

The State of Climate Action 2025

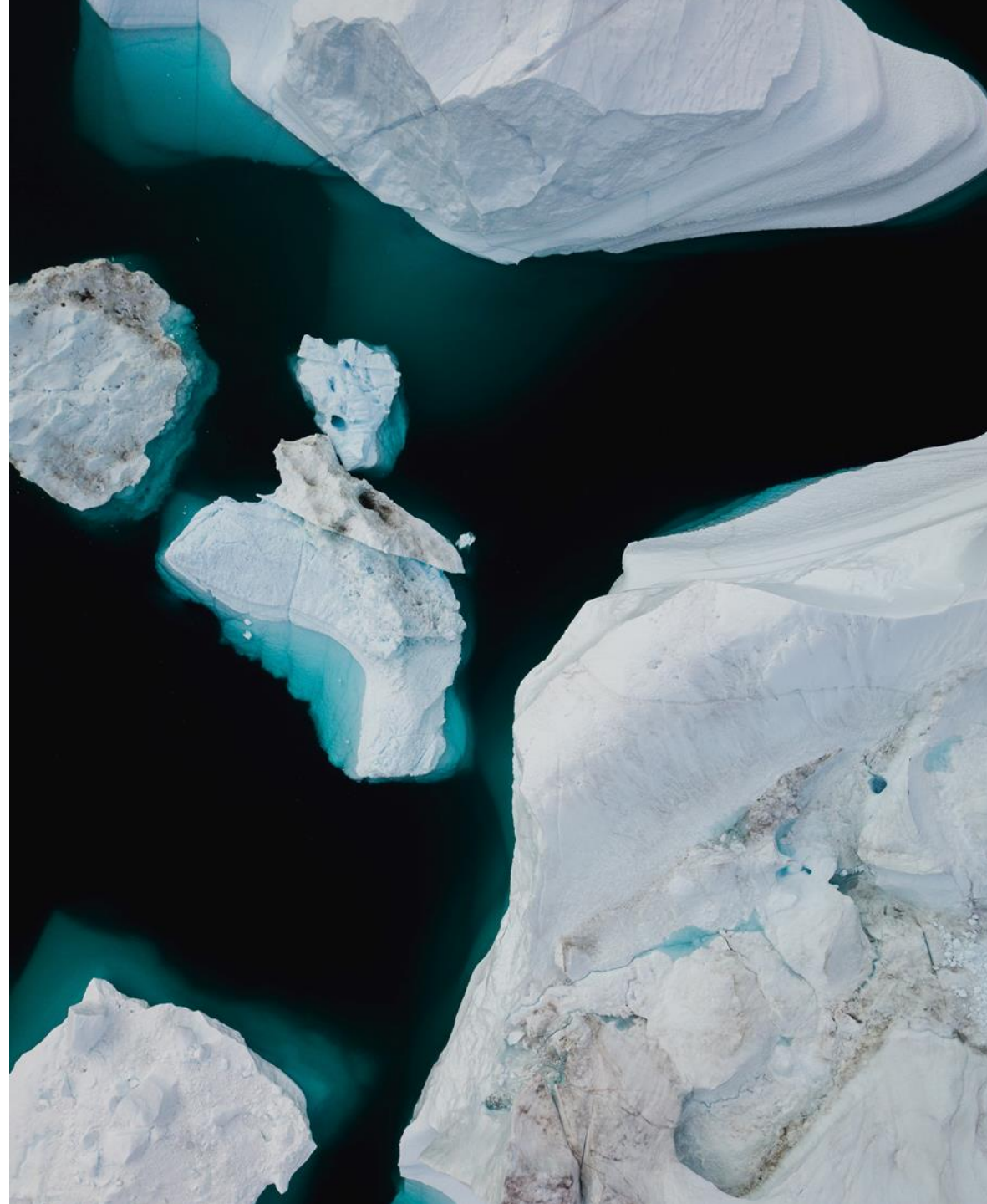


WORLD
RESOURCES
INSTITUTE

Photo by: simonkr/iStock

Systems Change Lab

Systems Change Lab is a collaborative initiative designed to spur action at the pace and scale needed to tackle some of the world's greatest challenges: limiting global warming to 1.5°C, halting biodiversity loss and building a just economy.



Webinar speakers



Jennifer Morgan

Former State Secretary and
Special Envoy for International
Climate Action, Germany



Joel Jaeger

Senior Research Associate,
Systems Change Lab,
World Resources Institute



Clea Schumer

Research Associate,
Systems Change Lab,
World Resources Institute



Sophie Boehm

Senior Research Associate,
Systems Change Lab,
World Resources Institute



Neil Grant

Senior Climate
and Energy Analyst,
Climate Analytics



Helen Mountford

President and CEO,
ClimateWorks Foundation



**Ruleta Camacho
Thomas**

Climate Ambassador,
Antigua and Barbuda



Dan Ioschpe

Climate High-Level
Champion, COP30



Dorah Modise

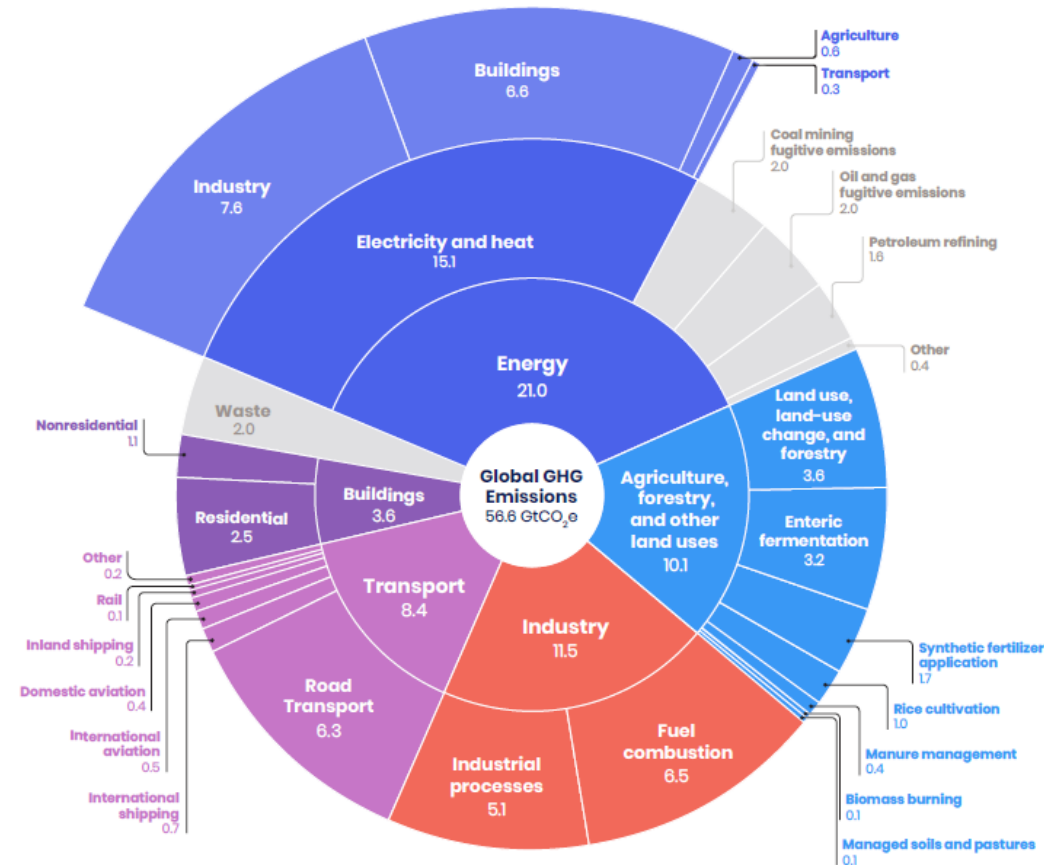
Executive Director, Presidential
Climate Commission, South Africa



Catherine McKenna

Founder and CEO, Climate
and Nature Solutions

Global GHG emissions by sector in 2023



Climate Action Report Card: Progress Toward 2030 Targets



! RIGHT DIRECTION, OFF TRACK		X RIGHT DIRECTION, WELL OFF TRACK		X RIGHT DIRECTION, WELL OFF TRACK		U WRONG DIRECTION, U-TURN NEEDED	
 1.2x	GHG emissions intensity of soil fertilization (gCO ₂ e/1,000 kcal)	 5x	Number of kilometers of rapid transit per 1 million inhabitants (km/1M inhabitants)	 >10x	Share of fossil fuels in the transport sector's total energy consumption (%)	 U-turn needed	Carbon intensity of global steel production (kgCO ₂ /t crude steel)
 1.6x	Ruminant meat productivity (kg/ha)	 5x	GHG emissions intensity of agricultural production (gCO ₂ e/1,000 kcal)	 >10x	Mangrove restoration (total ha)	 U-turn needed	Share of kilometers traveled by passenger cars (% of passenger-km)
 1.8x	Reforestation (total Mha)	 5x	Ruminant meat consumption in high-consuming regions (kcal/capita/day)	 >10x	Technological carbon dioxide removal (MtCO ₂ /yr)	 U-turn needed	Mangrove loss (ha/yr)
 1.8x	Global private climate finance (trillion US\$/yr)	 6x	GHG emissions intensity of manure management (gCO ₂ e/1,000 kcal)	 >10x	Weighted average carbon price in jurisdictions with emissions pricing systems (2024 US\$/tCO ₂ e)	 U-turn needed	Share of food production lost (%)
 N/A	Share of electric vehicles in light-duty vehicle sales (%)	 6x	GHG emissions intensity of rice cultivation (gCO ₂ e/1,000 kcal)	 N/A	Share of zero-carbon sources in electricity generation (%)	 U-turn needed	Public fossil fuel finance (trillion US\$/yr)
 N/A	Share of electric vehicles in the light-duty vehicle fleet (%)	 6x	Global public climate finance (trillion US\$/yr)	 N/A	Share of solar and wind in electricity generation (%)	? INSUFFICIENT DATA	
X RIGHT DIRECTION, WELL OFF TRACK		 7x	Share of unabated fossil gas in electricity generation (%)	 N/A	Green hydrogen production (Mt)	 Ins. data	Retrofitting rate of buildings (%/yr)
 2.5x	GHG emissions intensity of enteric fermentation (gCO ₂ e/1,000 kcal)	 7x	Ratio of investment in low-carbon to fossil fuel energy supply	 N/A	Share of electric vehicles in bus sales (%)	 Ins. data	Share of new buildings that are zero-carbon in operation (%)
 3x	Energy intensity of building operations (kWh/m ²)	 9x	Deforestation (Mha/yr)	 N/A	Share of electric vehicles in medium- and heavy-duty commercial vehicle sales (%)	 Ins. data	Peatland degradation (Mha/yr)
 4x	Carbon intensity of building operations (kgCO ₂ /m ²)	 10x	Crop yields (t/ha)	 N/A	Share of sustainable aviation fuels in global aviation fuel supply (%)	 Ins. data	Peatland restoration (total Mha)
 4x	Carbon intensity of global cement production (kgCO ₂ /t cement)	 >10x	Share of coal in electricity generation (%)	 N/A	Share of zero-emissions fuels in maritime shipping fuel supply (%)	 Ins. data	Food waste (kg/capita)
 4x	Global total climate finance (trillion US\$/yr)	 >10x	Carbon intensity of electricity generation (gCO ₂ /kWh)				
 5x	Share of electricity in the industry sector's final energy demand (%)						

Note: For indicators categorized as S-curve likely, acceleration factors calculated using a linear trendline are not presented, as they would not accurately reflect an S-curve trajectory. The category of progress was determined based on author judgement, using multiple lines of evidence. Source: Schumer et al. 2025.



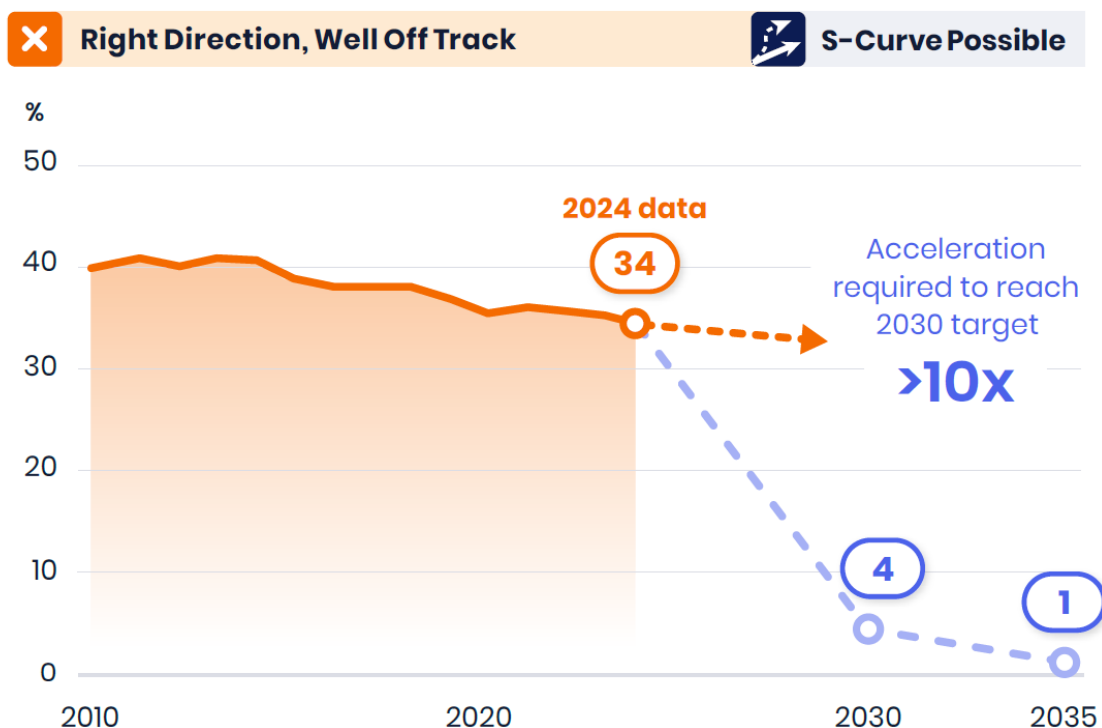
POWER

Photo by: Sebastien Van de Walle/Unsplash

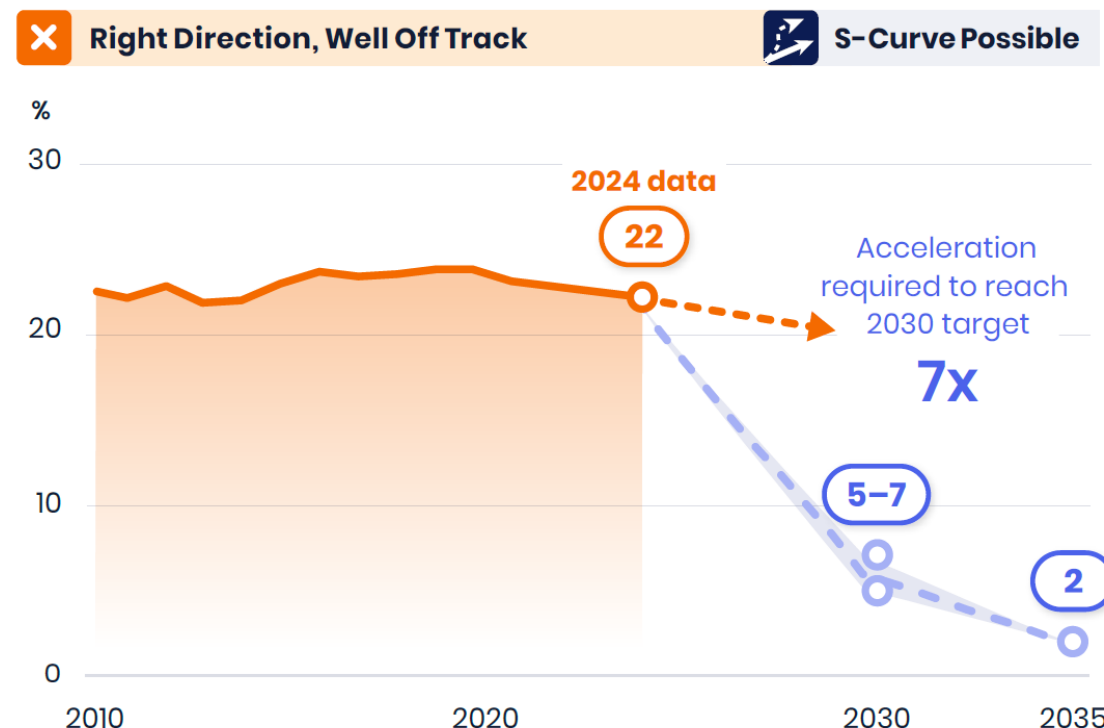
Power



Share of coal in electricity generation



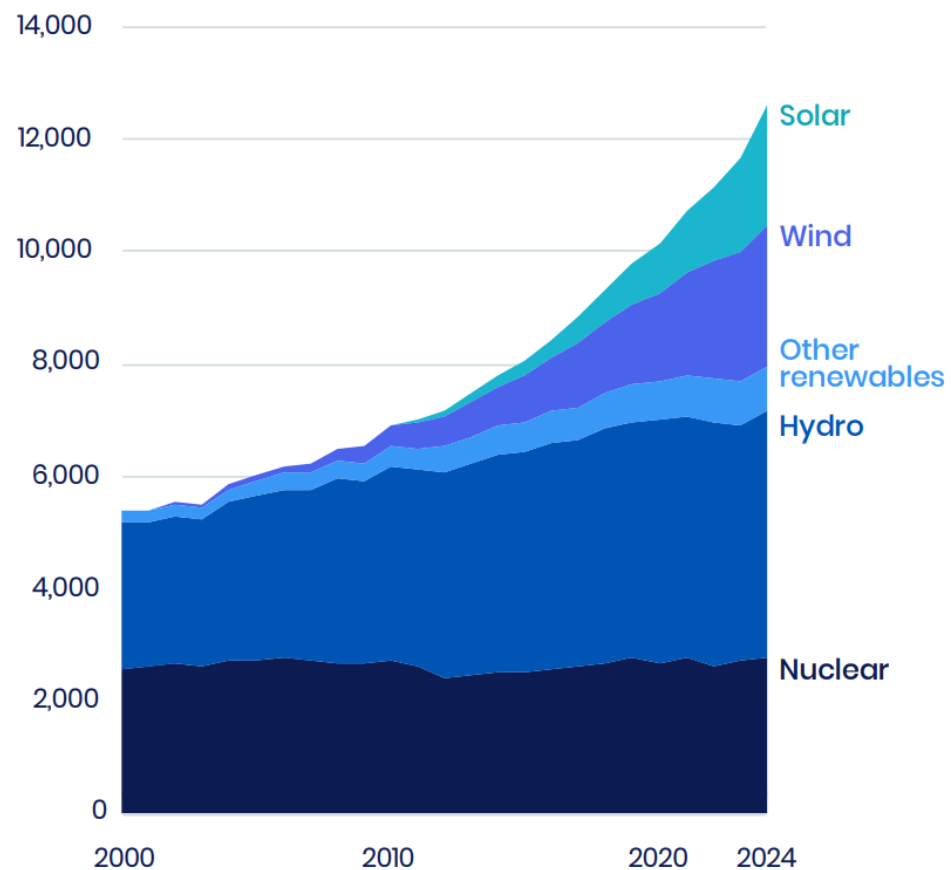
Share of unabated fossil gas in electricity generation



Sources: Schumer et al. 2025, using data from Ember 2025.

Power

Zero-carbon sources in global electricity generation (TWh)



Sources: Schumer et al. 2025, using data from Graham et al. 2025.

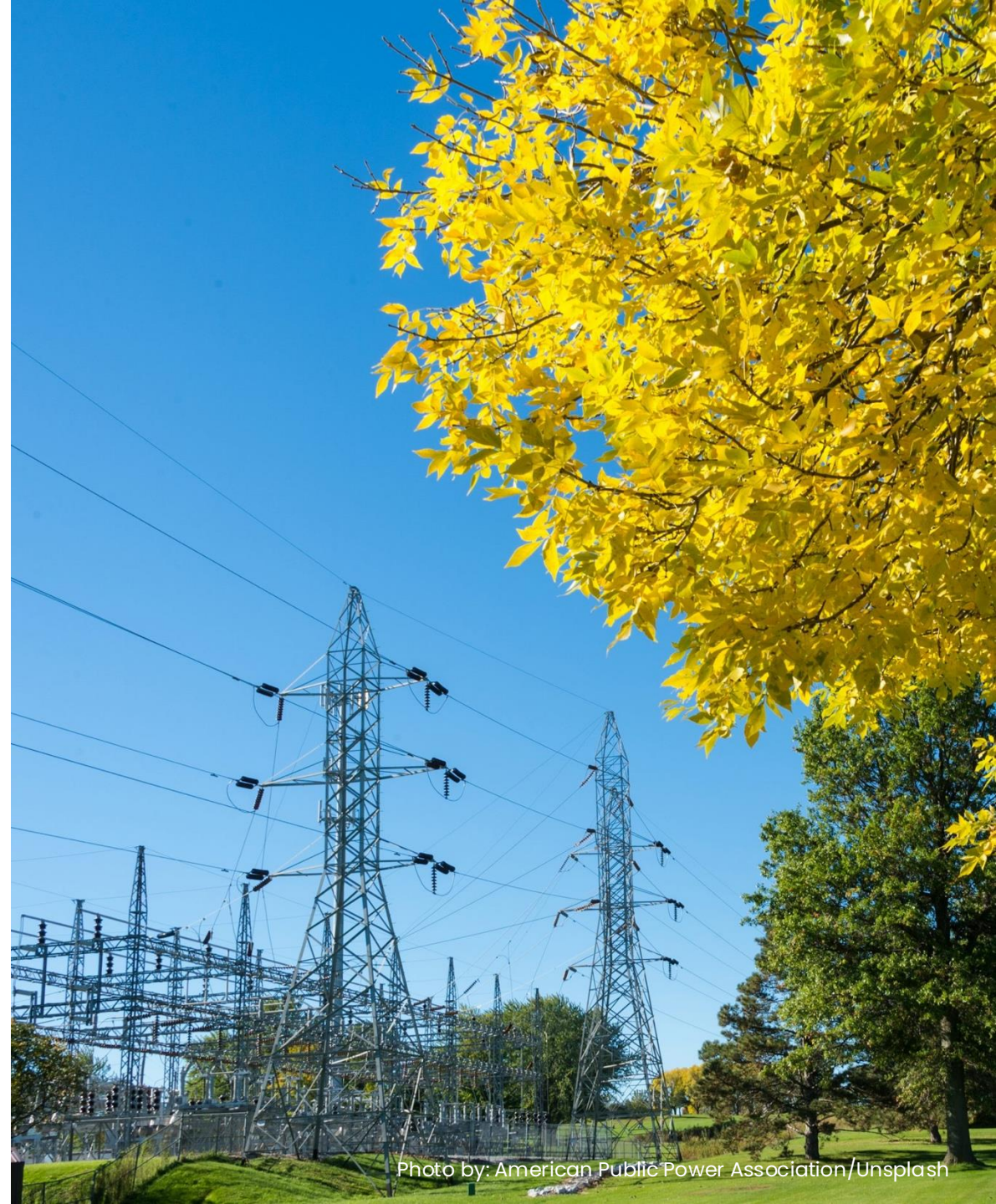
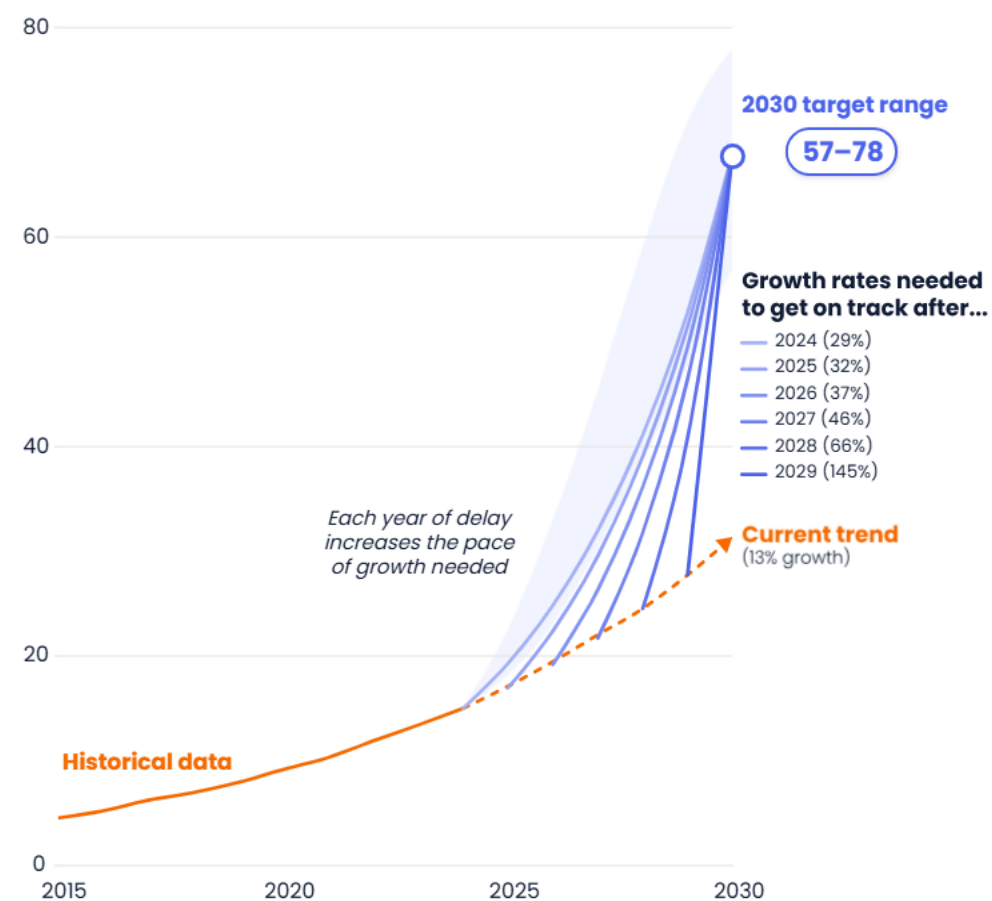


Photo by: American Public Power Association/Unsplash

Power

Solar and wind share of global electricity generation (%)



Sources: Schumer et al. 2025, using data from Ember 2025.



Photo by: Gary Machen/Flickr

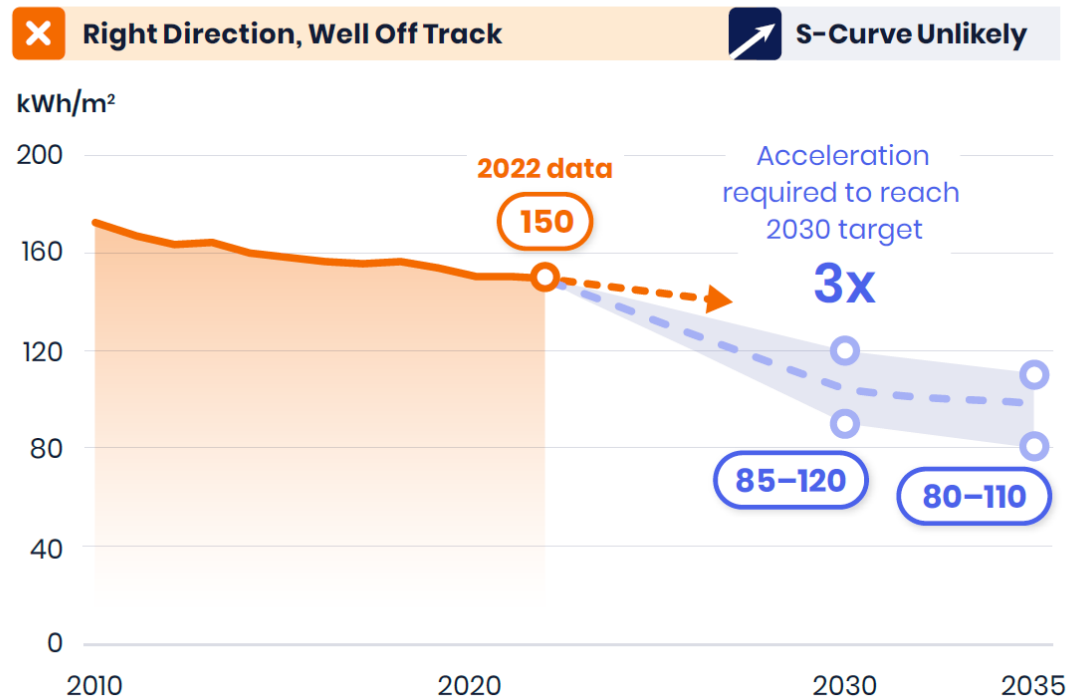


BUILDINGS

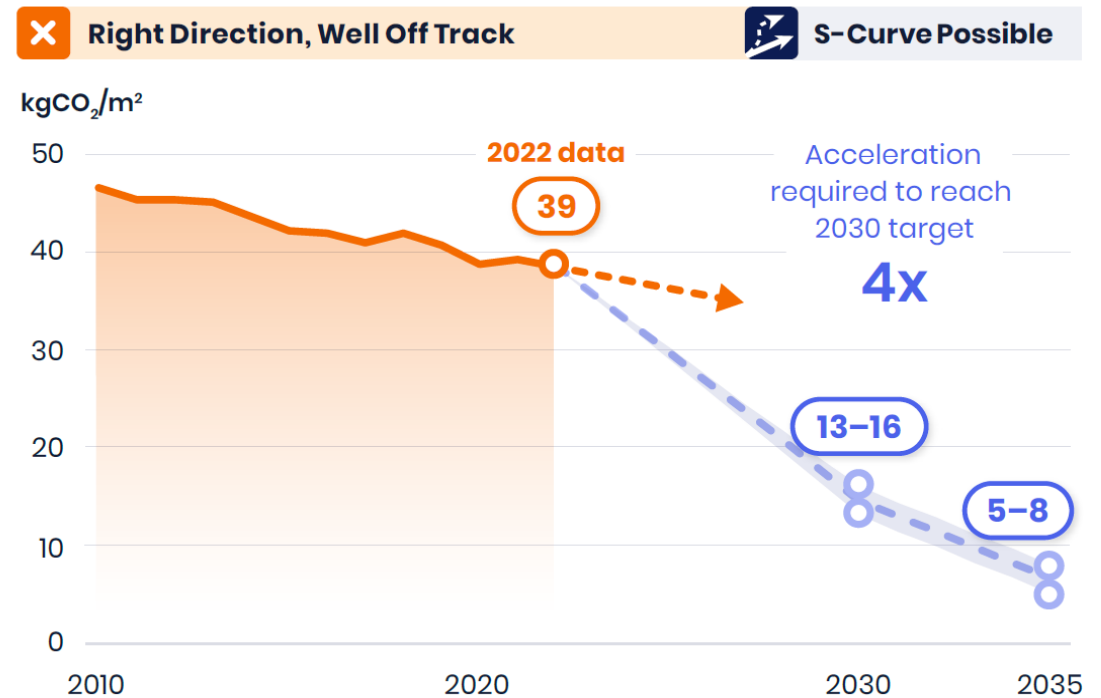
Buildings



Energy intensity of building operations



Carbon intensity of building operations



A close-up photograph of a welding process. A bright, intense light from the welding torch is visible on the left, with a massive spray of glowing orange and yellow sparks erupting from the point of contact and spreading across the right side of the frame. The background is dark, making the sparks stand out prominently.

INDUSTRY

Photo by: Jr Sham/Unsplash

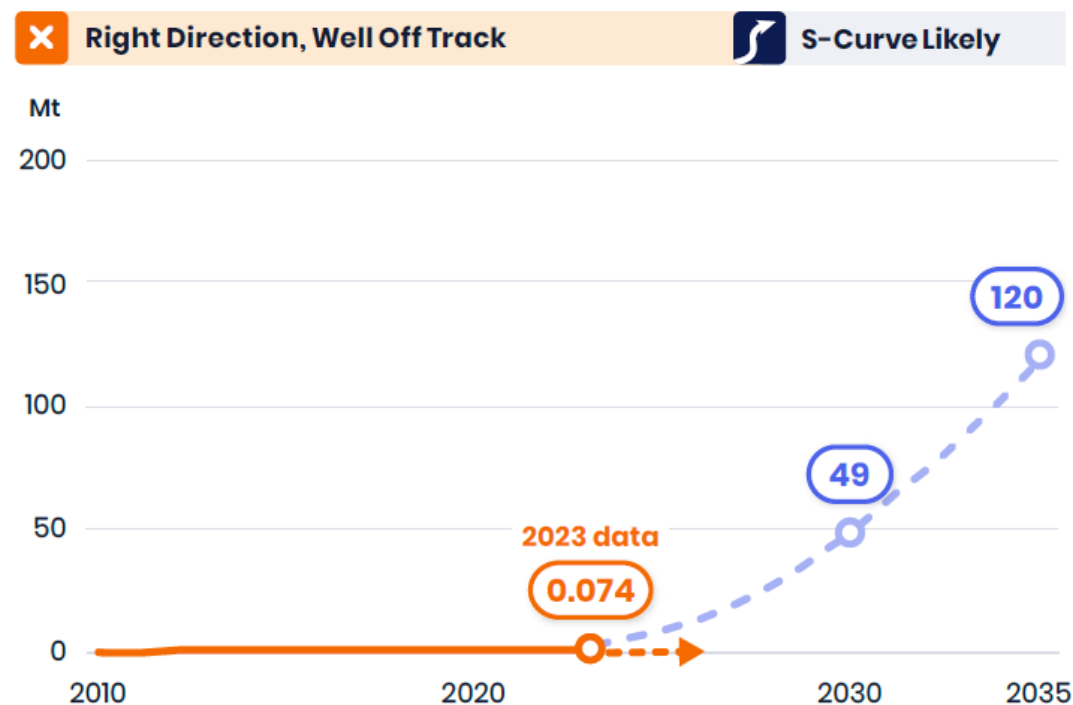
Industry



Carbon intensity of global steel production



Green hydrogen production



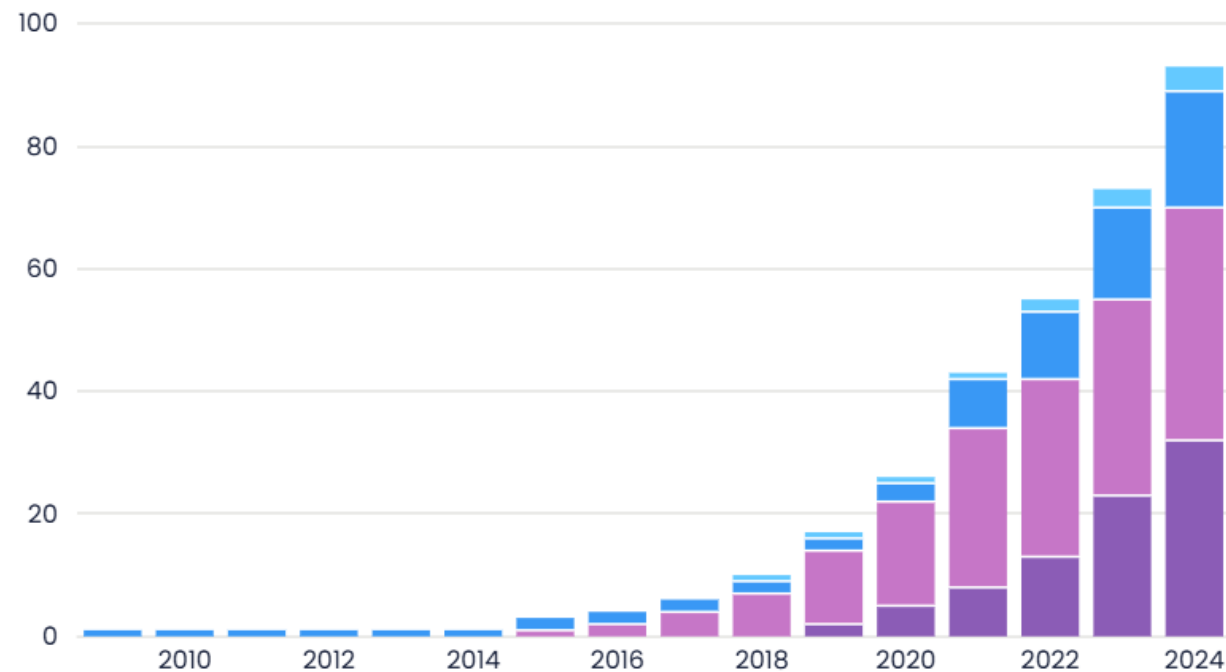
Industry



Low-carbon cement projects are increasing rapidly

CCUS cement ● Full-scale projects ● Pilot and demonstration projects
Calcined clay ● Full-scale projects ● Pilot and demonstration projects

Number of announced projects



Sources: Schumer et al. 2025, using data from Lorea et al. 2024.

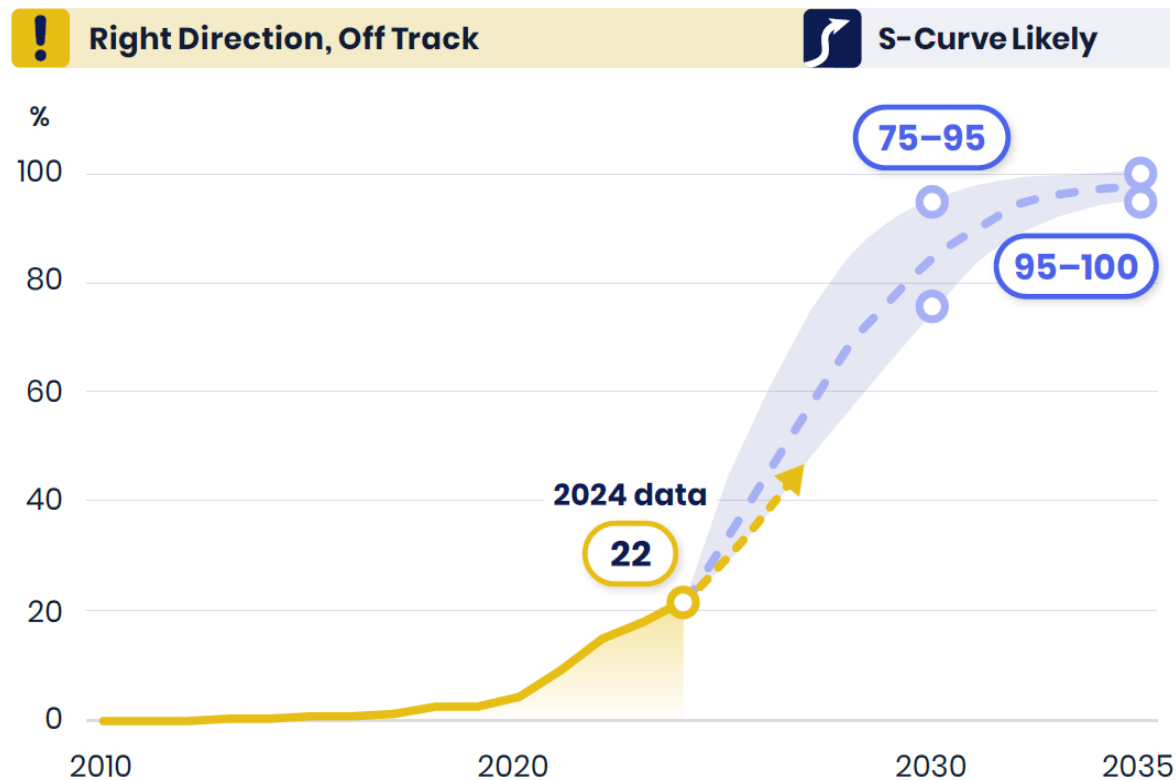
TRANSPORT

Photo by: Carina Sze/Unsplash

Transport



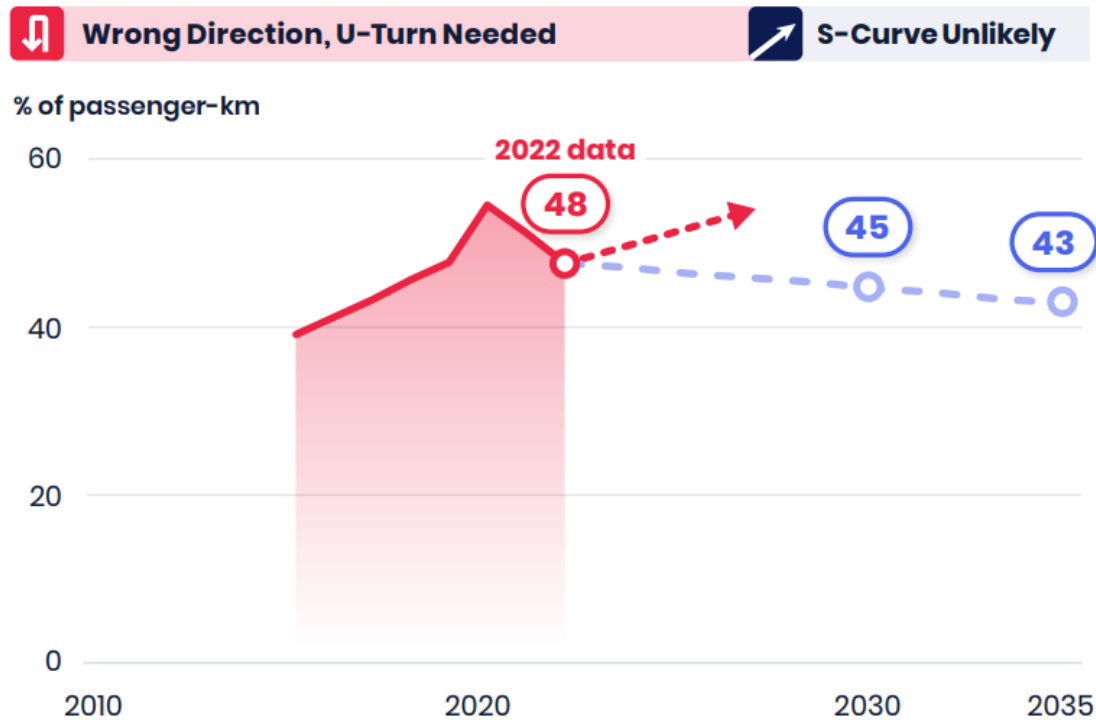
Share of electric vehicles in light-duty vehicle sales



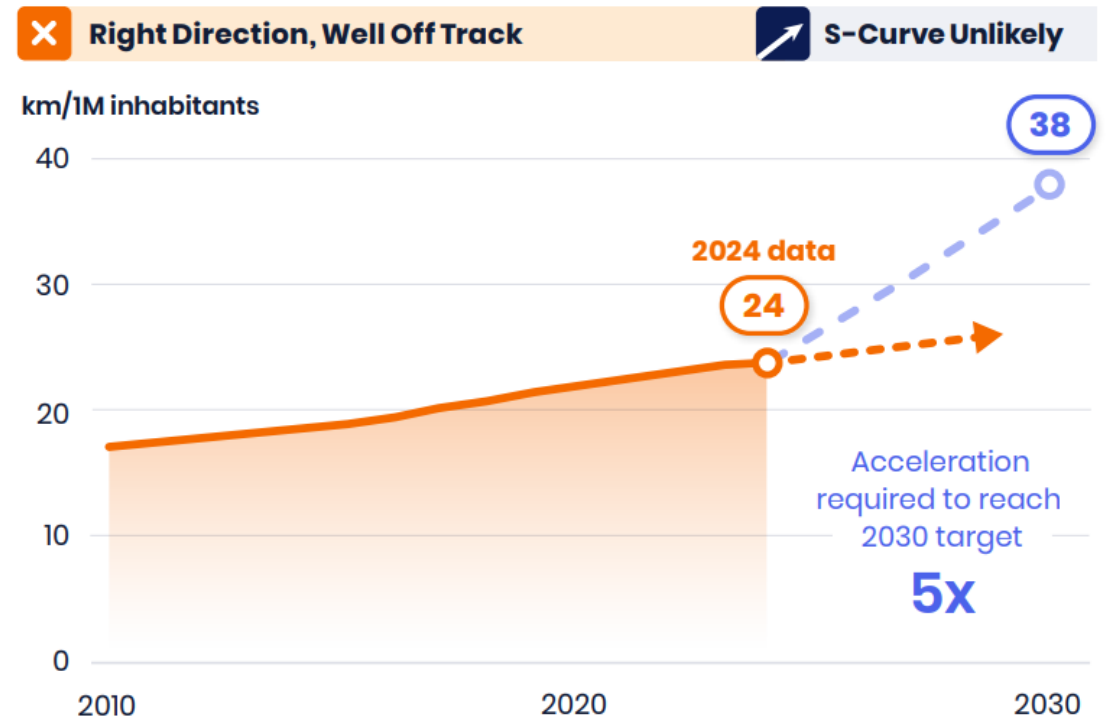
Transport



Share of kilometers traveled by passenger cars



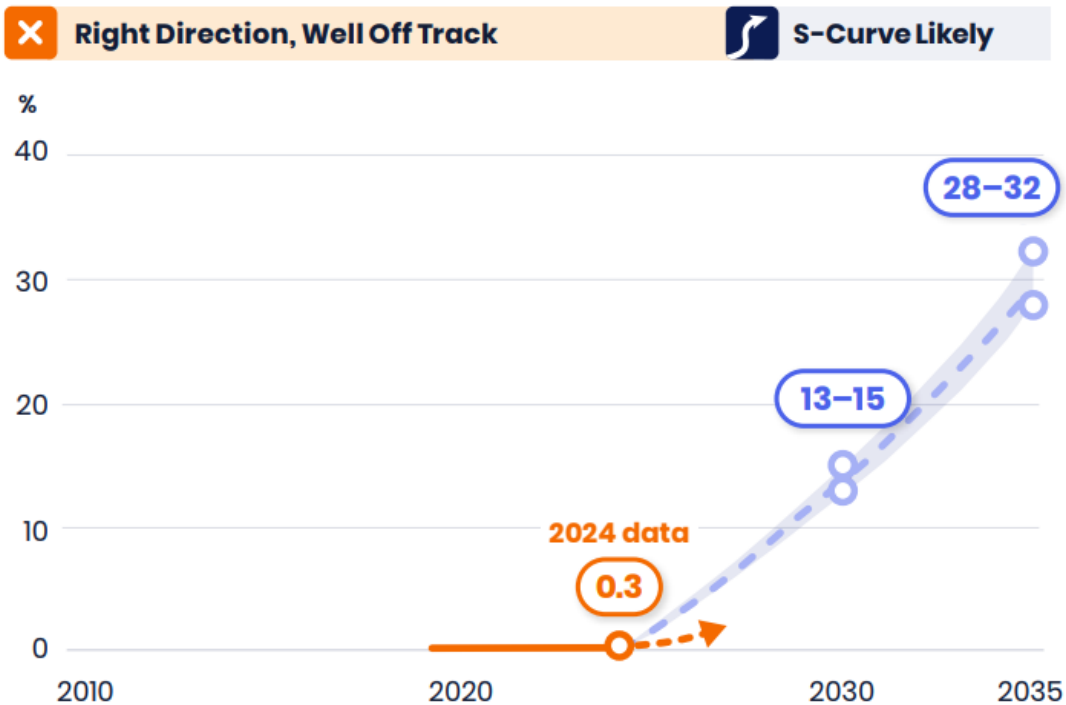
Number of kilometers of rapid transit per 1 million inhabitants



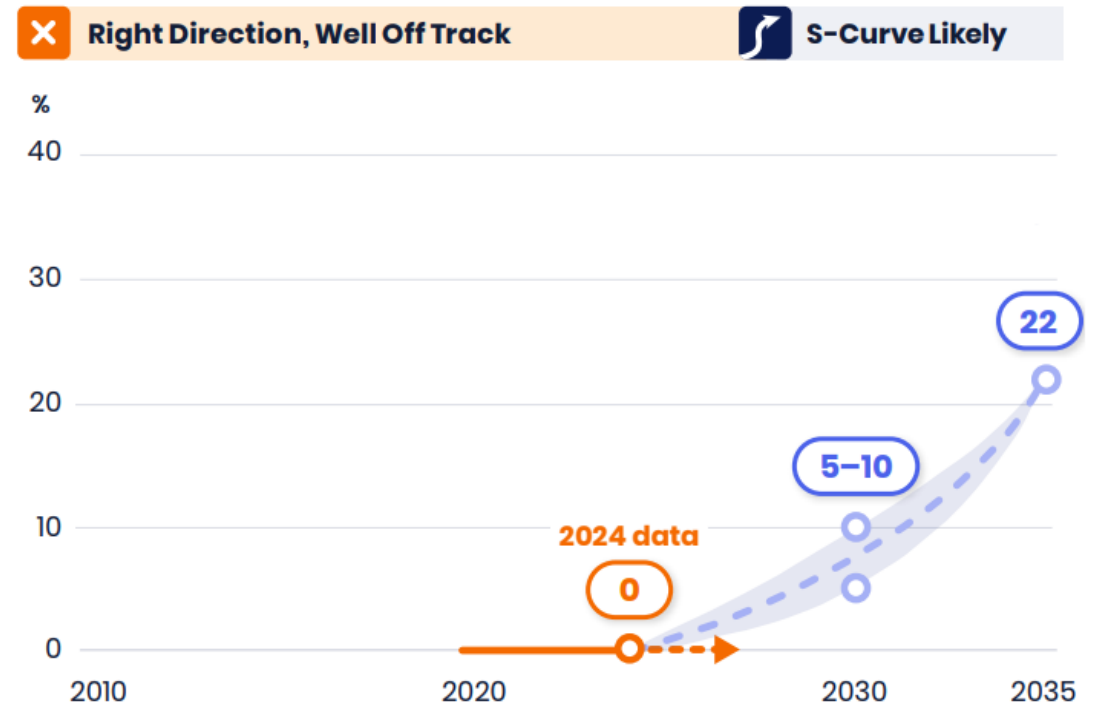
Transport



Share of sustainable aviation fuels in global aviation fuel supply



Share of zero-emissions fuels in maritime shipping fuel supply



An aerial photograph of a dense forest. A river flows through the center of the image, with mist or smoke rising from its banks. At the bottom center, a logging truck is visible on a path. The text "FORESTS AND LAND" is overlaid in large white letters, with a blue horizontal line underneath it.

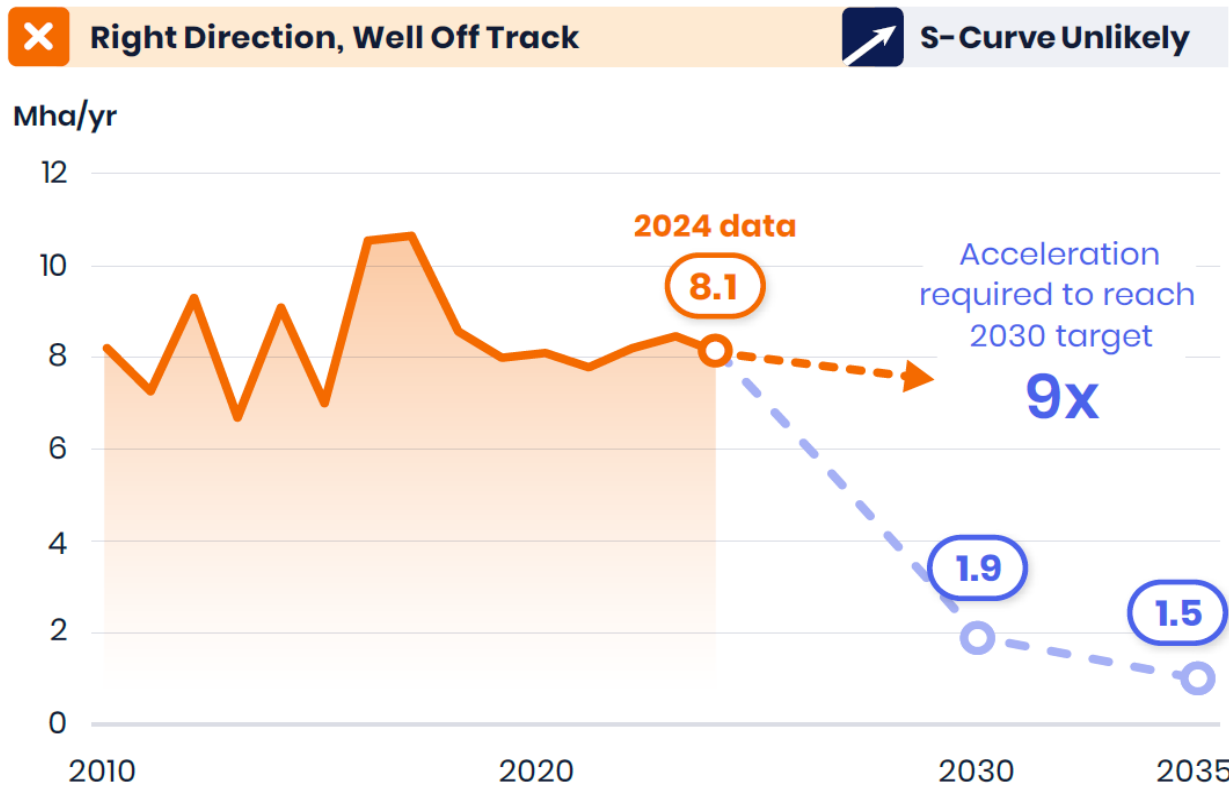
FORESTS AND LAND

Photo by: Filippo Cesarini/Unsplash

Forests and Land



Deforestation

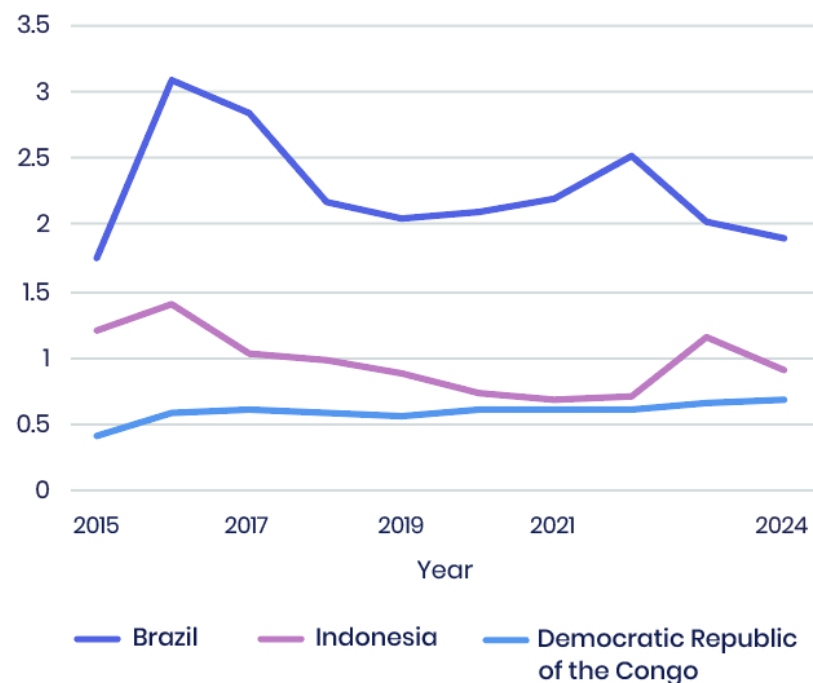


Forests and Land

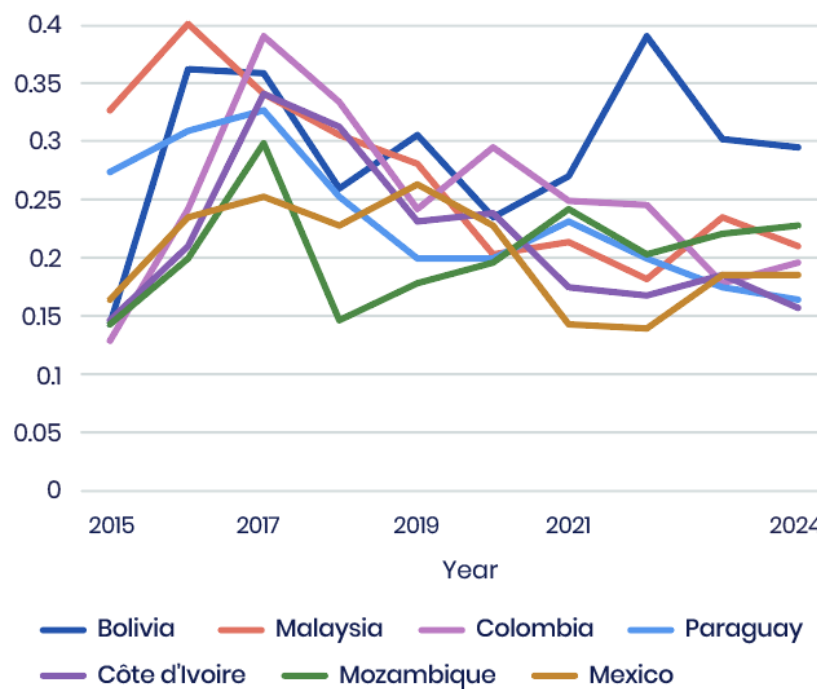


Annual trends for the top 10 countries with the highest total levels of deforestation between 2015–2024

Deforestation (Mha/yr)



Deforestation (Mha/yr)



Note: Mha/yr = million hectares per year.

Forests and Land

!	Reforestation (total Mha), Right Direction, Off Track	1.8x
x	Mangrove restoration (total ha), Right Direction, Well Off Track	10x
⬇️	Mangrove loss (ha/yr), Wrong Direction	U-turn needed
?	Peatland restoration (total Mha), Insufficient Data	Ins. data
?	Peatland degradation (Mha/yr), Insufficient Data	Ins. data

Source: Schumer et al. 2025.



Photo by: Yuichi Ishida/UNDP Timor-Leste via Flickr



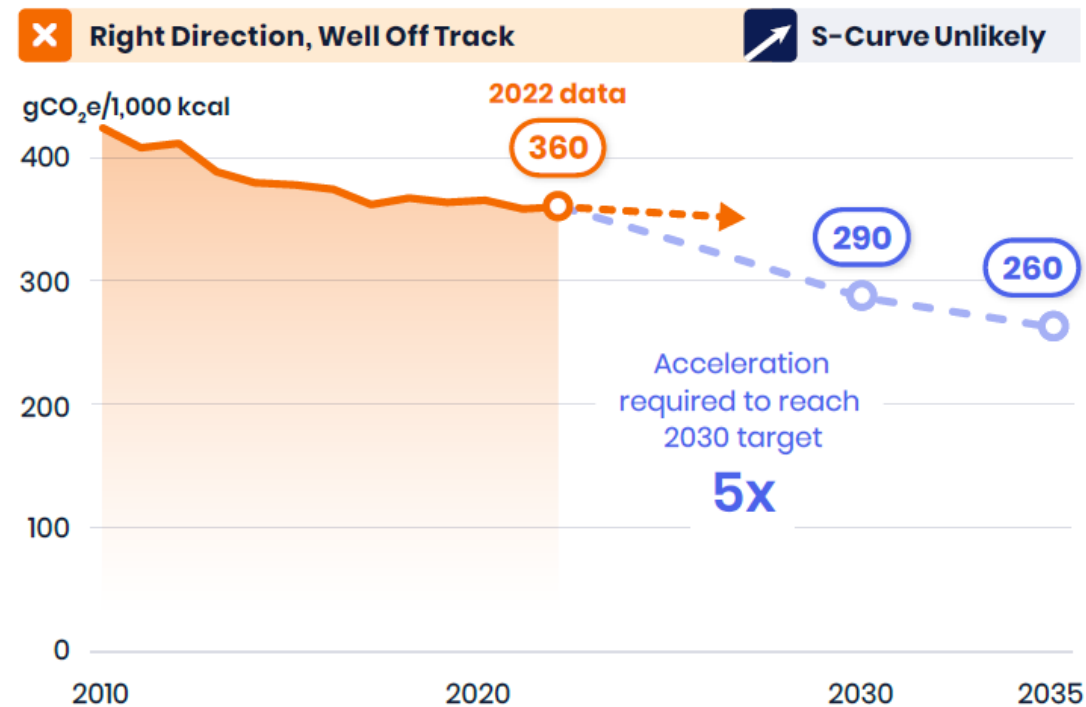
FOOD AND AGRICULTURE

Photo by: Barrie Williams/Scottish Government

Food and Agriculture



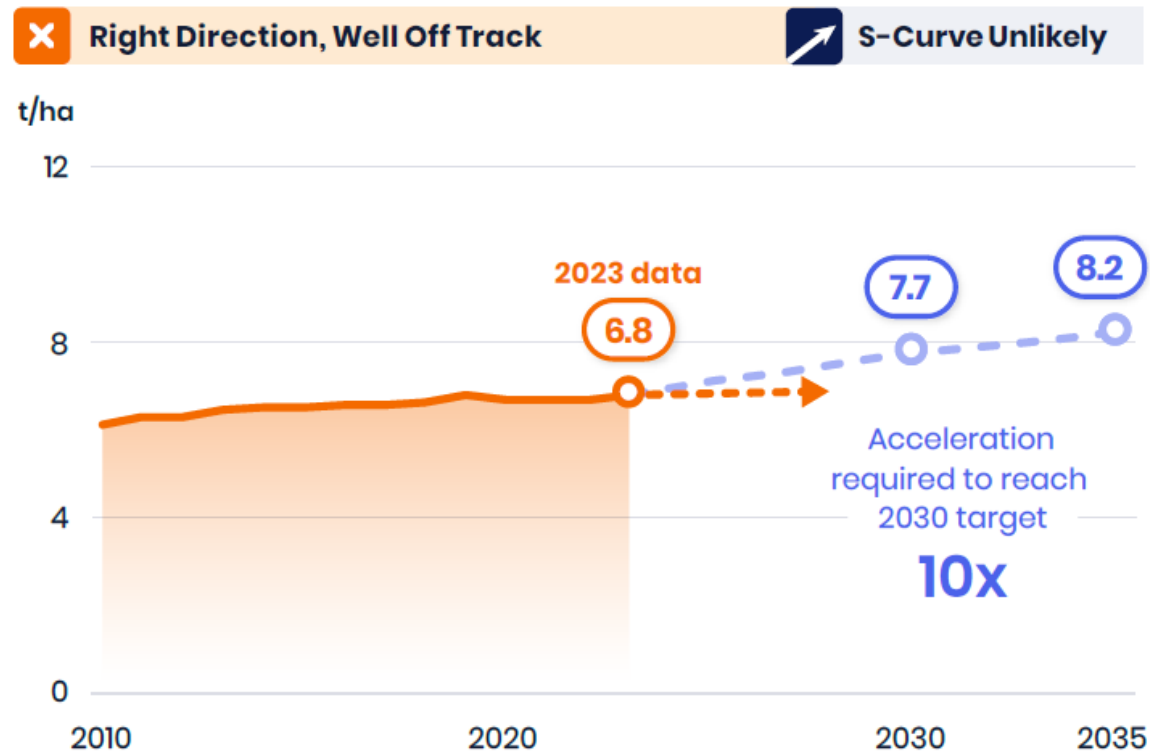
GHG emissions intensity of agricultural production



Food and Agriculture



Crop yields



Food and Agriculture

- ✗ Ruminant meat consumption in high-consuming regions (kcal/capita/day), Right Direction, Well Off Track 5x
- ↱ Share of food production lost (%), Wrong Direction U-turn needed
- ? Food waste (kg/capita), Insufficient Data Ins. data

Source: Schumer et al. 2025.



Photo by: Henry Sudarman/Flickr



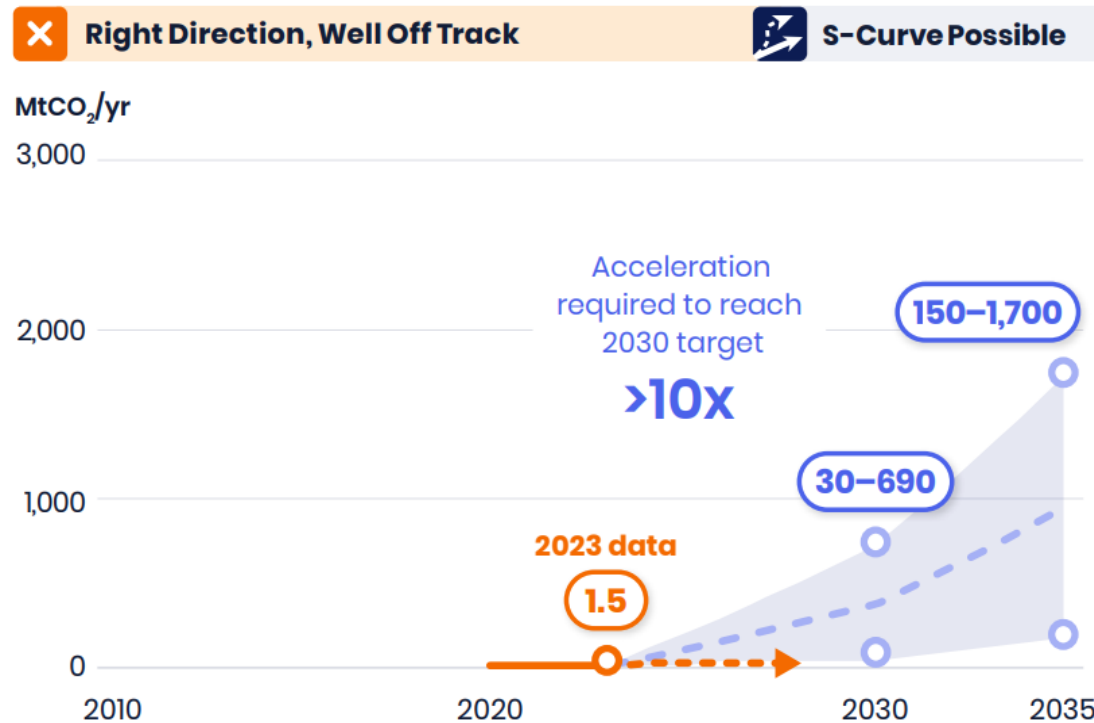
TECHNOLOGICAL CDR

Photo by: Julia Dunlop/Climeworks



Technological Carbon Dioxide Removal

Technological carbon dioxide removal



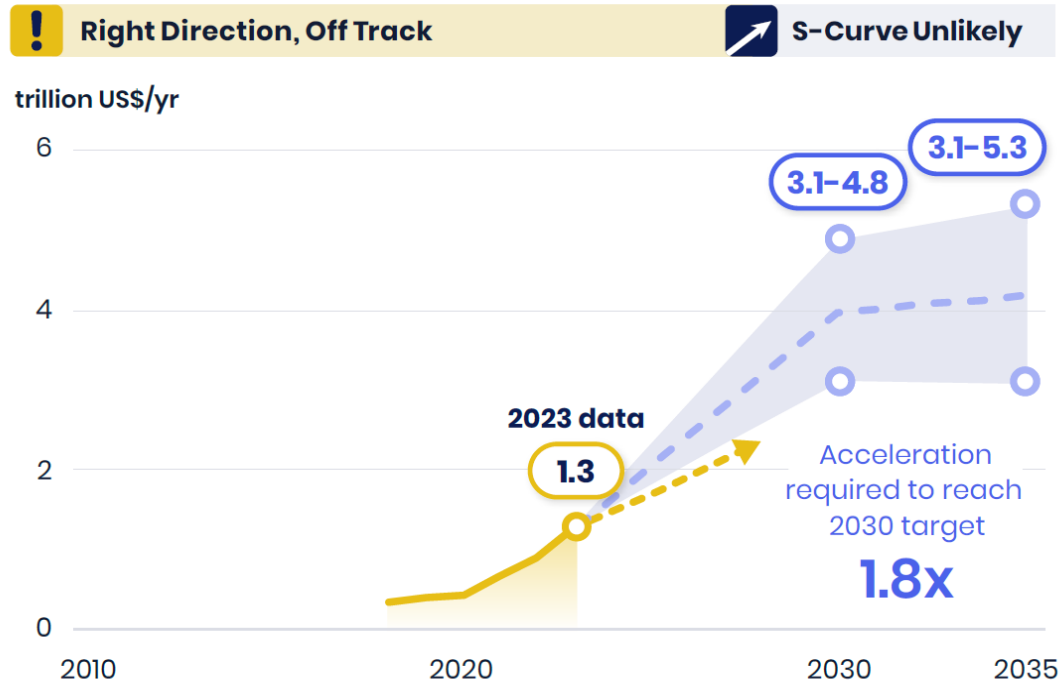


FINANCE

Finance



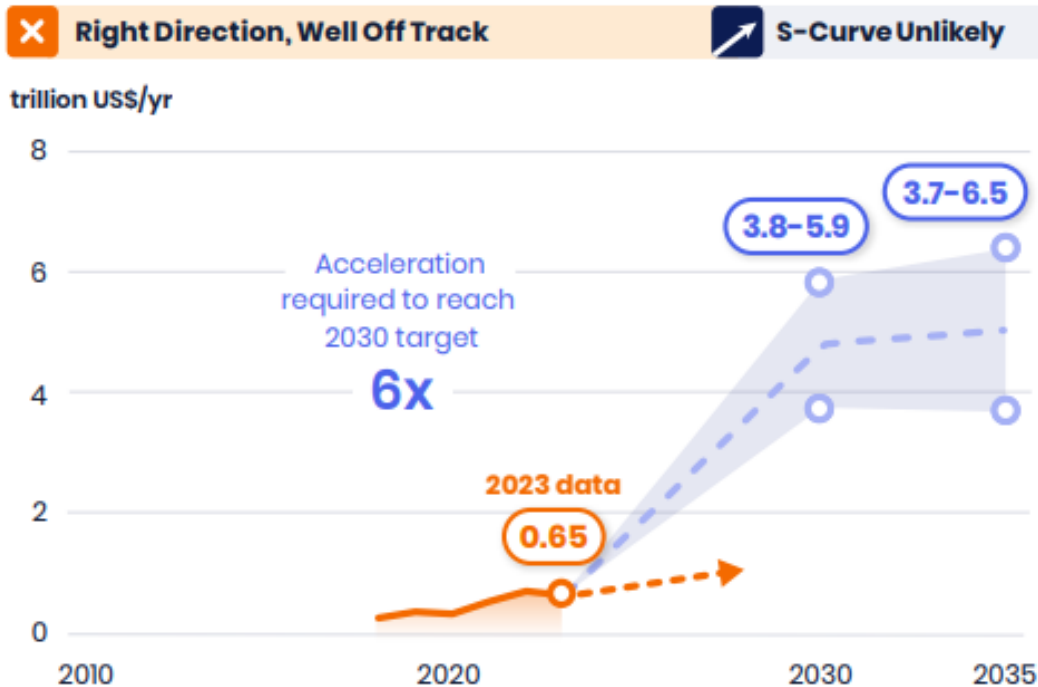
Global private climate finance



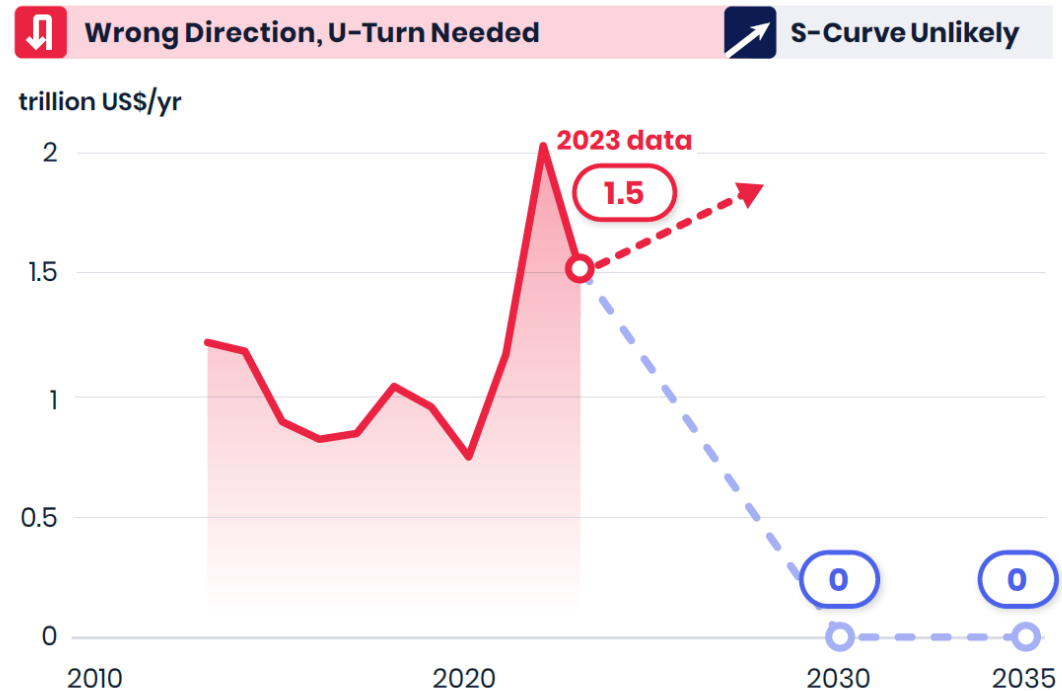
Finance



Global public climate finance



Public fossil fuel finance

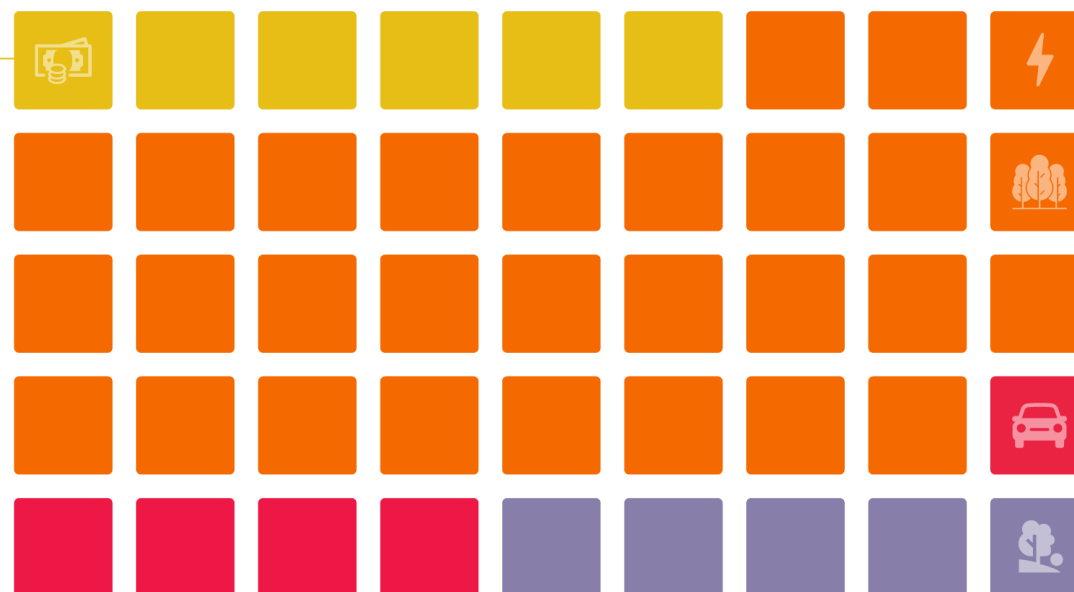


Sources: Schumer et al. 2025, using data from CPI 2025; OECD and IISD 2025; Laan et al. 2023; OCI 2025; Gerasimchuk et al. 2024.

Global climate action is falling short: No indicator is on track for 2030

 = 1 indicator
  On Track
  Off Track
  Well Off Track
  Wrong Direction
  Insufficient Data

Private climate finance
 reached a record \$1.3 trillion in 2023. Though impressive, these funds need to increase 1.8x faster.



The share of **solar and wind** in electricity generation has more than tripled since 2015, yet growth still needs to more than double to reach its 2030 target.

Deforestation levels are far too high — roughly equal to permanently losing nearly 22 football (soccer) fields of forest every minute in 2024.

Trips taken by **passenger cars** — most still gasoline-powered — now make up half of all distance traveled.

Available estimates show **peatlands** roughly the size of Kenya are degrading and releasing centuries of stored carbon.

Source: Schumer et al. 2025.

For more information

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