Energy
Transitions
Commission

# Protecting Paris – Where we are and what comes next

ETC Representatives Meeting

10 February 2026

# Agenda

- **Reflections on COP and the state of the transition in early 2026**
- Protecting Paris: the challenge and ETC role
- Emerging insights
- Progress to date and next steps

# In 2015, the Paris conference committed to limit global warming to "well below 2°C limit" with efforts to pursue the ideal of 1.5°C

## Paris Agreement (2015) Article 2.1(a)

*"This Agreement…aims to strengthen the global response to the threat of climate change… including by:*

**(a)** *Holding the increase in the global average temperature to* ***well below 2°C above pre-industrial levels*** *and to* ***pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels****, recognizing that this would significantly reduce the risks and impacts of climate change."*

## IPCC 1.5°C Special Report (2018)


*"Impacts on natural and human systems from global warming of* ***1.5°C are projected to be lower than at 2°C****. However, they will still be greater than at present.*

*Differences between 1.5°C and 2°C include increases in the frequency and intensity of extreme weather events, sea level rise, and impacts on ecosystems, human health, and livelihoods."*

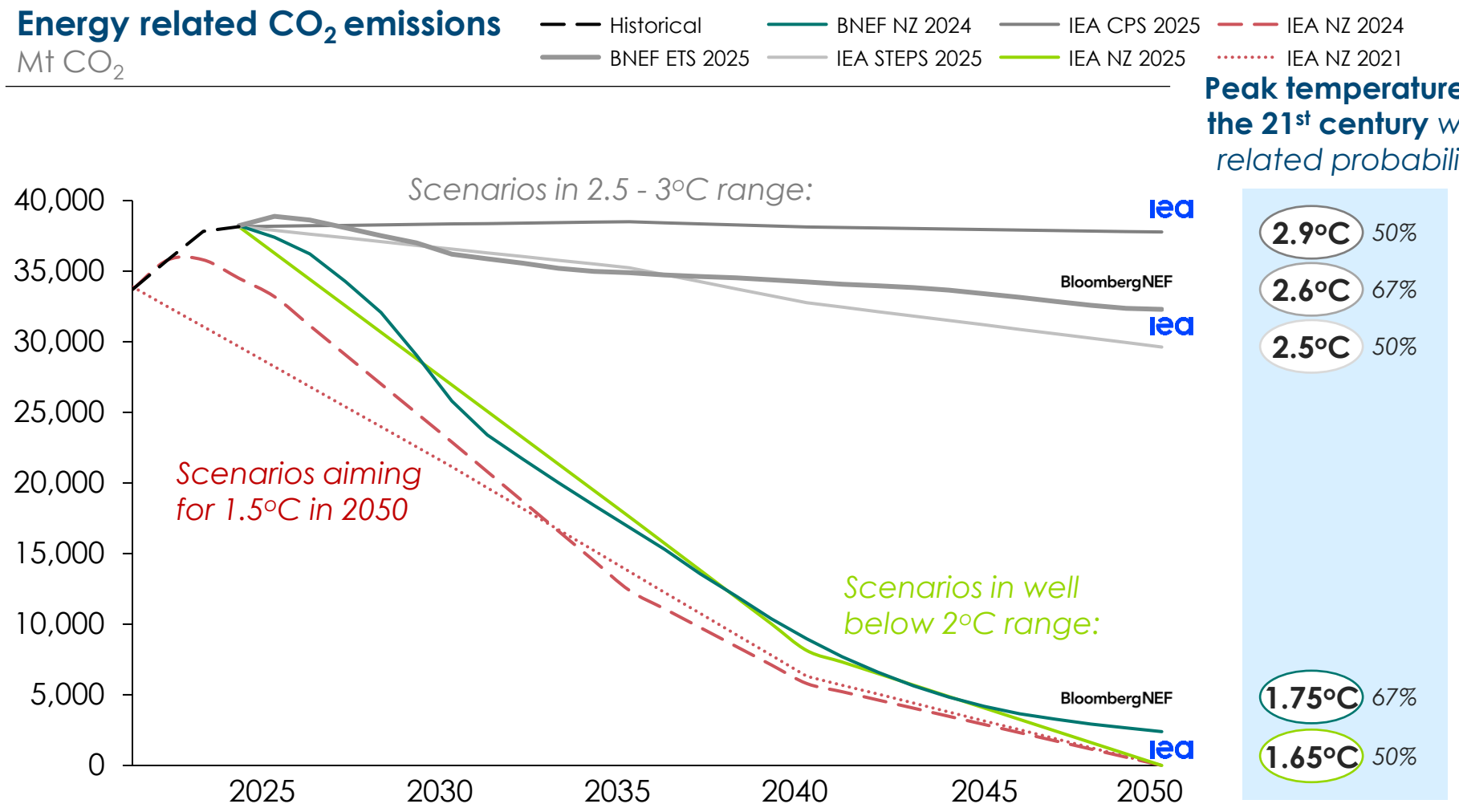
## COP26 (2021) and COP28 (2023)

*"Recognizes that the impacts of climate change will be much lower at the temperature increase of 1.5°C compared with 2°C, and* ***resolves to pursue efforts to limit the temperature increase to 1.5°C.****"*

- *"emphasizes the need for* ***urgent action and support to keep the 1.5 °C goal within reach****…"*
- *"encourages Parties to come forward in their next* ***nationally determined contributions … aligned with limiting global warming to 1.5°C****"*

Source: UNFCCC(2015) Paris Agreement; IPCC (2018) Global Warming of 1.5°C; UNFCCC (2021) Glasgow Climate Pact; UNFCCC(2023) First Global Stockage

# Latest projections note some level of overshoot to 1.5°C and well below 2°C still possible, but current momentum heading for 2.5-3°C




**Peak temperature in the 21st century** *with related probability*

| | |
|---|---|
| 2.9°C | 50% |
| 2.6°C | 67% |
| 2.5°C | 50% |
| 1.75°C | 67% |
| 1.65°C | 50% |

- IEA's 2021 and 2024 **Net-Zero scenarios** aimed to limit to 1.5°C in 2050; **2025 update reaches 1.65°C in 2050**, coming back to 1.5°C by 2100
- We have **yet to reach peak emissions**: $CO_2$ still grew at 0.8% in 2024. Latest update reflects, **slower pace of transition** in early years.
- **Unlike IEA, BNEF Net Zero doesn't assume reliance on removals post-2050**

Source: IEA (2021) Net Zero by 2050; IEA (2024) A Net Zero Roadmap; IEA (2024) World Energy Outlook; IEA (2025) Global Energy Review; BNEF (2025) New Energy Outlook
Note: IEA Scenarios have emissions interpolated between 5-10 years; BNEF scenarios only accounts for Energy Sector and Industrial process emissions, to compare against IEA's scenarios, remaining emissions from comparable scenarios from IEA were added to BNEF scenarios (i.e. BNEF ETS 2025 was adjusted according to IEA STEPS 2025, and BNEF NZ 2024 was adjusted according to IEA NZ 2025)

# Despite strong momentum on decarbonisation, COP30 negotiations had shortcomings

## Key COP30 Successes

1. **Momentum on Energy Transition**
   Global commitment to scale grids, storage, and renewables (e.g., UNEZA targeting **USD 1T by 2030**).
2. **Industrial Decarbonisation Push**
   Brazil launches ENDI; 30+ countries sign the Belém Declaration; unified steel standard covering **70% of global output**. Agreement on **four-fold increase** in global SAF production by 2035.
3. **Breakthrough on Climate–Trade Linkages**
   First COP text linking climate policy to trade (e.g., CBAM), elevating an issue long blocked in negotiations.

## Key COP30 Shortcomings

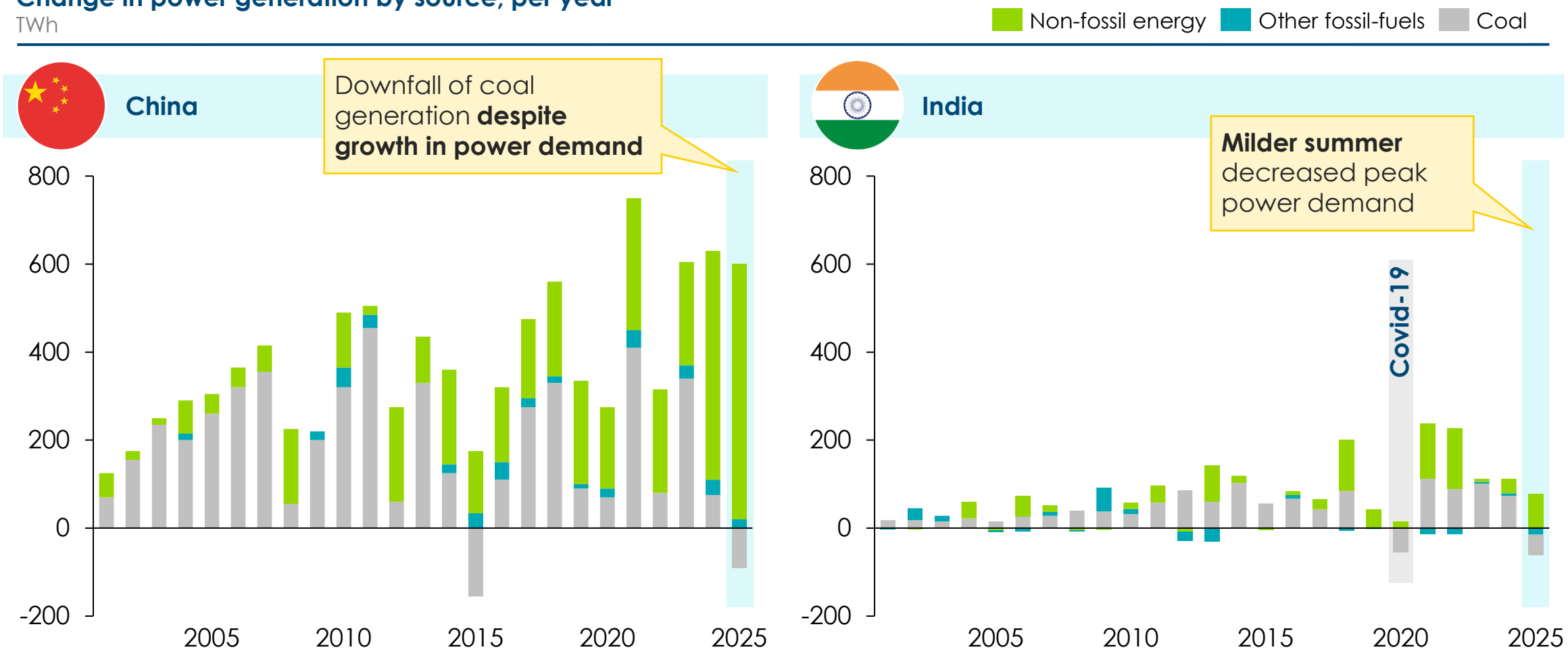
1. **Failure to commit to fossil fuel phase down**
   Fossil fuels not mentioned in the negotiation text
2. **Climate finance**
   Unable to secure a binding roadmap for climate finance, with pledges far below the $1.3 trillion required by developing nations
3. **Carbon market rules**
   Foundations of inter-governmental carbon credit trading continue to be put in place, though concerns about robustness and additionality still remain
4. **Weak ambition on NDCs**
   The 113 (of 197) new Nationally Determined Contributions submitted fall short by 9-26 $GtCO_2e$ to fill to ambition gap with key submissions missing from India and the UAE

Source: Systemiq analysis for ETC.

# In the power sector, progress has been strong with renewables growth in 2025 displacing for the first time coal power generation in China and India

## Change in power generation by source, per year

TWh

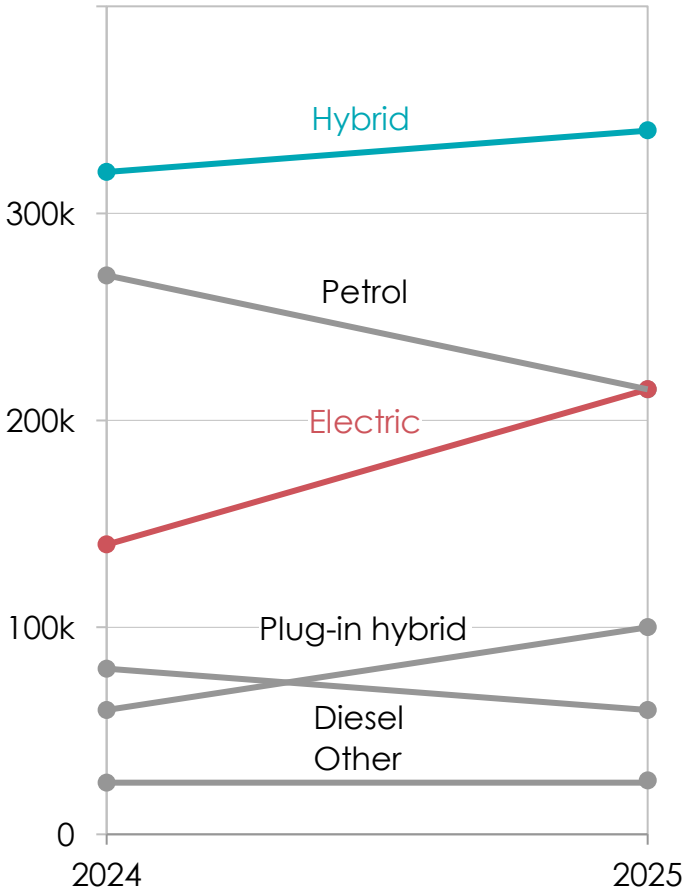



Source: Carbon Brief (2026) Coal power drops in China and India for first time in 52 years after clean-energy records

# Electric vehicles penetration is picking up outside of China: EV surpassed ICE sales in the EU and emerging markets are leapfrogging to high shares

## EU Sales by vehicle type, Dec 24-25

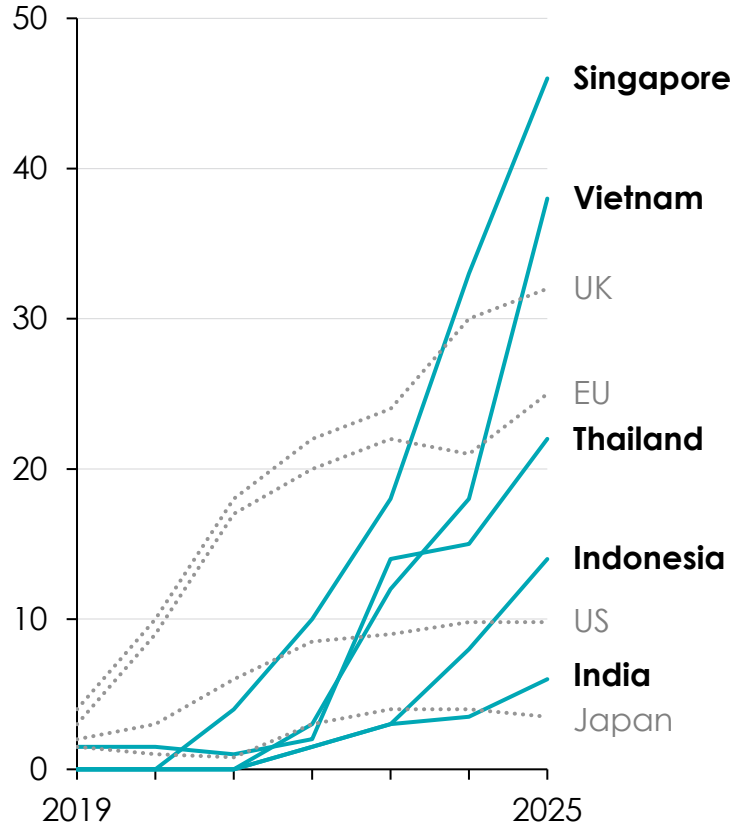
Number of vehicles



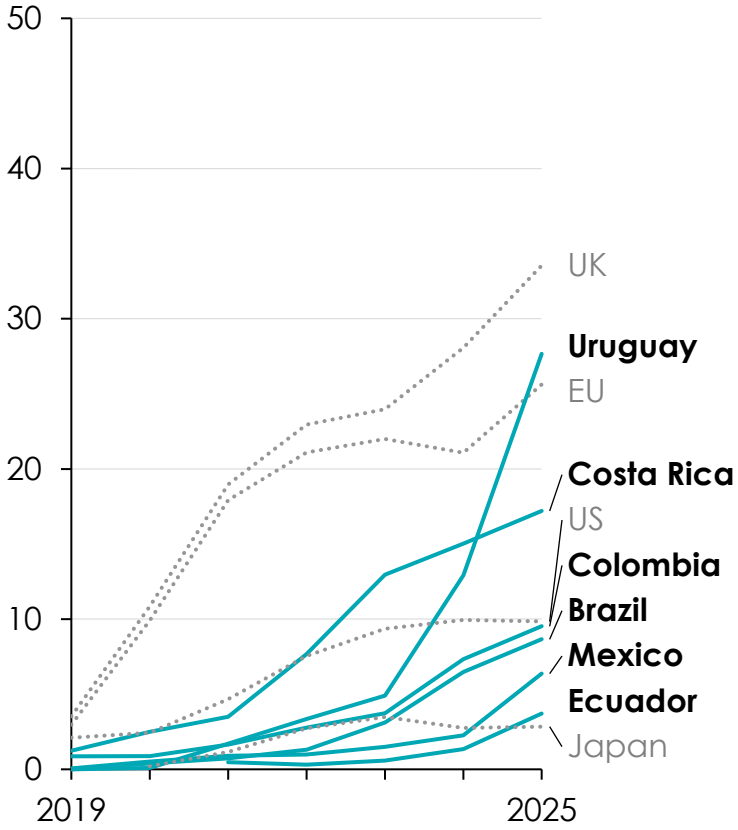

## EV Shares of new passenger car sales

%

### Asia[1]




### Latin America and Caribbean[1]



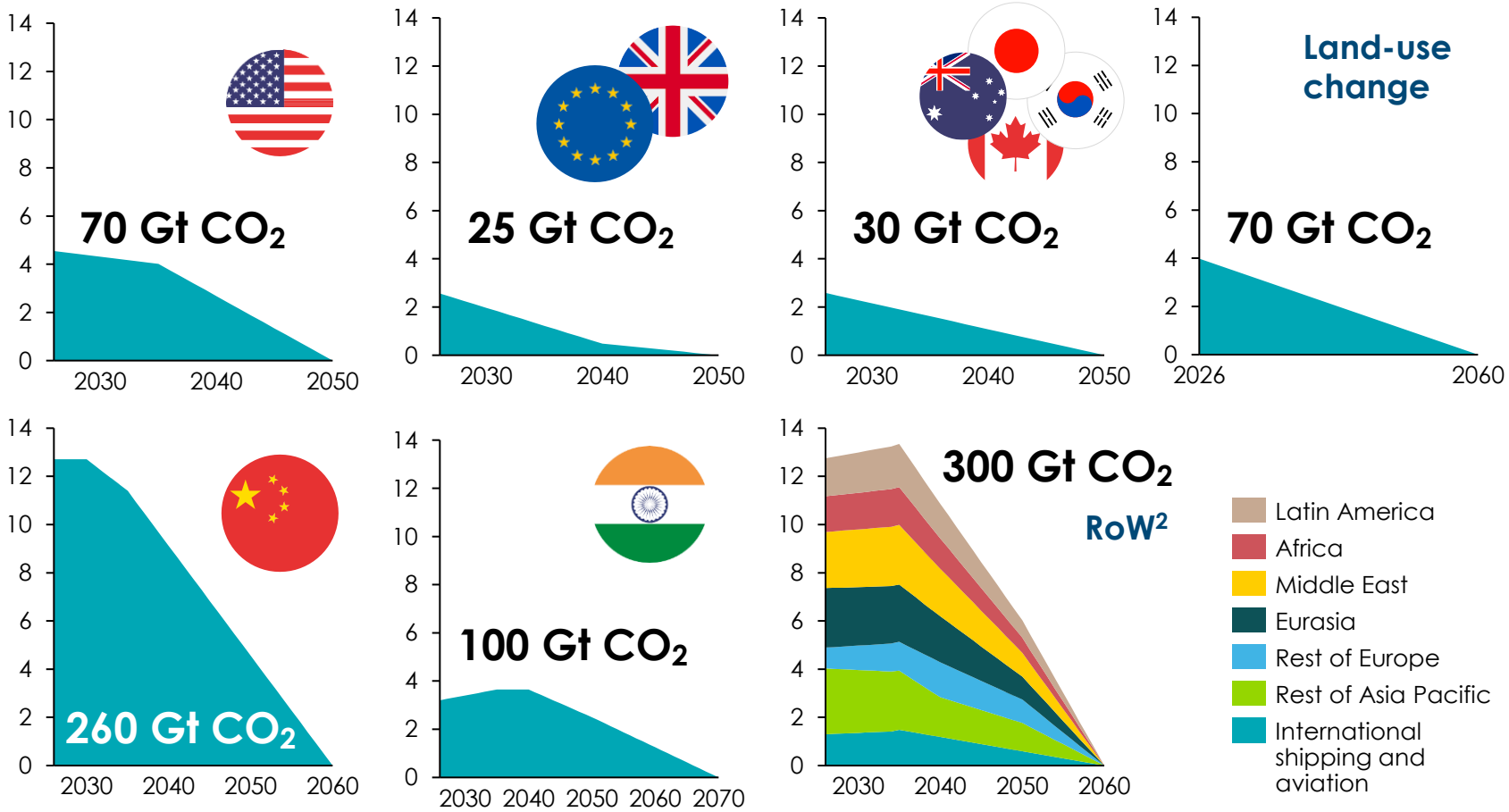

1. Grey lines show EV sales shares in select advanced economies for comparison

Source: Carbon Brief (2026) EVs just outsold petrol cars in EU for first time ever; Ember

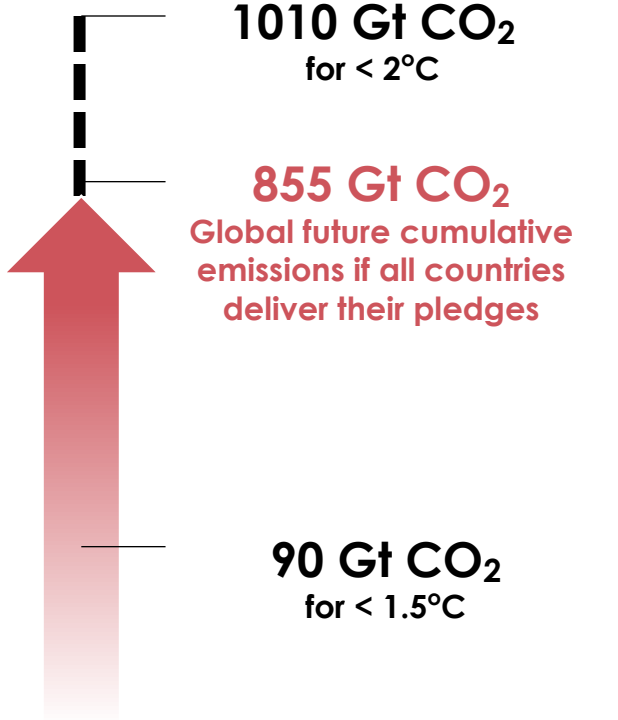
# Even if all countries implement their pledges, cumulative future emissions likely to far surpass the carbon budget for a 1.5°C trajectory

## Cumulative $CO_2$ emissions[1], 2026-2070

$GtCO_2$




## Remaining carbon budget in 2026 for a 50% likelihood




1. Country estimates refers to energy-and industry related emissions; 2. Estimated based on IEA's STEPS until 2035 and then straight lined to 2060

Source: IEA (2025) World Energy Review; JRC/IEA 2025 Report (2025) GHG emissions of all world countries; Global Carbon Budget (2025) Fossil fuel CO2 emissions hit record high in 2025; Climate Change Tracker available at: https://climatechangetracker.org/climate-change-progress/current-remaining-carbon-budget-and-trajectory-till-exhaustion [Accessed November 2025]

# Finance and corporates are struggling to implement net-zero targets, despite record year for SBTi validations

## Finance

### Alliances updates

GFANZ

*Over 700 members in 2024*

- Restructure: dropped requirement to be Paris aligned & publish targets and progress;

Net Zero Asset Managers Initiative

*325 signatories as of Jan 2024*

- Major companies left e.g., Blackrock (2025), Vanguard (2022)
- Suspended activities on implementation/reporting in Jan 25

net-zero banking alliance

*Disbanded in 2025*

- HSBC dialled back internal targets, but remains engaged with GFANZ.

Net Zero Insurance Alliance

*Disbanded in 2024*

## Corporates

### Commitment updates

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

*~11,000 companies, 25% of global revenue +* doubling of Chinese companies in 18 months, BUT:

- 200 high-profile companies delisted (e.g. Microsoft, Unilever)
- Only ~50% of companies on track for Scope 1 or 3 emissions reductions
- New guidance, due next year, to stick to Net Zero by 2050 but no temperature pathway

Major O&G dialling back on climate targets due to a slow phase out of FF

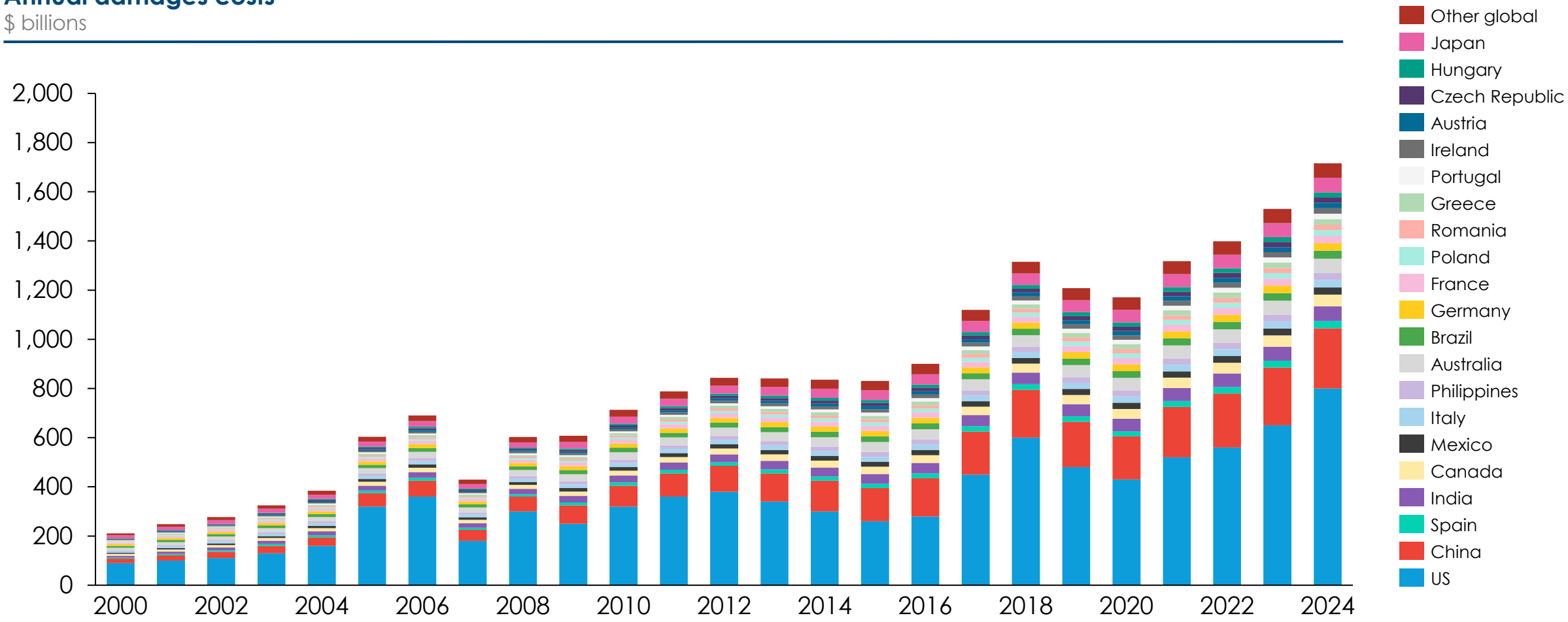
- **Shell's** removed 2035 target to reduce products emissions by 45% (though maintaining commitment of minus 15-20% by 2030)
- **BP** removed targets to 2030 and ramp-up fossil fuel investments

Source: Press releases; SBTi (2025) *SBTi Trend Tracker*. Shell (2024) *Energy Transition Update*. PWC (2025) *PwC's Second Annual State of Decarbonization report*. PWC (2025): 73% of companies on track for Scope 2; 46% on track for Scope 1; 54% for scope 3.

# Every year climate damage cost increases: in 2024 it cost the world $ 1.7 trillion with US spending 3.4% of national GDP

## Annual damages costs

$ billions




Note: Climate damages include insured and uninsured damages to property and climate-related government spending (including drainage grants, disaster prevention and recovery, environmental protection and agricultural insurance subsidies).

Source: https://assets.bbhub.io/professional/sites/44/BNEF-Adaptation-and-Resilience-The-New-Investment-Imperative.pdf, Bloomberg Intelligence Climate Damages Tracker, Bloomberg NEF.

# Agenda

- Reflections on COP and the state of the transition in early 2026
- **Protecting Paris: the challenge and ETC role**
- Emerging insights
- Progress to date and next steps

# Voices today are proposing we let Paris slide… ETC aims to shore up commitment to action, reinforcing Paris's well below 2°C objective

*Calling for re-anchoring in ambition*

*Calling for a decrease in ambition*

## Net Zero..ish at 2-3°C

- Focus on **economically viable solutions** – with a strong focus on **electrification** which enables 80% of emissions reduction.
- People should **not accept a cost impact** of:
  I. Accelerating clean electricity;
  II. Reducing emissions from the HTA sectors (i.e. green premiums).
- **Negative climate change effects** are likely to be manageable

**Risk of 'disorderly backsliding' on climate commitments**

## Net Zero well below 2°C

- Focus on **identifying the credible set of actions, and the target implications**, which responsible companies and countries should pursue.
- Provide concise evidence on transition costs and distributional impacts, clarify the collective effect of targets, and ground the work in the latest science on climate risks.
- ETC favorable positioning on this debate:
  - ✓ Trusted technical and economic analysis
  - ✓ Forum for objective debate
  - ✓ Extensive global reach

# Progress on cost reduction and deployment relative varies by sector – but progress expectations suggest well below <2°C still possible

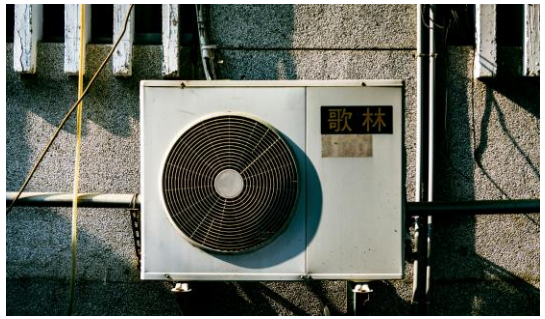
## Low/zero carbon power

- **Renewables and nuclear** accounted for **80% of electricity growth in 2024** – with renewables growth outpacing global electricity demand in 1st half of 2025
- **Renewables overtake coal** as the world's largest source of electricity
- ETC " Power system transformation" report confirms the potential for low-cost decarbonisation, particularly in the global sunbelt

## Road transport electrification

- **EVs** set to account for **25% of all car sales in 2025**
- EVs are already cheaper than ICE comparable models in China
- Rising sales in emerging markets: sales more than doubling in Brazil and almost tripling in Indonesia.

## Residential heat electrification



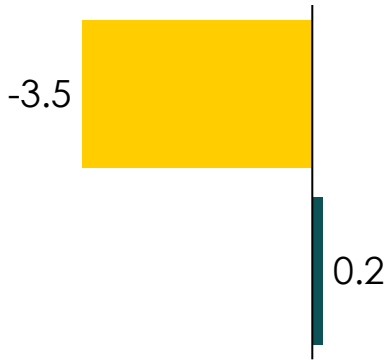
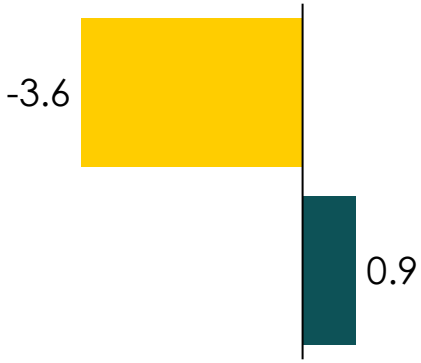
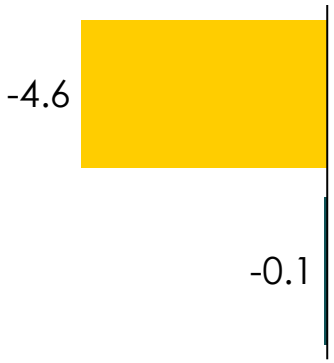
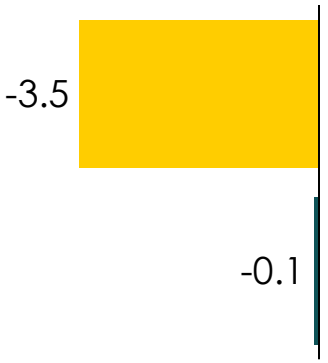

- **Heat pump** sales **fell by 1% in 2024** mostly due to slow down in Chinese market; but outsold gas boilers in the US by 30%
- The next decade will be vital for electrical heating to reach widespread deployment in key markets

## Hard to abate sectors

- **Significant announcements for ammonia and aviation** but too slow in aluminium, cement and steel.
- Over half of new projects now in Sunbelt (including EMDEs), driven by cheap renewables, national incentives.
- To achieve 2030 and 2040 goals, projects must be financed and begin construction within the next two years.

Source: IEA (2025) World Energy Review; MPP Global Project Tracker. For per sector sources, products in scope and technologies in scope please refer to MPP Global Project Tracker: Ember (2025) Global Electricity Mid-Year Insights 2025; BNEF (2025) Electric Vehicle Outlook

# 4 big “misses” in the 2020s

| Required action in 2020s for 1.5°C limit | Early run down of existing coal generation | End of deforestation | Methane emission reduction | Carbon removals |
|---|---|---|---|---|
| |  |  |  |  |
| **Required reductions in annual emissions (2021-2030)** *Gt CO2e* |   |   |   |   |
| **Actual change in annual emissions (2021-2024)** *Gt CO2e* |   |   |   |   |
| | ▪ Electricity equals 2/3 of coal demand<br>▪ China and India lead coal consumption, 2025 might have reached peak | ▪ Global deforestation slowing compared to previous decades, but still 65% higher than the required annual rate | ▪ Fossil fuel CH4 intensity down by only 8% in past 3 years<br>▪ Bio and agriculture emissions down by 2% in the past 3 years | ▪ Massive gap between CDR demand vs. need<br>▪ DAC cost pathways revised upwards |

Notes: Methane emissions expectations only account for NDCs and Global Methane Pledges commitments; *MSCI CDR credit volume calculated by multiplying projected market size ($) by ETC average cost of carbon removal in each year ($/tCO$_2$)*. Source: ETC (2021) Assessing the commitments from COP26; ETC(2021) Keeping 1.5oC Alive; WRI (2025) Deforestation and Restoration Targets Tracker (Beta); IEA (2025) world Energy Outlook; MSCI Carbon Markets (2025), Frozen Carbon Credit Market May Thaw as 2030 Gets Closer; *Crippa M., Guizzardi D., Pagani F., Banja M., Muntean M. et al., GHG emissions of all world countries - 2025 Report, Publications Office of the European Union, Luxembourg, 2025, doi:10.2760/9816914, JRC143227; Global Forest Watch [Accessed Nov 2025].*

# The focus of ETC work will be equal part analysis and considered engagement, with iterations between the two

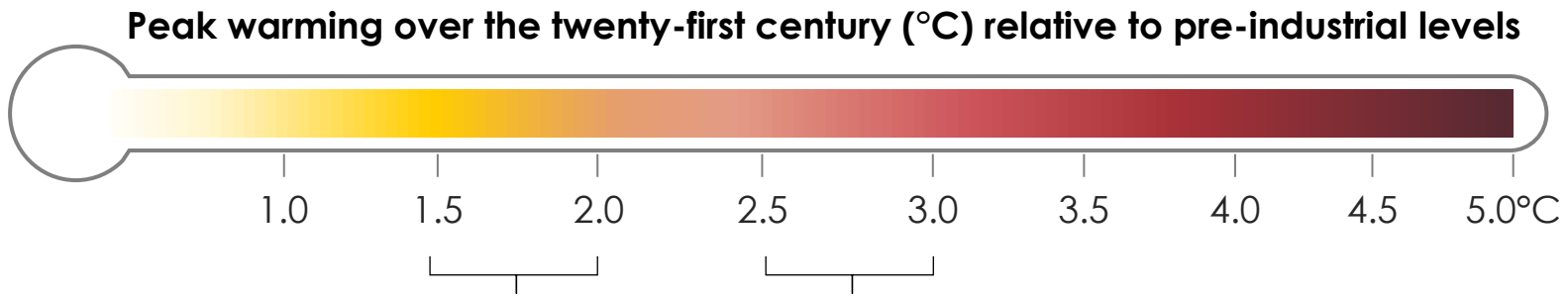
## Analysis

- Identify the core 'blocks' of emissions reductions that are needed to deliver temperatures closer to Paris objectives
- Identify costly and costless actions
- Actions and targets required to deliver

## Engagement

- Moving from deep listening to testing emerging conclusions
- Work with partners to seed ownership and adoption of actions and targets required to deliver ambitious climate action in next 5-10 years, by COP31

# ETC will dissect the difference between a transition led purely by lowest cost economics and a faster transition that allows us to remain well below 2°C




**2 main mitigation blocks**

**A** **Turbocharging clean electrification & power decarbonisation**

- **AI** Turbocharging electrification
- **AII** Accelerating renewables
- **AIII** Early coal phase out

**B** **Other critical mitigation actions beyond electrification**

- **BI** Accelerating action across the harder-to-abate (HTA) sectors
- **BII** Reducing methane and $N_20$ emissions
- **BIII** Reducing emissions in LULUCF*

**+** **Removals**

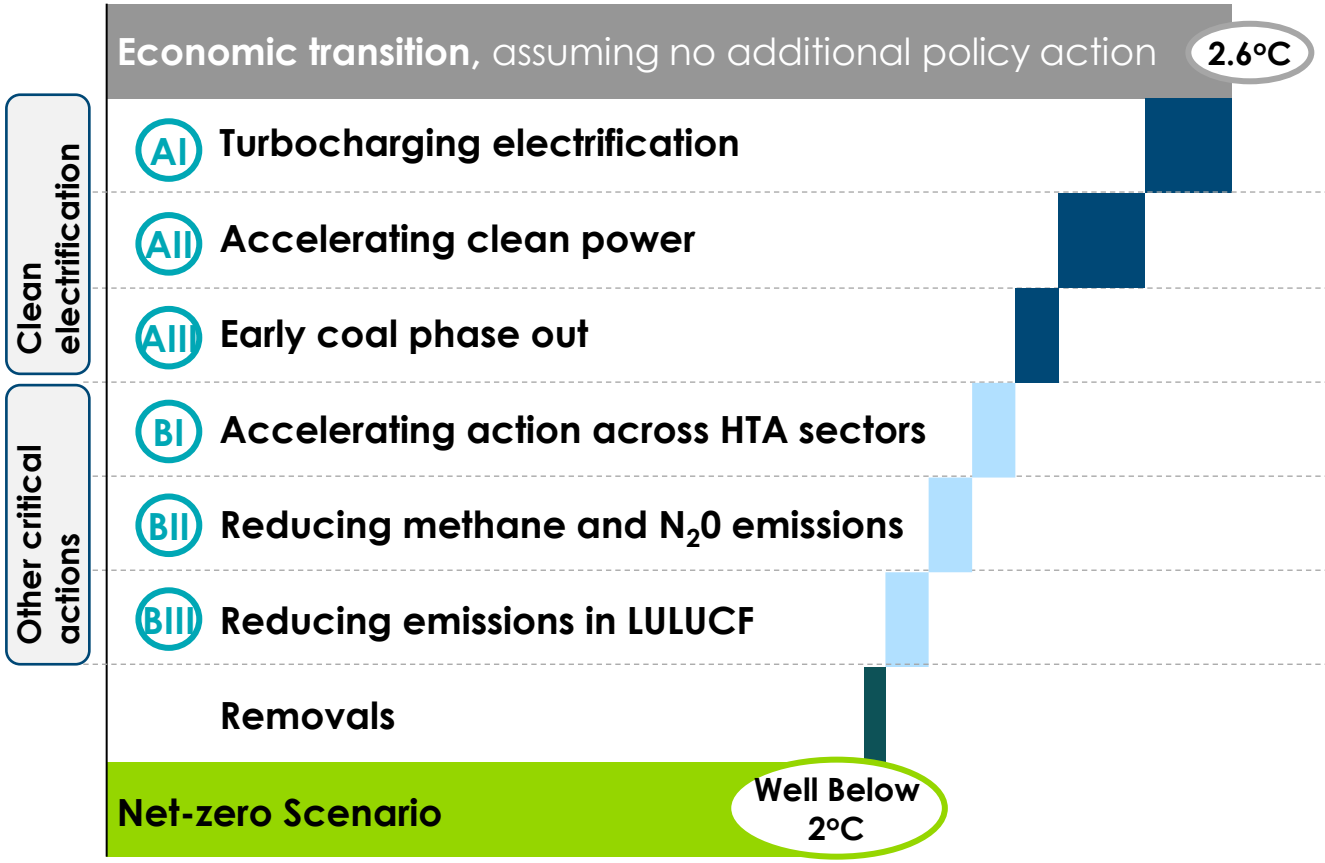
Note: LULUCF = Land Use, Land Use Change and Forestry

# We will clearly identify the core 'blocks' of emissions reductions that are needed to deliver temperatures closer to Paris objectives

Illustrative

## Peak warming in the 21st century and key mitigation areas

°C




## Key levers of change

- Accelerating electric vehicles, heat pumps and industrial electrification, doubling energy efficiency
- Tripling renewables, extending grids and deploying storage
- Decreasing coal generation by decommissioning of old plants or displacing baseload demand
- Low-carbon steel, cement, aluminium and chemicals + sustainable aviation/shipping
- Cutting non-$CO_2$ emissions from O&G production and distribution as well as waste and agriculture
- Ending deforestation and increasing ecosystem restoration
- Scaling carbon dioxide removals from nature and engineered sources, alongside ambitious emissions reductions

Note: LULUCF = Land Use, Land Use Change and Forestry

# We will highlight the costs – where mitigation is costless, it will need accelerated investment or will have a cost premium to be absorbed

**Illustrative**

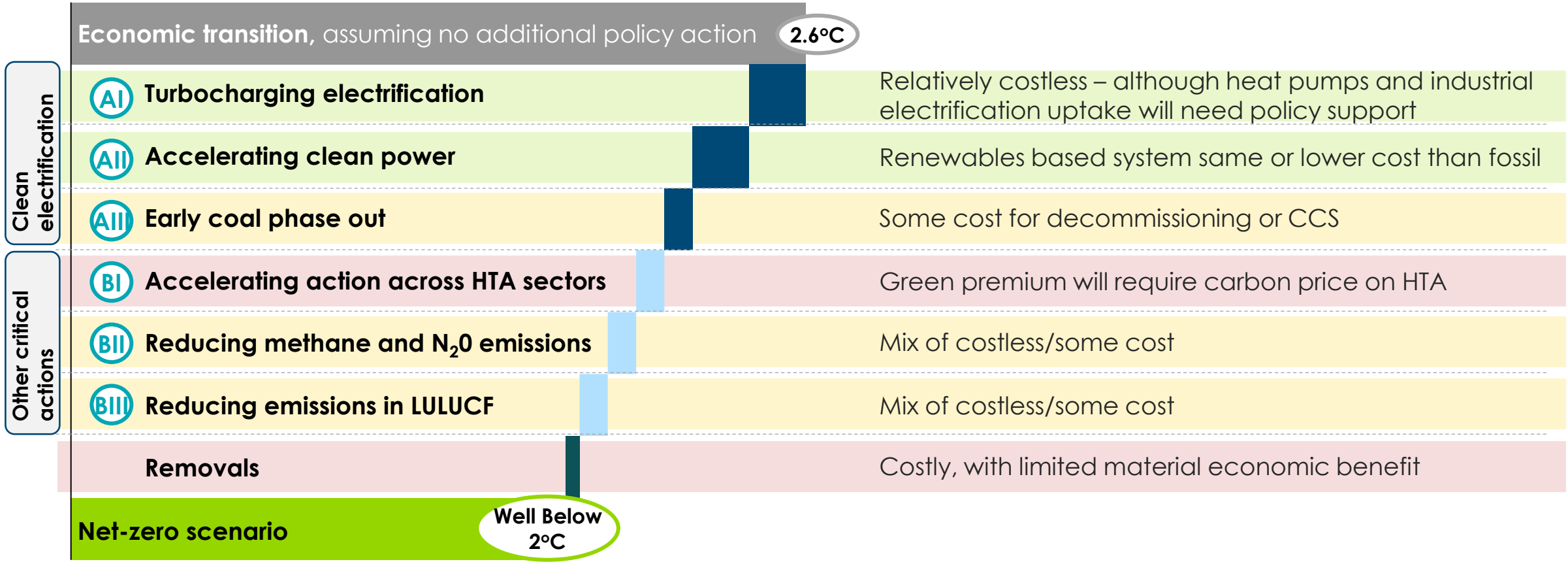
**Key**

| |
|---|
| No cost or cheaper than alternative |
| Some cost |
| Clear cost |

## Peak warming in the 21st century and key mitigation areas

°C

## Relative cost of action



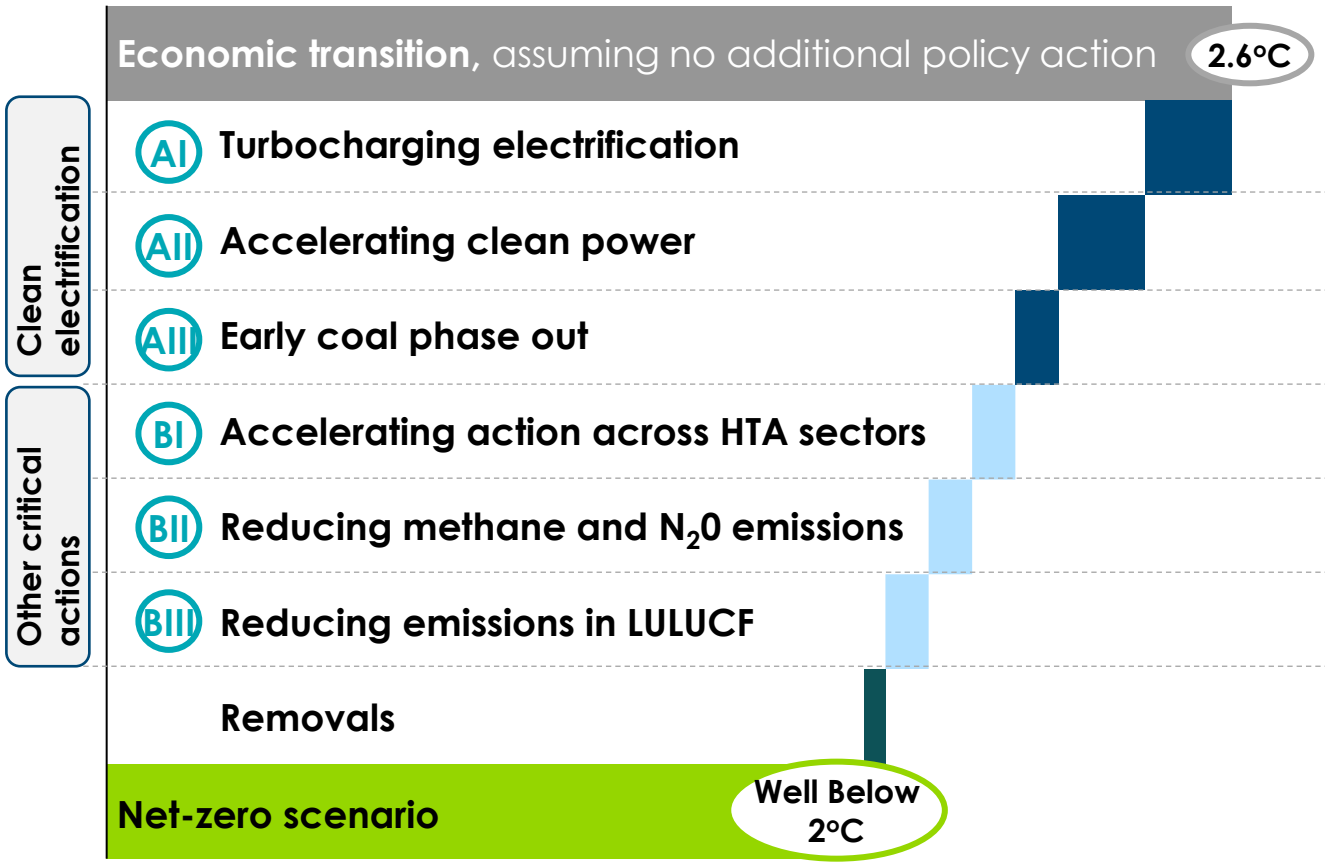

Note: LULUCF = Land Use, Land Use Change and Forestry

# …and highlight the critical actions that are required to deliver these reductions – including climate policy

**Illustrative & to be iterated in engagement phase**

## Peak warming in the 21st century and key mitigation areas

°C




## Key public policies to analyse

- ICE bans, heat pump incentives, gas to electricity price parity, increase access to electricity, appliance efficiency
- Grid reinforcement, market mechanism (e.g. distributed generation, enable demand side flexibility)
- Decommissioning costs, CCS incentives, carbon pricing
- Carbon price and/or CfD; off-take de-risking mechanisms; fuel/product mandates
- Methane regulation and enforcement in O&G, product/food labelling, campaigns for diet change
- End deforestation, increase ecosystem restoration
- Increase demand for carbon credits in mandatory and voluntary markets (e.g. Article 4 Mechanism)

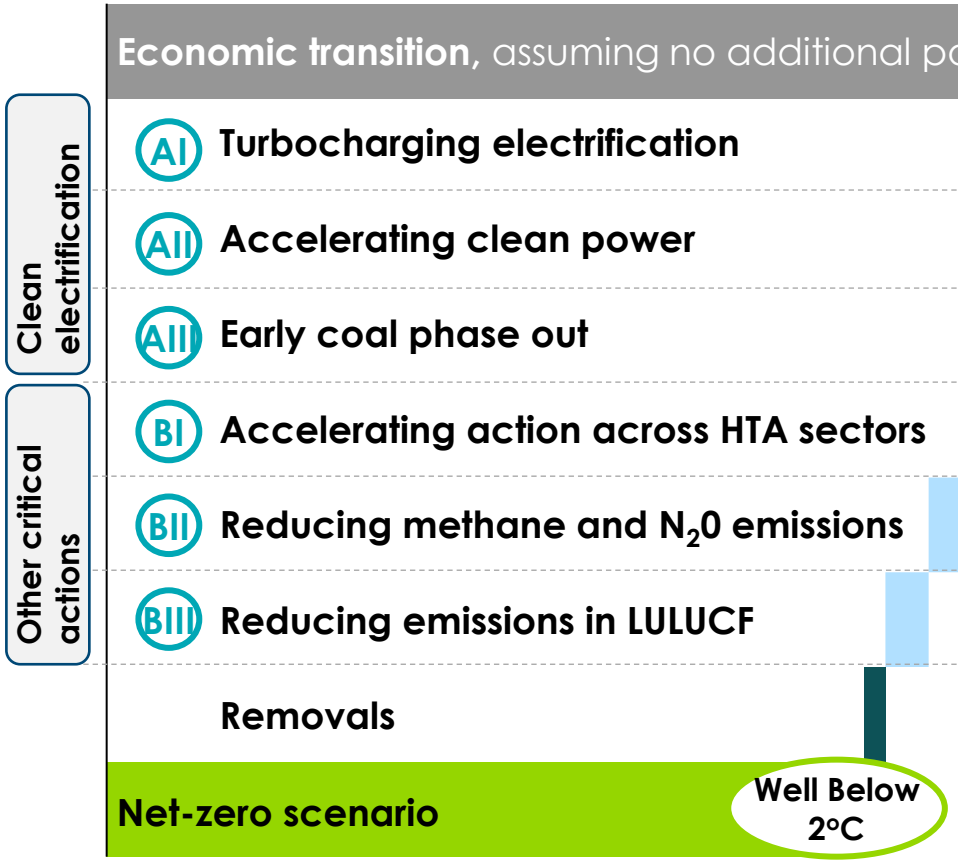
Note: LULUCF = Land Use, Land Use Change and Forestry

# …Finally, we will seek to test, refine & seed ownership of the required near-term actions & targets that put the world on track

**Illustrative & to be iterated in engagement phase**

## Peak warming in the 21st century and key mitigation areas

°C



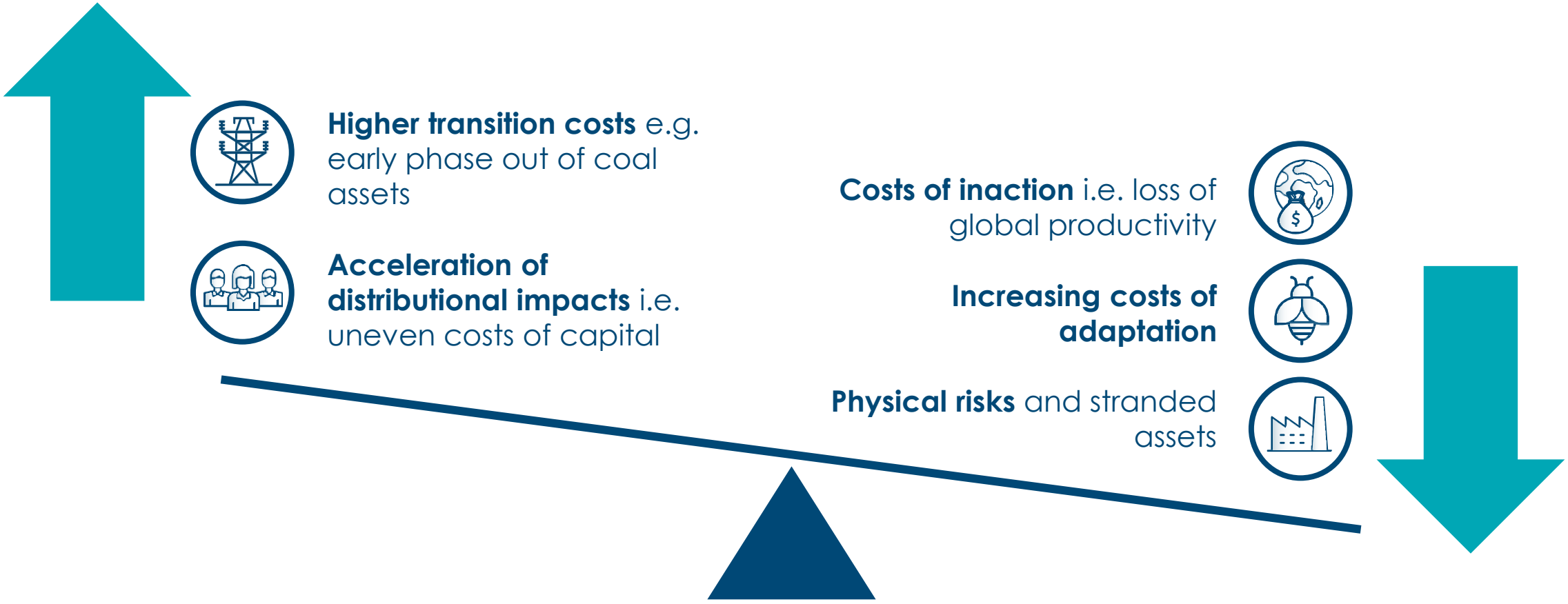

## Required targets (to be developed further)

- Near-term targets such as EV100, doubling energy efficiency, share of electrification (e.g. 35% by 2035), appliance efficiency
- Near-term targets such as RE100, tripling of renewables (GW)
- Coal phase out commitments, caps on grid emissions (i.e. $CO_2$/TWh),
- Green fuel and product targets (e.g. % by 2030, number of FIDs)
- Methane reduction targets (e.g. for O&G), food standards (e.g. for non-CO2 in agriculture)
- Supply chain targets for avoided deforestation
- Neutralisation or beyond net-zero pathway targets for companies with lower decarbonisation costs; robust integration in emissions trading schemes

Note: LULUCF = Land Use, Land Use Change and Forestry

# There will be trade-offs to continue in a “well below 2°C” trajectory, but the alternative cost of non-transitional scenarios could be far worse

**Faster transition** ⟷ **Delayed transition**



**Higher transition costs** e.g. early phase out of coal assets

**Acceleration of distributional impacts** i.e. uneven costs of capital

**Costs of inaction** i.e. loss of global productivity

**Increasing costs of adaptation**

**Physical risks** and stranded assets

Source: Systemiq analysis for ETC

# Through a programme of analysis and engagement, we will target endorsement and adoption of a revised action plan for "well below 2°C"

**OUTPUTS**

- **Revised action plan on mitigation opportunities** across clean electrification, heavy industry and nature + key country level acceleration prospects.
- **Global, white label, data sets and core narratives** addressing burning questions on how to accelerate the pace of today's transition

**OUTCOMES**

- **To protect and sustain climate action by keeping actions and targets credible and deliverable,** preventing abandonment of commitments perceived as unattainable.
- **Ambition, actions and targets** resulting from our analyses **recognised and owned by a broad network of key players** seeding a wider conversation at and in the run up to COP31 and beyond

**IMPACT**

**Endorsement and adoption of a revised action plan** – led by ETC but diffused through a broad community of actors - **to put the world back on track to well below 2°C**, based on leading new analysis, refined through engagement and adopted at the highest level and taken forward by key parties.

# ETC will engage with 6 key audience groups

**International climate community**
including IPCC, UNFCCC, SBTi

**Financial institutions**
including former GFANZ/NZBA stakeholders

**Corporates**
inside and outside the ETC coalition

**Civil society players**
including the NGO community

**Leading modellers**
including the IEA, BNEF, S&P

**Policymakers**
Politicians, Special Advisers and Senior Civil Servants

# We aim to mobilise throughout 2026 – targeting the ramp up to COP31

**Analysis**

Dec-Jun

**Development of core analysis:**
- Turbocharging clean electrification
- Accelerating power decarbonisation
- Hard-to-abate decarbonisation
- Reducing methane and N20 emissions
- Food production and LULUCF

End of analysis

Nov COP31

**Engagement**

*To be defined, if a publication, what format, e.g. a report, an article, …*

Oct-Feb '25

**PHASE 0 - Targeted conversations** with ambitious int'l climate community

Feb-Jun '26

**PHASE 1 - Deep listening and targeted dialogue with core audiences (climate community, corporates, financiers),** to inform out thinking

Jun-Nov

**PHASE 2 - Broader engagement across the wider climate, energy and public-discourse ecosystem** for the going public of ETC recommendations

**PHASE 3 - Seeding a future campaign**

***Ongoing bilaterals***

***~40-50 key bilateral meetings testing our thinking***

***~ 4-5 possible roundtables with key audiences***

***Key stakeholders***

*IPCC, UNFCCC, IEA, Paris Agreement leaders* +

- *Key climate interlocutors*
- *Financial institutions*
- *Civil Society*
- *Leading modellers*

+ *Critical mass of voices including wider climate, energy and public-discourse ecosystem*

Notes: Phase 1 will re-engage with those in Phase 0 plus: key international climate interlocutors (IPCC, UNFCCC, SBTi), Financial institutions (including former GFANZ/NZBA stakeholders); Civil society players (NGO community); Leading modellers (IEA, BNEF, S&P); Phase 2 will reengage with all of Phase 0 and 1 targets plus a broader scope.

# Phase 1 – Deep listening and targeted dialogue with core audiences

Discussions to serve as a listening exercise to help us understand, including how different groups perceive current challenges with decarbonization pathways. ETC will:

- ***Understand how policymakers*** *best think a* ***restatement of climate goals*** *can contribute to renewed momentum.*
- **Seek understanding from financiers and corporates on the challenges** they have faced in implementing targets and what is required to safeguard them going forward.
- **Explore gaps in tools**, **pathways and targets** that ensure transition alignment and action.
- **Discuss how to reshape climate goals and narratives** in light of new priorities around resilience, competitiveness, affordability and security.
- **Decipher implications of a "variable geometry" world on regional and global climate pathways,** particularly with regard to the role of the US and new **electrostate vs. petrostate** polarities.
- **Assess which practical enablers** (finance, policy, technology, sector pathways) all groups consider essential to sustaining momentum.

***Spirit of the conversation:*** *Shaping next phase + Analysis + Embedding ownership*

# Phase 2 – Broader engagement across the wider climate, energy and public-discourse ecosystem

***Key outputs***

**Revised action plan on mitigation opportunities** + **Global, white label, data set and core narratives**

**~40-50 Bilateral meetings**

- **Re-engage with key audiences from Phase 0 & 1** (SBTi, IPCC, GFANZ, UNFCCC) to present emerging conclusions and foster ownership of conclusions and actions.
- **Selectively engage with wider ecosystem key actors:** Corporates, Financiers, Ambitious international climate community, wider energy ecosystem, key communication partners.

**Roundtable discussions (~4).** Tentative topics include:

1. **Understand data gaps and need for a revised pathway toolkit** to give **corporates and financial decision makers** clarity in boardroom decisions on the transition (e.g. GFANZ, NGFS, WMBC)
2. **Align on a plausible set of agreed actions** in supportive policy environments to support **heavy industry players** deal with the increasingly common hurdles to low-carbon investments (e.g. MPP, SBTi)
3. **Agree a plausible set of parameters that underline an ambitious transition** with the **analyst community** to overcome stakeholder pressure limiting the IEA's Net Zero stance (e.g. BNEF, S&P, Wood Mac, Rystad, Ember, IEA)
4. **Empowering and enabling the NGO community to promote key narratives** that result from our analysis and engagement to overcome shifts in sentiment towards security and defence (e.g. WBCSD, SBTi, WMBC, CAN)

**Global climate events:**

CERAWeek by S&P Global | UNITED NATIONS UN Climate Change Conference - Bonn (UNFCCC SB62) | LONDON CLIMATE ACTION WEEK | CLIMATE WEEK NYC °CLIMATE GROUP | COP'31 Antalya Türkiye

# Agenda

- Reflections on COP and the state of the transition in early 2026
- Protecting Paris: the challenge and ETC role
- **Emerging insights**
- Progress to date and next steps

# We will anchor our energy analysis on BNEF's reference scenarios, while benchmarking against other scenarios

**Preliminary**

New Scenarios from BNEF to be released **April 2026**

| | Scenario | Pathway Type | Net-Zero 2050? | Peak temperature | Included Sectors | | | Emissions Scope | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Energy Use[1] | AFOLU[2] | Removals | $CO_2$ | $CH_4$ | $N_2O$ |
| *Reference* | **BNEF** NEO 2025 Economic Transition | **Cost based technology change** with no further policy support for the energy transition beyond existing measures | | **2.6°C** *at 67% probability* | ● | ○ | ○ | ● | ○ | ○ |
| *Reference* | **BNEF** NEO 2024 Net Zero | Normative scenario of an achievable stretch to get back on track to **net zero by 2050 by meeting sectorial carbon budgets** | ✓ | **1.75°C** *at 67% probability* | ● | ○ | ○ | ● | ○ | ○ |
| | **IEA** WEO 2025 Stated Policies | An exploratory scenario that models a **dynamic reading of today's policy** settings | | **2.5°C** *at 50% probability* | ● | ○ | ● | ● | ● | ● |
| | **IEA** WEO 2025 Net Zero | A normative scenario for a global pathway to be **aligned with a 1.5°C warming with limited overshoot** | ✓ | **1.65°C** *at 50% probability* | ● | ○ | ● | ● | ● | ● |
| | **ETC** Accelerated But Clearly Feasible | A technically and economically feasible scenario that would require **more forceful policy support than current in place** | ✓ | **1.7°C** *at 50% probability* | ● | ○ | ● | ● | ● | ○ |
| *New – to be included* | **BP** 2025 Below 2°C Trajectory | Scenario assuming significant **tightening of climate policies** and **shift in societal behaviour and preferences** supporting efficiency | | **2.0°C** *at 67% probability* | ● | ○ | ○ | ● | ● | ● |
| *New – to be included* | **Shell** 2026 Energy Security - Horizon | Normative scenario aiming for **net-zero emissions by 2050 with increased climate-friendly policies** | ✓ | **1.7°C** *at 50% probability* | ● | ● | ● | ● | ● | ● |
| *New – to be included* | **NGFS** Orderly Net-Zero 2050 | Scenario assuming **climate policies introduced early** and become gradually more stringent - **physical and transition risks limited** | ✓ | **<1.7°C** *at 50% probability* | ● | ● | ● | ● | ● | ● |

**Other scenarios to consider:** S&P's IRENA's; Rystad's; The Food and Land Use Coalition's (for AFOLU)

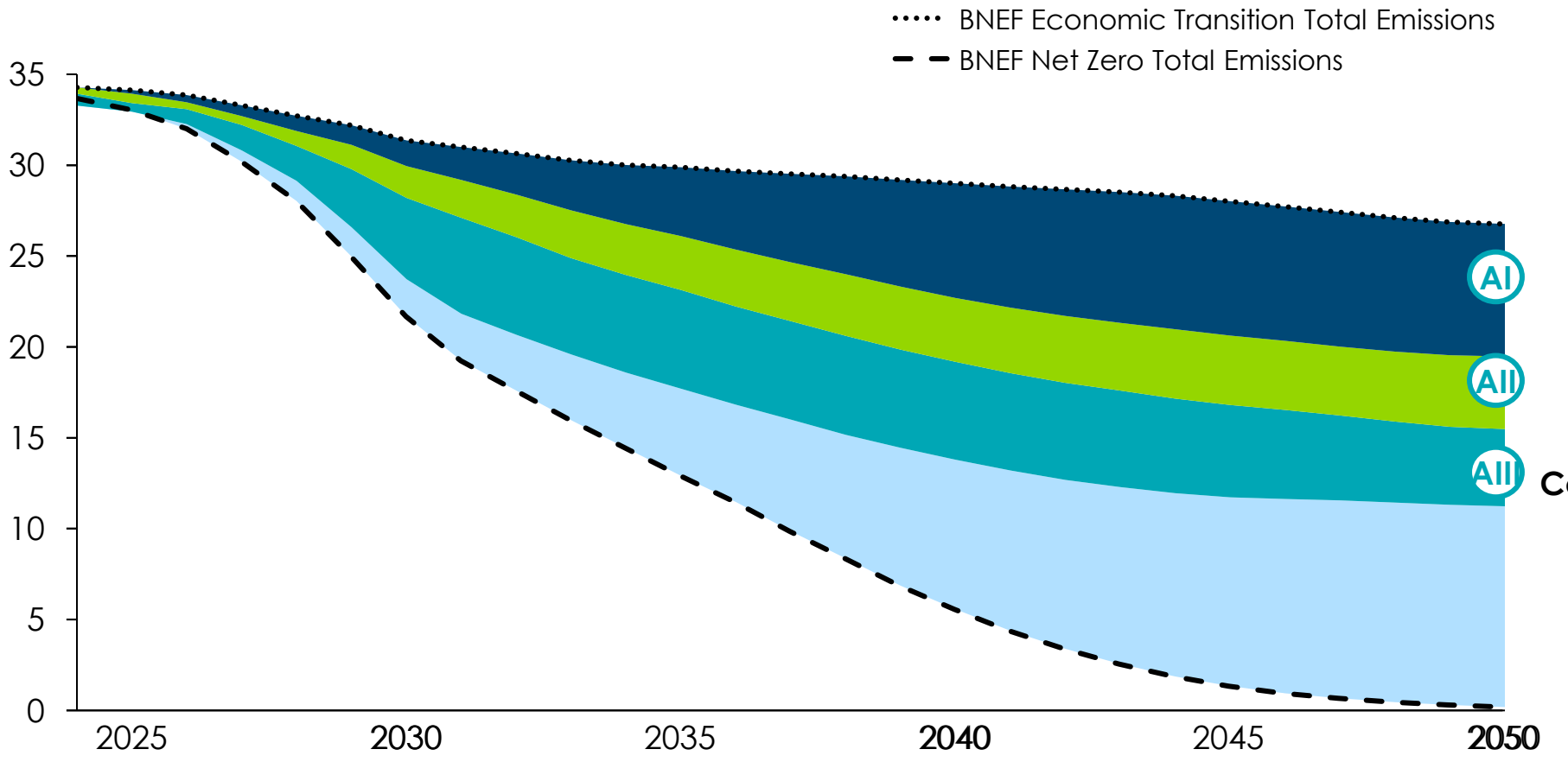
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025; IEA (2025) World Energy Outlook; BP (2025) Energy Outlook; Shell (2025) The 2026 Energy Security Scenarios; NGFS, Scenarios Portal [Accessed January 2026]

# Clean electrification, is two-thirds of the abatement opportunity beyond an economic transition to reach net zero by 2050

Preliminary

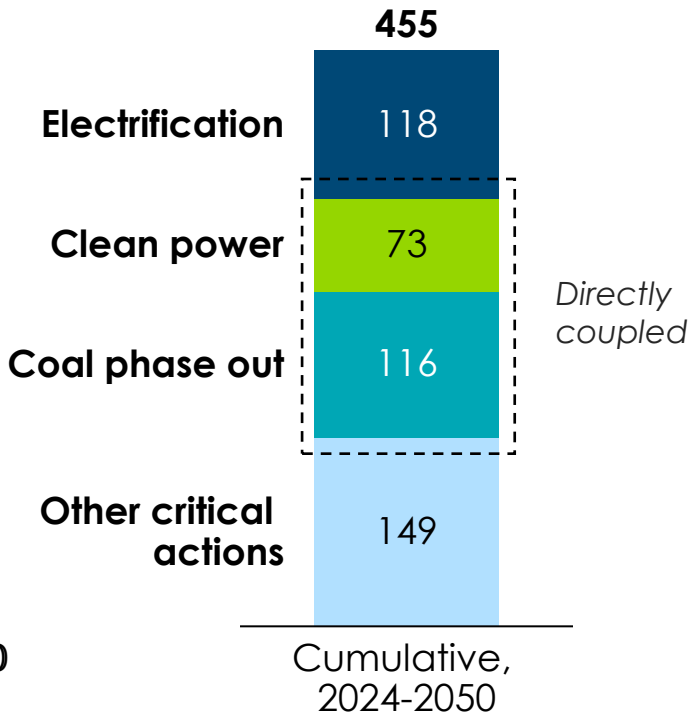
## Annual energy related $CO_2$ emissions abatement by lever (NZS vs ETS)

$GtCO_2/y$




### Abatement difference between scenarios

$GtCO_2$

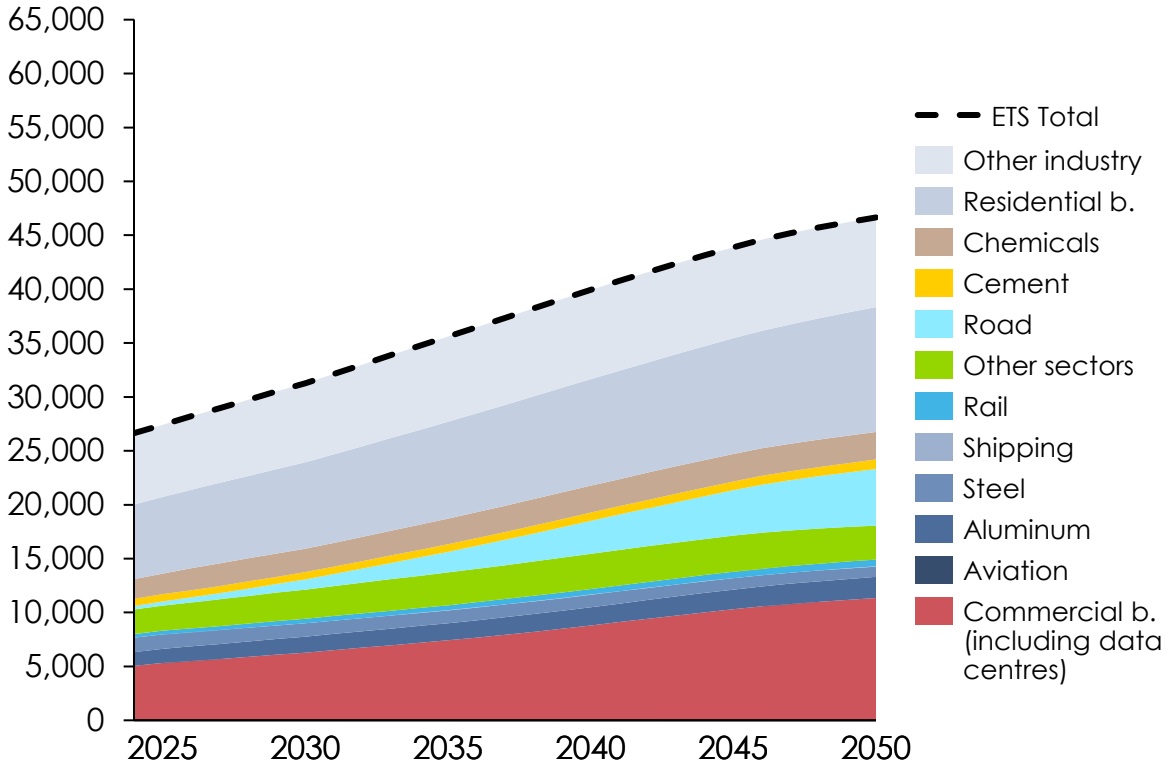



Notes: "Other critical actions" include energy–intensive industry, shipping and aviation, demand reduction, energy efficiency, and heat (non-electrified)
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# Faster pace of electrification in industry, including electricity demand for CCS, buildings and road is required to achieve net-zero

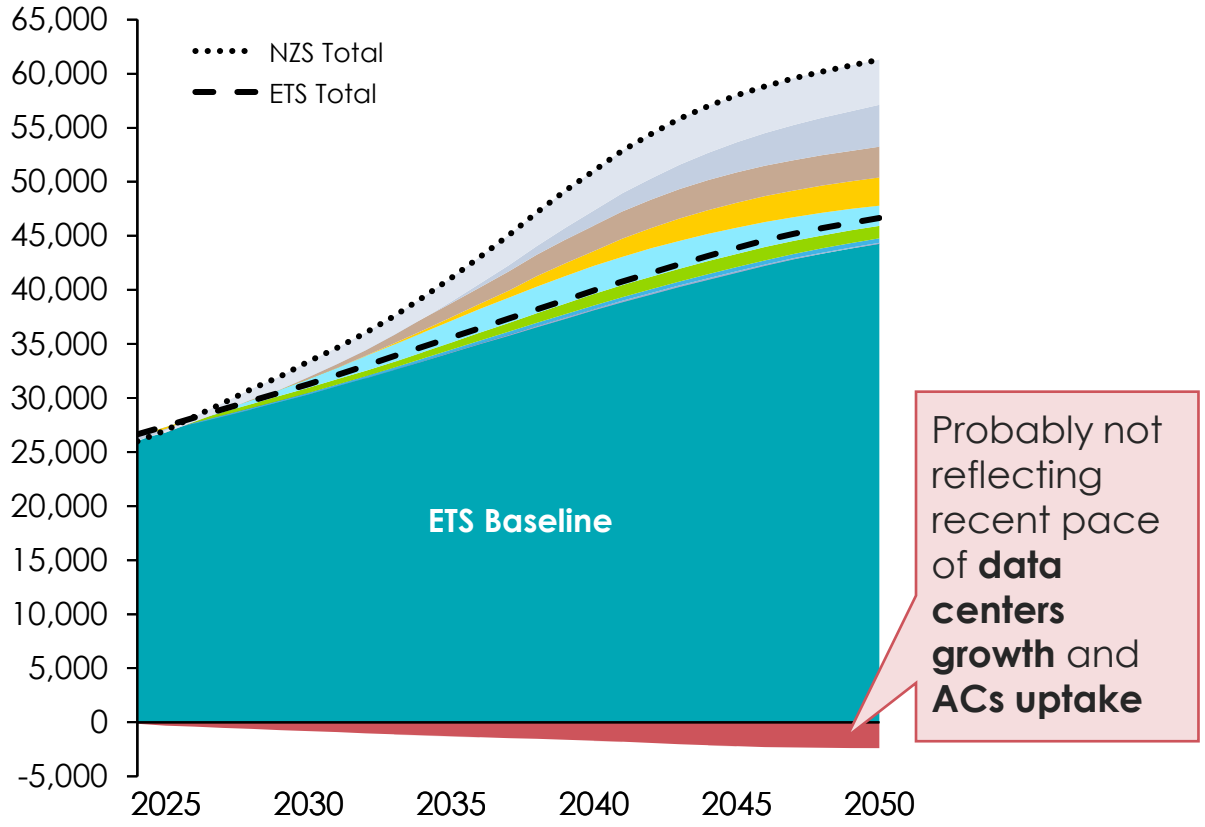
## Economic Transition: Final electricity demand by sector

TWh/y




## Net Zero: Final electricity demand

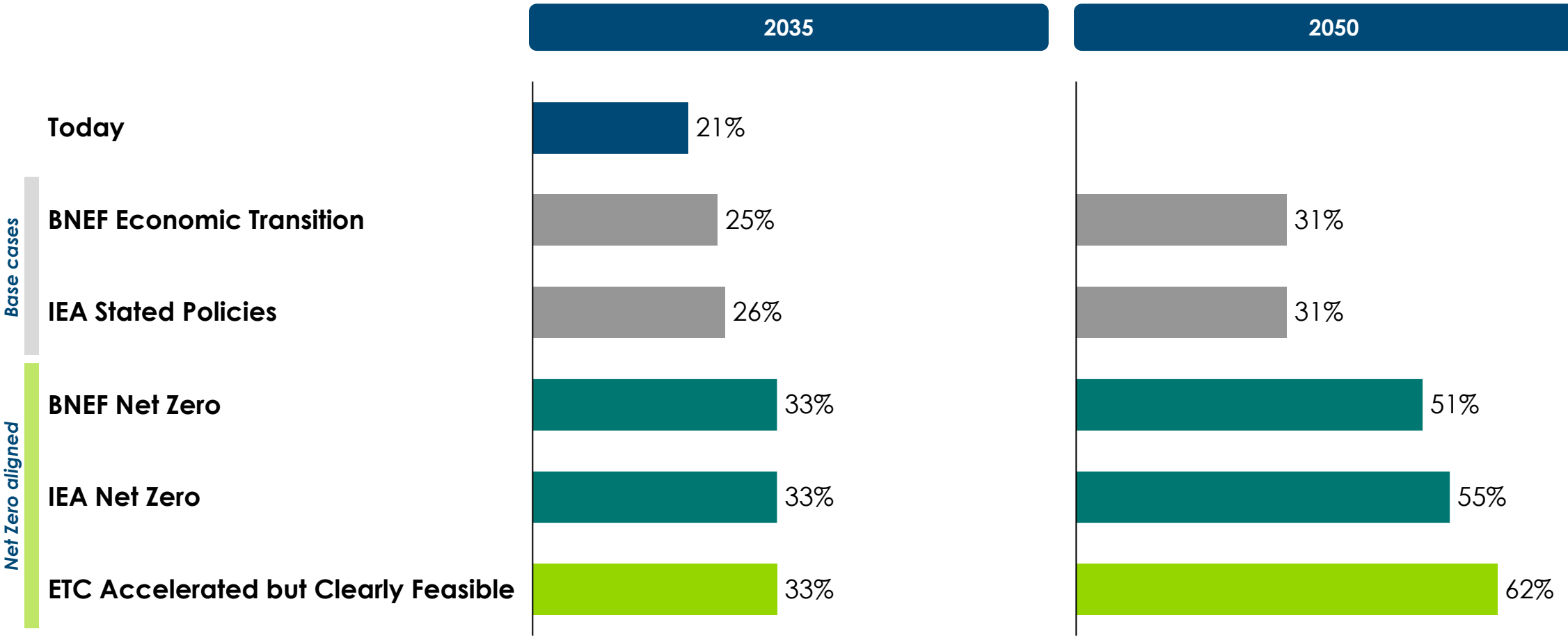
TWh/y




Notes: ETS Baseline refers to the overlapping demand in both.
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# Electrification in BNEF Scenarios are aligned with IEA's assumptions, but both lag on what ETC believe to be the full potential by 2050

## Electricity as share of final energy across multiple scenarios

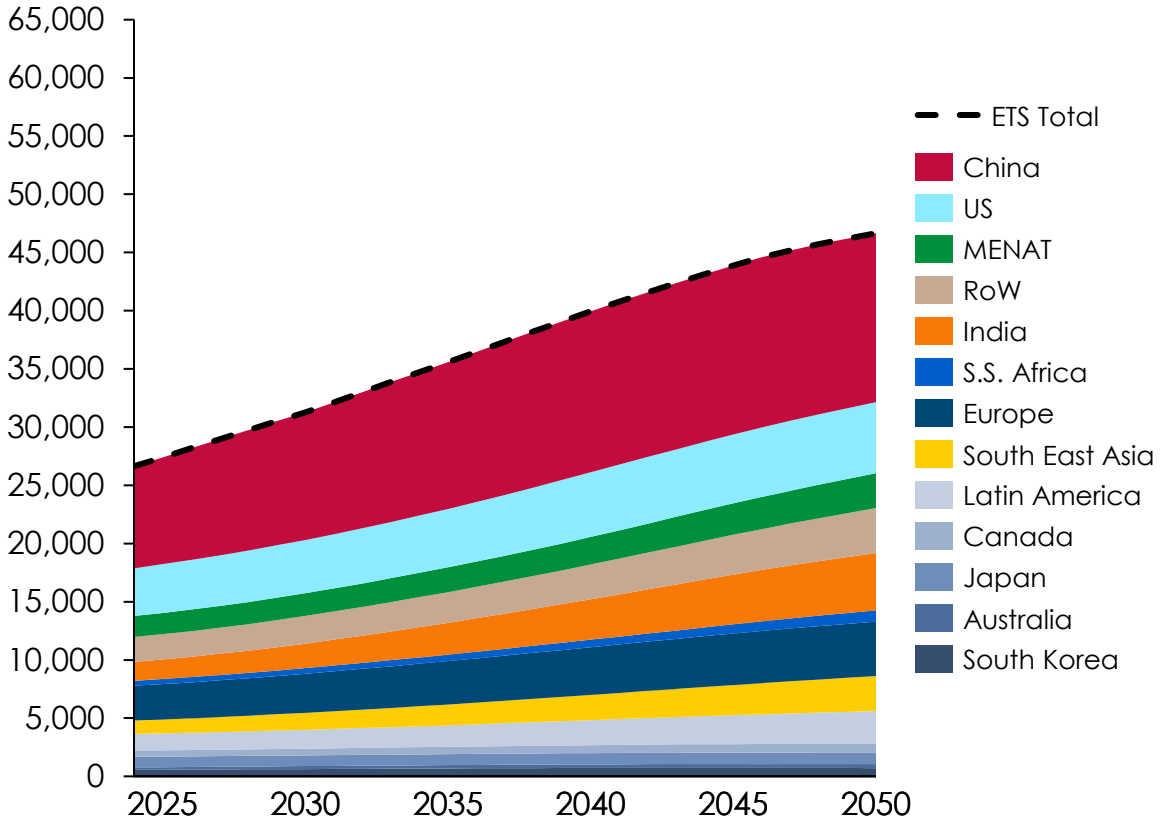



Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025; IEA (2025) World Energy Outlook

# Going beyond an 'economic transition' will require that higher levels of electrification is achieved by all regions

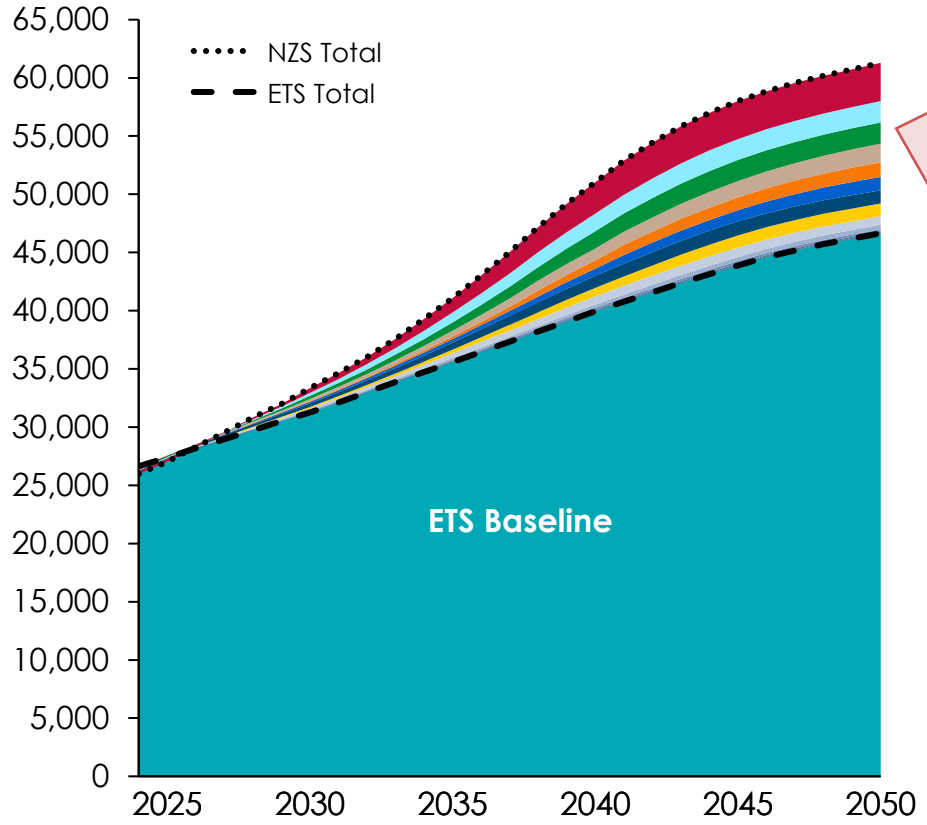
## Economic Transition: Final electricity demand by region

TWh/y




## Net Zero: Final electricity demand by region

TWh/y



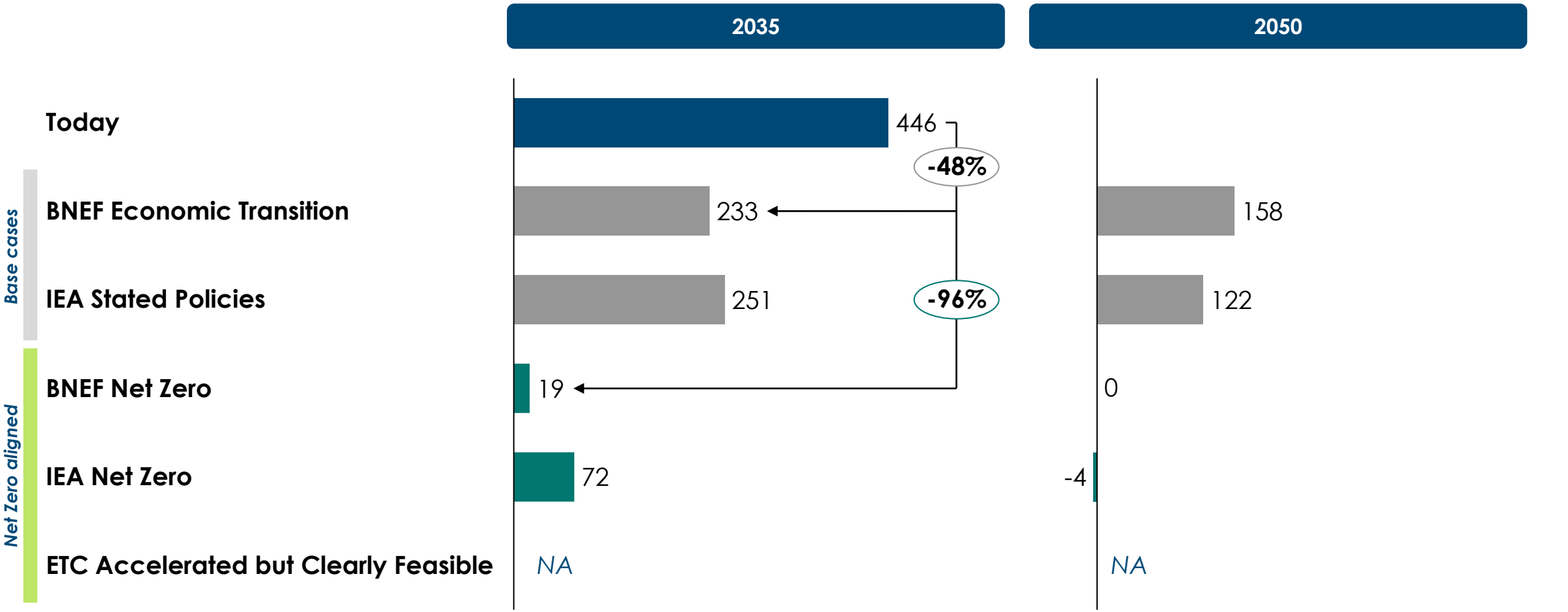

Higher power demand in China, US and MENAT driven by **industry** and **hydrogen production**

Notes: ETS Baseline refers to the overlapping demand in both. S.S. Africa = Subs-Saharan Africa; RoW = rest of world. Hydrogen demand is expected to be revised downwards in NZS 2025 which could decrease the additional electricity demand.
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# The pathway to "well below 2°C" depends on a turnaround of grid emissivity in the next 10 years

## Grid emissivity

gCO2/kWh

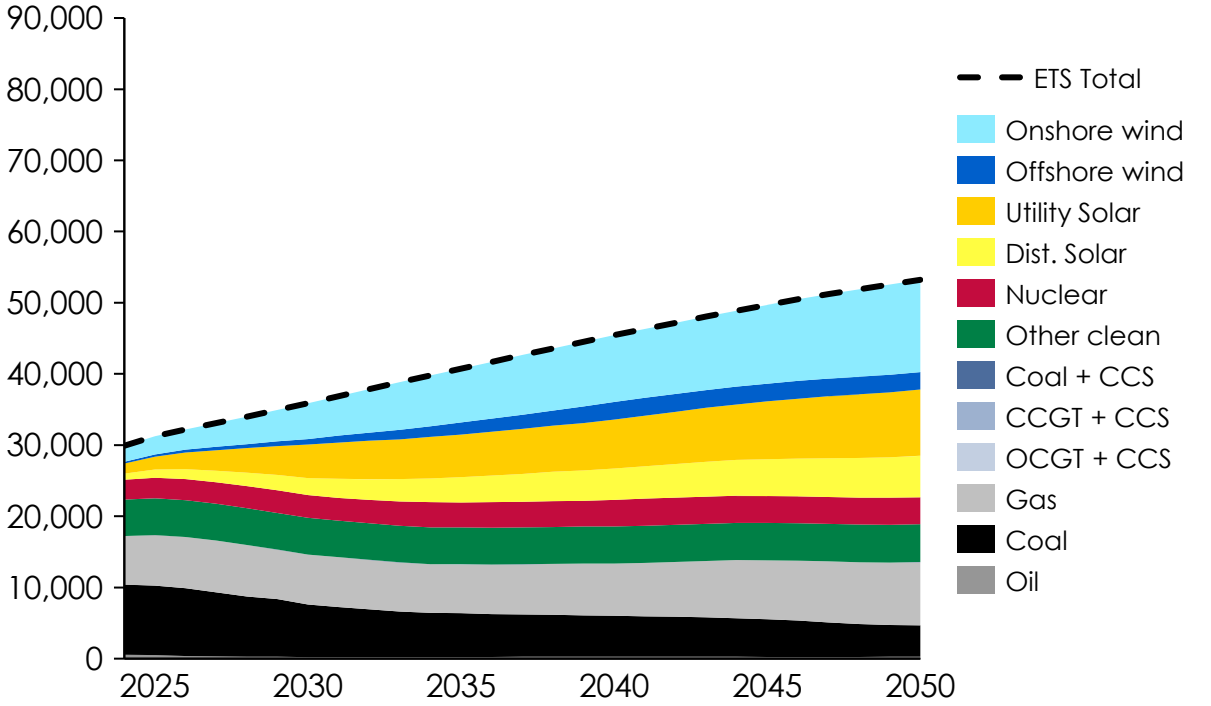



Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025; IEA (2025) World Energy Outlook

# Additional solar, but particularly wind, are key to more rapidly displacing fossil fuels in the power system

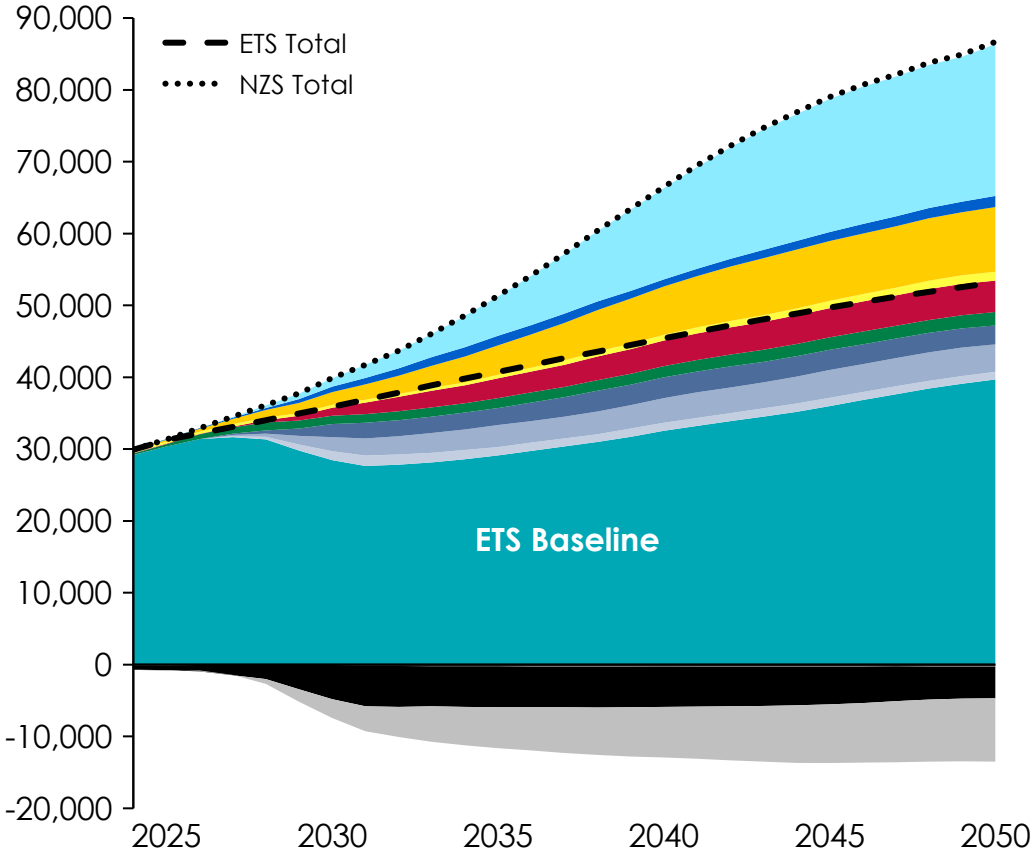
## Economic Transition: Global electricity generation by source

TWh/y




## Net Zero: Global electricity generation by source

TWh/y

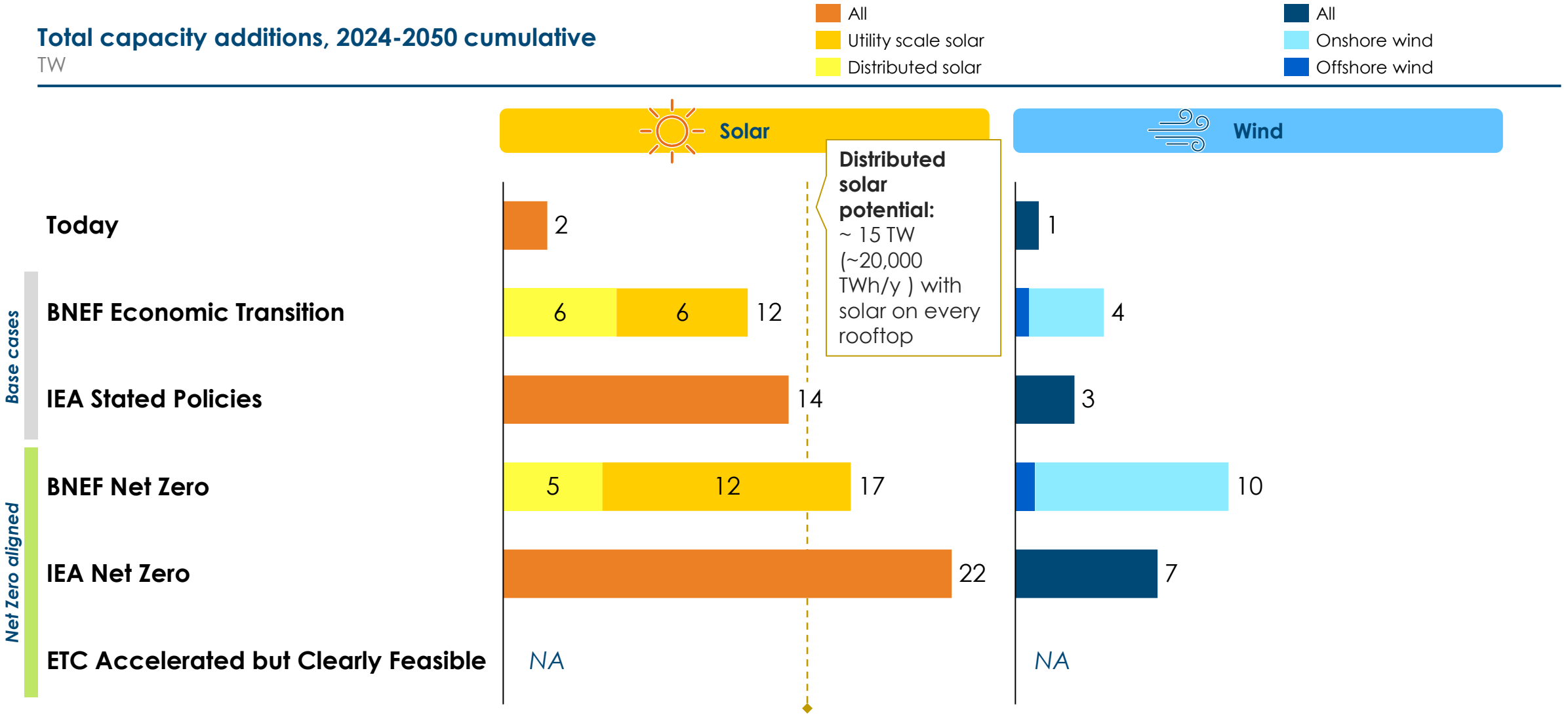



Notes: ETS Baseline refers to the overlapping demand in both.
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# IEA points to opportunity for solar potential to go even further

## Total capacity additions, 2024-2050 cumulative

TW



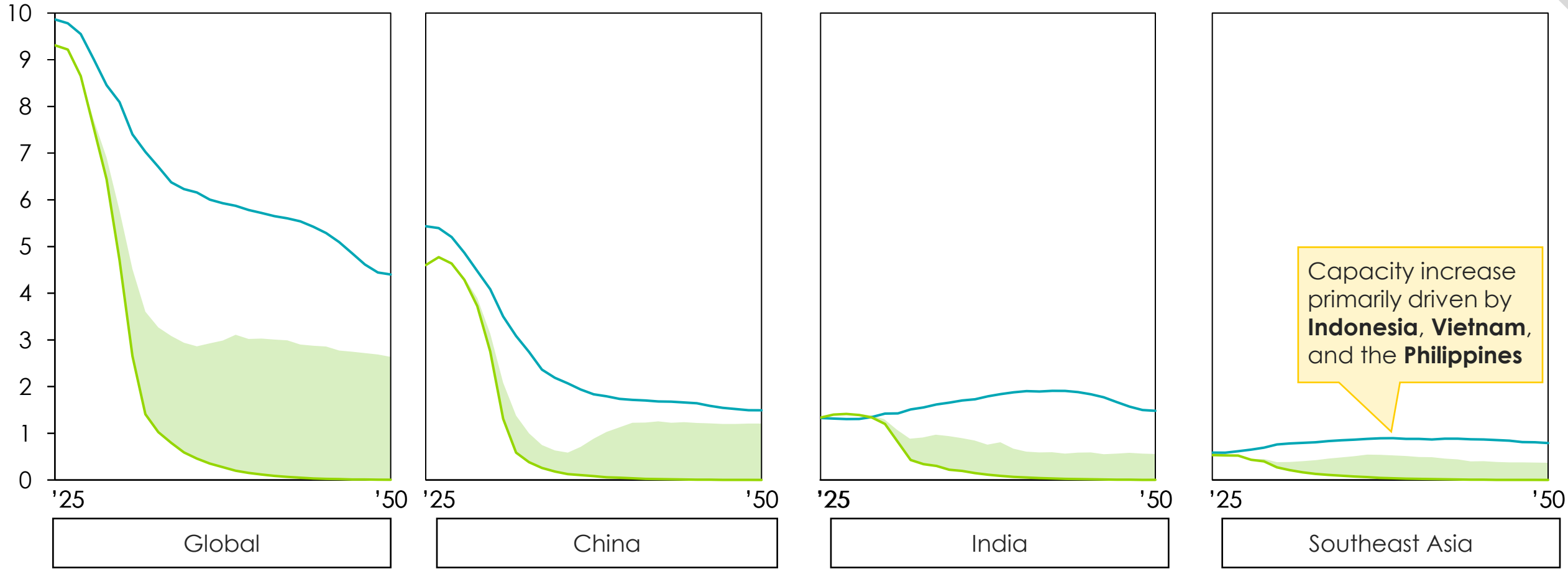

Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025; IEA (2025) World Energy Outlook

# In BNEF Net Zero scenario, coal generation is largely being abated with CCS rather than being phased out

Coal

## Coal generation by year

000 TWh



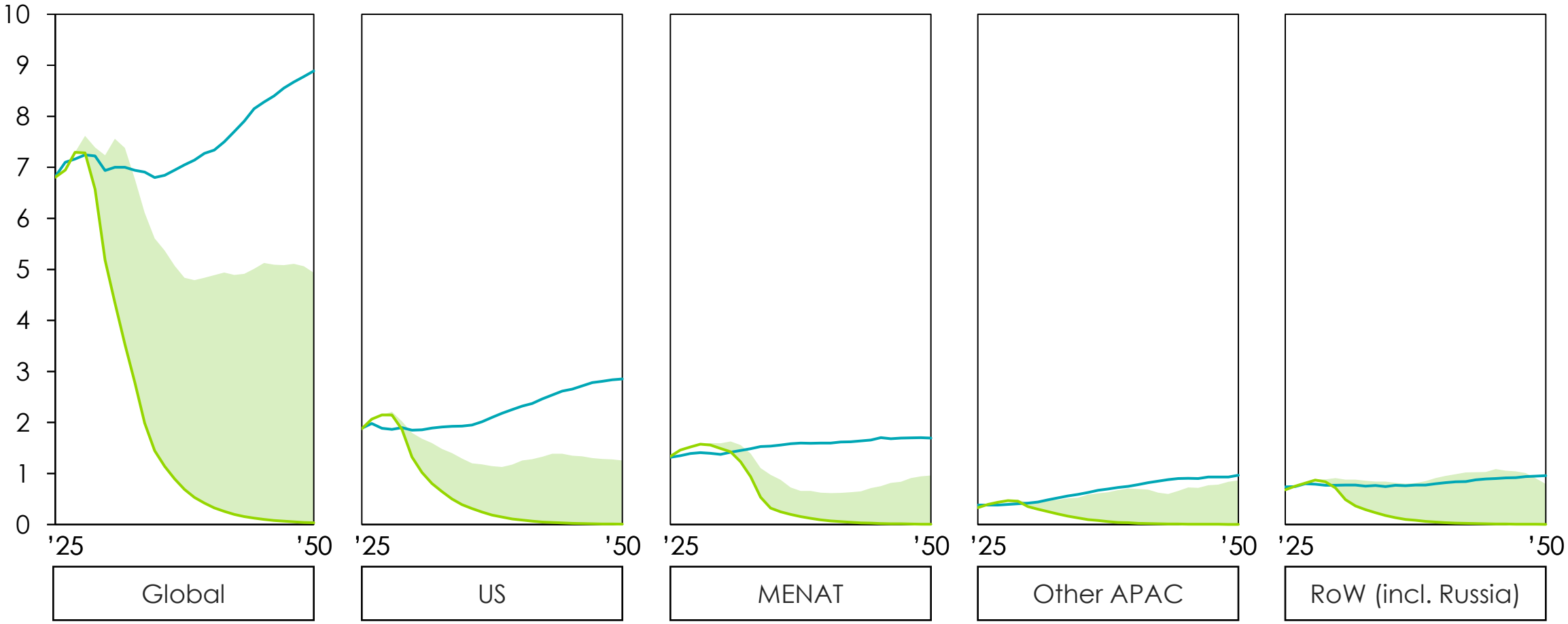

Note: negligible abated coal generation is deployed in the ETS (20 TWh at its peak) therefore it doesn't show up in these charts.
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# In regions such as US, Middle East, Asia Pacific and Russia, it is gas generation that would need to abated (1/2)



## Gas generation by year

000 TWh



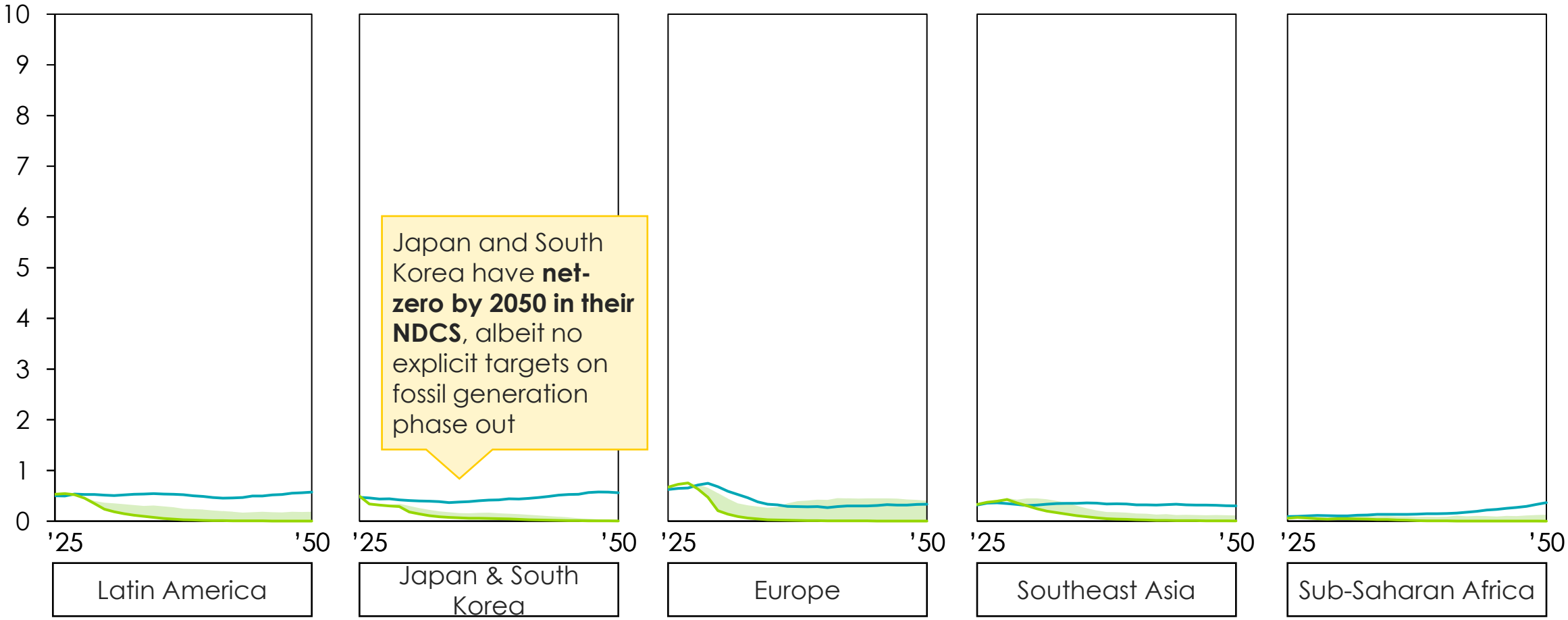

Note: Other Asia Pacific (APAC) includes Central Asia and Pacific island nations, as well as selected East Asian economies (Hong Kong, Macau, Mongolia, North Korea, and Taiwan).
Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# However, it is reasonable to assume that some unabated gas could still have a role in developing economies (2/2)

Gas

## Gas generation by year

000 TWh



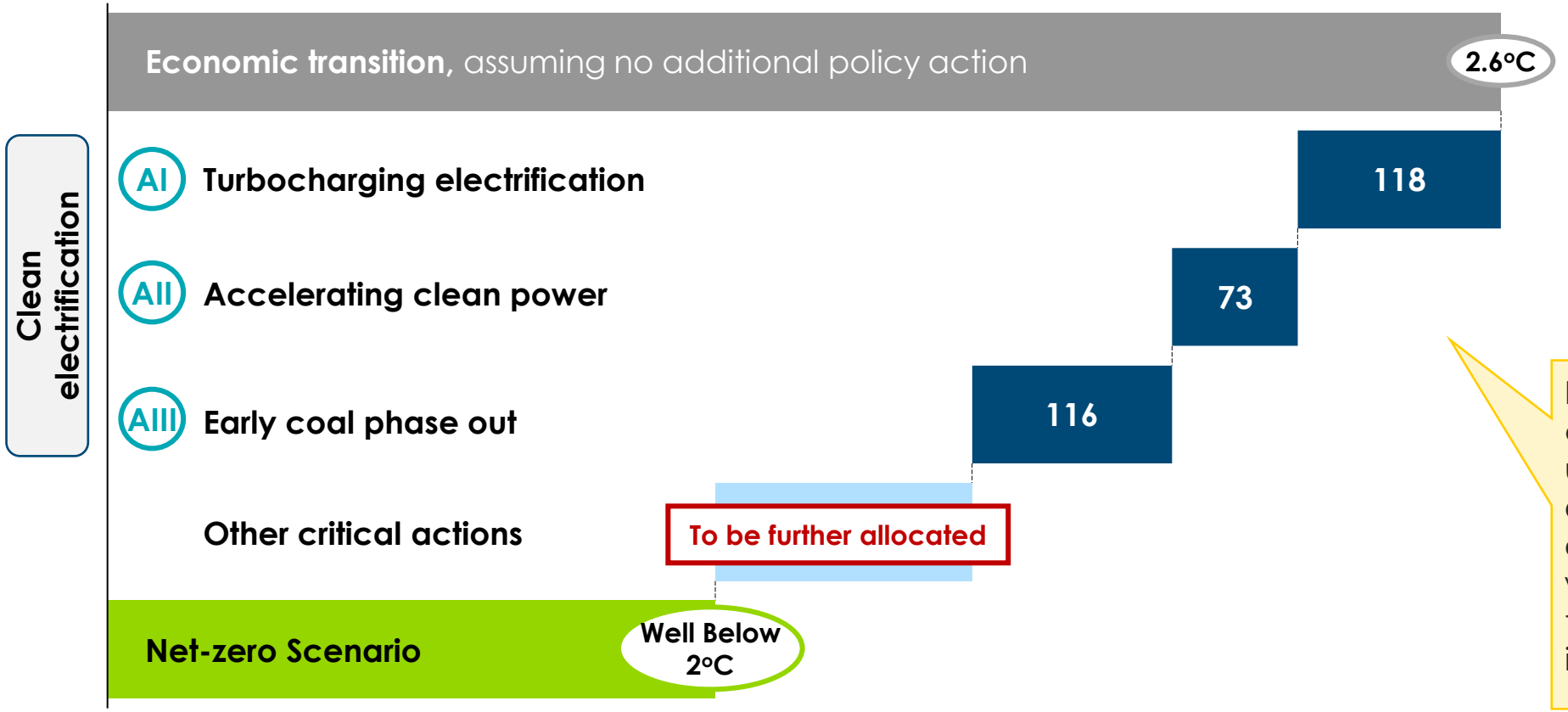

Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# We have started to size each mitigation block with the available data on cumulative emissions, to be then translated into temperature

Preliminary

## Peak warming in the 21st century and key mitigation areas

Cumulative GtCO2 2025-2050




Initial assessment is on cumulative emissions until 2050, however **any continued emissions until 2100** will have a temperature increase impact

Source: Systemiq analysis for ETC; BNEF New Energy Outlook 2025

# Agenda

- Reflections on COP and the state of the transition in early 2026
- Protecting Paris: the challenge and ETC role
- Emerging insights
- **Progress to date and next steps**

# Next steps

**Analysis**

- **Electrification & power:** Finalise the scenario benchmark (incl. Shell, BP and other counterfactuals), while avoiding deep optimisation of BNEF assumptions ahead of the April scenario update.
- **Hard-to-abate sectors:** Refine the assessment of residual emissions and abatement levers in heavy-industry, shipping and aviation, focusing on where additional action beyond economically led pathways is required.
- **Methane emissions from fossil fuels:** Stress-test fossil methane reductions against Keeping 1.5°C Alive, distinguishing between automatic declines from fossil fuel phase-down and additional abatement needed by 2030 across coal and oil & gas.
- **AFOLU (agriculture, food, agriculture and land use):** Clarify assumptions on diet change, agricultural best practices and land-use outcomes, and define a transparent treatment of forest protection, restoration and management across scenarios, building on existing partner work and specialist interviews (e.g. Food and Land Coalition, WRI, Shell Venture Capitals, Environmental Defense Fund, IIASA).

**Engagement**

- **Advance engagement alongside analysis:** Continue senior bilateral discussions and technical exchanges to test emerging findings, while preparing a focused member workshop after the April scenario updates to align on implications for targets, sequencing and priorities.

# Q&A