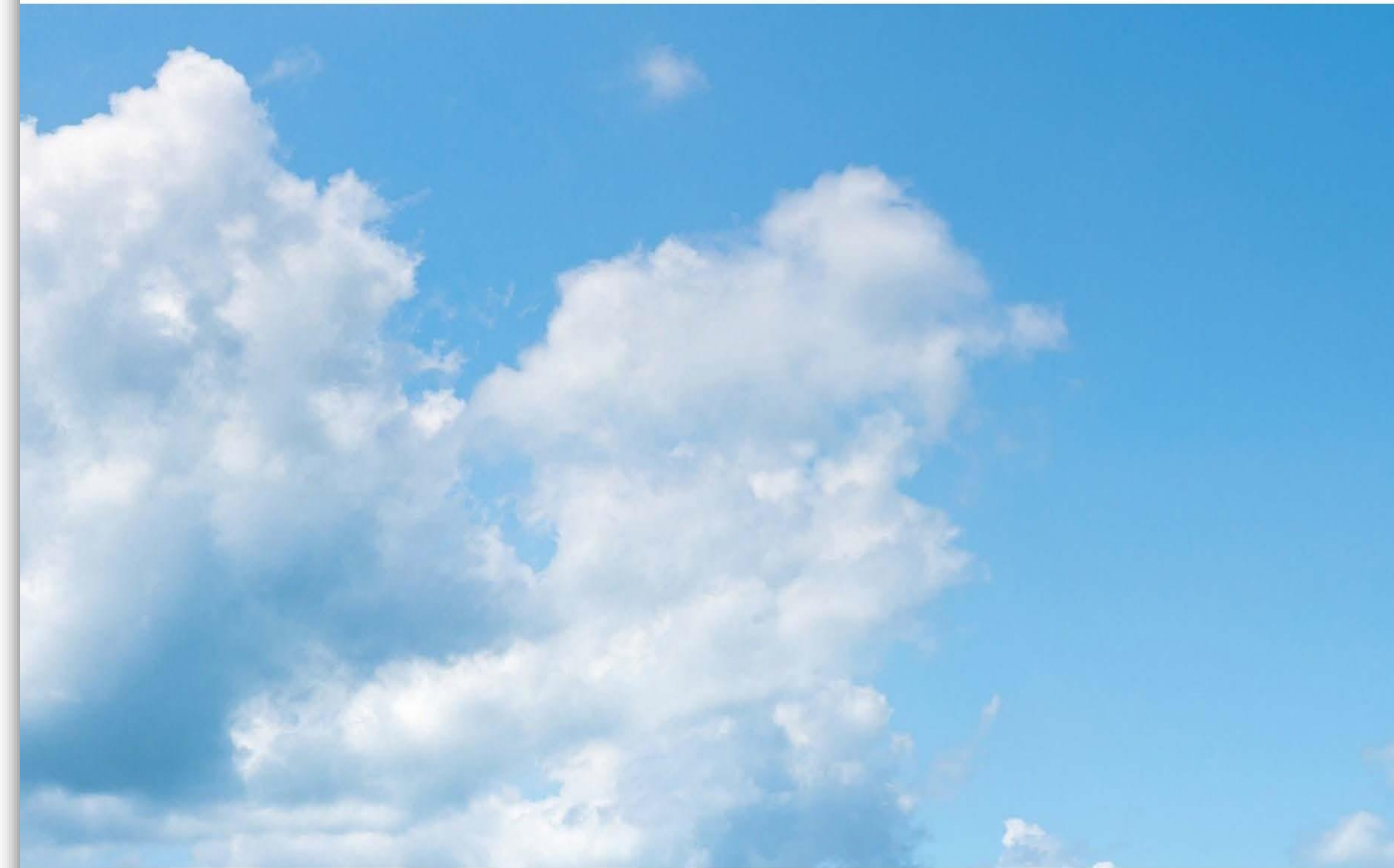
Enablement

- Cloud services
- Smart buildings
- Video conference
 - Telework
- Smart energy
- Smart mobility

From offsets to removals

- Moving from voluntary offsets (“carbon neutral”) to carbon removal (“Net zero”)
- Digital companies have provided over \$4 billion for carbon removal initiatives

Criteria for high-quality carbon dioxide removal

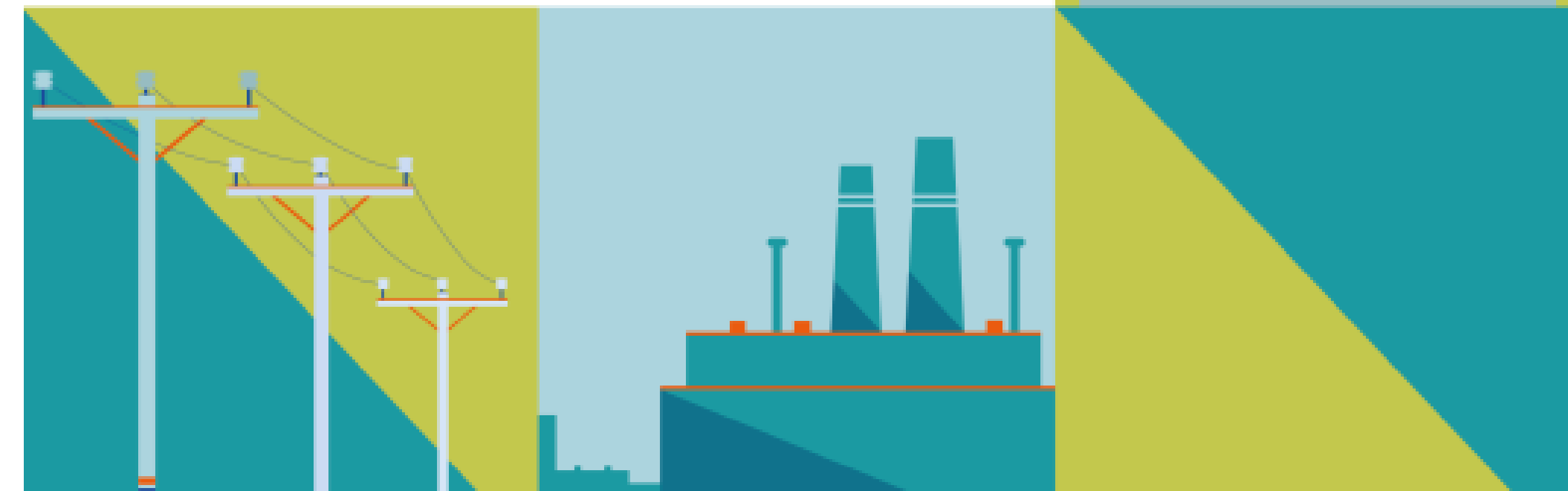


Results

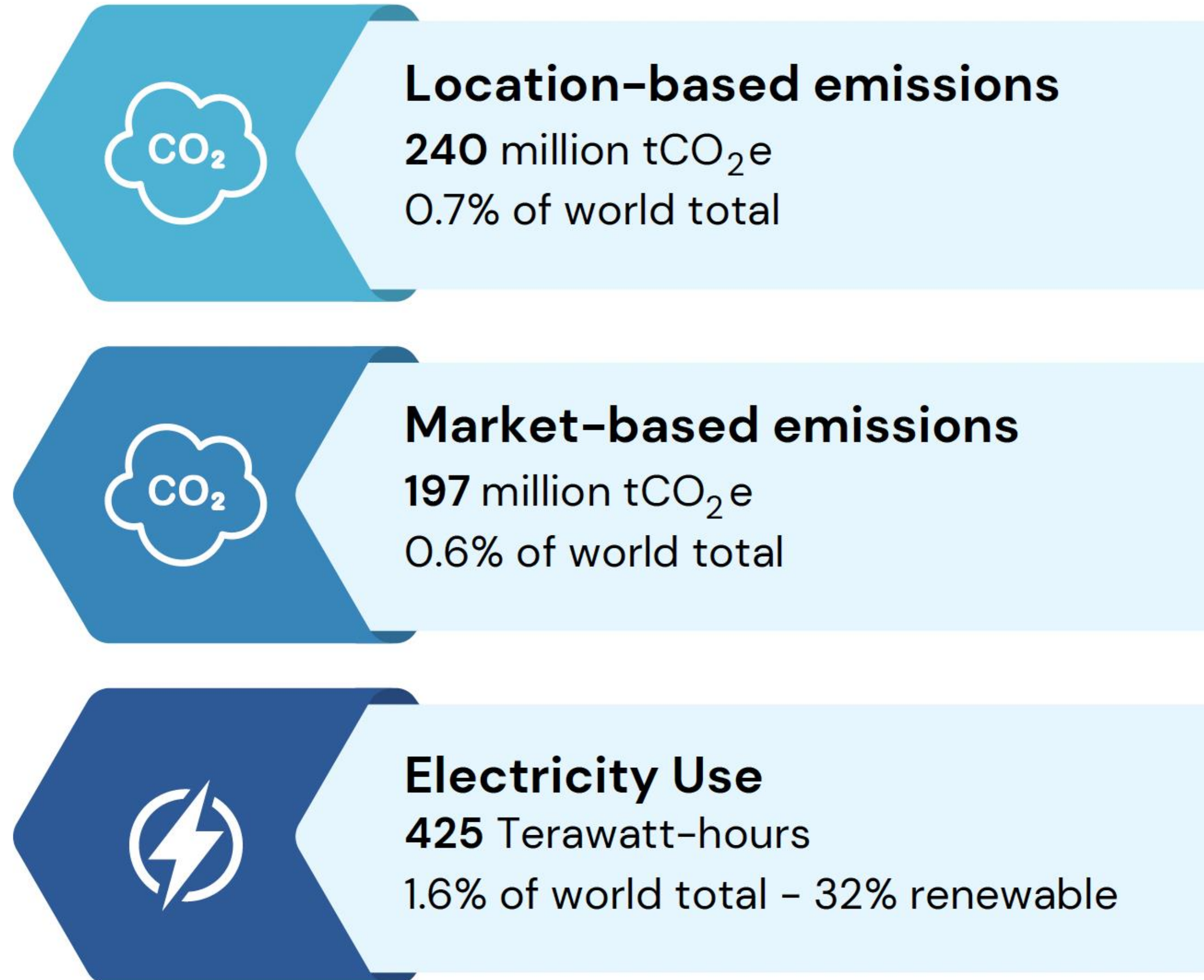


Greening digital companies:

Monitoring emissions and climate commitments



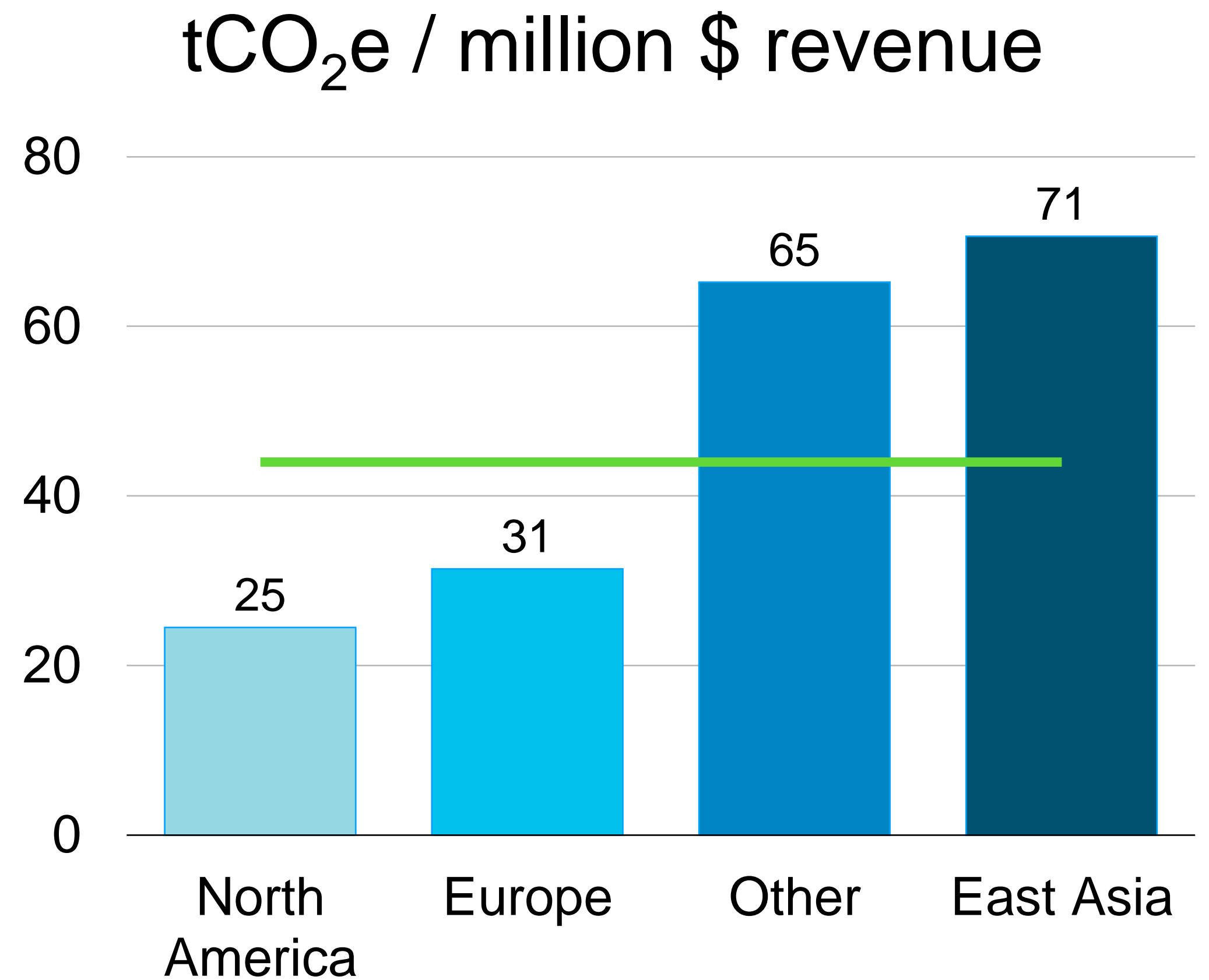
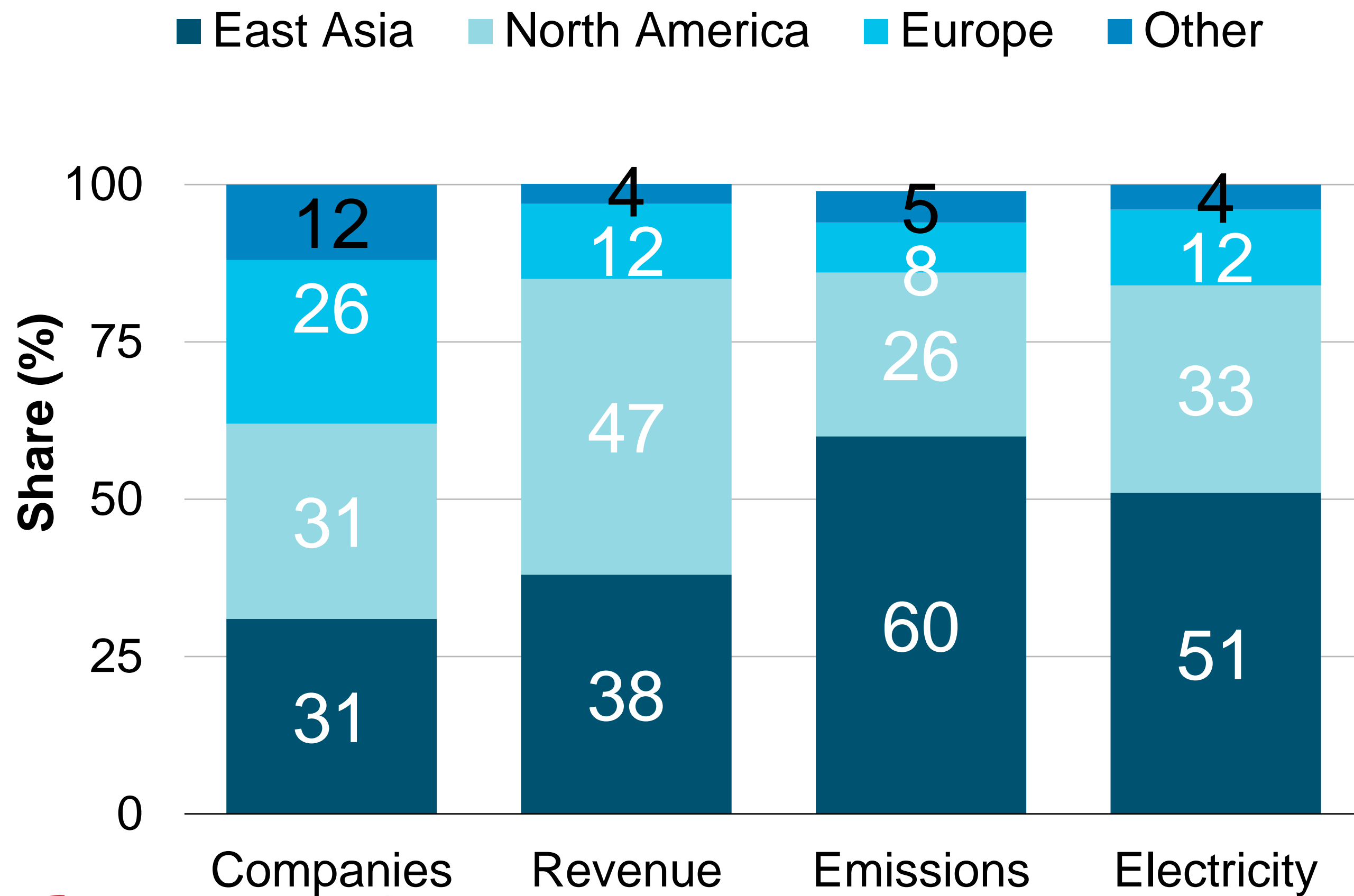
Results



Emissions refer to Scope 1 & 2. Data refers to 2020.

Results

By region of company headquarters, 2020



Assessment

Top performing digital companies in climate disclosure assessment, 2020

Company	Headquarters	Industry	Overall	Data	Target	Performance
Elisa	Finland	Telecom services	A	A	A	B
Cisco	USA	Hardware	A	A	A	B
Apple	USA	Hardware	A	A	A	A
Akamai	USA	IT Services	A	A	A	C
Ericsson	Sweden	Hardware	A	A	A	B
IBM	USA	IT Services	A	A	A	B
Microsoft	USA	IT Services	A	A	A	B
Proximus	Belgium	Telecom services	A	A	A	B
Facebook	USA	IT Services	A	A	A	B
Swisscom	Switzerland	Telecom services	A	B	A	A
Adobe	USA	IT Services	A	A	B	B
Alphabet	USA	IT Services	A	A	A	B
Telefonica	Spain	Telecom services	A	A	B	B
Vodafone	UK	Telecom services	A	A	B	C
Tele2	Sweden	Telecom services	A	B	A	B
SAP	Germany	IT Services	A	B	A	B

Companies shown in order of total points.

Target

- Company has a time bound commitment to reduce emissions
- Commitment is near term and not intensity-based
- Target aims for operational carbon neutrality by 2030

Data

- Discloses all 8 data points: i) Scope 1, ii) Scope 2 location-based, iii) Scope 2 market-based, iv) Scope 3, v) energy use, vi) share of renewables in energy use, vii) electricity use, viii) share of renewable in electricity use
- Dedicated environmental report
- Evidence of third party verification of emissions data
- Evidence verification is informed by ISO 14064

Performance

- Share of renewables in electricity
- Proportion of GHG emissions (location based) to US\$ revenue
- Proportion of GHG emissions (market based) to electricity use

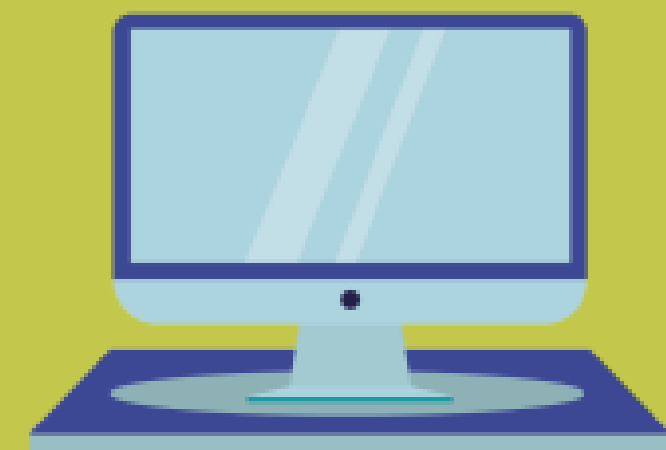
Conclusions

- East Asian companies need to catch up
- Clarity on impact in non-ICT sectors
- Developing countries
- Better accounting and clear goals needed



Greening digital companies:

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”Rather than simply offsetting emissions, we need to work together to focus on eliminating carbon from the electricity sector entirely.”

—24/7 CFE Compact

”...carbon dioxide removal is essential if the world is to achieve its universally agreed Sustainable Development Goals (SDGs).”
—UN Sustainable Development Group



Thank you!

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