

2025 TRANSITION FORECAST

~250 climate experts' view on what the energy and land transition will look like in a post-US election world

February 27, 2025

INEVITABLE POLICY RESPONSE NETWORK

The Principles for Responsible Investment (PRI) commissioned the Inevitable Policy Response in 2018 to advance the industry's knowledge of climate transition risk, and to support investors' efforts to incorporate climate risk into their portfolio assessments

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The IPR consortium is led by Energy Transition Advisers (ETA) & Theia Finance Labs. Analytics support is provided by Deloitte.



IPR benefits from the support of philanthropic funders, Strategic Partners across the industry, and non-profit research partners.





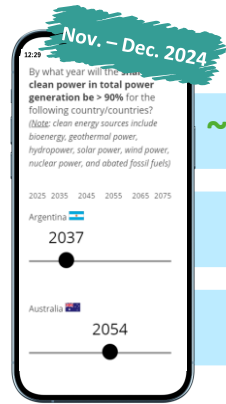
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Methodology

THE IPR 2025 TRANSITION FORECAST REPRESENTS THE MEDIAN OUTLOOK OF ~250 CLIMATE TRANSITION EXPERTS ACROSS 15 TRANSITION SECTORS AND 21 COUNTRIES, CONTEXTUALIZED BY A BOTTOM-UP QUARTERLY TRACKING OF POLICY MOMENTUM

Climate Transition Expert Survey



~250 Total climate expert participants

21 Number of countries covered (G20 + Vietnam + Nigeria)

15 Sectors covered

Survey Result Analysis

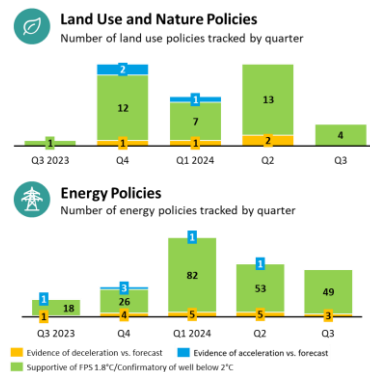
- 1 Review of Survey Response Robustness
- 2 Calculation of Median Transition Forecast Targets
- 3 Definition of Target Ranges based on the median to acknowledge variability in transition pathways

Transition Forecast

The median results of the 2024 Climate Transition Expert Survey are used to update forecast targets.



Quarterly Forecast Trackers (QFTs)



IPR monitors **energy and land use policies** on a quarterly basis, to contextualize market and expert sentiment around the transition and **identify key policy gaps & investment opportunities.**

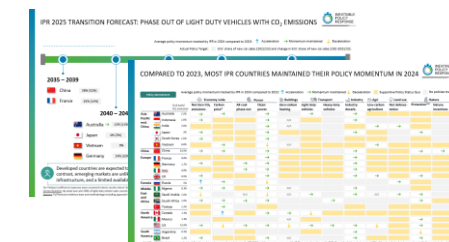
Policy Analysis

Assessment of the significance of shifts in policy announcements relative to the previous year.

- ↑ Acceleration
- Momentum maintained
- ↓ Deceleration

Policy Momentum

The Quarterly Forecast Trackers (QFTs) are used to indicate directional shifts in policy momentum.



KEY INSIGHTS OF THE 2025 TRANSITION FORECAST

Net Zero

- Despite post US-election climate policy headwinds and expectations of a delayed US net zero target year in the 2060s, climate experts remain **optimistic** about the broader global net-zero trajectory.
- Over **80% of G20 nations** are projected to achieve an **80% reduction in emissions by the 2050s**, with no country expected to miss its stated net-zero target by more than 15 years.
- Furthermore, **40% of G20 countries** are **expected to meet their net-zero target.***

The Next 5 Years

- Climate transition experts expect **continued growth** in clean power and electric vehicles, consistent with investor surveys run by IPR in parallel to the transition forecast.
- On average, **G20 clean power shares and EV adoption will rise by >10 percentage points by 2030.**
- However, **ending deforestation** remains **unlikely this decade**. Only Japan is expected to join the 9 G20 countries that have achieved no net deforestation by 2030, while 40% of G20 nations may continue deforestation into 2040.

Key Technology Trends

- Climate transition experts expect a significant **acceleration in industrial decarbonization** across all jurisdictions, underscoring the potential for industry to mirror the **rapid cost declines** and **scaling success** seen in the **renewable energy sector**.
- At the same time, some experts predict that **by the 2030s, the adoption rate of electric heavy-duty vehicles (HDVs) could surpass that of electric light-duty vehicles**, driven by continued decline in battery costs and the underlying economics of fleet operations.



Investor Implications

The IPR investor forecast workshops highlight that the optimism of experts is largely shared by the private sector. However, within the survey there is significant dispersion in views associated with different financial and strategic implications. As a result, investors need to further develop their own high-conviction, in-house forecasts to ensure they are resilient to transition risks and to capture opportunities.

*Defined as achieving net zero within 4 years or less of the target.

KEY INSIGHTS FROM POLICY MOMENTUM TRACKED BY IPR IN 2024



Balance between Energy Security and Clean Power

In 2024, the clean power sector experienced the most policy momentum. However, while advanced economies have supported renewable energy growth, emerging markets are struggling to find the balance between high energy demands, energy security, and clean power ambitions.



Slow Progress on Nature

Progress on nature protection and conservation lags other sector ambitions in most countries. With exception of a few countries, low-carbon agriculture, net deforestation, and nature incentives overall recorded insufficient policy momentum in 2024. This increases focus on COP30 in Brazil later this year.



Trade Wars between the East and West

(Potential) trade wars further increase market volatility. Tariffs on green technologies, such as solar panels or electric vehicles, are delaying the diffusion of cheap(er) technologies, posing challenges to the pace of progress in mitigating climate change.



Policy Momentum Widely Maintained

Compared to 2023, many IPR countries sustained climate policy momentum in 2024, with a few countries experiencing notable shifts in specific energy and land use sectors. In addition to nature, the buildings and transport sectors also saw the least policy advancement.



Driving Force of Transitions

Although no major climate policy acceleration was tracked in 2024, most countries maintained their policy momentum. Besides policies measures, progress is driven by advancement of cost-effective, low-carbon **technologies** and demand-driven shifts in the **real economy**. That being said, the policy outlook for 2025 looks more uncertain.

THE 2025 TRANSITION FORECAST IS POWERED BY ~250 GLOBAL EXPERTS' SENTIMENT ON THE EXPECTED ENERGY AND LAND USE TRANSITION TAKEN POST US ELECTION

>7k

Data points informing the 2025 Transition Forecast

~250

Climate transition expert participants

79%

Of **global economic activity** covered in the survey

74%

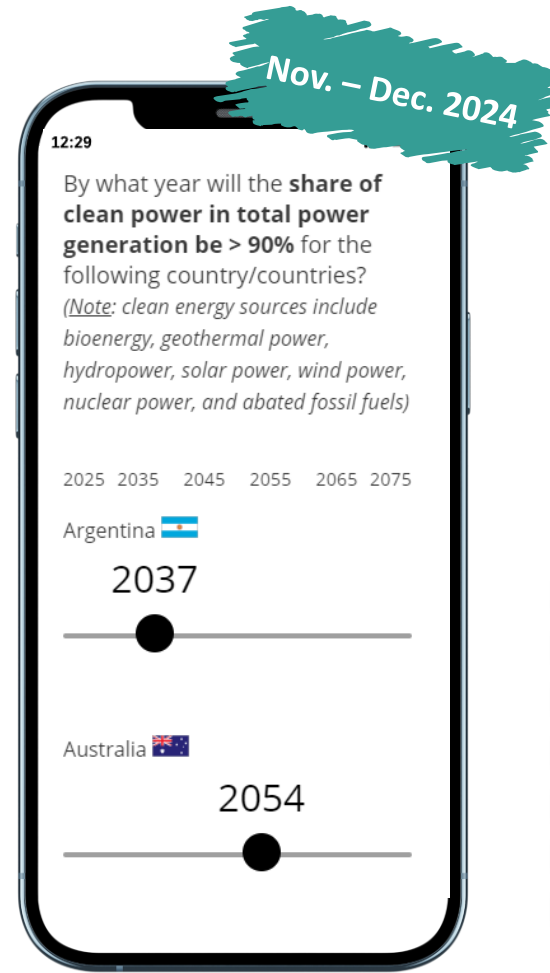
Of **global energy use** and **CO2 emissions** covered

21

Number of countries from which experts participated

15

Policy areas covered in the Climate Transition Expert Survey



Net Zero and Carbon Price



Power



Transport



Buildings



Industry



Agriculture



Land Use



Nature



Australia



Indonesia



India



Japan



South Korea



Vietnam



China



France



Germany



Italy



UK



Russia



Nigeria



Saudi Arabia



South Africa



Türkiye



Canada



Mexico



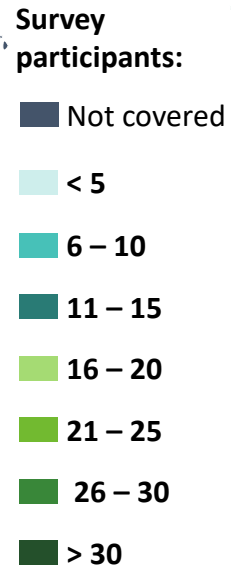
US



Argentina



Brazil



Survey of “individuals with **meaningful amount of experience, expertise, and recognized contributions** across one or multiple IPR sectors, evidenced through e.g. scholarly work, strategic leadership roles or notable achievements within these sectors.”

THE ~250 EXPERT VIEWS ON WHAT THE ENERGY AND LAND TRANSITION WILL LOOK LIKE IN A POST-US ELECTION WORLD ARE THE BASIS OF IPR'S 2025 TRANSITION FORECAST

 Insufficient responses were received to deem results robust, hence actual policy targets were applied instead (N/A if no policy target is available)

				 Economy wide	 Power	 Buildings	 Transport	 Industry	 Agri	 Land use	 Nature				
<i>% of world CO₂ emissions</i>				Net Zero CO ₂ emissions	Carbon price*	All coal phase-out	Clean power	Zero-carbon heating	Light duty vehicles	Heavy duty vehicles	Industry decarb.	Low-carbon agriculture	Net defores-tation	Protection**	Nature incentives
Asia Pacific excl. China		Australia	1.0%	2050-2054	\$70-\$82	2035-2039	2040-2044	2035-2039	2040-2044	2045-2049	2045-2049	by 2040	by 2040	2035-2039	2030-2034
		Indonesia	1.8%	2065-2069	\$37-\$50	2045-2049	2055-2059	N/A	2050-2054	2050-2054	2050-2054	> 2040	>2040	2040-2044	2040-2044
		India	7.0%	2070-2074	\$50-\$74	2045-2049	2055-2059	N/A	2050-2054	2055-2059	2055-2059	> 2040	Achieved	2050-2054	2050-2054
		Japan	3%	2050-2054	\$35-\$70	2040-2044	2045-2049	2045-2049	2040-2044	2045-2049	2045-2049	by 2040	by 2030	Achieved	2035-2039
		South Korea	1.6%	2055-2059	\$43-\$70	2045-2049	2050-2054	2050-2054	2050-2054	2045-2049	2055-2059	> 2040	>2040	2040-2044	2040-2044
		Vietnam	0.8%	2060-2064	N/A	2050	2045-2049	N/A	2040-2044	2050	>2050	> 2040	by 2030	2030	N/A
China		China	33.9%	2060-2064	\$50-\$62	2035-2039	2045-2049	2045-2049	2035-2039	2045-2049	2045-2049	by 2040	Achieved	2030-2034	2040-2044
Europe		France	0.8%	2050-2054	\$95-\$120	Achieved	Achieved	2035-2039	2035-2039	2045-2049	2045-2049	by 2035	Achieved	2030-2034	2035-2039
		Germany	1.7%	2050-2054	\$85-\$120	2035-2039	2035-2039	2035-2039	2040-2044	2040-2044	2040-2044	by 2040	Achieved	Achieved	2035-2039
		Italy	0.8%	2055-2059	\$71-\$120	2030-2034	2040-2044	2040-2044	2040-2044	2045-2049	2045-2049	by 2040	Achieved	2030-2034	2040-2044
		UK	0.9%	2050-2054	\$95-\$120	Achieved	2035-2039	2040-2044	2040-2044	2045-2049	2040-2044	> 2040	Achieved	2035-2039	2040-2044
Eurasia		Russia	5%	2065-2069	N/A	2050-2054	2060-2064	2050-2054	2055-2059	2060-2064	2055-2059	> 2040	Achieved	2035-2039	2040-2044
Middle East and Africa		Nigeria	0.3%	2065-2069	N/A	Achieved	2050-2054	N/A	2055-2059	2060-2064	2060-2064	> 2040	>2040	2050-2054	2045-2049
		Saudi Arabia	1.6%	2060-2064	\$20-\$43	N/A	2050-2054	N/A	2055-2059	2050-2054	2050-2054	N/A	Achieved	2035-2039	2045-2049
		South Africa	1.0%	2060-2064	\$30-\$60	2045-2049	2045-2049	2045-2049	2050-2054	2045-2049	2045-2049	> 2040	>2040	2035-2039	2040-2044
		Türkiye	1.2%	2060-2064	\$30-\$40	2040-2044	2045-2049	2050-2054	N/A	2050-2054	2045-2049	N/A	Achieved	2030	N/A
North America		Canada	1.5%	2050-2054	\$100-\$146	2030-2034	2040-2044	2040-2044	2040-2044	2045-2049	2050-2054	> 2040	>2040	2040-2044	2035-2039
		Mexico	1.3%	2065-2069	\$30-\$42	2045-2049	2055-2059	N/A	2055-2059	2055-2059	2050-2054	> 2040	>2040	2045-2049	2045-2049
		US	12.6%	2060-2064	N/A***	2040-2044	2045-2049	2045-2049	2045-2049	2050-2054	2050-2054	> 2040	>2040	2045-2049	2045-2049
South America		Argentina	0.5%	2055-2059	\$30-\$43	Achieved	2045-2049	2045-2049	2050-2054	2045-2049	2050-2054	> 2040	>2040	2045-2049	2050-2054
		Brazil	1.2%	2060-2064	\$48-\$50	Achieved	Achieved	N/A	2050-2054	2055-2059	2050-2054	> 2040	>2040	Achieved	2035-2039

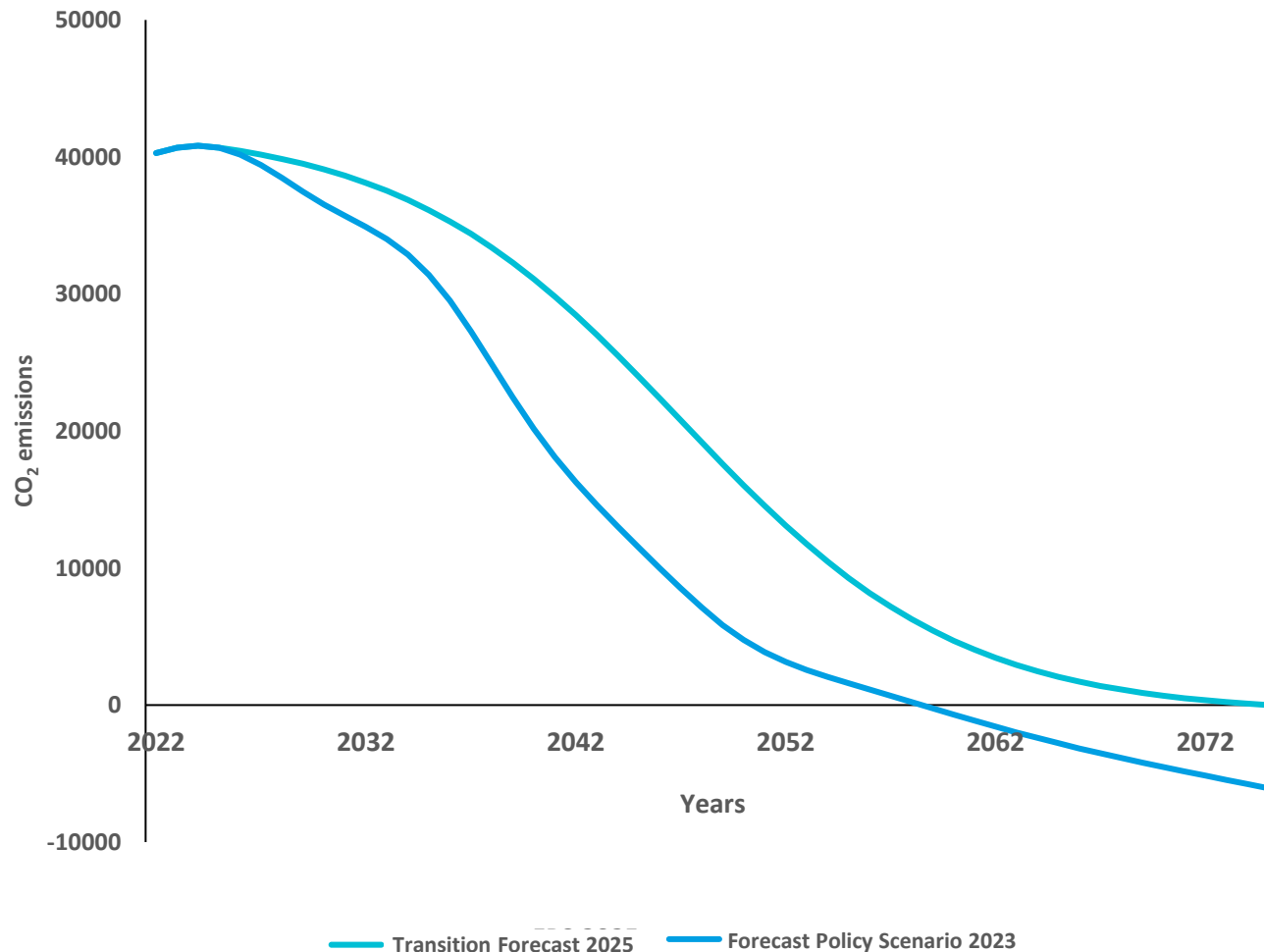
* A different methodology was applied to define the carbon price ranges (span between the FPS 2023 and the average survey result). ** This projection aligns with GBF's Target 3, which seeks to protect 30% of the planet's land and oceans by establishing protected areas and implementing effective area-based conservation measures. *** The survey responses for the U.S. were defective, hence the forecast was descoped.

COMPARED TO 2023, MOST IPR COUNTRIES MAINTAINED THEIR POLICY MOMENTUM IN 2024

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration Policies tracked before 2024 No policies tracked

				 Economy wide	 Power	 Buildings	 Transport	 Industry	 Agri	 Land use	 Nature				
% of world CO ₂ emissions				Net Zero CO ₂ emissions	Carbon price	All coal phase-out	Clean power	Zero-carbon heating	Light duty vehicles	Heavy duty vehicles	Industry decarb.	Low-carbon agriculture	Net deforestation	Protection	Nature incentives
Asia Pacific excl. China		Australia	1.0%	→	→		→		→		→				
		Indonesia	1.8%	→			→	N/A			→				
		India	7.0%				→	N/A				→	→		
		Japan	3%	→			→				→			→	
		South Korea	1.6%	→			→								
		Vietnam	0.8%		→		↓	N/A					→		
China		China	33.9%	→	→		→				→			→	→
Europe		France	0.8%				→				→				
		Germany	1.7%	→		→	→				→				
		Italy	0.8%			→	→				→				
		UK	0.9%	→			→				→	→		→	
Eurasia		Russia	5%	↑	→		↓						→		
Middle East and Africa		Nigeria	0.3%	→	→		→	N/A			→				
East and Africa		Saudi Arabia	1.6%	↓		N/A	↓	N/A	→		→	N/A	→	→	
		South Africa	1.0%	→	→	→	→			→				→	
		Türkiye	1.2%		→										
North America		Canada	1.5%		↑		→	→	↓						
		Mexico	1.3%					N/A						→	
		US	12.6%	→	↓	→	→	↓	→	→		↓		→	
South America		Argentina	0.5%								→			↓	
		Brazil	1.2%	→			→	N/A			→			→	

USING IPR'S STAND MODEL, IPR PROJECTS THE AGGREGATED TRANSITION FORECAST TO LEAD TO A 2°C TEMPERATURE OUTCOME



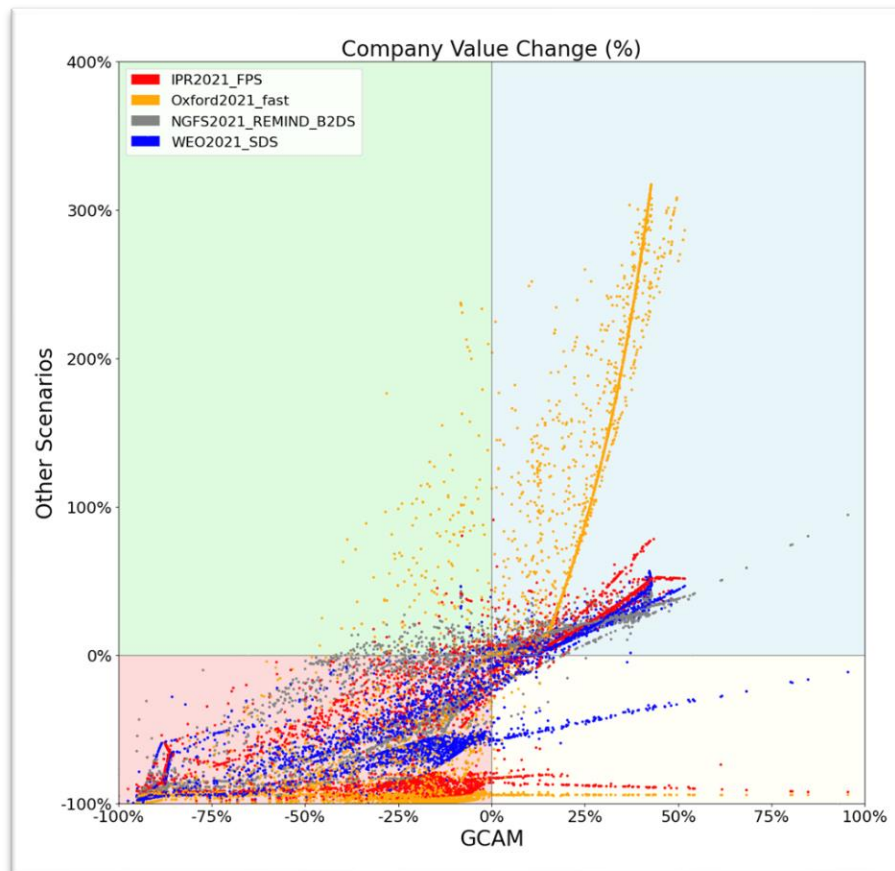
The IPR 2025 Transition Forecast suggests **937 Gt of CO₂ emissions between 2025 until we reach net zero**, consistent with a 67% probability of limiting global warming to 2°C or below.

In light of recent warming trends, uncertainty is increasing as to the tail temperature outcomes related to different carbon budgets, rendering 'temperature projections' more of an art than a science. In fact, IEA's Announced Policy Scenario (APS) suggests a cumulative CO₂ reduction of 386 Gt by 2050 but currently does not provide estimates for the remaining years up to 2100. IPR recognizes that carbon budgets may imply radically different temperature outcomes.

Should negative emissions technologies (e.g. afforestation, DACCs) and solutions to hard to abate sectors fail to materialize, limiting decarbonization to 80% relative to current levels, **temperature increase by 2100 may be 0.2°C-0.3°C higher than forecasted by the experts**, underlining the **crucial role of technology breakthrough or changes in economic activity**.

FINANCIAL IMPACTS OF TRANSITION SCENARIOS ON CORPORATES ARE HIGHLY SENSITIVE TO INPUT SCENARIOS, WITH DRAMATICALLY DIFFERENT RESULTS EVEN FOR SCENARIOS WITH SIMILAR AMBITION. THIS HIGHLIGHTS THE NEED FOR BUILDING A CONVICTION-BASED FORECAST

Company valuation shocks under different climate transition scenarios with similar ambition levels

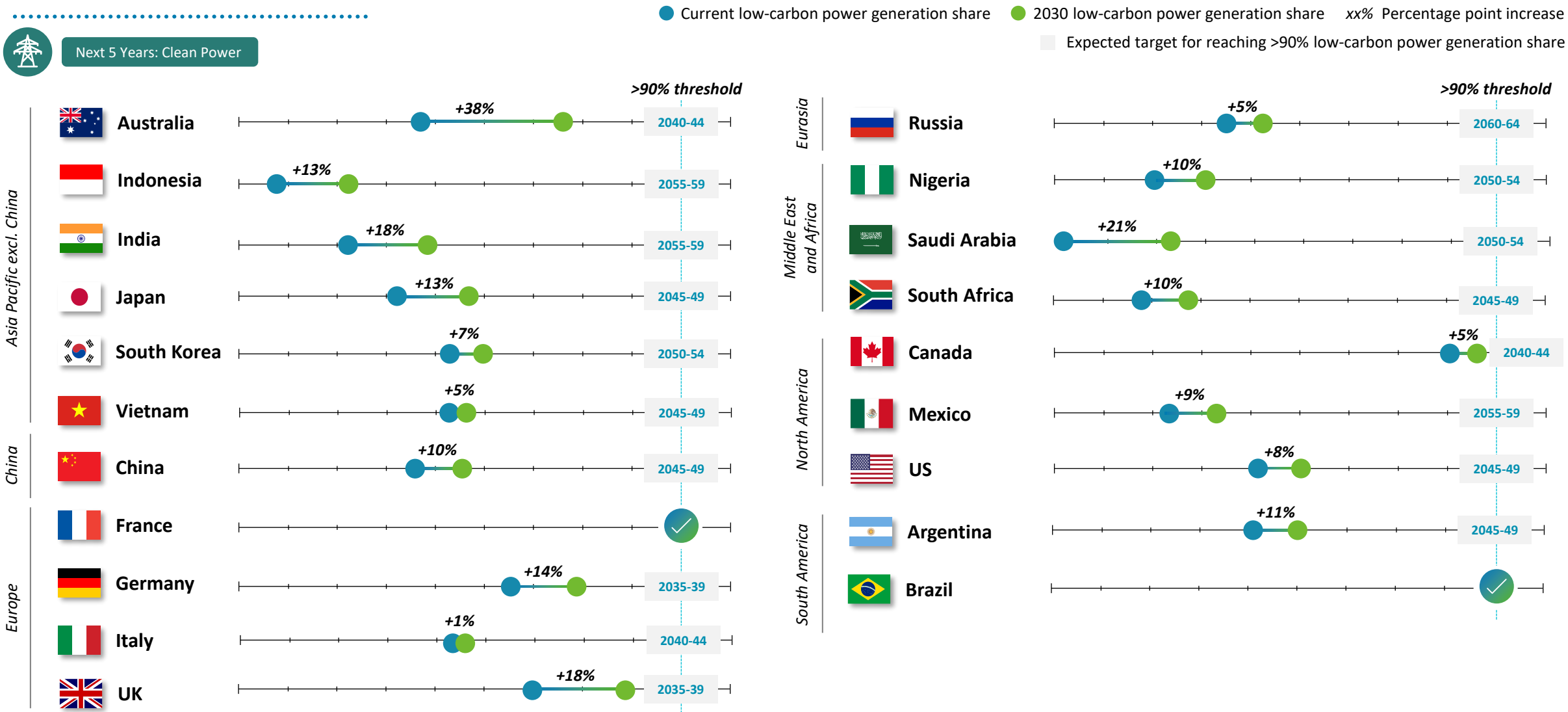


Analysis by 1in1000, a Theia Finance Labs / Oxford Sustainable Finance Group initiative, has highlighted that even when keeping models, input data, and 'scenario ambition' constant, valuation impacts may still differ widely across scenario outcomes.

As a result, companies will remain sensitive to discrete transition pathways from a financial impact perspective.

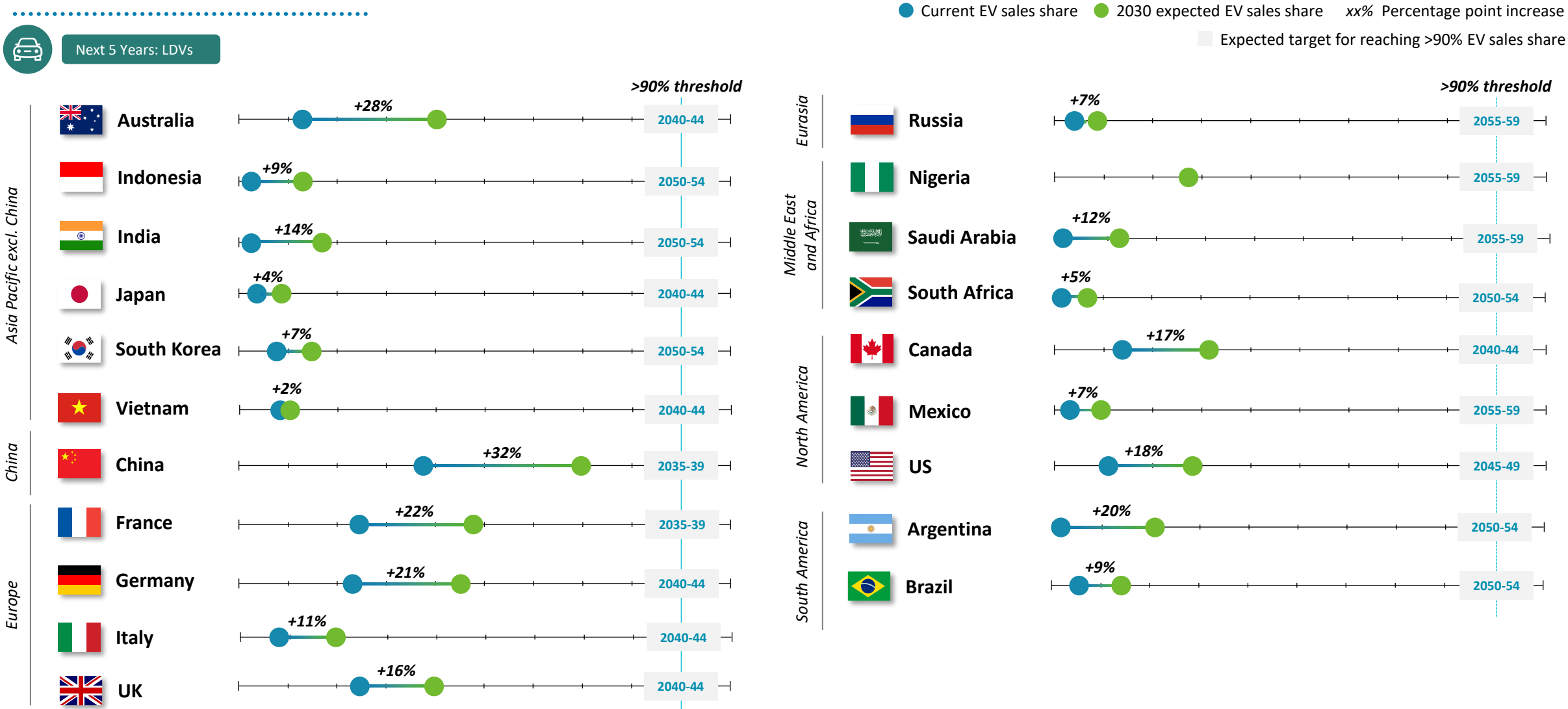
Choosing the 'right' scenario for financial analysis matters. To do this, a forecasting approach is needed.

MOST IPR COUNTRIES ARE PROJECTED TO SURPASS A 50% SHARE OF CLEAN POWER BY 2030, MARKING AN INCREASE OF >10% FROM THEIR CURRENT LEVELS WITHIN THE NEXT 5 YEARS



Survey Question: What do you expect the share of clean power to be in the total power generation by 2030?

CLIMATE TRANSITION EXPERTS FORECAST THE MAJORITY OF IPR COUNTRIES TO ACHIEVE A >10% INCREASE IN EV SALES SHARES WITHIN THE NEXT 5 YEARS



Survey Question: What percentage share of battery electric vehicles (BEVs) do you anticipate in the total domestic light-duty vehicle sales by 2030?

EXPERTS FORECAST IPR COUNTRIES WILL REACH NET ZERO WITHIN 5-10 YEARS AFTER REDUCING NET CO₂ EMISSIONS BY 80%. HOWEVER, REACHING 100% NET ZERO WILL REQUIRE SCALING NET ZERO TECHNOLOGIES OR BREAKTHROUGHS IN HARD-TO-ABATE SECTORS



Last Mile: Net Zero

Closing the Emissions Gap from 80% to net zero within 10 Years

		>80%	100%			>80%	100%
Asia Pacific excl. China	Australia	2045-2049	2050-2054	Eurasia	Russia	2060-2064	2065-2069
	Japan	2045-2049	2050-2054		Nigeria	2060-2064	2065-2069
	Vietnam	2055-2059	2060-2064		Saudi Arabia	2055-2059	2060-2064
China	China	2055-2059	2060-2064*	Middle East and Africa	South Africa	2055-2059	2060-2064
Europe	France	2045-2049	2050-2054	North America	Canada	2045-2049	2050-2054
	Germany	2045-2049	2050-2054		Argentina	2055-2059	2055-2059
	UK	2045-2049	2050-2054	South America			

Closing the Emissions Gap within 10+ Years

		>80%	100%
Asia Pacific excl. China	Indonesia	2055-2059	2065-2069
	India	2060-2064	2070-2074
	South Korea	2045-2049	2055-2059
Europe	Italy	2045-2049	2055-2059
	Türkiye	2050-2054	2060-2064
Middle East and Africa	Mexico	2055-2059	2065-2069
	US	2050-2054	2060-2064*
South America	Brazil	2050-2054	2060-2064

* Adjusted for outliers



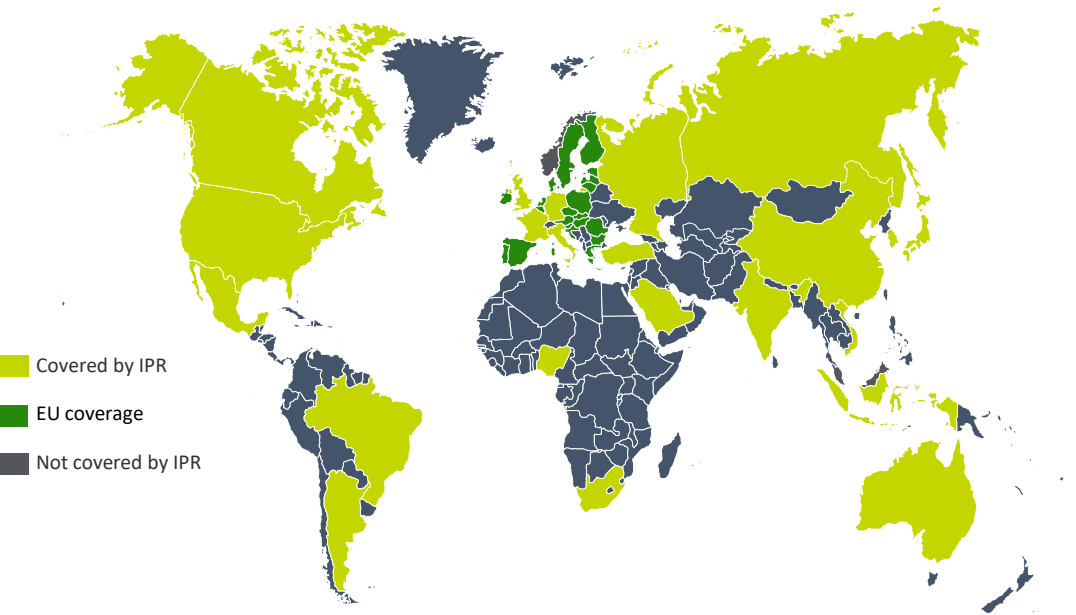
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THE 2025 TRANSITION FORECAST COVERS 21 MAJOR ECONOMIES ACCOUNTING FOR THREE QUARTERS OF GLOBAL CO₂ EMISSIONS AND ~80% OF GLOBAL ECONOMIC ACTIVITY

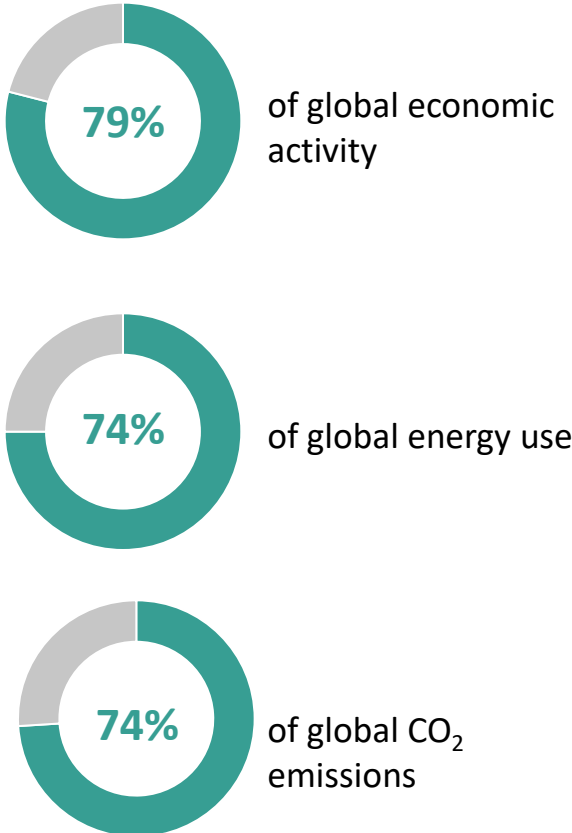
IPR forecasts cover G20 countries plus Nigeria and Vietnam:



Covers the transition across energy and land use:

-  Power
-  Transport
-  Buildings
-  Industry
-  Agriculture
-  Land use
-  Nature

With IPR countries accounting for:



IPR'S CLIMATE TRANSITION EXPERT SURVEY DRIVES THE 2025 TRANSITION FORECAST WHILE QUARTERLY TRACKING PROVIDES CRITICAL INSIGHTS ON POLICY AND TECHNOLOGY MOMENTUM

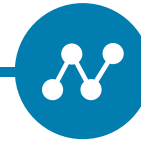


Quarterly Policy Tracking (QFT)

Undertaken since 2022, IPR tracks policy announcements in 21 countries and 15 sectors to understand the status, speed and scale of the energy, land and nature transition. Key insights are published on a quarterly basis in Quarterly Forecast Trackers (QFTs) ([link](#)).



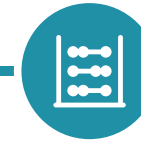
*IPR distils and transforms complex climate policy developments into **actionable insights**, for investors, financial advisors, and corporations.*



Climate Transition Expert Survey

The 2024 Climate Transition Expert Survey captures post US election experts' sentiment on the current pace and scale of the climate transition.

The survey covers ~250 experts' opinion on decarbonization timescales across 15 sectors in 21 countries.



**Forecast
Methodology**

2025 Transition Forecast

The 2025 Transition Forecast is powered by the Climate Transition Expert Survey.

It covers the current pace of climate, land use and nature transition in G20+ nations, and outlooks to the expected transition pathways.

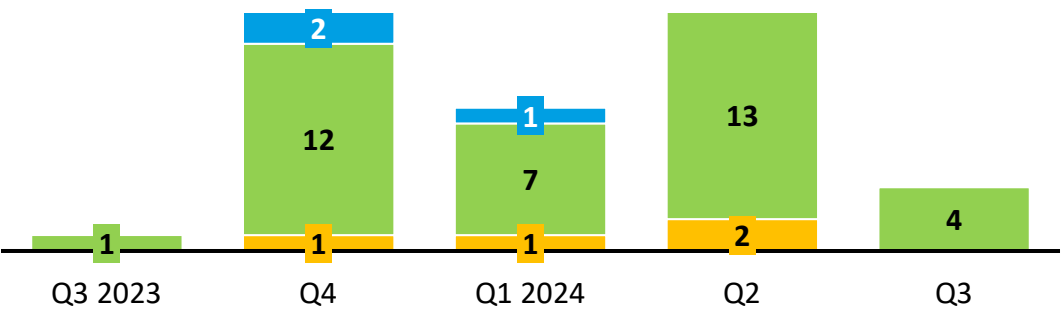


QUARTERLY FORECAST TRACKERS (QFTS) ARE INFORMED BY A GENERATIVE AI SOLUTION FOR TRACKING RELEVANT POLICY DEVELOPMENTS ACROSS 15 SECTORS AND 21 COUNTRIES



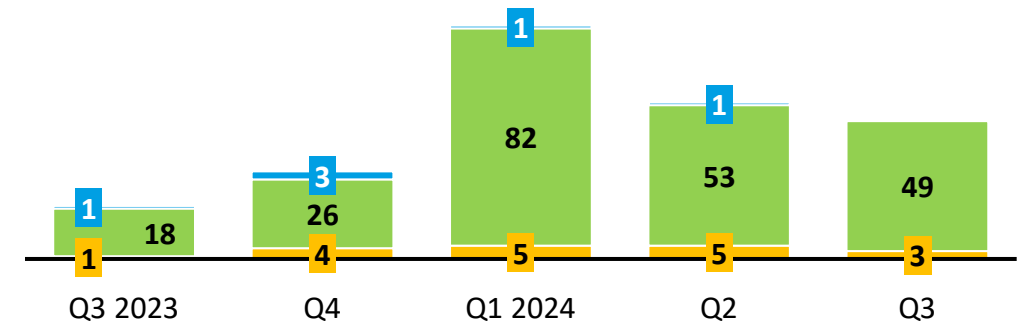
Land Use and Nature Policies

Number of land use policies tracked by quarter¹



Energy Policies

Number of energy policies tracked by quarter¹



■ Evidence of deceleration vs. forecast
 ■ Evidence of acceleration vs. forecast
■ Supportive of FPS 1.8°C/Confirmatory of well below 2°C

1. IPR's Q4 2024 QFT will be published alongside its Q1 2025 QFT in April 2025.

IPR Policy Tracking Approach



GENERATIVE AI

Intelligent classification of relevant and irrelevant information from articles reduces noise.

Summarization of key policy item findings within news sources.

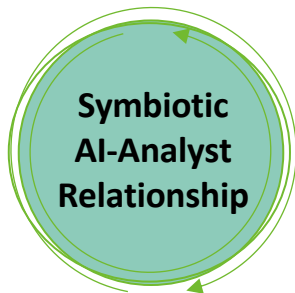


TRADITIONAL SEARCH

Embeddings generation to structure textual data as n-dimensional vectors based on their semantic distance.

Semantic search based on user query fit narrows baseline to most relevant news items.

Find, extract, and generate data to **fuel traditional policy analysis**.



Produce outcomes and curate data that can further **drive Gen AI applications**.



High-speed automated policy news tracking



Comprehensive coverage of a wide range of policies



High accuracy due to end-to-end policy screening



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- Net zero**

- Carbon pricing

- Phase-out of all unabated coal

- Clean power

- Light-duty vehicles (LDVs)

- Heavy-duty vehicles (HDVs)

- Zero carbon heating

- Industry decarbonization

- Low-carbon agriculture

- Net deforestation

- Land protection

- Nature incentives

Methodology

IPR 2025 TRANSITION FORECAST: NET ZERO CO₂ EMISSIONS ACHIEVEMENT YEAR

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Actual policy target: Legislated Announced Forecast vs. actual policy target comparison: Not on track (gap ≥ 5 years) On track (gap ≤ 4 years)

	2025 Forecast	Actual Policy Target		2025 Forecast	Actual Policy Target		2025 Forecast	Actual Policy Target
 Australia →	2050-2054	2050	 France	2050-2054	2050	 South Africa →	2060-2064	2050
 Indonesia →	2065-2069	2060	 Germany →	2050-2054	2045	 Türkiye	2060-2064	2053
 India	2070-2074	2070	 Italy	2055-2059	2050	 Canada	2050-2054	2050
 Japan →	2050-2054	2050	 UK →	2050-2054	2050	 Mexico	2065-2069	2050
 South Korea →	2055-2059	2050	 Russia ↑	2065-2069	2060	 US →	2060-2064*	2050
 Vietnam	2060-2064	2050	 Nigeria →	2065-2069	2060	 Argentina	2055-2059	2050
 China →	2060-2064*	2060	 Saudi Arabia ↓	2060-2064	2060	 Brazil →	2060-2064	2050

* Adjusted for outliers



The 2024 Climate Transition Expert Survey revealed positive sentiment around achieving net zero emissions with the majority of national net zero targets being validated. 10 IPR countries have officially legislated their net zero targets, while 9 have mentioned their net zero plans in other policy documents and 2 have announced their net zero ambition.

Note: Policy targets vary in definition and scope. For consistency, CO₂ emissions are compared with the net-zero target, independent of each country's specific net-zero definition.

Survey Question: By what year will net zero CO₂ emissions be achieved? (Referring exclusively to CO₂, excluding all other GHG emissions)

Sources: Forecast methodology including approach for validating robustness can be found in the Methodology section.

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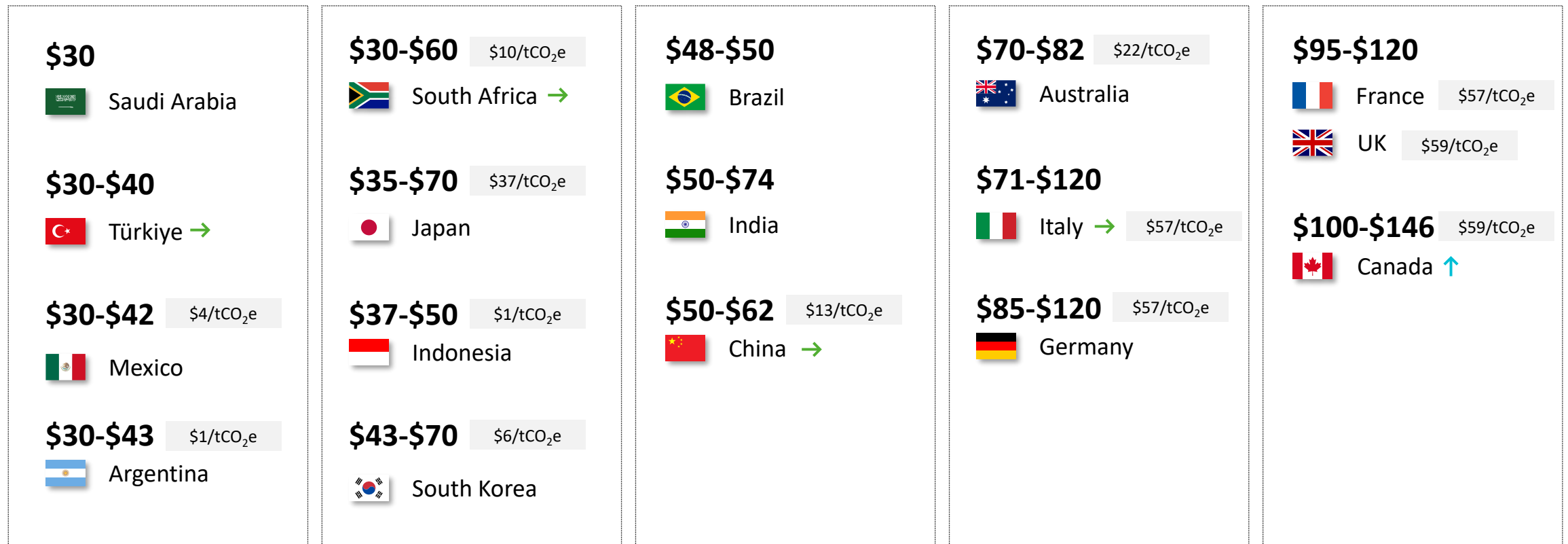
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IPR 2025 TRANSITION FORECAST: CARBON PRICING FOR POWER AND INDUSTRY

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Current status quo: Carbon Price



For Vietnam, Russia, Nigeria, and the US insufficient responses were received to deem results robust. Since no actual policy targets were available, the forecast is not applicable.

Survey Question: What will the national carbon price be for the power and industrial sectors by 2030?

Sources: [World Bank Carbon Pricing](#). Forecast methodology including approach for validating robustness can be found in the Methodology section.

AMONG THE 21 IPR COUNTRIES, 15 HAVE IMPLEMENTED CARBON PRICING SCHEMES TO MITIGATE THEIR EMISSIONS

15 countries have introduced a carbon price
(EU Emissions Trading System (ETS) or carbon price)

 **France**  **Germany**  **Italy**

The EU Emissions Trading System (ETS) covers power, industry and aviation, with a shipping expansion planned until 2026, and buildings until 2027.

 **UK**

The UK ETS covers power, aviation and industry with a planned expansion of shipping until 2026.

 **Canada**

Canada's federal government set a rising national carbon price, reaching CAD\$170 (US\$131) by 2030.

 **Australia**

Australia Safeguard Mechanism sets limits on GHG emissions from large industrial facilitators.

 **USA**

The US lacks a federal carbon pricing scheme, but several states have introduced carbon initiatives for the power and industry sectors.

 **China**

China has an ETS launched in 2021 covering the power generation sector with planned expansion to other sectors until 2025.

 **Japan**

In April 2023, Japan launched the trial phase of its new ETS, GX League, with plans to transition to a compliance market in 2026.

 **Argentina**

In 2018, Argentina launched a carbon price on petrol and petroleum coke.

 **Mexico**

In 2020, Mexico launched an ETS that covers emissions from the energy and industrial sectors.

 **Indonesia**

In 2023, Indonesia launched a mandatory ETS initially covering 99 coal facilities that account for 81% of it's national power generation capacity.

 **South Korea**

South Korea's ETS has been active since 2015 and covers ~700 of the country's largest emitters.

 **South Africa**

South Africa has a voluntary carbon market and plans a 140% carbon tax increase by 2030.

 **Saudi Arabia**

At COP29, KSA launched its first voluntary and regional carbon credit exchange.

5 countries have proposed the
introduction of a ETS or carbon tax

 **India**

India passed the Energy Conservation Amendment Bill which proposes the establishment of a carbon market.

 **Vietnam**

The government has been evaluating options for implementing a carbon credit market with a carbon credit pilot from 2025 and full trading potentially beginning in 2028.

 **Türkiye**

The Turkish Emission Trading System (TR ETS) will launch in early 2025 and is expected to cover sectors with emissions >500,000 tCO₂ per year.

 **Nigeria**

In 2022, the Nigerian Minister of the Environment announced that the country had begun activities to develop a national ETS and carbon tax.

 **Brazil**

Brazil has proposed the establishment of a regulated carbon market for major emitters based on a national cap-and-trade scheme. Full implementation is expected in 2030.

1 country has no
carbon pricing policy

 **Russia**



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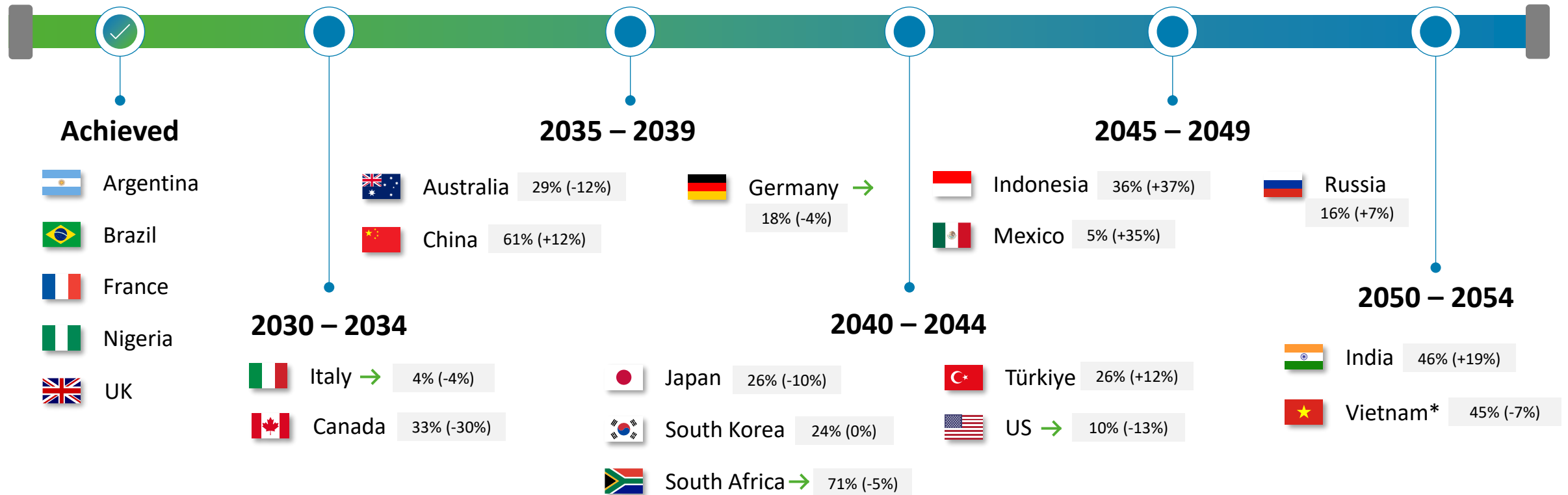
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IPR 2025 TRANSITION FORECAST: PHASE-OUT OF ALL UNABATED COAL

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Current status quo: Share of coal in electricity generation (2022/23) and change in coal share (2020-2022/23)



Five countries have already phased-out of unabated coal in their grid. Experts are optimistic that countries which have halted new coal projects will phase out all unabated coal generation within 10 years (excluding Mexico). Experts forecast China will phase out coal generation before 2040 while India will be last, reflecting its recent plans to ramp-up new coal plant build and its postponed coal exit announcements as tracked by IPR.

For Vietnam insufficient responses were received to deem results robust. Therefore, the actual policy targets was used for the forecast. In addition, the forecast is not applicable for Saudi Arabia (N/A).

Survey Question: By what year will unabated coal power generation be phased down to less than 3%? (Note: Coal is abated when installed with CCS with a capture rate of 90% or equivalent)

Sources: [IEA Country Profiles](#). Forecast methodology including approach for validating robustness can be found in the Methodology section.

9 IPR COUNTRIES HAVE ANNOUNCED OR LEGISLATED A TARGET TO PHASE OUT THE USE OF UNABATED COAL FROM THE POWER SECTOR, WHILE 8 COUNTRIES HAVE NO POLICY IN PLACE

4 countries have **legislated** a coal power phase-out target



France

France has legislated to phase out all coal generation by 2024.



Canada

Canada has legislated a target to phase out all coal power by 2030.



Germany

Germany has legislated a target to phase out all coal power by 2038 and announced an intention to accelerate this target to 2030.



UK

The UK has legislated a ban on all unabated coal generation by Oct 2025. on October first, 2024, the United Kingdom has officially closed its last coal-fired power plant.



5 countries have **announced** or **proposed** coal power phase+out targets



Italy

Italy has set a target to phase out coal power by 2025.



USA

USA agreed on to end the use of unabated coal power plants by 2035



Vietnam

Vietnam has announced a target to phase out coal power by 2050.



Indonesia

Indonesia statement during G20 Summit in Rio de Janeiro: Indonesia will retire all coal-fired power plants within the next 15 years and build over 75 GW of renewable energy capacity by 2040.



Brazil

Brazil is planning to phase out coal-fired power generation by 2040.



5 countries have **announced** plans to **reduce** coal use in power



South Korea

South Korea has announced plans to reduce the share of coal from 33% in 2021 to 14% of generation in 2036.



South Africa

South Africa secured a US\$ 8.5bn financial package, under the Just Energy Transition Partnership, to shift away from coal in its power sector.



Japan

Japan's Energy Minister has indicated intentions to reduce reliance on coal, with plans to phase out inefficient plants by 2030. There are plans in place to reduce the share of coal from 32% in 2019 to 19% in 2030.



Australia

Australia's coal power stations announced to all close in 2038.



China

China's government has pledged to reduce coal over the 2026-2030 period.



8 countries have **no policy or strategy** in place to phase out coal from power



India



Brazil



Mexico



Argentina



Nigeria



Türkiye



Russia



Saudi Arabia



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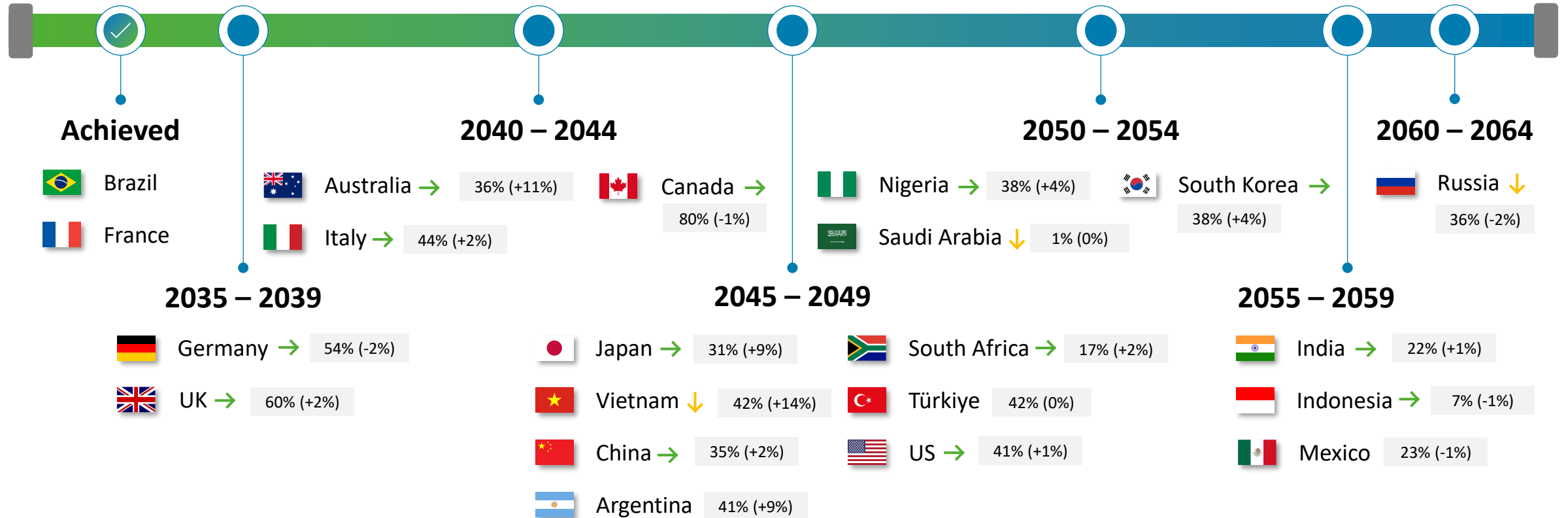
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IPR 2025 TRANSITION FORECAST: CLEAN POWER

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Current status quo: Share of low-carbon generation (2022/23) and change in low-carbon generation (2020-2022/23)



Climate transition experts were optimistic that countries will reach ~90% of power generation from renewable sources by 2050, with Germany and the UK expected to reach this target the earliest (i.e. by 2035 - 2039 respectively).

2 IPR COUNTRIES HAVE ACHIEVED THEIR CLEAN POWER TARGET, WHILE 5 COUNTRIES HAVE SET A NET ZERO POWER TARGET, AND 14 COUNTRIES HAVE SET INTERIM TARGETS

2 countries
have **achieved**
their target



5 countries have **targets**
in place to deliver clean
power

-  **Canada**
Canada has announced a target to achieve a net zero electricity grid nationwide by 2035.
-  **UK**
The UK has announced a target to achieve a zero-carbon electricity system by 2035.
-  **Germany**
Germany has announced a target to achieve 80% renewable power by 2030 and decarbonise electricity supply by 2035.
-  **USA**
The Biden administration set a target for a zero-carbon electricity grid by 2035.
-  **Indonesia**
Indonesia has announced a target to achieve 44% clean power by 2030 and 100% by 2050 as part of the JETP deal.

14 countries have **set interim targets** to
partially decarbonise their electricity grid

-  **Australia**
Australia aims to increase the share of low-carbon power generation to 82% by 2030.
-  **Italy**
Italy has announced a target for renewables to provide 65% of its electricity generation by 2030 and 80-90% by 2050.
-  **Japan**
Japan has announced a target of reaching 40-50% renewable generation (+ additional 20% nuclear) by 2040.
-  **China**
China aims to increase the proportion of non-fossil power generation to 33% by 2025.
-  **India**
India aims to achieve 50% electric power capacity from non-fossil fuel sources by 2030.

-  **South Korea**
South Korea has announced a target to reach a share of 56% renewable energy power generation by 2030 and 72% by 2036.

-  **Saudi Arabia**
Saudi Arabia announced that it plans to generate 50% of its electricity from renewables by 2030.

-  **Vietnam**
Vietnam's Eight National Power Development Plan includes a target for 58% renewable energy to by 2030 and 71-78% by 2050.

-  **Türkiye**
Türkiye has announced a target for 55% of renewable electricity generation and 65% installed capacity by 2035.

-  **South Africa**
South Africa has set a target to increase the share of renewable energy to 41% by 2030.

-  **Russia**
Russia has not set a specific clean power target but wants to reduce energy intensity by 56% by 2030.

-  **Mexico**
Mexico has announced to increase its share of renewables to 45% by 2030.

-  **Nigeria**
As part of its Renewable Energy Master Plan (REMP), Nigeria set a target to achieve 36% of total electricity from renewables by 2030.

-  **Argentina**
The Economy Ministry of Energy has announced plans to achieve 57% renewable energy generation by 2030.



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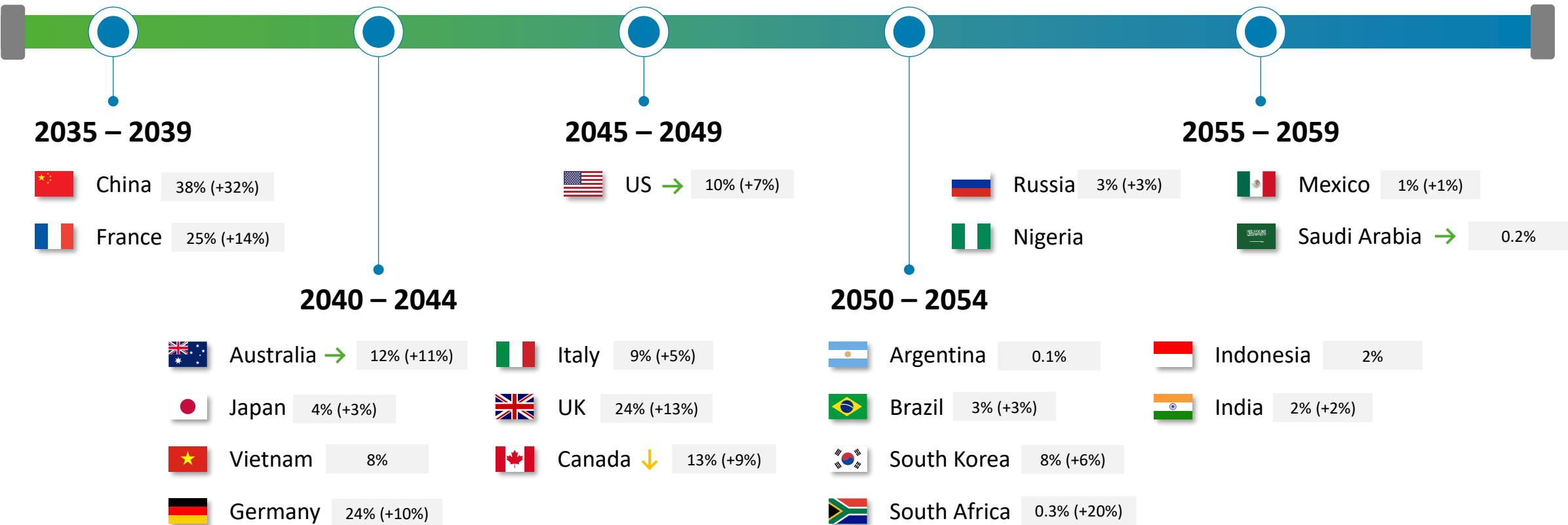
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IPR 2025 TRANSITION FORECAST: PHASE-OUT OF LIGHT DUTY VEHICLES WITH CO₂ EMISSIONS

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Current status quo: EVs' share of new car sales (2022/23) and change in EVs' share of new car sales (2020-2022/23)



Experts forecast China and France will phase out fuel-powered light-duty vehicles (LDVs) the earliest, with China leading in EV sales growth. In contrast, other emerging markets are unlikely to decarbonise LDVs until 2050 due to insufficient policy support and inadequate charging infrastructure.

8 IPR COUNTRIES HAVE ANNOUNCED TARGETS TO FULLY DECARBONISE NEW SALES OF LIGHT DUTY VEHICLES

5 countries target **fully decarbonising** new LDV sales by 2035



Canada

Canada has set a target for all new light-duty vehicles to be zero-emission by 2035.



UK

The UK has announced a ban on sales of cars and vans with CO₂ emissions from 2035.



Germany



Italy



France

The EU has mandated that all new cars and vans registered in the EU are to have zero-CO₂ emissions by 2035.

3 countries target **fully decarbonising** new LDV sales beyond 2035



Vietnam

Vietnam has approved a target for net zero emissions in the transport sector by 2050, aiming to increase the sales of EVs to 10% by 2030.



Indonesia

Indonesia has set a goal for all sales of new cars to be electrically-powered by 2050.



South Korea

In 2022, Korea announced a policy agenda which planned to set a goal for a transition to ZEVs by 2035 but did not explicitly commit to a date for phasing out ICE vehicles.



China*

China has set a target of 50% of all new cars sold before 2035 to be powered by 'new energy'.



Japan*

Japan has set a target for 100% of car sales to be 'clean energy vehicles' by 2035.

6 countries have **announced strategies to partially decarbonise** their transport system



Australia

Australia aims to increase EV sales under the National Electric Vehicle Strategy, with South Australia and Queensland setting phase-out targets by 2035/36.



USA

Under the Biden administration, the US set a target for 56% of all vehicles sold to be electric by 2032. However, this target was revoked under the new Trump administration.



Mexico

At COP27, Mexico announced a target for 50% of vehicle sales to be zero-emission vehicles by 2030.



Saudi Arabia

Saudi Arabia has set a target of ensuring that 30% of cars on its capital city's roads are electric by the end of 2030, reaching 50% by 2050.

7 countries **have not set targets** to decarbonise their transport system



Russia



South Africa



Brazil



Türkiye



India



Nigeria



Argentina

* Clean energy vehicles and new energy vehicles include conventional hybrids which does not meet our definition of ZEV. Note: ZEV = BEV, PHEV and FCEV

Sources: Full forecast evidence can be found in the separate Policy Evidence Annex.



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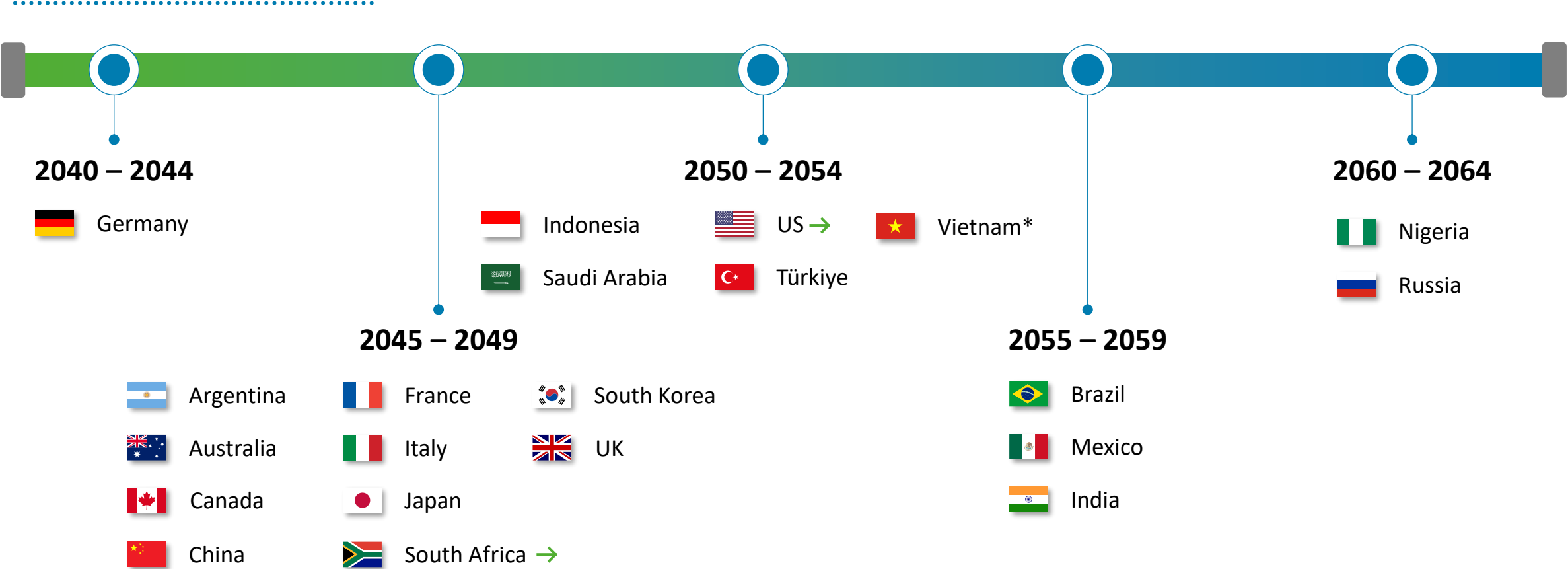
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IPR 2025 TRANSITION FORECAST: PHASE-OUT OF HEAVY-DUTY VEHICLES WITH CO₂ EMISSIONS

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration



 Heavy-duty vehicle sales are expected to accelerate later than light-duty vehicles, although experts believe that in Argentina, Saudi Arabia, South Africa, South Korea, and Türkiye the transition towards zero emission HDVs will be faster than for LDVs.

*For Vietnam insufficient responses were received to deem results robust. Therefore, the actual policy targets was used for the forecast.
Survey Question: By what year will >90% of heavy-duty vehicle sales consist of zero-emission vehicles (ZEVs)? (Note: i.e., 90% of new sales are ZEVs; ZEV = BEV, PHEV, FCEV)
Sources: Forecast methodology including approach for validating robustness can be found in the Methodology section.

5 IPR COUNTRIES HAVE COMMITTED TO DEEP DECARBONIZATION OF HEAVY-DUTY VEHICLES

.....

5 countries have announced strategies or ambitions to deliver deep decarbonization in HDVs



UK

The UK has announced that it will phase out sales of new petrol, diesel, and hybrid HDVs by 2040.



Germany



Italy



France

The European Commission announced the introduction of stronger CO₂ emission standards for heavy-duty vehicles from 2030 onwards, with a 90% emissions reduction by 2040 compared to 2029 levels.



Vietnam

Action program on Green Energy Transition and Reducing Emissions in the Transport Sector has set the target for all road vehicles to be electric by 2050.



2 countries have signed non-binding memorandums to achieve deep decarbonization in HDVs



USA

The Biden administration has signed a non-binding memorandum of understanding for 30% of new sales of medium-and heavy-duty vehicles to be zero-emission by 2030 and 100% by 2040.



Canada

Canada has signed a non-binding memorandum of understanding for 35% of new sales of medium-and heavy-duty vehicles to be zero-emission by 2030 and 100% by 2040.



14 countries have not announced policies to achieve deep decarbonization in HDVs



Russia



South Africa



Brazil



Türkiye



India



Nigeria



Saudi Arabia



Indonesia



Australia



Mexico



Argentina



South Korea



Japan



China

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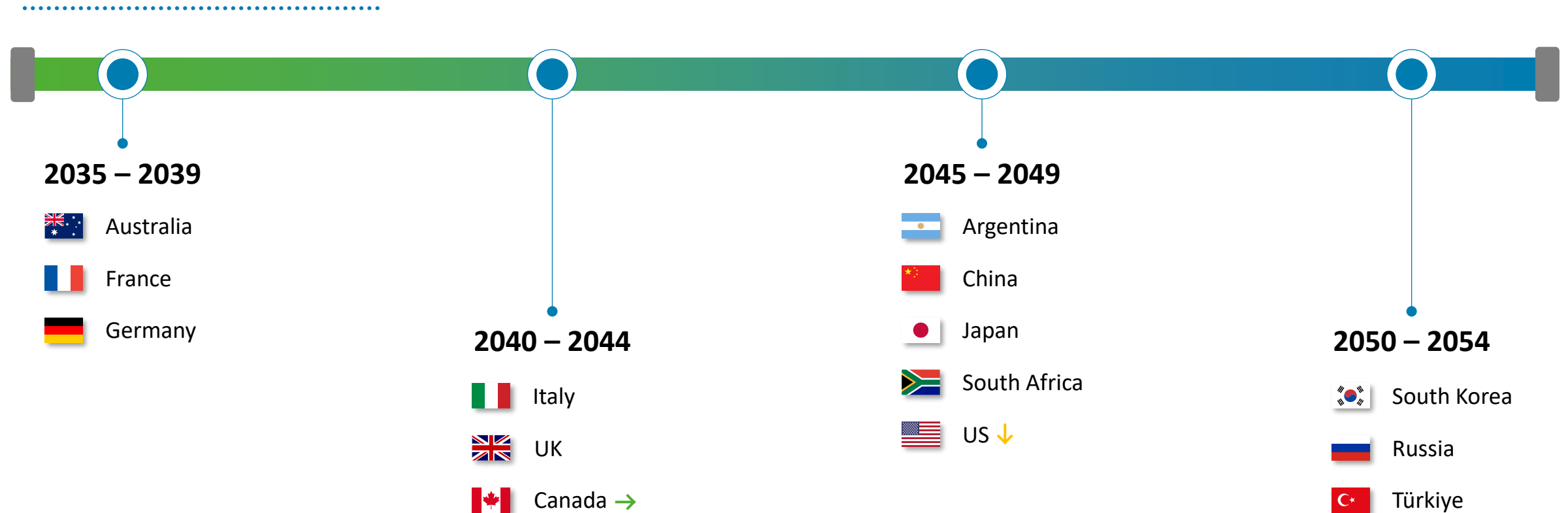
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IPR 2025 TRANSITION FORECAST: PHASE-OUT OF NEW FOSSIL FUEL HEATING SYSTEMS

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration



In IPR's 2024 Climate Transition Expert Survey, Australia, France, and Germany are expected to phase out of new fossil fuel heating systems between 2035-2039. South Korea, Russia, and Türkiye are expected to end sales much later.

The forecast target not applicable for Brazil, Indonesia, India, Mexico, Nigeria, Saudi Arabia, and Vietnam (N/A).

Survey Question: By what year will >90% of new heating system sales for existing and new buildings be low-emissions? (Low-emissions heating implies the phasing out of fossil fuel heating and includes heat pumps, low-carbon district heating and green hydrogen)

Sources: Forecast methodology including approach for validating robustness can be found in the Methodology section.

11 IPR COUNTRIES HAVE POLICIES IN PLACE TO DECARBONISE BUILDINGS

5 countries have policies in place to **fully decarbonise buildings**

France

In 2020, the National Low-carbon Strategy set the ambition for buildings to be heated using only carbon-free technologies and energy by 2050.

Germany

The German Buildings Energy Act (GEG) amendment, effective from January 2024, mandates that newly installed heating systems must use at least 65% renewable energy sources. The deadline for the replacement of fossil fuel/oil/gas heating systems is set to 2045.

UK

The UK announced that it will prioritize measures to encourage greener heating options, instead of enforcing the gas boiler ban by 2035. Nevertheless, the UK still plans to achieve a net zero buildings by 2050.

Canada

Canada's Green Buildings Strategy sets a goal of net zero emissions for buildings by 2050, along with a minimum 40% emissions reduction from 2005 levels by 2030.

Italy

The EU's 2021 Energy Performance of Buildings Directive aims to reduce building sector emissions by at least 60% by 2030 (relative to 2015) and achieve climate neutrality by 2050.

6 countries have **policies or strategies in place** to partially decarbonise buildings

Australia

Australia is committed to achieve net zero emissions in the built environment by 2050, with a specific emissions reduction plan still being under development.

Japan

Japan's 2022 Green Transition Strategy sets a target for new buildings and houses to emit zero-emissions by 2030, with the Building Energy Efficiency Act requiring compliance with energy efficiency standards for all newly constructed buildings.

USA

In June 2024, the Biden administration announced the first national definition of zero-emissions buildings (ZEBs), which requires them to be energy-efficient, produce no on-site greenhouse gas emissions, and be powered entirely by clean energy.

South Africa

The C40 Cities South Africa Buildings Programme supports cities in developing zero carbon building policies and codes.

South Korea

South Korea's 1st National Basic Plan for Carbon Neutrality and Green Growth targets to achieve a 37.6% reduction in emissions by 2030, including plans for Zero-Energy Building requirements for public and private buildings.

China

In 2022, China updated building codes to require all new urban buildings to be constructed in line with green building standards by 2025 and raises the requirement for buildings' utilization of renewable energy from 6% in 2020 to 8% by 2025.

3 countries have **no targets or policies** to decarbonise buildings

Russia

Argentina

Türkiye

1. Space heating is not needed in 7 IPR countries, and therefore not included here: Mexico, Saudi Arabia, India, Brazil, Vietnam, Indonesia and Nigeria

Sources: Full forecast evidence can be found in the separate Policy Evidence Annex.



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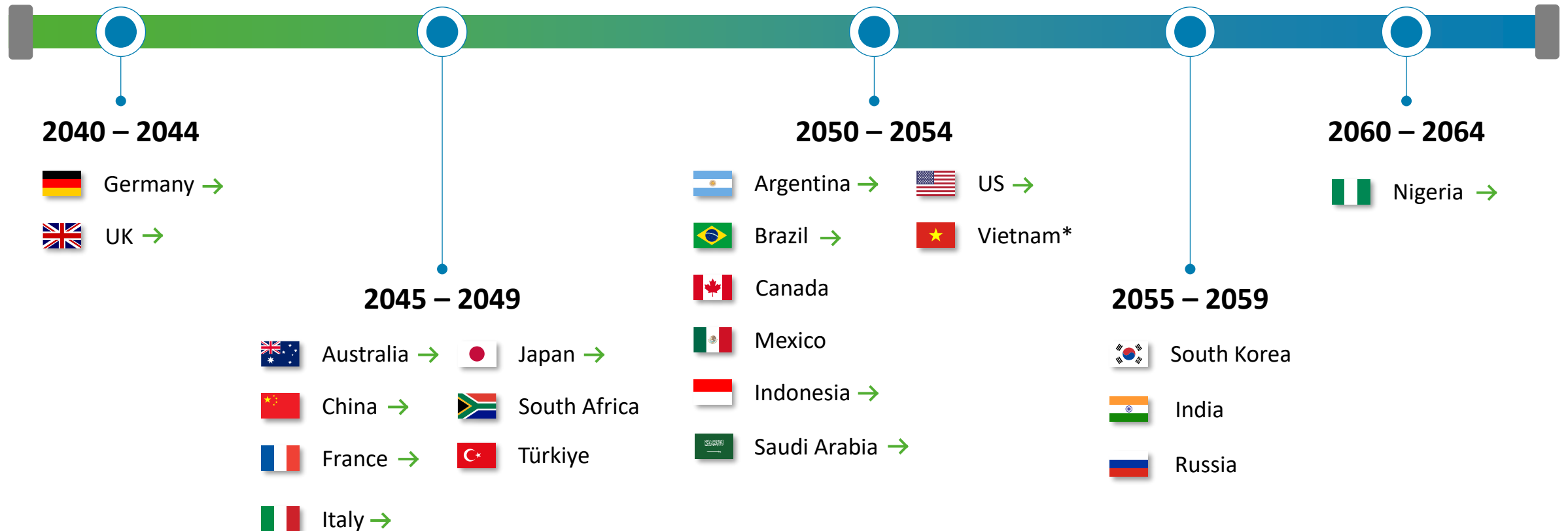
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IPR 2025 TRANSITION FORECAST: INDUSTRY PROCESS EMISSIONS

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration



Experts in IPR's 2024 Climate Transition Expert Survey anticipate industry decarbonization will occur either before or alongside the achievement of net-zero emissions. Within the heavy industry sector, iron & steel, cement, and chemicals are expected to decarbonise on similar timelines.

*For Vietnam insufficient responses were received to deem results robust. Therefore, the actual policy targets was used for the forecast.

Survey Question: By what year will an >80% reduction in iron & steel, cement, and chemical production emissions be achieved? (Production emissions include Scope 1 emissions, i.e. emissions from fuel combustion and process emissions)

Sources: Forecast methodology including approach for validating robustness can be found in the Methodology section.

7 IPR COUNTRIES HAVE INDUSTRIAL CARBON PRICING AND CCUS INCENTIVES IN PLACE

7 countries have **carbon pricing** covering **industry** and **CCUS incentives** in place

Germany

Industry is covered by the EU ETS. Germany has announced US\$54 bn to support industrial decarbonisation and supports carbon capture & storage for selected industries.

Canada

Industrial emissions are covered by an ETS. Canada has proposed CCfDs and tax credits to support CCUS.

UK

Industrial emissions are covered by the UK ETS. The UK has announced US\$ 22 bn of funding to scale CCUS.

Australia

Australia Safeguard Mechanism sets limits on GHG emissions from large industrial facilitators.

South Korea

Industrial emissions are covered by an ETS. South Korea provides 20-40% tax credits for CCUS.

France

Industry is covered by the EU ETS. France has introduced tax credits to support CCUS.

Japan

Japan has launched the first phase of a carbon market. Japan has a target for 6-12MtCO₂ annual CCUS capacity by 2030, which is supported by subsidies.

6 countries have **carbon pricing** covering **industry** or **CCUS incentives** in place

CCUS incentives

USA

The IRA provides US\$ 61bn for clean tech including tax credits of up to US\$ 85 per tonne of CO₂ permanently stored from CCS.

Saudi Arabia

Saudi Arabia has launched a US\$10.4 bn investment fund for CCUS.

Carbon pricing

Italy

Industrial emissions in Italy are covered by the EU ETS.

Mexico

Industrial emissions in Mexico are covered by its ETS.

Brazil

With the Brazilian Emissions Trading System (SBCE), companies emitting less than their allocated quotas can trade surplus allowances with other companies.

South Africa

Industrial emissions in South Africa are covered by its carbon tax.

5 countries have **announced** other industry decarbonisation targets

Vietnam

Vietnam has announced targets to reduce industrial emissions 38.3% by 2030 and 84.8% by 2050.

Argentina

Argentina will receive a \$216 million hydrogen-focused fund as announced by the EU.

Türkiye

The Turkish Emission Trading System (TR ETS) will launch in early 2025 and is expected to cover sectors with emissions >500,000 tCO₂ per year.

India

India's CCTS is planned to be based on the existing PAT and the transition will begin in 2024.

China

China is planning to expand its current ETS to cover industry.

3 countries have **no policy or strategy** to decarbonise industrial processes

Indonesia

Nigeria

Russia



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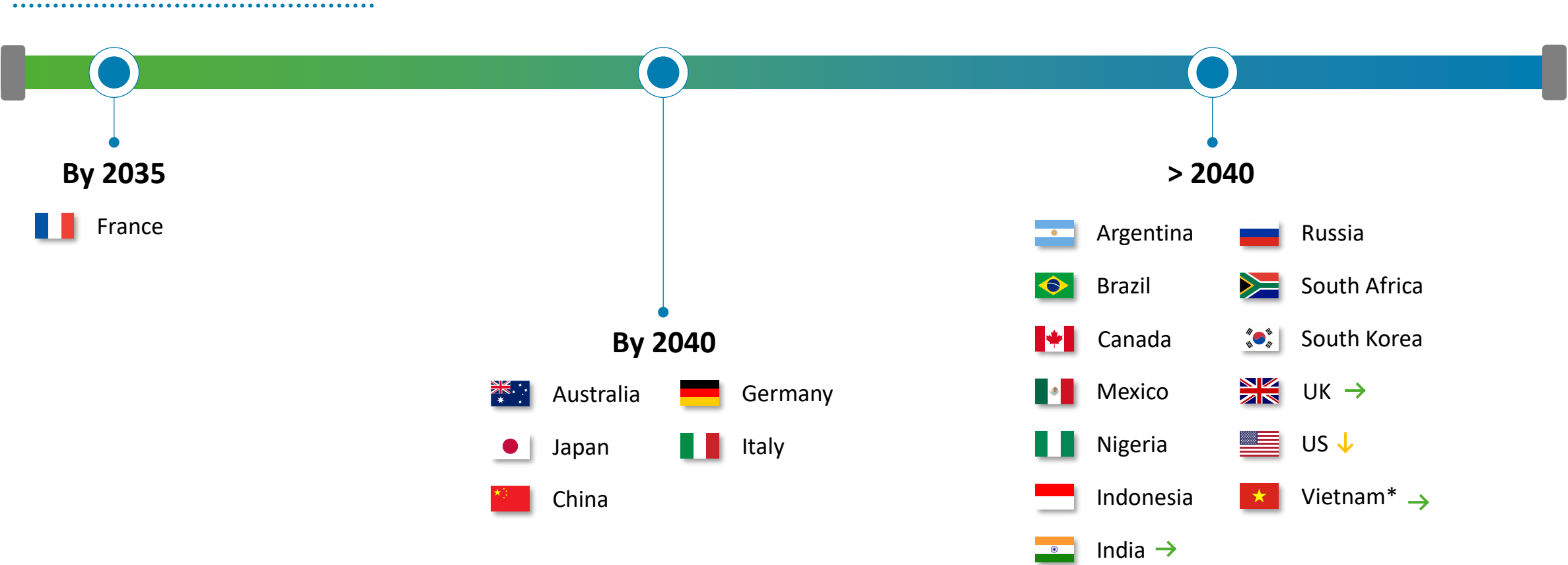
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IPR 2025 TRANSITION FORECAST: INCENTIVES FOR REDUCING EMISSIONS FROM AGRICULTURE

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration



Experts surveyed forecast countries are unlikely to significantly reduce agricultural emissions before 2040, with the exception of France. This underscores a substantial lack of policy momentum in 2024 and existing policy gaps in reducing emissions from agriculture for almost all countries.

*For Vietnam and Türkiye insufficient responses were received to deem results robust. For Vietnam, the country's own policy targets was used, whereas no target was available for Türkiye. In addition, the forecast is also not applicable for Saudi Arabia (N/A).
Survey Question: By what year will strong policies that incentivize farmers to significantly reduce emissions from fertilizer and livestock be implemented? (Significant reduction in GHG emissions is defined as a pathway resulting in an emissions decrease of over 80% in the medium term after policy implementation)
Sources: Forecast methodology including approach for validating robustness can be found in the Methodology section.

15 IPR COUNTRIES HAVE AGRICULTURAL POLICIES IN PLACE TO INCENTIVIZE THE REDUCTION OF FROM CROP PRODUCTION AND LIVESTOCK

15 countries have **policies in place** to provide market incentives for reducing agricultural emissions

Canada

Canada provides ~CAD\$600m (US\$423m) for agricultural emissions reduction under the 2030 Emissions Reduction Plan.

UK

The UK is piloting the Sustainable Farming Incentive (SFI), which provides £20 (US\$25) per ha per year for the first 50 hectares enrolled in SFI actions.

Germany **Italy** **France**

Under the Common Agricultural Policy (CAP), the EU offers direct payments to farmers to encourage and support sustainable agricultural practices.

South Korea

South Korea provides direct payments to farmers to support the adoption of environmental practices.

Mexico

Mexico set a target of 22% reduction in GHG emissions by 2030 and incentivizes investments in emission reduction projects through its carbon tax.

USA

The Inflation Reduction Act (IRA) offers \$3.2bn to farmers and agricultural producers to support their efforts in reducing emissions.

Australia

The Emission Reduction Fund (ERF) allows farmers to generate tradeable carbon certificates that can be sold to the government or on the voluntary carbon market.

Japan

Japan offers direct payments to farmers who participate in activities aimed at combating global warming. These incentives range from US\$6 to \$86 per acre.

China

China has established several provincial-level agricultural funds to support greening initiatives in agriculture.

South Africa

The national carbon tax enables farmers to implement projects that sequester carbon and reduce GHG emissions, generating tradable carbon credits.

5 countries have **announced policies or targets** to reduce agricultural emissions

Vietnam

Vietnam has set a target to reduce agricultural sector emissions by 43% by 2030 relative to business-as-usual.

Argentina

Argentina announced to reduce agricultural emissions by improving manure management, optimizing cattle feed, and educating farmers.

Nigeria

Nigeria announced plans to unveil a carbon tax policy incentivizing also farmers to reduce GHG emissions through generating carbon credits.

India

The Energy Conservation Bill supports the development of domestic carbon markets and incentivization of GHG-emission reduction.

Türkiye

Türkiye published its Climate Change Mitigation Strategy and Action Plan (CCMSP) outlining its strategies to reduce greenhouse gas emissions across various sectors including agriculture.

Russia

Russia launched a voluntary carbon offsetting scheme enabling farmers to generate tradable carbon credits.

Brazil

The RenovAgro promotes low-carbon agriculture through financial incentives like investment credit for sustainable practices and GHG emission reduction.

Indonesia

Indonesia has set a GHG reduction target for the agriculture sector at 10 Mt CO₂ eq and implemented a mandatory biodiesel blending program to achieve this.

1 country has no policies to reduce agricultural emissions

Saudi Arabia

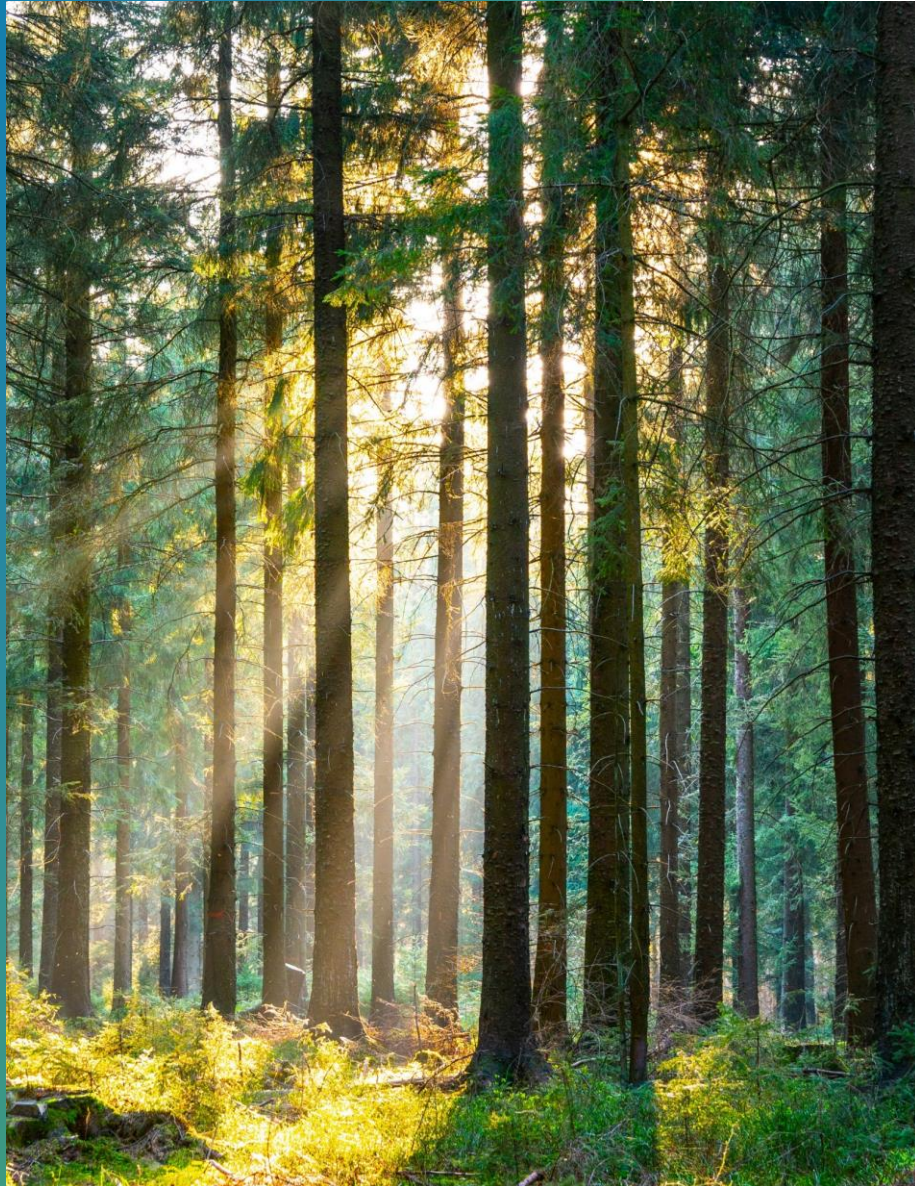


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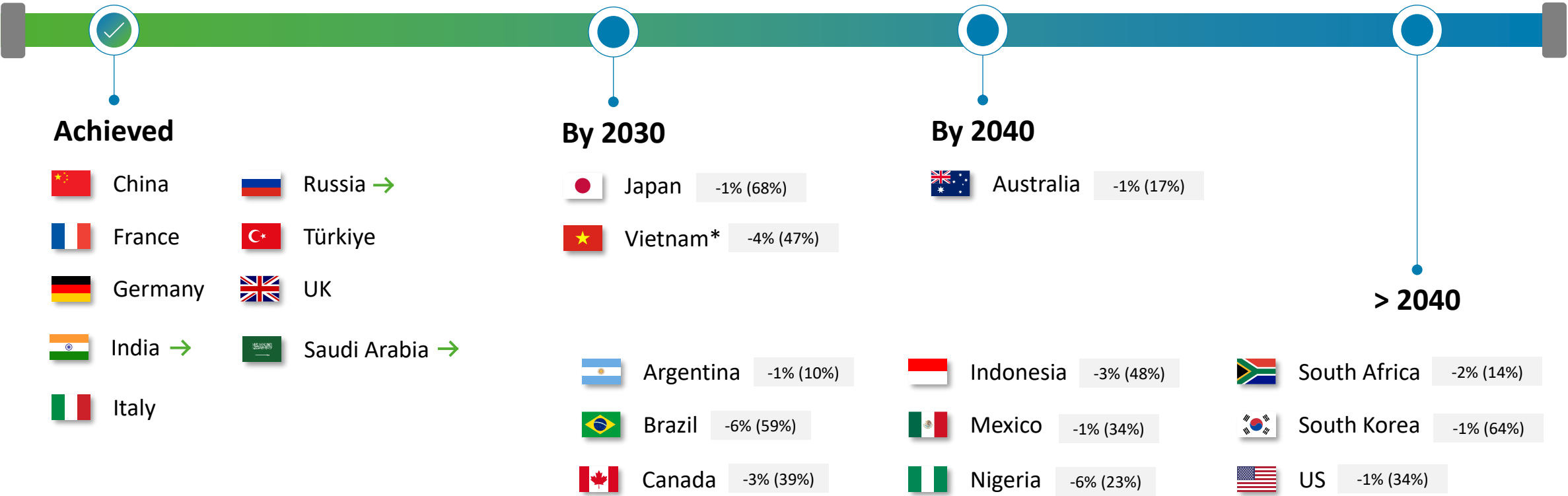
- Nature incentives

Methodology

IPR 2025 TRANSITION FORECAST: ENDING NET DEFORESTATION

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Current status quo:  Change in forest cover (2000-2020) and forest cover as a share of total land area (2022)



 Even though 9 countries have already achieved their net deforestation target, experts expect the majority of remaining countries to end net deforestation only after 2040, highlighting the importance of implementing more ambitious policies and strategies aimed at halting deforestation.

*For Vietnam insufficient responses were received to deem results robust. Therefore, the actual policy targets was used for the forecast.
 Survey Question: By what year will net deforestation end (by which year will forest losses no longer be greater than forest gains)?
 Sources: [Global Forest Watch](#), [World Bank](#). Forecast methodology including approach for validating robustness can be found in the Methodology section.

Note: Different methodologies exist for defining deforestation. IPR adopts a carbon sequestration-focused approach, considering deforestation and afforestation in tandem

9 IPR COUNTRIES HAVE ENDED NET DEFORESTATION WHILE A FURTHER 11 COUNTRIES HAVE ANNOUNCED PLANS TO END OR REDUCE NET DEFORESTATION

9 countries have **ended** net deforestation

-  **China**
-  **France**
-  **Germany**
-  **India**
-  **Italy**
-  **Russia**
-  **Saudi Arabia**
-  **Türkiye**
-  **UK**

2 countries have **announced** an end to (net) deforestation

-  **Mexico**
In 2022, Mexico set a target to reach net zero deforestation by 2030.
-  **Brazil**
In 2022, Brazil pledged to achieve zero deforestation by 2030.

9 countries have **announced** plans to **reduce** (net) deforestation

The following countries have signed the 'Glasgow Leaders' Declaration on Forests and Land Use by 2030', which aims to halt deforestation by 2030.

-  **South Korea**
-  **Australia**
-  **Argentina**
-  **Japan**
-  **Vietnam**
-  **Canada**
-  **USA**
-  **Nigeria**
-  **Indonesia**
In 2021, Indonesia set a target to halve the deforestation rate over the next three decades.

1 country has **no policy or strategy** in place to end (net) deforestation

-  **South Africa**

18 IPR COUNTRIES HAVE AFFORESTATION OR REFORESTATION POLICIES OR STRATEGIES IN PLACE

.....

18 countries have policy or strategy in place for delivering afforestation or reforestation



Australia

Afforestation and reforestation projects can qualify for emissions offsets under the Emissions Reduction Fund. The government has allocated AUD\$70m (US\$50m) towards the 20m Trees Programme.



Canada

In November 2024, the Canadian government announced an additional investment of over CAD\$200 million for more than 30 new tree-planting projects, which will result in over 160 million new trees across the country.



Germany



France



Italy

A €200 million fund for European afforestation was launched by France Valley in June 2024.



India

In its NDC, India aims to reach 33% forest cover and create a carbon sink of 2.5-3bn tonnes of CO₂ through forest cover by 2030.



Argentina

Argentina's Green Insurance Initiative aims to increase forest plantation to 2 million ha by 2030.



Mexico

Mexico's 2019 National Development Plan 2019-2024 sets a reforestation target of 1 million hectares.



Brazil

The BRB Finance Coalition allocates \$10 billion to accelerate forest conservation & restoration, restoring 12 million hectares by 2030.



UK

A Tree Planting Taskforce has been launched to oversee the planting of millions of trees across the UK's four nations.



USA

The 2022 Replant Act directs the Forest Service to plant more than a billion trees over the next decade and removes a cap of \$30 million.



China

The country plans to plant 500 million mu (about 33.33 million hectares) of forests and grasslands between 2021 and 2025.



Japan

Japan's National Biodiversity Strategy includes plans to conserve and restore degraded ecosystems including forests.



Indonesia

In 2021, Indonesia set a target to reforest 26.2m acres of land by 2050.



Nigeria

Nigeria aims to reduce emissions from forestry by 20% by 2050.



Saudi Arabia

As part of the Saudi Green Initiative, KSA has pledged to plant 100 million trees, including 7 million trees in national parks and forests, to offset 45 million tonnes of CO₂ emissions by 2030.



Vietnam

Prime Minister Nguyen Xuan Phuc has announced to plant 1 billion trees nationwide by 2025 to help prevent landslides and flooding.



Türkiye

Türkiye plans to expand its forest cover by 5% by 2030, taking total forest cover to 30%.

3 countries have no clear policy or strategy in place for afforestation or reforestation



South Africa



South Korea



Russia



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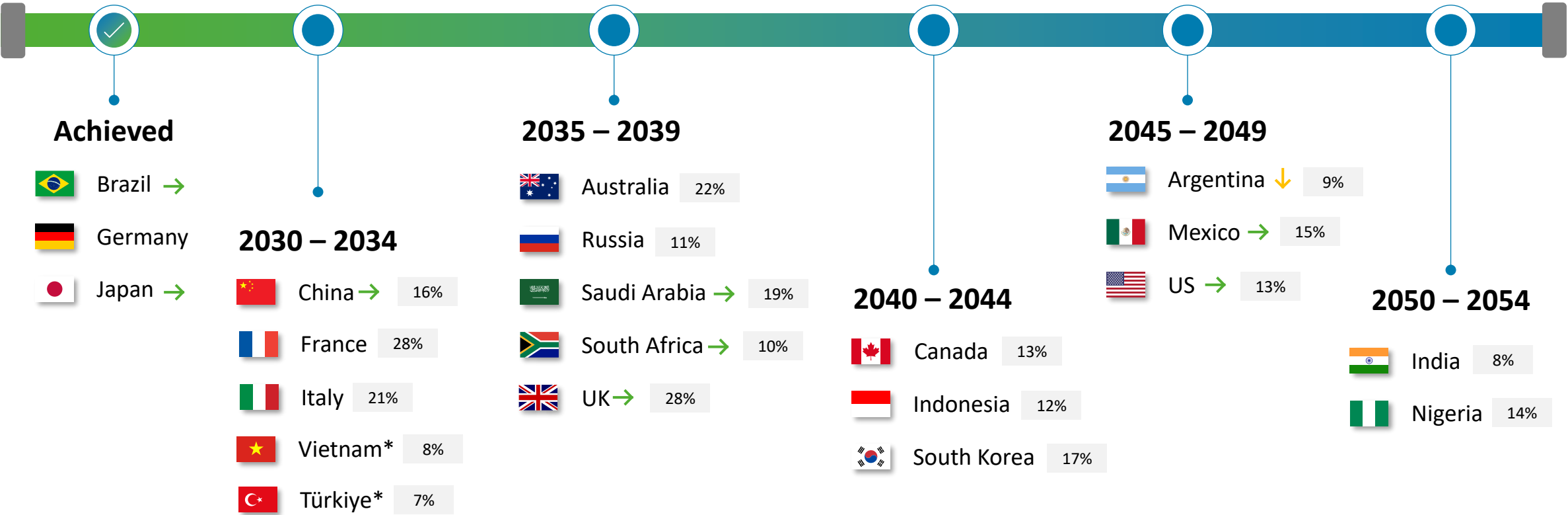
- Nature incentives

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IPR 2025 TRANSITION FORECAST: 30% LAND PROTECTION

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration

Current status quo:  Terrestrial and inland waters protected area coverage (2024)



 Even though the majority of IPR countries have updated their national biodiversity strategies ahead of COP16 in 2024, experts do not believe that the 30% protection of land target will be achieved by 2030, except for China, France, and Italy.

*For Vietnam and Türkiye insufficient responses were received to deem results robust. Therefore, the actual policy targets were used for the forecast.
Survey Question: By what year will the targets of the 2022 Kunming Biodiversity Framework (GBF) of protecting 30% of land and marine area be achieved?
Sources: [UNEP-WCMC \(2025\)](#). Forecast methodology including approach for validating robustness can be found in the Methodology section.

Note: This projection aligns with GBF's Target 3, which seeks to protect 30% of the planet's land and oceans by establishing protected areas and implementing effective area-based conservation measures

19 IPR COUNTRIES HAVE NATIONAL BIODIVERSITY TARGETS FOR PROTECTING 30% OF LAND BY 2030 IN PLACE, WITH 3 COUNTRIES HAVING ALREADY ACHIEVED THEIR TARGET

3 countries have **achieved** a 30% land protection target

-  **Brazil**
-  **Germany**
-  **Japan**



16 have **announced** a 30% land protection by 2030 target

The following countries have submitted their KMGBF aligned national targets to the Convention on Biological Diversity:

- | | | |
|--|---|---|
|  Australia |  India |  South Africa |
|  Canada |  Mexico |  South Korea |
|  China |  Nigeria |  Türkiye |
|  France |  Russia |  UK |
|  Indonesia |  Saudi Arabia | |

- | | |
|---|---|
|  USA
Under the 2021 America the Beautiful initiative, the goal to conserve 30% of U.S. lands and waters by 2030 was set. |  Italy
As part of their revised National Biodiversity Strategy, Italy plans to protect 30% of land and waters by 2030. |
|---|---|

In addition, 10 IPR countries, namely Australia, Argentina, Canada, China, France, Indonesia, India, Mexico, South Korea, and Vietnam have submitted their National Biodiversity Strategy Action Plans (NBSAPs).*



2 countries have **no clear strategy** in place

-  **Argentina**
-  **Vietnam**

* Germany and Japan did also submit their NBSAPs but have already achieved the target
Sources: Full forecast evidence can be found in the separate Policy Evidence Annex.



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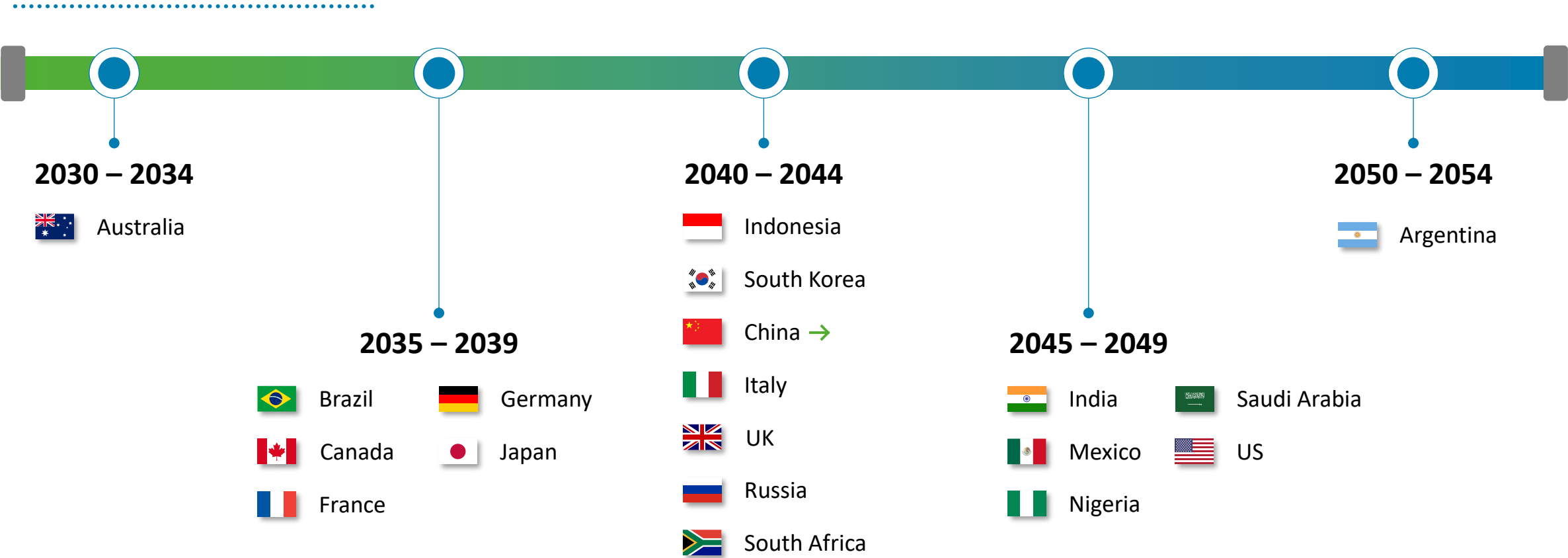
- Land protection

- Nature incentives**

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IPR 2025 TRANSITION FORECAST: NATURE INCENTIVES

Average policy momentum tracked by IPR in 2024 compared to 2023: ↑ Acceleration → Momentum maintained ↓ Deceleration



 The 2024 Climate Transition Expert Survey shows that in most IPR countries national biodiversity nature markets or other significant nature incentives are expected to be implemented by 2044, with Australia achieving the target the earliest and Argentina the latest.

*For Vietnam and Türkiye insufficient responses were received to deem results robust. Since no actual policy targets were available, the forecast is not applicable.
 Survey Question: By what year will compliance mechanisms be in place requiring most businesses (>80%) with a significant impact on Nature to offset their environmental damages or to pay for ecosystem services?
 Sources: Forecast methodology including approach for validating robustness can be found in the Methodology section.

3 IPR COUNTRIES ARE DEVELOPING NATIONAL BIODIVERSITY MARKETS, WHILE 15 OTHERS HAVE NATURE INCENTIVES IN PLACE

3 countries are **developing** a biodiversity nature market

 **France**  **UK**

The UK and France are developing a framework for high integrity biodiversity credit markets.

 **UK**

The UK launched the Biodiversity Net Gain (BNG) scheme, mandating the achievement of at least 10% net increase in biodiversity as prerequisite for planning approvals, creating a regulated market for biodiversity credits.

 **Australia**

The Clean Energy Regulator is currently building capability and establishing systems to launch the Nature Repair Market Bill in 2025.

15 countries either have **other nature market incentives** or are **planning to introduce** nature incentives

 **USA**  **Canada**

USA and Canada have active compensation schemes targeting the protection of fish habitats, wetland and stream ecosystems and endangered species.

 **China**  **Vietnam**  **Argentina**  **Mexico**

China, Vietnam, and Argentina have implemented national-level payment for ecosystem services (PES) programs to conserve nature.

 **Germany**  **Italy**

The EU aims to allocate 10% of its annual spending to biodiversity by 2026 and 2027, up from 7.5% in 2024. Additionally, a dedicated biodiversity fund is proposed for the next Multiannual Financial Framework, expected by July 1, 2025.

 **South Korea**  **Nigeria**

South Korea and Nigeria have announced a National Biodiversity Strategy And Action Plan (NBSAP) that supports nature projects.

 **Brazil**

In 2024, Law No. 15,042/2024 came into force, establishing the Brazilian Greenhouse Gas Emissions Trading System (SBCE).

 **Japan**

Japan has announced the Satoyama Initiative which aims to introduce market mechanisms for nature conservation.

 **South Africa**

South Africa has a national payment for ecosystem services scheme to conserve the country's water resources.

 **Indonesia**

The country launched the Indonesian Biodiversity Strategy & Action Plan (IBSAP) 2025-2045 on August 8, 2024, which serves as a strategic roadmap for biodiversity management.

 **India**

India's updated National Biodiversity Strategy and Action Plan aligns with global biodiversity goals for 2030 and 2050. The plan is projected to cost Rs. 816 billion (approximately \$10 billion) per year between 2024-2025 and 2029-2030.

3 countries have **no nature market incentives**

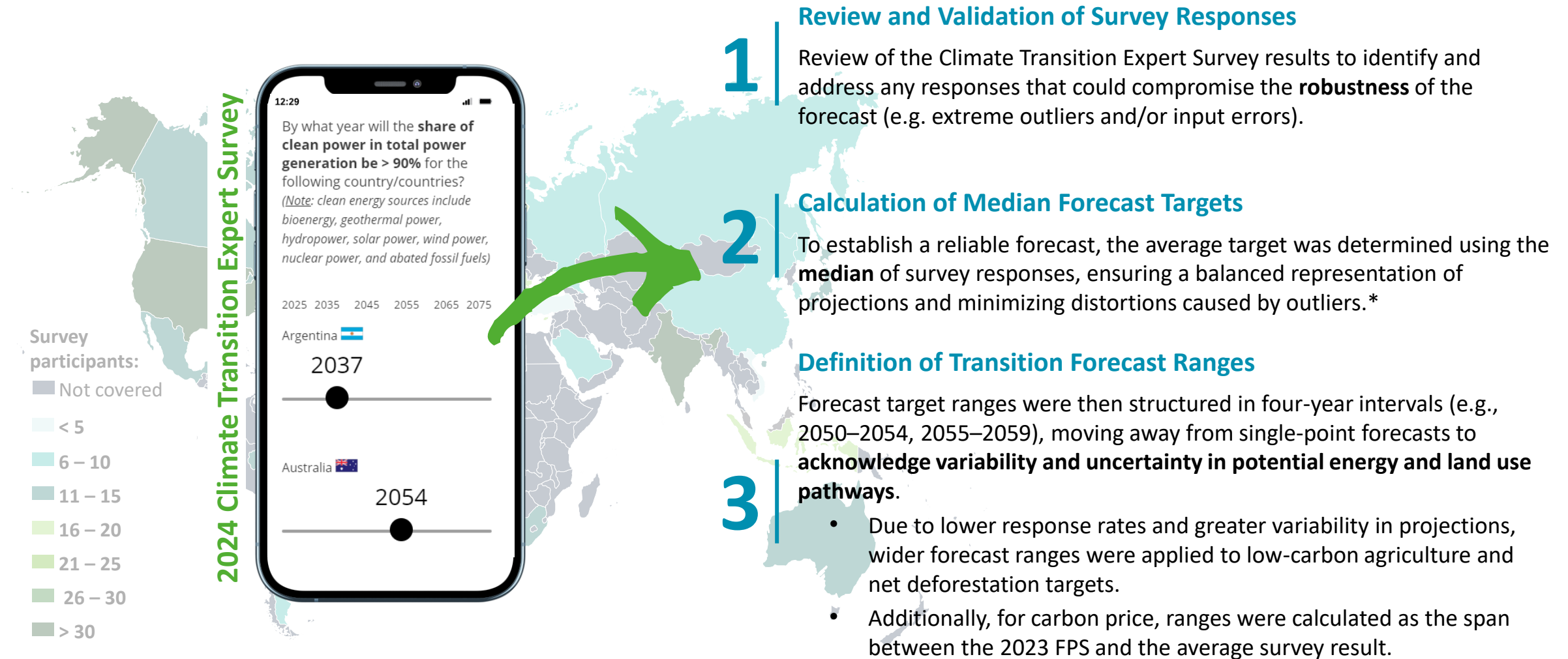
 **Russia**
 **Saudi Arabia**
 **Türkiye**

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*The **median** is less affected by extreme values or outliers because it only depends on the middle value of a sorted dataset. Outliers can disproportionately shift averages, making it unrepresentative of the typical data point, whereas the median remains relatively stable, providing a more accurate representation of the typical value in a skewed dataset.

CLIMATE TRANSITION EXPERTS WERE SELECTED BASED ON THEIR DIVERSE EXPERIENCE, RECOGNITION, AND CONTRIBUTION ACROSS ONE OR MULTIPLE PROFESSIONAL AREAS



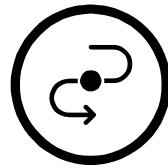
Academic and Research Institutions

- Universities
- Research centers
- Think tanks
- Environmental research institutes
- Climate policy analysis organizations



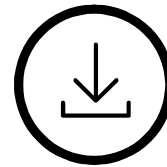
(Inter-) Government organizations

- National government agencies
- Subnational government agencies
- International organization
- Regulatory agencies



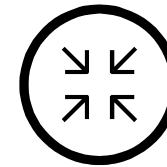
NGOs and Advocacy Groups

- Environmental advocacy organizations
- Climate-focused NGOs
- Sustainability-oriented NGOs
- Legal advocacy groups



Private Sector and Consulting

- Sustainability consulting firms
- Corporate sustainability departments in power, transport, industry, and real estate companies
- Sustainable business practices divisions



Legal and Judicial Institutions

- Environmental law firms
- Courts and tribunals



Professional Associations and Societies

- Environmental professional associations
- Climate change and sustainability-focused professional societies
- Interdisciplinary professional networks



Wide **geographic coverage** with experts from 21 countries

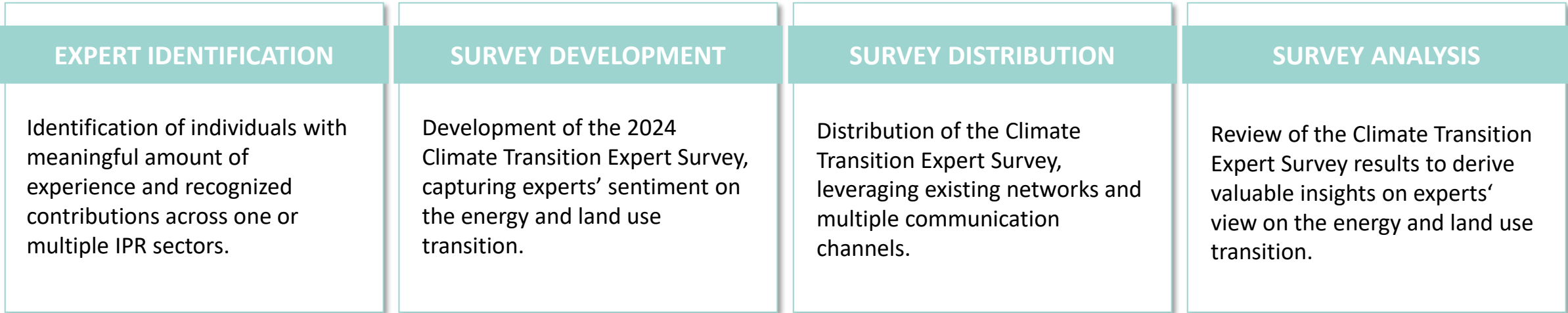


Experts with **diverse sector and industry experience**



Insights in markets' actual sentiment on the achievability of climate targets

THE 2024 CLIMATE TRANSITION EXPERT SURVEY FOLLOWED A 4-STEP PROCESS, STARTING WITH IDENTIFYING EXPERTS TO DEVELOPING THE SURVEY AND ANALYSING THE RESULTS



Average Policy Momentum Tracked by IPR



Acceleration

The average policy momentum shows signs of moderate to significant acceleration.



Momentum maintained

The average policy momentum shows no signs of significant policy movement.



Deceleration

The average policy momentum shows signs of moderate to significant deceleration.

The **Policy Momentum Indicator** synthesizes policy changes over time, assigning ratings based on the significance of shifts in policy announcements in 2024 compared to 2023. It is calculated using the average impact score of relevant and credible policy developments:

- A ↓ (downward arrow) is assigned if substantial policy changes indicate **deceleration**, with an average impact score of **1 (significant deceleration)** or 2 (moderate deceleration).
- A ↑ (upward arrow) is assigned if policy changes signal **acceleration**, with an average impact score of 4 (moderate acceleration) or 5 (significant acceleration).
- A → (rightward arrow) is assigned if **no significant policy movement** is detected, indicating a stable trajectory.

Disclaimer

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