



Quarterly
Forecast Tracker
Global progress against
IPR policy scenarios

Quarterly Forecast Tracker

Update of energy and land use policy developments


July-September 2024


Q3 2024


September 19, 2024


EXECUTIVE SUMMARY: TRACKING POLICY DEVELOPMENTS


Policy momentum has slowed in terms of overall announcements when compared to Q1 & Q2 2024, with net zero and clean power announcements dominating the global policy environment

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IPR tracked **57 credible and material policy announcements in Q3 2024**, a 23% decrease from policies tracked in Q2 2024. Activity changes in the run-up to major elections, summer recesses, and preparatory work before the COP 29 in November 2024 are all likely contributing to this slowdown.
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60% of cumulatively tracked policies are in line with a well below 2°C outcome. Developing economies are closing their gap with new energy and land use policies. The largest policy gap by emissions in advanced economies continues to be in the land use sector.
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The **vast majority** of tracked announcements are **supportive of IPR FPS policy forecasts (53)**, with a small number showing **signals of deceleration (4) and none signaling acceleration**. IPR is downgrading its FPS 2023 forecast for the UK's light-duty vehicles sub-sector to 2035, as hybrid vehicles are excluded in the UK's ICE sales ban policy. Overall, net-zero and clean power policies have dominated over the period of Q3 2024, while announcements for the transport, agriculture, and land use sectors (containing some of the largest policy gaps) remained insufficient.
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In Q3 2024, **2 policies were placed on the IPR watch-list** due to their **potential short-term impact on sectoral measures**. These include announced delays to South Africa coal plant closures and tariffs on Chinese EV imports in Canada. Both policies and their respective sectors **will undergo further assessment later this year**, based on cumulative evidence and the annual forecast survey.
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A focused analysis of the **EU's hydrogen strategy and policy framework** highlights **significant challenges** to delivering REPowerEU 2030 renewable hydrogen targets. Both **demand and supply** capacity for renewable hydrogen currently **lag behind ambition** set out by the EU Commission in 2022. IPR FPS forecasts the EU could reach its **2030 targets by 2040 instead**, presenting a scenario of a steady, albeit slower build-up of the renewable hydrogen market towards the middle of the century. The EU should revise its hydrogen plans to ensure that they are realisable under the defined conditions.

See [Slide 3](#)

See [Chapter 1](#)

See [Slide 14](#)

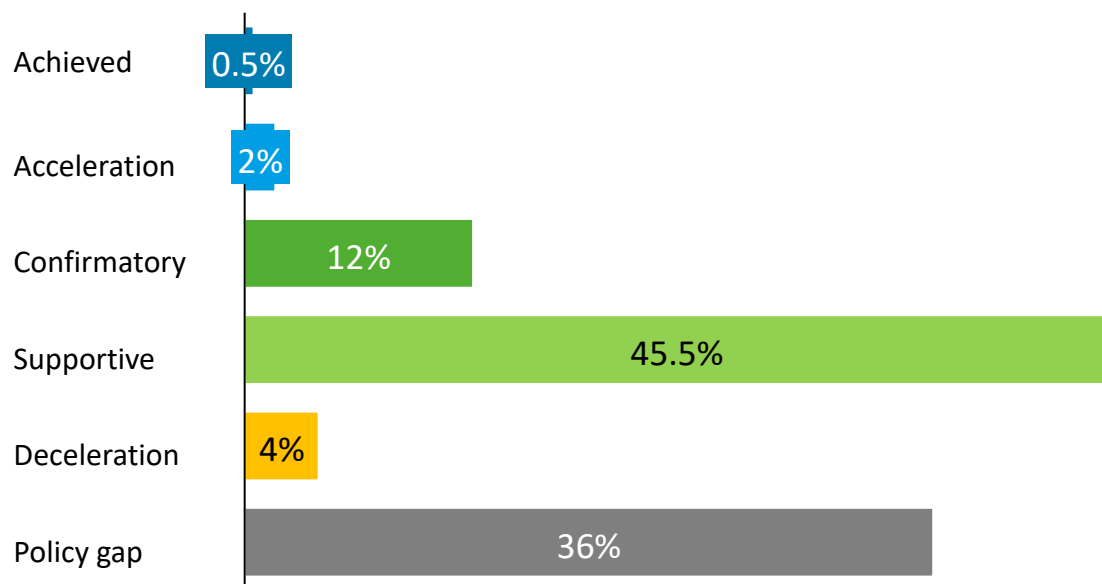
Deep dive on
[Slide 26](#)

WEIGHTED BY EMISSIONS, 60% OF TRACKED POLICIES SINCE Q1 2022 ARE IN LINE WITH A WELL BELOW 2°C* OUTCOME BUT POLICY GAPS REMAIN

See [Technical Annex](#) for more details on policy gap analysis

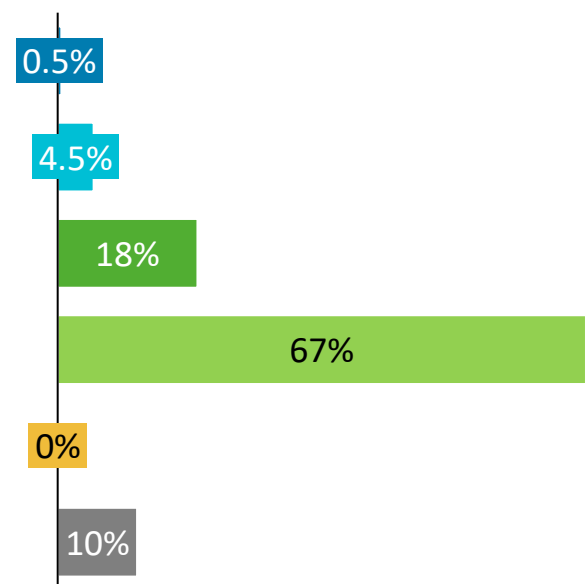
All 21 IPR countries

2022 CO₂e emissions distribution of energy, agricultural and LULUCF emissions¹ across all 21 countries and tracked policy areas, covering 40.66 Gt CO₂e



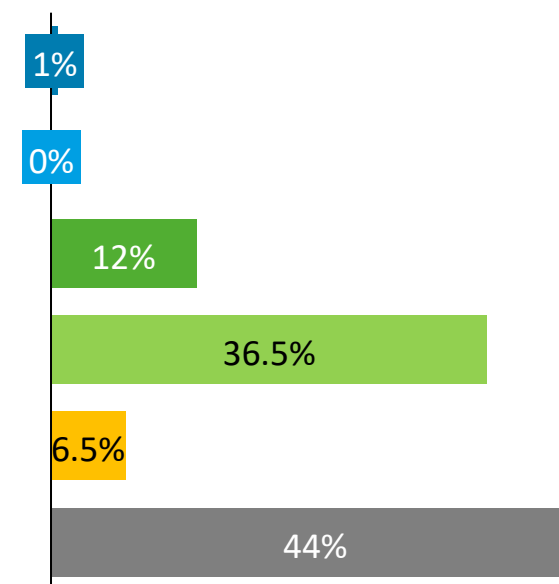
IPR Advanced Economies

Covering 11.20 Gt CO₂e



IPR EMDE

Covering 26.93 Gt CO₂e






Developing economies are closing their gap with new energy and land use policies. Most emissions gaps in advanced economies are from land.

* Weighted by emissions coverage of tracked policies

1. Sources for emission data: EDGAR Database (2022); FAOstat (2021); 2. Data on announced/legislated status of policies can be found at page 25 and in the annex/previous publications





SUMMARY OF KEY POLICIES TRACKED IN Q3 2024

During Q3, there 5 notable policy announcements that were supportive of IPR FPS forecasts, with most announced from China and relating to decarbonizing the power sector

Region	Policy Area	Development	1.8°C FPS Forecast	Impact	Details
 China	Net zero CO2 emissions	China plans to implement low-carbon upgrades to its coal power plants to reduce their environmental impact.	Policy delivers net zero CO2 emissions by 2060.	3	This policy aims to cut carbon emissions from existing coal power plants, which will be operating until the coal phase-out by 2045. The planned low-carbon technology upgrades are supportive of reducing China's net zero CO2 emissions.
	Clean power	China's state planner, aimed at upgrading the country's power system to better integrate renewable energy and manage increasing electricity demand.	Policy delivers dispatched generation of 97% low-carbon power by 2050.	3	Modernizing the power system by upgrading grids is a supportive measure to enhance integration of renewable energy sources.
	Clean power	Chinese authorities unveiled a plan to boost large-scale equipment renewals in the energy sector.	Policy delivers dispatched generation of 97% low-carbon power by 2050.	3	This policy aims to renew facilities in the energy sector on a large scale by upgrading them for clean energy. Building and providing a good infrastructure with modernized technologies is important to ensure a clean energy transition.
 US	Protection & restoration	The US announced a new initiative targeting environmental crimes in the Amazon Basin	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2035.	3	This funding initiative between the US and Amazon Basin countries aims to regenerate the rainforest by reducing deforestation through illegal environmental crimes.
 UK	Net zero CO2 emissions and clean power	The UK's new government has published four new bills, allocating funding for net zero and clean power.	Policy delivers net zero CO2 emissions by 2050. Policy delivers dispatched generation of 97% low-carbon power by 2035.	3	The UK has announced a total investment of £26.5bn over the next few years under various legislation to reduce carbon emissions as well as build and expand renewable energy infrastructure.

SUMMARY OF KEY POLICIES TRACKED IN Q3 2024 (CONTINUED)

There were also indications of slowdown in South Africa, Canada, India, and the UK. While only the UK light duty vehicle forecast was adjusted, IPR will further assess these countries later this year based on cumulative policy evidence

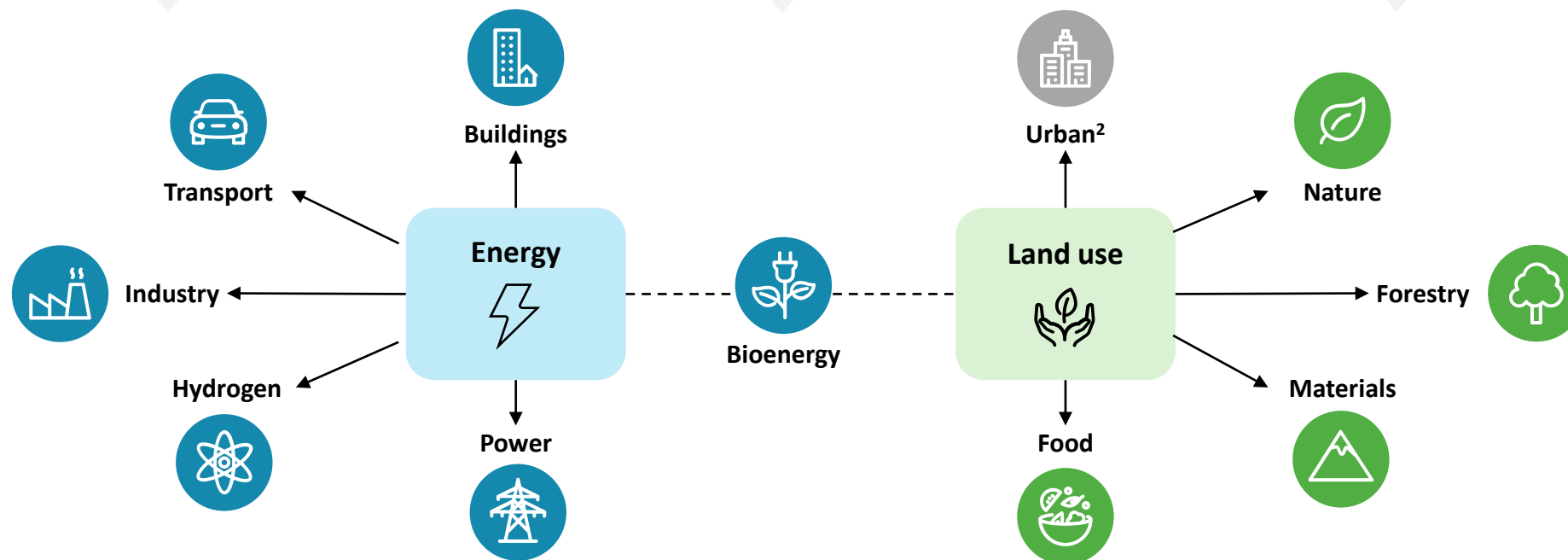
Region	Policy Area	Development	Forecast	Impact	Details
 South Africa	All coal phase out	South Africa seeks to delay coal plant closures, risking \$2.6 billion in climate financing.	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal by 2055.	2	The policy represents another step confirming South Africa's current course of a largely delayed energy transition. If funding is revoked, this may lead to a further near-term slowdown of decarbonization, albeit long-term changes seem unlikely. ➤ Policy is placed on watch-list
 Canada	Light duty vehicles	Canada plans to impose 100% tariffs on Chinese EVs	Policy ends the sale of 97% of new cars and vans with CO2 emissions. (i.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV by 2035.	2	Similar to tariffs announced by the US and EU, this may negatively affect the dynamic of EV sales in the short term. However, assessing the impact on the ultimate forecast targets for Canada requires further observation and evidence. ➤ Policy is placed on watch-list
 India	New coal phase out	India plans to accelerate coal-fired power capacity by ordering equipment worth \$33 billion this year.	Actual policy and anticipated policy signals end new unabated coal from being built. Coal is abated when installed with CCS with a capture rate of 90% or equivalent by 2030.	2	IPR previously adjusted their forecast to 2030 as India planned to add 17GW to their already permitted 61 GW of coal. The new policy aims to add 31GW over the next 5-6 years, confirming IPR's previous Forecast adjustment.
 UK	Light duty vehicles	The UK government plans to allow the sales of hybrid cars until 2035, backing away from the total ban in 2030.	Policy ends the sale of 97% of new cars and vans with CO2 emissions by 2030. (i.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV.	2	This policy extends the sale of new hybrid vehicles by five years, despite the government's previous commitment to end the sale of all new emission vehicles by 2030. Since hybrids are not fully electric vehicles (BEVs), it is unlikely that the UK will meet the original 2030 target, necessitating an adjustment to 2035. ➤ Adjustment of the IPR Forecast

IPR OFFERS A RANGE OF APPLICATIONS TO HELP FINANCIAL INSTITUTIONS NAVIGATE THE CLIMATE TRANSITION

Policy Forecast

IPR produces **>300 high-conviction policy forecasts** covering 21 countries and 14 policy areas across energy and land use. Policy forecasts are incorporated into a fully **integrated climate and nature scenario model** that identifies the impact of the forecasted policies on the energy, land use and nature systems up to 2050, tracing detailed effects on all emitting sectors¹.

Modeling



Value drivers

IPR's integrated scenario model outputs detail value drivers across energy and land use. See [Value Driver Visualizer](#)

Applications

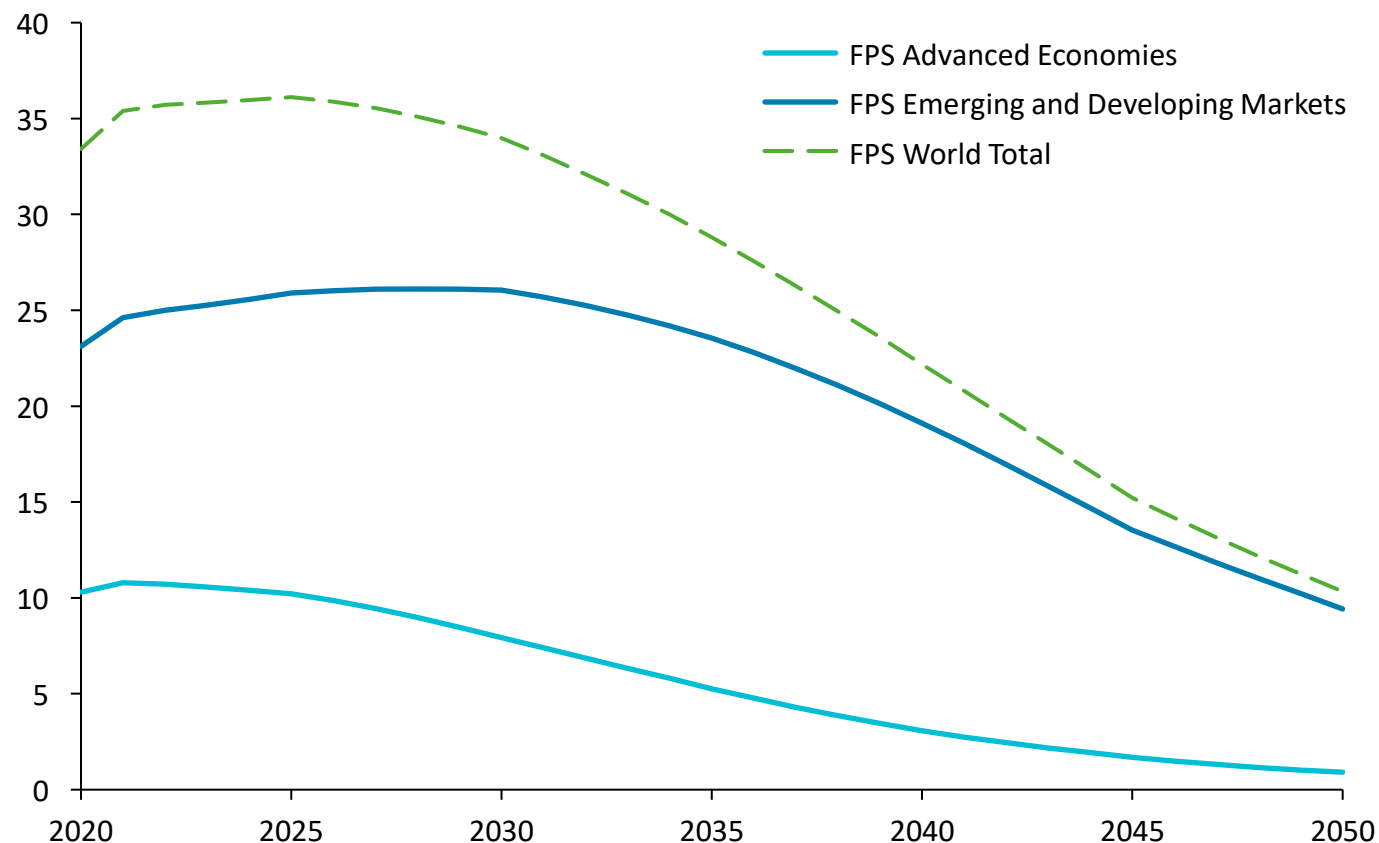
Fitch Ratings, Morningstar, Paris Agreement Capital Transition Assessment (PACTA), tilt (Climate data for SMEs)

1. IPR also develops a '1.5°C Required Policy Scenario'(1.5°C RPS) building on the IEA NZE by deepening analysis on policy, land use, emerging economies, NETs and value drivers. The RPS scenario is also run through the model and can be used by those looking to align to 1.5°C.; 2. Urban areas are not modelled in detail in IPR

THE IPR FPS (2024) RESULTS IN TOTAL CO₂ EMISSIONS (LAND AND ENERGY) FALLING 70% BY 2050 AND IS ALIGNED WITH A BELOW 2°C CLIMATE OUTCOME AT 1.8°C

Inevitable Policy Response 1.8°C FPS Scenario

Billion metric tons CO₂ (GtCO₂) including LULUCF



- IPR's **Forecast Policy Scenario (FPS)** models the impact of forecasted policies on the real economy, where global emissions fall by 69% by 2050, aligned with warming below 2°C (1.8°C)
- IPR forecasts policy action **by 2025** that drives momentum from then through to **2050**
- When we assess **quarterly policy developments in the QFTs**, we do this against **these longer-term outcome forecasts**
- According to an IEA 2024¹ report, global CO₂ emissions from energy **rose to 37.4 billion tonnes in 2023**, a **1.1%** increase compared to 2022

INEVITABLE POLICY RESPONSE NETWORK

IPR is commissioned by the Principles for Responsible Investment (PRI) to develop a realistic forecast of climate policy and derive a quantitative scenario that reflects it

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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



The IPR consortium is led by Energy Transition Advisors (ETA) & Theia Finance Labs. Analytics support is provided by Deloitte who is part of a **Research Partner Group** which includes the Carbon Tracker Initiative, Climate Bonds Initiative & Planet Tracker Initiative.

The consortium was given the mandate to bring leading analytical tools & an independent perspective to assess the drivers of likely climate policy action & their implications on the market.



INEVITABLE POLICY RESPONSE NETWORK

IPR is supported by a number of different leading financial institutions as well as world-class research partners

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Leading financial institutions have joined the IPR in 2024 to provide more in-depth industry input and to further strengthen its relevance to the financial industry.



Core philanthropic support since IPR began in 2018. The IPR is funded in part by the Gordon and Betty Moore Foundation through The Finance Hub, which was created to advance sustainable finance and the ClimateWorks Foundation striving to innovate and accelerate climate solutions at scale. In 2024 The Bezos Earth Fund has become the main supporter.



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- 2 Detailed individual policies & methods for key credible and material policy announcements during Q3 2024



IPR QUARTERLY FORECAST TRACKER: ASSESSING POLICY ANNOUNCEMENTS FOR IMPACT AND MOMENTUM AGAINST THE WELL BELOW 2°C FPS SCENARIO

The Quarterly Forecast Tracker aims to compare current policies trends with the forecast to understand the state, speed and quality of the energy transition as well as the remaining policy gaps. Most important policies will be used to update the forecast to adjust for changing ambition levels.



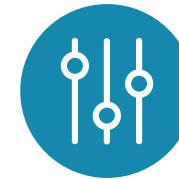
IPR categorizes policy announcements according to the following:

- **Legislated** covers any enforceable or funded policy from policymakers or regulators
- **Announced** but not yet legislated



Legislated or announced policies can:

- **Support for** our policy forecasts, although further strengthening of policies may be required
- **Be confirmatory**, or align closely with 1.8°C FPS forecast thereby moving the forecast into current policies
- Signal an **acceleration** or **deceleration** in policy forecast



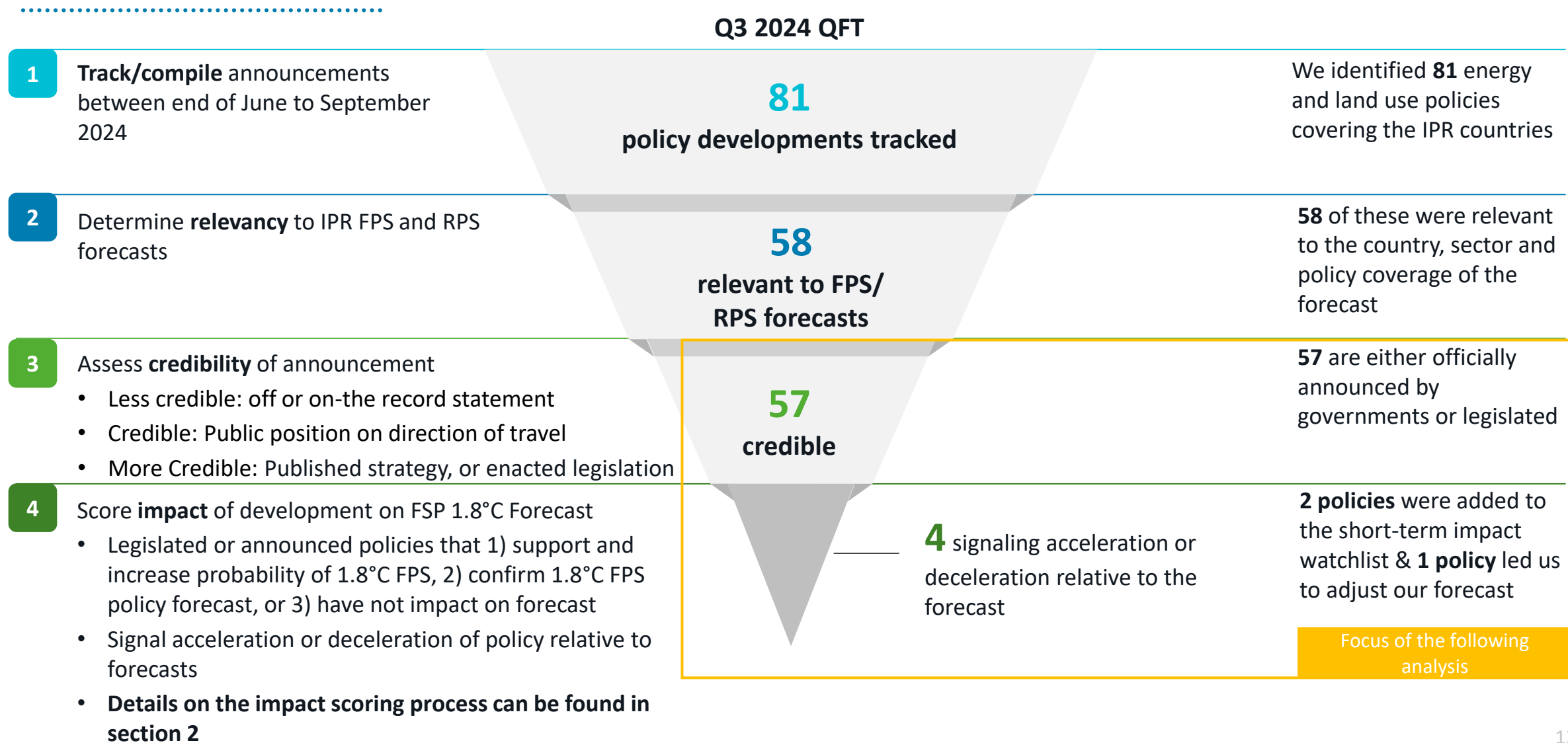
In addition to legislative policy, IPR policy forecasts are based on the assumption that selected announced measures that have a supportive or confirmatory effect will either flow directly into legislation or have an impact on the real economy.

On top of this the IPR 1.8C FPS forecasts policies expected but not yet announced.

The IPR FPS Policy Forecast therefore goes beyond NDCs, and current policy commitments and ambitions.

POLICY DEVELOPMENTS FROM JULY 2024 UNTIL SEPTEMBER 2024


We identified 58 policies relevant to the IPR policy forecast, focusing on the 57 most credible and material, with 4 of these policies likely impacting the FPS forecast in the long-term



POLICY FORECAST UPDATES RELATIVE TO THE FPS 2023 FORECAST

Due to the exclusion of hybrid vehicles in UK ICE sales ban policy, IPR is downgrading its FPS 2023 forecast for the light-duty vehicles sub-sector to 2035, as reaching 97% EV penetration by 2030 seems unlikely

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	Economy wide		Power			Buildings	Transport		Industry	Agri	Land use	Nature		
	Net Zero CO ₂ emissions	Carbon price	New coal phase-out	All coal phase-out	Clean power	Zero-carbon heating	Light duty vehicles	Heavy duty vehicles	Industry decarb.	Low-carbon agriculture	Net deforestation	Deforestation free supply	Protection & restoration	Nature incentives
Europe  UK	2050	\$120	Achieved	2024	2035	2035	2035	2040	2065	2025	2025	2030	2030	2025

Change in forecast relative to IPR 2023: Deceleration Consistent

Policy Forecast Updates

- Former Prime Minister Rishi Sunak announced a 5-year delay to the UK's ICE cars phase-out back in September 2023 with the Conservative Party's manifesto pledging to halt road pricing and reverse the expansion of London's ultra-low emission zones.
- This stance was challenged by the Labour Party previous to the election, pledging to ban diesel and petrol cars from 2030, restoring the original phase-out date for the sale of new cars with internal combustion engines. While Labour's manifesto didn't specify whether hybrids are included, all hybrids have internal combustion engines paired with a smaller battery.
- Although hybrid vehicles have overall lower emissions compared to conventional ICE, they still produce direct tailpipe emissions unlike EVs. Allowing hybrid sales beyond 2030 therefore contradicts the goal of raising ZEV sales to 97% by 2030, prompting IPR to adjust its forecast to 2035.





Policy watch-list for Q3 2024

List of policies with the potential to affect short term forecast developments

Q3 2024 POLICY IMPACT ON WATCH – POTENTIAL DECELERATION


During the third quarter of 2024, 2 policies were placed on a watch-list to be further assessed at year end for a potential deceleration based on cumulative policy evidence and IPR’s annual forecast survey

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Region	Policy Area	Development	Forecast	Impact	Details
 South Africa	All coal phase out	South Africa seeks to delay coal plant closures, risking \$2.6 billion in climate financing.	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal by 2055.	2	The policy represents another step confirming South Africa's current course of a largely delayed energy transition. If funding is revoked, this may lead to a further near-term slowdown of decarbonization, albeit long-term changes seem unlikely.
 Canada	Light duty vehicles	Canada plans to impose 100% tariffs on Chinese EVs	Policy ends the sale of 97% of new cars and vans with CO2 emissions. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV by 2035.	2	Similar to tariffs announced by the US and EU, this may negatively affect the dynamic of EV sales in the short term. However, assessing the impact on the ultimate forecast targets for Canada requires further observation and evidence.

Q3 2024 TECHNOLOGY AND IMPLEMENTATION DEVELOPMENT



In addition to the regular policy tracking, IPR has identified 12 non-policy developments related to key transition technologies and implementation activities

Region	Policy Area	Development	Forecast	Details
Global	Heavy duty vehicles	Major truck manufacturers are investing in hydrogen to extend combustion engine life.	Policy ends the sale of 97% of new heavy-duty vehicles with CO ₂ emissions. (I.e., 97% of new sales are ZEVs)	Major truck manufacturers are investing \$5 billion in hydrogen technology to extend the life of combustion engines and support the transition to cleaner energy. <i>This development is supportive of the energy transition.</i>
	Net deforestation	A study found that human degradation of tropical forests is comparable with those of deforestation.	Policy delivers an end to net deforestation and delivers afforestation or reforestation at scale	A recent study found that degradation, including logging and fires, affects 38% of the Amazon, compared to 12% impacted by deforestation alone. <i>This highlights the importance of protecting ecosystems to prevent the damage of essential ecosystems.</i>
 Germany	Clean power	Germany's wind energy sector is expected to experience a slowdown in new capacity growth in 2024.	Policy delivers dispatched generation of 97% low-carbon power by 2040-	Wind generation in Germany is set to grow by only 1% in 2024, the slowest growth pace in 3 years. <i>The reasons for the slowdown include bureaucratic hurdles, the global supply chain crisis, and growing resistance from local communities.</i>
	Clean power	Germany plans to invite bids for constructing 12.5 GW of hydrogen-ready power plants to support its green hydrogen strategy.	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Germany will launch its first tender to construct and modernize 12.5 gigawatts (GW) of gas power plants, which will be capable of switching to hydrogen. <i>The tenders aim to boost wind and solar energy and accelerate the shift to low-carbon power generation.</i>

Note: The technology and implementation developments are tracked as part of the regular policy tracking process

Q3 2024 TECHNOLOGY AND IMPLEMENTATION DEVELOPMENT (CONTINUED)

China is reducing the number of permits for new coal-fired power plants and the US is focusing on reducing its carbon emissions from power plants and heavy industry, even if some of the projects are delayed




Region	Policy Area	Development	Forecast	Details
 US	Clean power	A U.S. appeals court allowed the EPA's regulation requiring significant carbon emission cuts from power plants to proceed.	Policy delivers dispatched generation of 97% low-carbon power by 2040.	The EPA rule is part of Democratic President Joe Biden's broader climate agenda, requires that greenhouse gas emissions be reduced by 90% by 2032. <i>The rule requires the power industry to install emissions-control technologies to help achieve net zero emissions.</i>
	Industry decarbonization	The U.S. oil and gas industry needs to cut methane emissions by 80% by 2030 to meet industry targets.	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions by 2065.	On average, about 1.6% of gross gas production is emitted as methane, roughly eight times higher than the targets many operators aim to achieve by 2030 or sooner to reduce emissions. <i>This shows that the U.S. needs to establish more plans to decarbonize its industries.</i>
	Economy-wide	Approximately 40% of major U.S. manufacturing investments have been delayed or paused.		The delays, affecting projects worth \$84 billion, are due to deteriorating market conditions, policy uncertainty, and economic challenges. <i>The further progress of the projects highly depends on the outcome of the 2024 election.</i>
 China	New coal phase out	China has reduced the number of new coal power plant permits by nearly 80%.	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal by 2045.	China, the world's largest builder of coal-fired power stations, cut the number of permits for new plants by nearly 80% in the first half of 2024. <i>This marks a great step on the road towards clean power generation.</i>
	Clean power	Coal's share of China's total energy generation mix dropped to record lows in H1 of 2024.	Policy delivers dispatched generation of 97% low-carbon power by 2050.	China reduced coal's share in its electricity generation mix to 55% in the first half of 2024. <i>This shift underscores China's ongoing transition toward renewable energy, driven by gradually reducing reliance on coal.</i>

Note: The technology and implementation developments are tracked as part of the regular policy tracking process

Q3 2024 TECHNOLOGY AND IMPLEMENTATION DEVELOPMENT (CONTINUED)






While Italy increased its renewable energy production in the first half of this year, analysis shows that the EU's hydrogen targets might be too ambitious and that Australia needs to ramp up its transition to clean energy
































Region	Policy Area	Development	Forecast	Details
 Australia	Clean power	Australia increased its fossil fuel-fired electricity generation in the first half of 2024.	Policy delivers dispatched generation of 97% low-carbon power by 2045.	The electricity from fossil fuels during the H1 of this year was 4.2% more than during the opening half of 2023. <i>This shows that Australia needs to focus even more on investments in renewable energies and accelerate them.</i>
 Italy	Clean power	Italy's renewable energy production surpassed fossil fuels for the first time in H1 of 2024.	Policy delivers dispatched generation of 97% low-carbon power by 2045.	Italy experienced a historic peak of 33.2 gigawatt (GW) in production from green sources, while power produced from fossil fuels fell by 19% compared to 2023. <i>This development is supportive of Italy's plan to increase electricity output from renewables by 63% by 2030.</i>
 EU	Clean power	The European Court of Auditors found that the EU is unlikely to meet its 2030 targets for hydrogen production and import.	Policy delivers dispatched generation of 97% low-carbon power.	The report found that the EU's hydrogen policy framework has failed to stimulate sufficient demand and investment by market actors (see hydrogen deep dive). <i>This analysis calls into question whether the EU 2030 target will achieve its ambitious hydrogen targets.</i>

IPR HAS ADJUSTED FPS 2023 FORECASTS THIS YEAR BASED ON AVAILABLE EVIDENCE AND STABILITY OF ACHIEVEMENT

Adjusted baseline

Forecast change relative to IPR FPS 2023:  Forecast changes (previous quarters)  Consistent  Acceleration  Achieved  Deceleration

		 Economy wide		 Power			 Buildings			 Transport		 Industry	 Agri	 Land use	 Nature	
		Net Zero CO ₂ emissions	Carbon price	New coal phase-out	All coal phase-out	Clean power	Zero-carbon heating	Light duty vehicles	Heavy duty vehicles	Industry decarb.	Low-carbon agriculture	Net deforestation	Deforestation-free supply	Protection & restoration	Nature incentives	
Asia Pacific excl. China	 Australia	2050	\$70	2023	2038-40	2045	2035	2040	2045	2065	2030	2025-30	2030	2030	2025	
	 Indonesia	2060	\$50	2025	2055	2055	N/A	2045	2050	>2070	2035	2030	>2035	>2040	2035	
	 India	2065	\$50	2030	2060	2060	N/A	2040	2045	>2070	2035	2025-35	>2035	2040	>2035	
	 Japan	2050	\$70	2025	2045	2045	2040	2040	2040	2065	2025	2025	2035	2030	2030	
	 South Korea	2050	\$70	2025	2045	2045	2040	2035	2040	2065	2030	2030	>2035	2040	2030	
	 Vietnam	2060	\$50	2025	2045	2050	N/A	2040	2045	>2070	2030	2025	>2035	>2040	2030	
China	 China	2060	\$50	2030	2045	2050	2045	2035	2040	>2070	2030	2025	2035	2035	2030	
Europe	 France	2050	\$120	Achieved	Achieved	2035	2035	2035	2040	2065	2025	Achieved	2030	2030	2025	
	 Germany	2045	\$120	<2023	2035	2040	2030	2035	2040	2060	2025	2025-30	2030	2025	2030	
	 Italy	2050	\$120	<2023	<2030	2045	2035	2035	2040	2070	2025	2025	2030	2030	2030	
	 UK	2050	\$120	Achieved	2024	2035	2035	2035	2040	2065	2025	2025	2030	2030	2025	
Eurasia	 Russia	>2065	\$0	2030	2060	2060	2050	2050	2055	>2070	2035	2025-35	>2035	>2040	>2035	
Middle East and Africa	 Nigeria	>2065	\$20	Achieved	Achieved	2050	N/A	2045	2050	>2070	2035	2035	>2035	>2040	>2035	
	 Saudi Arabia	2060	\$20	N/A	N/A	2060	N/A	2040	2045	>2070	N/A	2030	>2035	2040	>2035	
	 South Africa	>2065	\$30	2030	2055	2055	2050	2040	2045	>2070	2035	2035	>2035	2040	2035	
	 Turkey	2060	\$30	2030	2045	2050	2050	2040	2045	>2070	2035	2025	>2035	>2040	>2035	
North America	 Canada	2050	\$100	<2023	2030	2035	2035	2035	2040	2065	2025	2025	2035	2035	2030	
	 Mexico	>2065	\$30	<2023	2038-40	2050	N/A	2040	2045	>2070	2035	2030	>2035	2040	2035	
	 US	2050	\$30	<2023	2035	2040	2040	2040	2045	2065	2030	2025	2035	2035	2030	
South America	 Argentina	2060	\$30	Achieved	Achieved	2050	2045	2040	2045	>2070	2035	2030	>2035	2040	2035	
	 Brazil	2050	\$50	Achieved	Achieved	2030*	N/A	2045	2050	2070	2030	2030	2035	2030	2030	

*Brazil's coal power share has declined since Q4 2021, sitting at around [1.2% since February 2024](#). Overall fossil shares fluctuate between 3 – 6% since 2022, prompting IPR to adjust the Clean power date to 2030

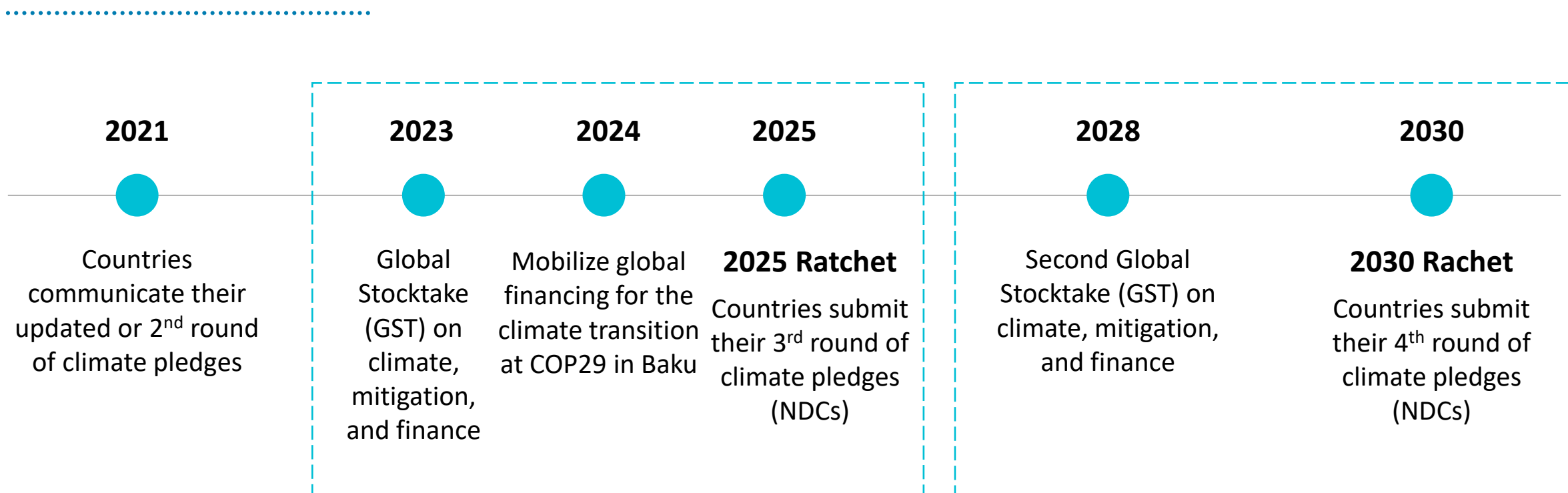


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PARIS RATCHET PRESSURES INCREASE THE LIKELIHOOD OF STRENGTHENED POLICY ACTION

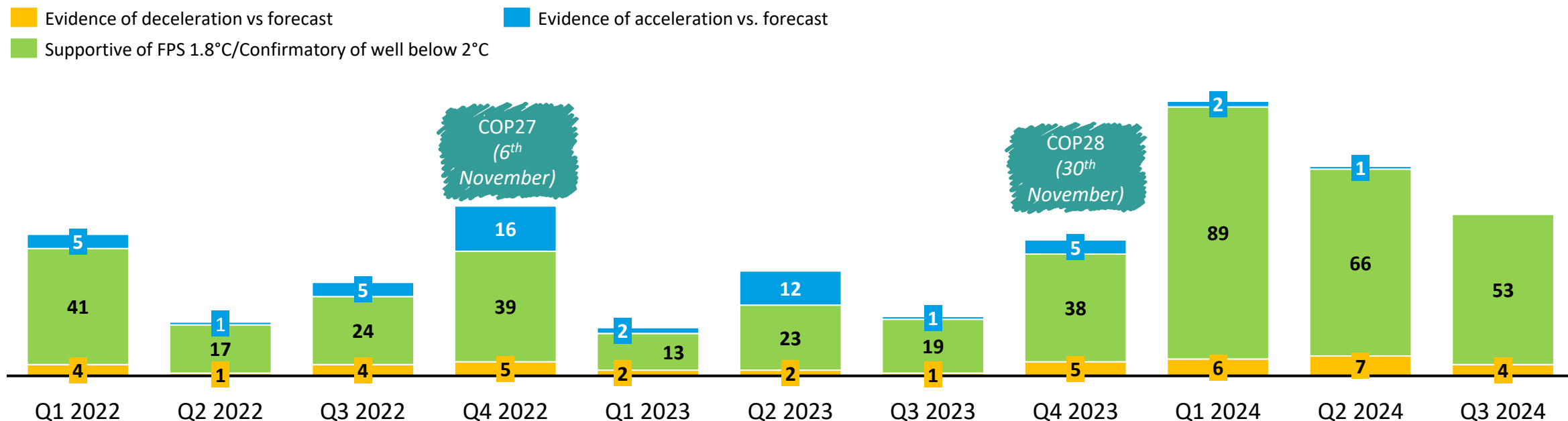
The COP29 will see a push towards a New Collective Quantified Goal (NCQG) on Climate Finance, following which the Paris Ratchet process will trigger a cumulating policy response into 2025, 2030, and beyond



COP29 to define a **New Collective Quantified Goal** on Climate Finance, with high relevance to EMDE national energy strategies.

IPR TRACKED 57 CREDIBLE & MATERIAL POLICY ANNOUNCEMENTS IN Q3 2024, A ~23% DECREASE COMPARED TO POLICIES TRACKED IN Q2 2024 BUT HIGHER THAN Q3 2022 & 2023

Number of policies tracked by quarter since 2022: Energy and land use policy announcements



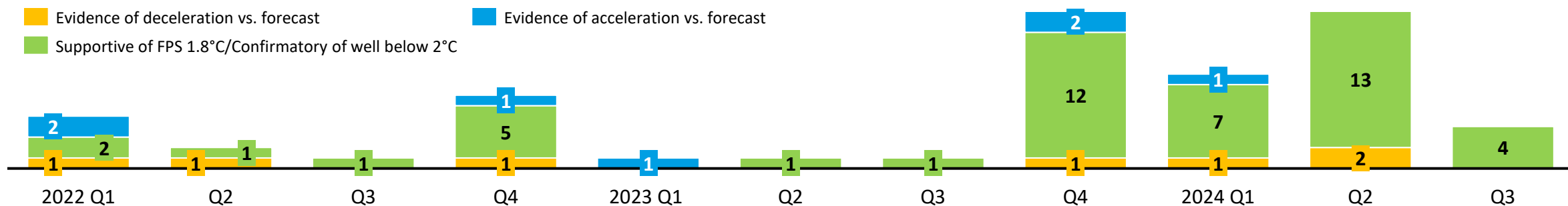
- Tracked policy announcements and finalized legislation counts have declined since Q1 2024. This development is most likely affected by the immediate run-up to major elections, summer breaks for many institutions, and work for the upcoming COP29 in November.
- Despite the quarter-to-quarter decrease, the overall **2.5 increase** in material policies relative to Q3 2023 (and **1.5 increase** relative to Q3 2022) in combination with the upcoming climate change conference in Baku suggest an increased policy momentum this year.

CUMULATIVELY TRACKED CREDIBLE AND MATERIAL POLICIES FOR LAND DECREASED BY 73% SINCE Q2 2024, WHILE TRACKED ENERGY POLICIES DECREASED BY 10% SINCE Q2 2024

Access the full Land use and Nature QFT [here](#)

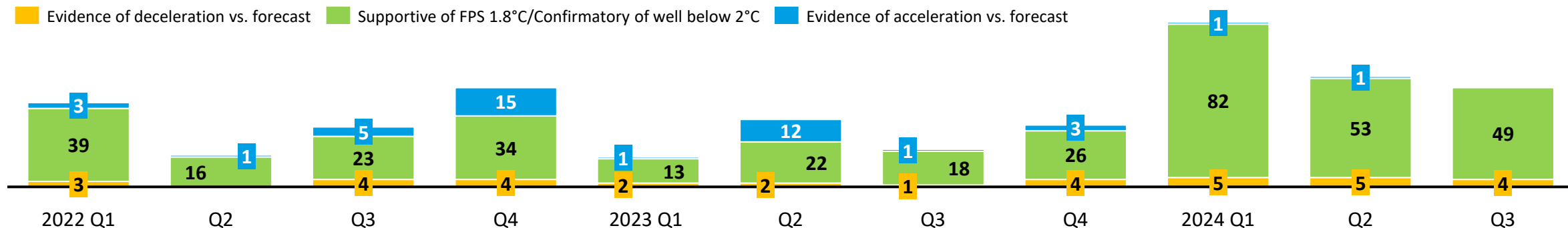
Land Use and Nature Policies

Number of land use policies tracked by quarter: momentum is building in the land use sector with peaks surrounding climate and biodiversity COPs



Energy Policies

Number of energy policies tracked by quarter: a policy push in the 'mega election year' 2024



POLICY TRACKING AGAINST THE UPDATED FPS 2023 FORECAST








■ Achieved
 ■ Acceleration
 ■ Confirmatory
 ■ Supportive
 ■ Deceleration
 ■ FPS policy gap

		Economy wide		Power			Buildings	Transport		Industry	Agri	Land use	Nature		
		Net Zero CO ₂ emissions	Carbon price	New coal phase-out	All coal phase-out	Clean power	Zero-carbon heating	Light duty vehicles	Heavy duty vehicles	Industry decarb.	Low-carbon agriculture	Net deforestation	Deforestation free supply	Protection & restoration	Nature incentives
Asia Pacific excl. China	Australia	Legislated	Legislated	Policy gap	Policy gap	Announced	Policy gap	Announced	Policy gap	Legislated	Legislated	Legislated	Policy gap	Announced	Announced
	Indonesia	Announced	Announced	Announced	Announced	Announced	N/A	Announced	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Legislated	Policy gap
	India	Announced	Announced	Announced	Policy gap	Announced	N/A	Policy gap	Policy gap	Legislated	Policy gap	Announced	Policy gap	Legislated	Policy gap
	Japan	Announced	Announced	Policy gap	Announced	Announced	Announced	Announced	Policy gap	Announced	Legislated	Policy gap	Policy gap	Legislated	Policy gap
	South Korea	Legislated	Legislated	Announced	Announced	Announced	Policy gap	Announced	Policy gap	Announced	Announced	Policy gap	Policy gap	Legislated	Policy gap
	Vietnam	Announced	Announced	Announced	Announced	Legislated	N/A	Announced	Announced	Announced	Announced	Announced	Policy gap	Legislated	Legislated
China	China	Announced	Legislated	Policy gap	Policy gap	Announced	Announced	Announced	Policy gap	Legislated	Legislated	Announced	Policy gap	Legislated	Legislated
Europe	France	Legislated	Legislated	Achieved	Achieved	Legislated	Announced	Legislated	Legislated	Legislated	Legislated	Achieved	Legislated	Legislated	Legislated
	Germany	Legislated	Legislated	Legislated	Announced	Announced	Announced	Legislated	Legislated	Announced	Legislated	Legislated	Legislated	Legislated	Legislated
	Italy	Legislated	Legislated	Announced	Announced	Announced	Announced	Legislated	Legislated	Legislated	Legislated	Legislated	Legislated	Legislated	Legislated
	UK	Legislated	Legislated	Legislated	Legislated	Announced	Announced	Announced	Announced	Legislated	Legislated	Legislated	Legislated	Announced	Legislated
Eurasia	Russia	Announced	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Legislated	Policy gap
Middle East and Africa	Nigeria	Legislated	Policy gap	Achieved	Achieved	Announced	N/A	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Legislated	Policy gap
	Saudi Arabia	Announced	Policy gap	N/A	N/A	Announced	N/A	Policy gap	Policy gap	Announced	N/A	N/A	Policy gap	Announced	Policy gap
	South Africa	Announced	Announced	Announced	Announced	Announced	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Policy gap	Legislated	Announced
	Turkey	Announced	Announced	Policy gap	Policy gap	Announced	Policy gap	Policy gap	Policy gap	Announced	Policy gap	Announced	Policy gap	Legislated	Policy gap
North America	Canada	Legislated	Legislated	Legislated	Legislated	Announced	Announced	Announced	Announced	Legislated	Legislated	Legislated	Policy gap	Announced	Legislated
	Mexico	Policy gap	Legislated	Policy gap	Policy gap	Policy gap	N/A	Announced	Policy gap	Policy gap	Policy gap	Announced	Policy gap	Legislated	Announced
	US	Announced	Policy gap	Legislated	Announced	Announced	Announced	Announced	Announced	Legislated	Legislated	Announced	Policy gap	Announced	Legislated
South America	Argentina	Announced	Policy gap	Achieved	Achieved	Policy gap	Policy gap	Announced	Policy gap	Policy gap	Policy gap	Announced	Policy gap	Announced	Legislated
	Brazil	Announced	Announced	Achieved	Achieved	Legislated	N/A	Policy gap	Policy gap	Announced	Announced	Announced	Policy gap	Legislated	Announced

Note: Changes from IPR's previous Gap Analyses are the result of new policy developments. Countries sorted alphabetically, by region. n/a indicates sectoral policy forecast not relevant to regional forecast (e.g. for zero-carbon heating, space heating less relevant in certain jurisdictions).

TRACKING Q3 2024: GLOBAL POLICY UPDATE BY POLICY AREA








Economy-wide and power policies have clearly dominated this quarter, with the US, Brazil, and Vietnam being the only countries to announce nature and land use related policies

Policy area	Tracked policy developments ²	Synthesis
 Economy-wide	Economy-wide investment plans in the EU, UK, Japan, China, Indonesia, and Australia to transition to a low-carbon economy by reducing CO₂ emissions ; New carbon market proposal in South Africa.	New plans and targets set for reducing emissions across different sectors but no progress on clear carbon prices.
 Power	Several clean power investments in the US, France, Germany, and Brazil , with Indonesia, Vietnam, Nigeria and China accelerating their renewable energy / electricity infrastructure . Ongoing energy security concerns lead India and South Africa to extend and increase their coal power use beyond set timelines.	Ramp-up of renewable energy developments in Europe, Asia Pacific, North America, and Africa despite ongoing energy security concerns in EMDEs.
 Industry	European hydrogen-focused fund to decarbonize key industries in Argentina and new wealth fund in the UK to boost public and private investment in hydrogen, automotives, and steel.	Increased focus on hydrogen as way to decarbonize heavy industries.
 Transport	Extended sales of new hybrid models by 2035 in the UK and tariffs on Chinese EVs imposed in Canada to regulate market dynamics lead to a deceleration in both countries.	The increased use of hybrid models leads to a delay in achieving the goal of net zero emissions vehicles.
 Agriculture	Cooperation between Brazil and Vietnam to enhance sustainable agricultural practices and reduce carbon footprints in production .	While some policy activity was recorded, the worldwide ambition levels remains insufficient to meet the IPR forecast.
 Land use	Enhanced protection of land and nature in the US by updating the existing ‘Climate Adaption Plan’, protection land in Alaska, and setting up a new initiative targeting environmental crimes in the Amazon basin.	Though the developments are supportive, they are not sufficient to meet Biden’s plan of preserving 30% of land and water by 2030.
 Nature & biodiversity		

1. See IPR FPS 1.8°C forecast set out in slide 28; 2. See detailed policy tracking in section 1; 3. See impact on IPR forecast in section 2 and legend on the impact scales in the [annex](#)

TRACKING Q3 2024: GLOBAL POLICY UPDATE BY REGION

The US, China, and South Africa lead on supportive policy announcements, while Eurasia lags behind its climate ambitions

Policy area	Tracked policy developments ²	Synthesis
 Asia Pacific	<p>Japan and Indonesia are investing in offshore wind capacity and green hydrogen with Vietnam approving a new power purchase agreement. Australia legislated a new net zero economy authority bills, whereas India is accelerating its coal power capacity to meet its energy demand.</p>	<p>High demand and energy security concerns remain a challenge in Asia Pacific, with the majority of nations trying to bridge the gap through renewable energy.</p>
 China	<p>China made advances in reducing CO₂ emissions, by setting hard targets, issuing new standards, and implementing low-carbon upgrades. Furthermore, China published new initiatives to upgrade its power systems through modernized transmission and distribution systems.</p>	<p>China increased its effort to reduce emissions and push its transition towards renewable energy.</p>
 Europe	<p>Europe is making progress in the transition to clean energy, with France and Germany receiving financial support from the EU. New legislations in the UK setting tougher environmental standards but also extending sales of new hybrid models by 2035.</p>	<p>Large investments in renewable energy are driving Europe's decarbonization efforts, however there's a gap between the EU's hydrogen ambition and implementation (see deep dive).</p>
 Eurasia	<p><i>No policy developments were tracked for Eurasia in Q3 2024.</i></p>	
 Middle East and Africa	<p>Following South Africa's election, new climate and clean power bills were signed into law, focusing on attracting investments and diversifying energy production. Nigeria legislated a new electricity policy and announced a new investment to upgrade existing power structures.</p>	<p>Whether these ambitions translate into concrete implementation measures and tangible progress must be closely monitored</p>
 North America	<p>Good investments in the US for reducing CO₂ emissions and upgrading the clean power system, albeit newly highlighted IRA implementation gaps contributed a somewhat sceptical climate. Tariffs on Chinese EVs imposed in Canada to manage and regulate market dynamics.</p>	<p>Good progress on net zero and clean power in the US, while Canada needs to ramp up its overall climate policy announcements.</p>
 South America	<p>Hydrogen has moved into the focus of governments, with Brazil signing a new Hydrogen Legal Framework and a National Energy Transition Policy into law, while Argentina received a hydrogen fund to decarbonize its heavy industries.</p>	<p>Hydrogen as tool to help South America decarbonize its heavy industries and ramp up renewable energy.</p>

1. See IPR FPS 1.8°C forecast set out in slide 28; 2. See detailed policy tracking in section 1; 3. See impact on IPR forecast in section 2 and legend on the impact scales in the [annex](#)



Deep Dive: The State of Hydrogen in the EU

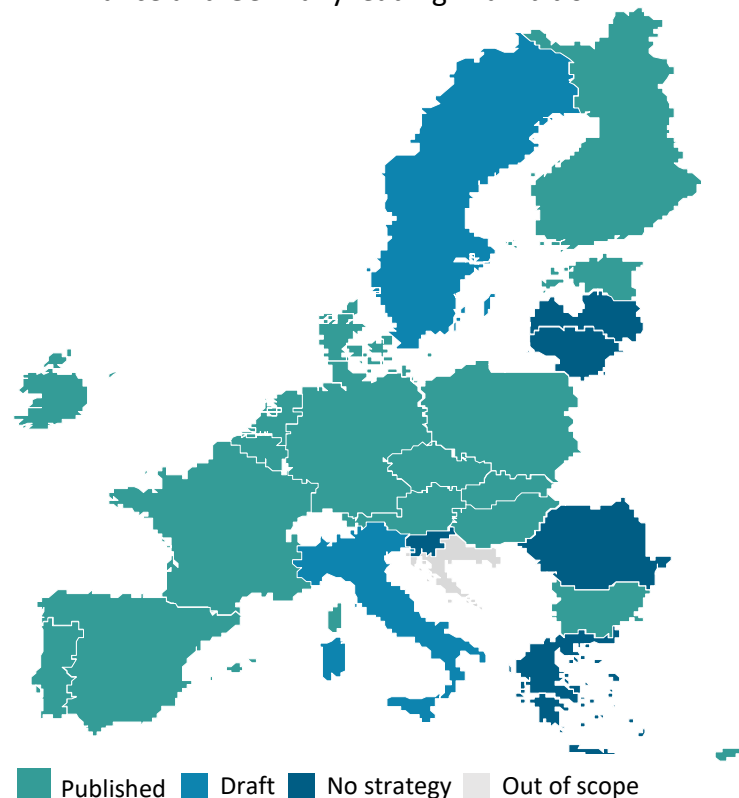
Feasibility analysis of the EU's hydrogen strategy and production targets

IS THE EU ON TRACK TO MEET ITS AMBITIOUS HYDROGEN TARGETS?

In the wake of the 2022 Energy Crisis, the EU announced plans to promote clean¹ hydrogen as a key energy source in achieving climate neutrality by 2050, with a goal of producing and importing 10MT of hydrogen annually by 2030

National Hydrogen Production Strategies

EU member states have announced plans to build a cumulative ~36 GW in electrolyzer capacity by 2030, with France and Germany leading in ambition

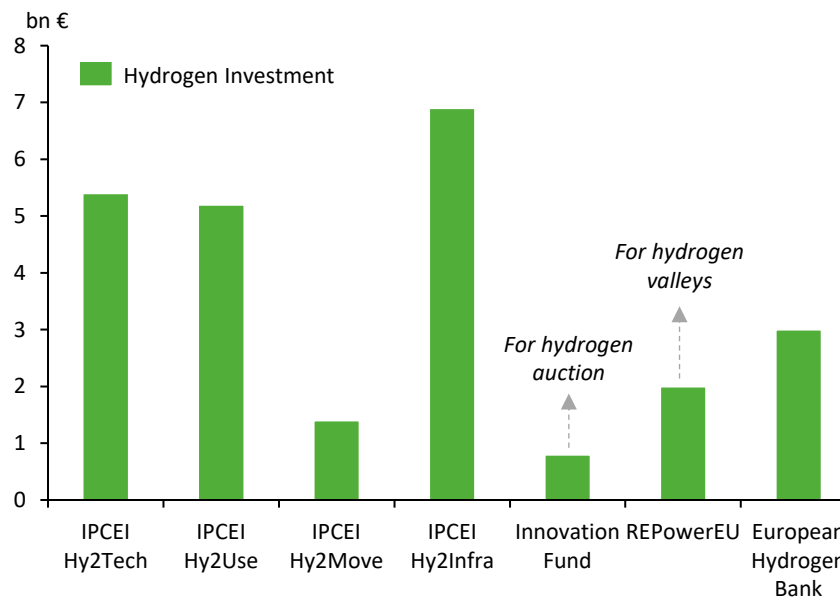


Renewable Hydrogen Production

The EU Commission announced its targets of producing and importing renewable hydrogen in its **Hydrogen Strategy** and **REPowerEU** Communications:

10Mt renewable hydrogen imported by 2030² **10Mt** renewable hydrogen produced by 2030³
40GW of electrolyzers installed by 2030

Confirmed EU Public Funding for H2



- An estimated €86 billion to €126 billion are needed to build the hydrogen infrastructure required to use 20Mt by 2030.
- The EU funding approach is regulatory in nature, with grants and state aid making up the majority of facilities, while auctions and other market-based mechanism feature less prominently.
- The EU has announced around €25bn in direct hydrogen funding (see left), with further unspecified investment coming from other sources e.g. CETPartnership, Just Transition Fund or Connecting Europe Facility.

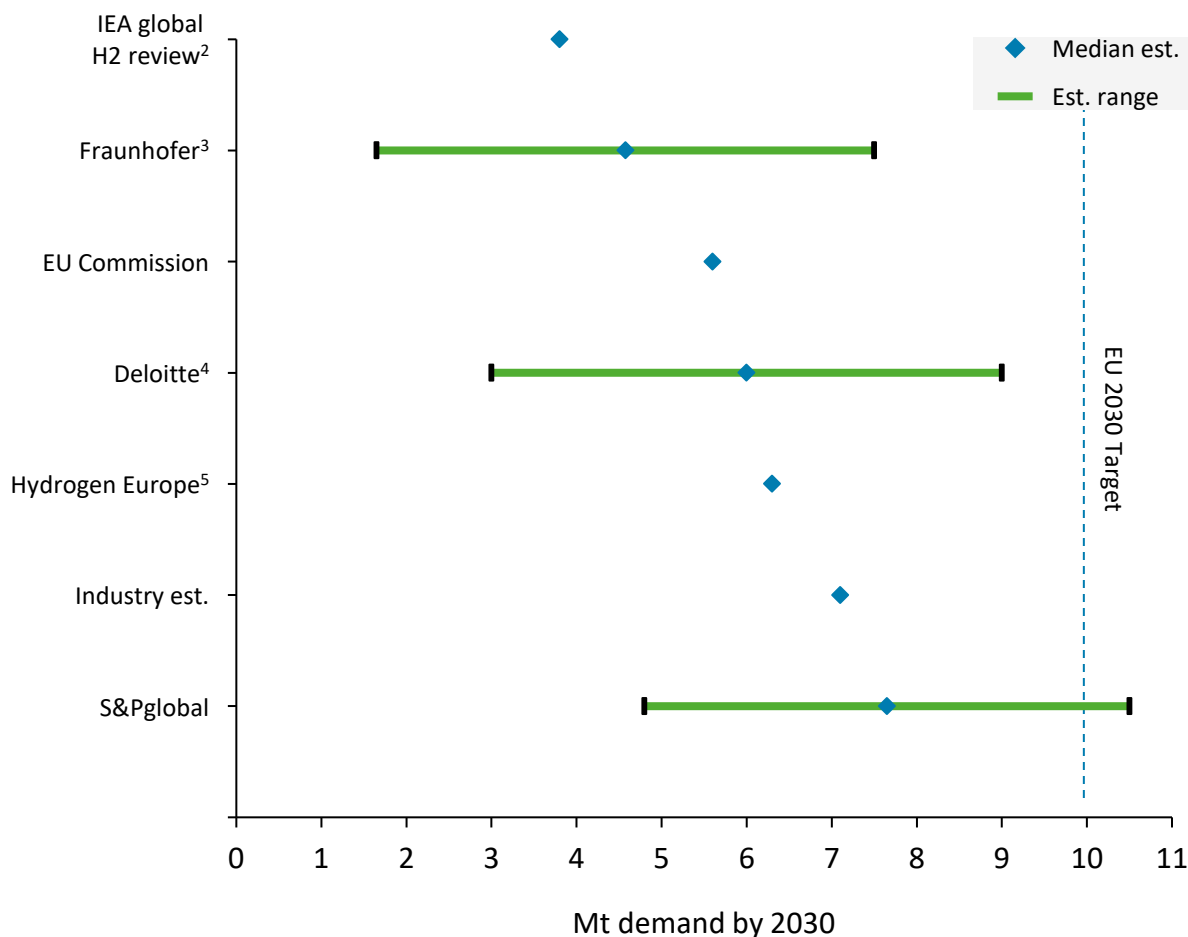
Sources: [National Strategies](#) | [European Hydrogen Observatory \(europa.eu\)](#) | [ECA SR 2024: Commission outlines European Hydrogen Bank to boost renewable hydrogen; In focus: Renewable hydrogen to decarbonise the EU's energy system](#);

¹: Clean H2 = with CCS or renewables, renewable H2 = only with green electricity; ²: See [EHB](#) for projected import corridors; ³: Current blue hydrogen production around ~11Mt

RECENT ANALYSES HOWEVER SUGGEST A GAP BETWEEN AMBITION AND IMPLEMENTATION

The feasibility of the EU 2030 targets has been called into question¹, while the overall policy framework has so far failed to stimulate sufficient demand and investment by market actors

Estimated EU renewable hydrogen demand by 2030



Considerations on EU H2 plans

Demand estimates suggest 2030 targets won't be realized

Based on a sample of demand forecasts for renewable and low-emissions hydrogen, it seems likely that **demand will not reach 10 Mt, with ranges in 3.8-7.65 Mt being more likely** (currently around 30% of offtake amounts required for 10 MT have been agreed⁶)

Targeted 40 GW domestic electrolyzer capacity insufficient

Estimates for the electrolyzer capacity required to produce 10 Mt of hydrogen vary widely in the literature but anywhere from 56 to 192 GW are needed. This means that even if 40 GW are installed by 2030, an additional minimum of 16 GW are needed to produce 10Mt (**currently in operation 28,7 GW**) [see page 29].

Funding and signal mechanisms lack effectiveness

Unlike the US (1\$ per kg by 2030), EU policies aimed at promoting H2 uptake lack a clear pricing target. Furthermore, currently dispensed funds¹ are likely insufficient to stimulate broad infrastructure expansion, as total investment needs range between 335-471 bn €, according REPowerEU estimates.

IPR FPS projections to achieve 20 Mt by 2040 as more plausible

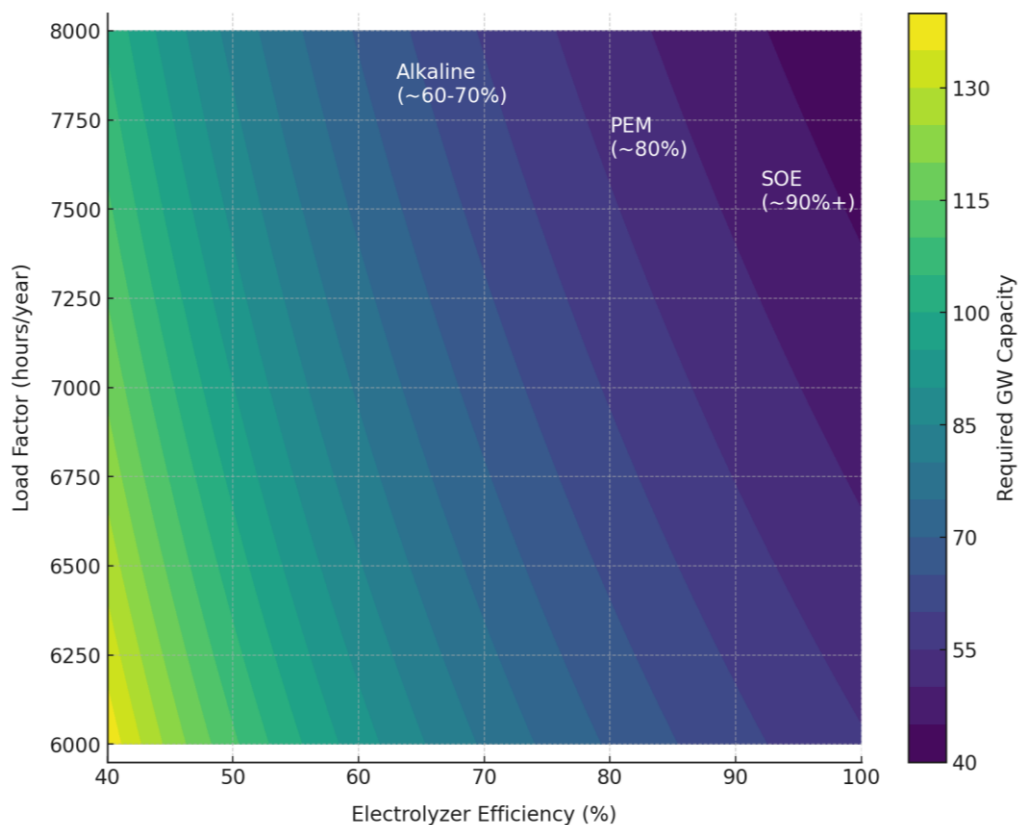
IPR projects a total of 1.4 Mt of green hydrogen produced in the EU by 2030 in line with the low end of the demand forecast values, growing to 20 Mt in 2040.

THE TECHNICAL FEASIBILITY OF PRODUCING 10 MT OF RENEWABLE HYDROGEN BY 2030

Ranges of required electrolyzer capacity associated renewable energy needed to produce 10 Mt of renewable hydrogen by 2030 in the EU are much higher than in EU strategy

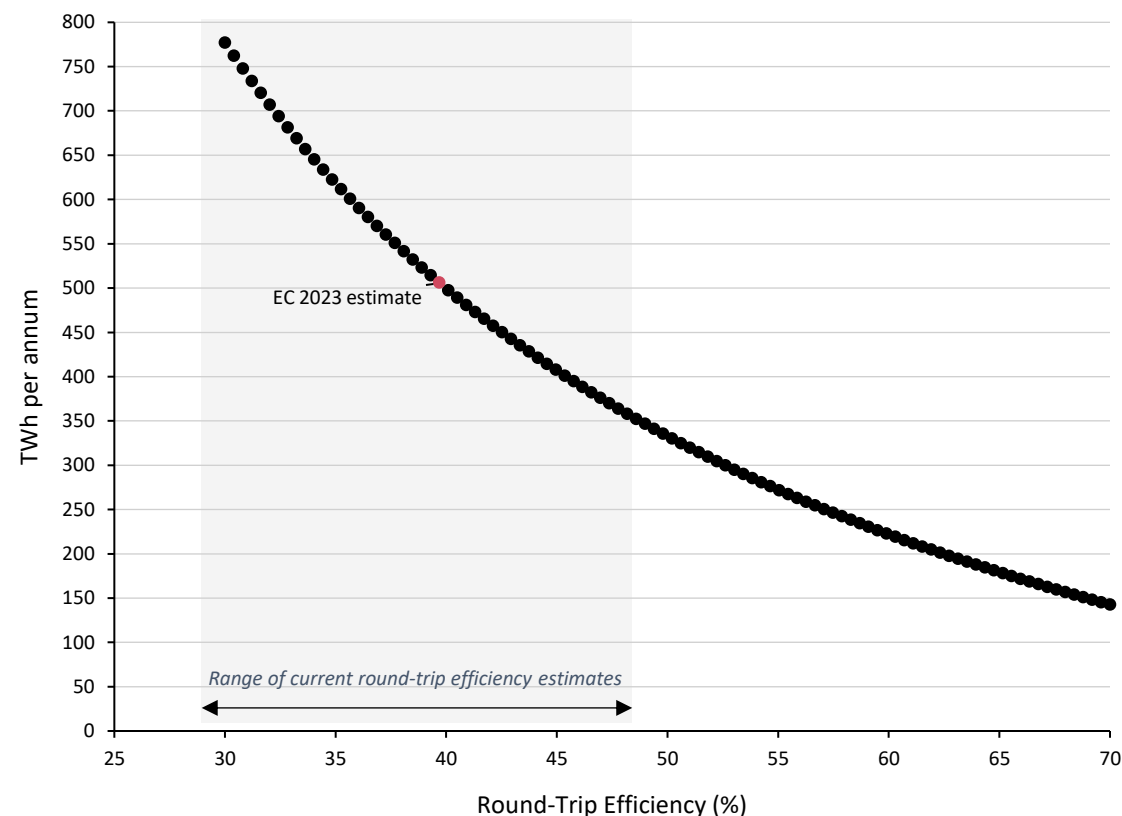


Required electrolyzer capacity for 10 mt H2*



Attaining 10 Mt domestic production of renewable hydrogen with 40 GW of capacity requires highly idealized production parameters

Additional annual renewable energy needs for 10 Mt H2



To achieve the 2030 10 Mt goal, the EU Commission estimates an additional 500 TWh of clean energy are needed, or roughly 25% of the 2023 EU energy demand

*Assuming an energy content of 1 kg of hydrogen of 33.33 kWh

EU HYDROGEN TARGETS LIKELY WILL BE REACHED MUCH LATER THAN 2030

Based on IPR assessments, ECA audit findings & market leader views¹, the EU renewable hydrogen demand could grow to 20 Mt later than targeted, as H2 uptake and infrastructure provision are currently too slow to meet the 2030 timeframe



The hydrogen policy framework across member states is not clear enough to send strong signals to market actors

While EU member states have announced plans to build a cumulative ~36 GW in electrolyzer capacity by 2030, the cohesiveness of frameworks between member states remains low, only making up about less than half of REPowerEU target ambitions in total. Furthermore, at a Union level, elements like 2030 hydrogen pricing targets are missing completely.



Actual hydrogen demand will likely not meet the EU's ambition of 20 Mt by 2030

Based on recently aggregated procurement contracts (1 Mt EU-total in 2024), demand predictions and investments in hydrogen use in industry, it does not appear that the EU will reach 20 Mt of hydrogen demand (import + domestic production) by 2030.



Intended electrolyzer capacity targets for 2030 does not match domestic production targets

The EU's 40 GW electrolyzer capacity target for 2030 is unlikely to be sufficient to reach a total output of 10 Mt of hydrogen in the EU. Based on IPR assessments and available literature, the required capacity would much more likely fall in the 56 – 190 GW range. Any stated figure is however contingent on assumptions (efficiency, technology mix etc.) and technological progress.



Based on current data, the IPR FPS projection of ~20 Mt green hydrogen in the EU by 2040 seems more plausible

The overall EU 2030 project pipeline may be as large as 130 GW¹, though most projects have not left the concept stage. In comparison, IPR estimates a total of 1.4 Mt of green hydrogen demand by 2030, with demand accelerating after 2030 and reaching around 20 Mt by 2040. These more modest demand predictions seem in alignment with current data and observed growth in the renewable hydrogen market.






TABLE OF CONTENTS

- ⌘ IPR background and key QFT findings
- 1 Energy and land use policy forecast tracking for Q3 2024
- 2 Detailed individual policies & methods for key credible and material policy announcements during Q3 2024**

IPR HAS DEVELOPED GLOBAL, POLICY-BASED FORECASTS OF FORCEFUL POLICY RESPONSES TO CLIMATE CHANGE AND IMPLICATIONS FOR ENERGY, AGRICULTURE AND LAND USE

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Please see the IPR [Home Page](#) for further details

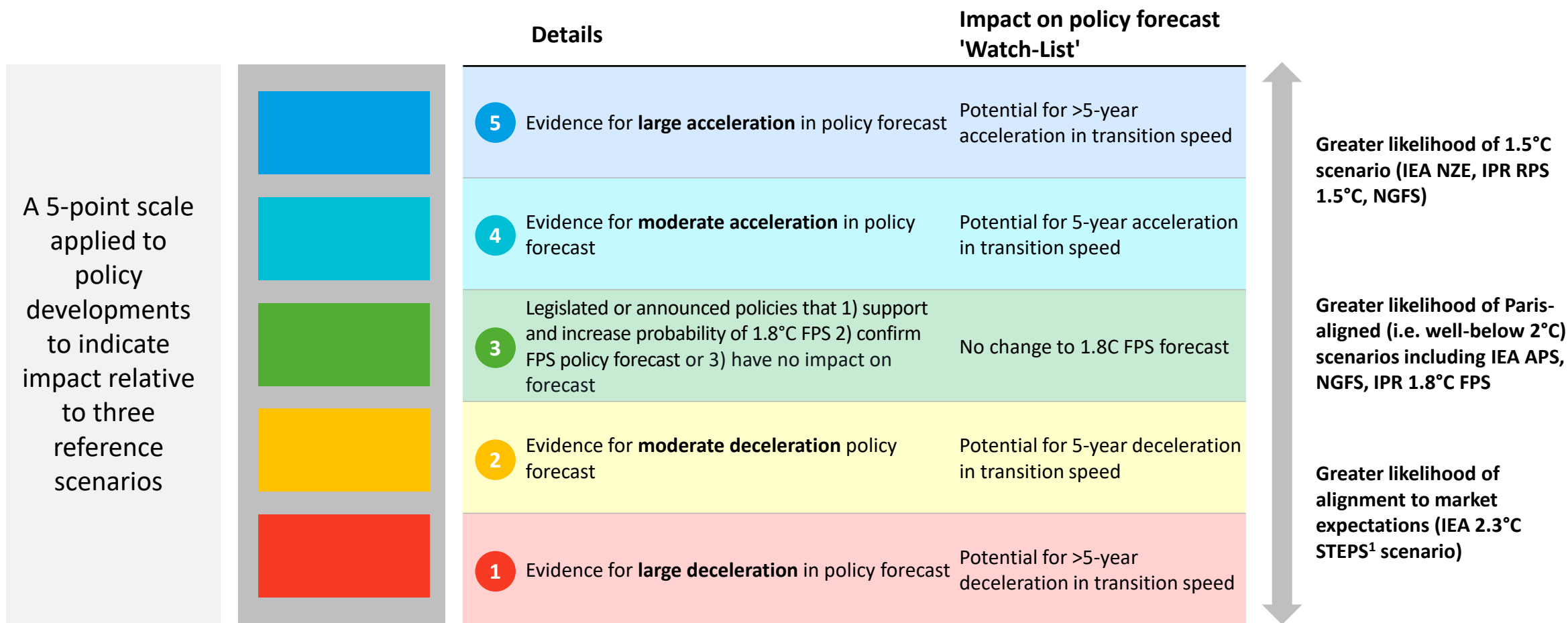
Scenario	Policy Forecast Details	Open Access Database
 <p>IPR 2023 Forecast Policy Scenario (FPS)</p> <ul style="list-style-type: none"> Models impact of forecasted policies on the real economy 	<p>IPR FPS 2023 Summary Report</p> <p>IPR 2023 Policy Forecast</p> <p>IPR FPS 2023 Detailed Energy Results</p> <p>IPR FPS 2023 Detailed Land Use and Nature Results</p> <p>IPR 2023 Bioenergy Report</p>	<p>FPS Value Drivers Database</p>
 <p>IPR 1.5°C Required Policy Scenario (RPS)</p> <ul style="list-style-type: none"> Required policies to align to a 1.5°C objective building on the IEA’s Net Zero scenario and deepening analysis on policy, land use, emerging economies and value drivers 	<p>IPR 1.5°C RPS Energy and Land Use System Results including Policy Details</p>	<p>IPR RPS 2021 Value Drivers</p>
 <p>IPR Forecast Policy Scenario + Nature (FPS + Nature)</p> <ul style="list-style-type: none"> First integrated climate and nature scenario for use by investors 	<p>IPR 2022 FPS + Nature detailed results</p>	<p>IPR FPS + Nature Value Drivers</p>

IPR has published a set of publicly available outputs from the FPS and 1.5°C RPS that offer significant granularity at the sector/country level, allowing investors to assess their own climate risk across 4,000+ variables

Disclaimer: This is not intended to constitute policy advice, financial advice or any specific advice.


IMPACT SCALE FOR IPR POLICY FORECAST

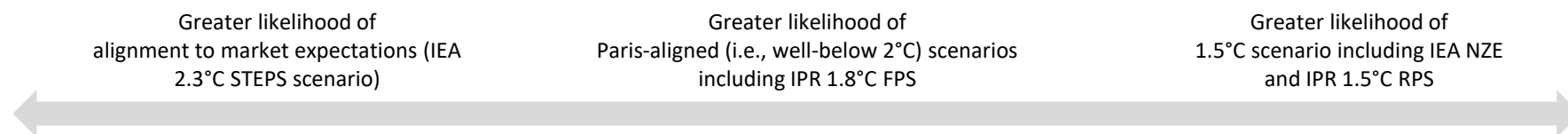
Assessing policy impact on 5-step scoring scale relative to three reference scenarios



IPR QFT: KEY Q3 2024 POLICY DEVELOPMENTS BY REGION

The findings of IPR's Quarterly forecast tracker show that most of the key credible and material policies are in line with the Paris Agreement

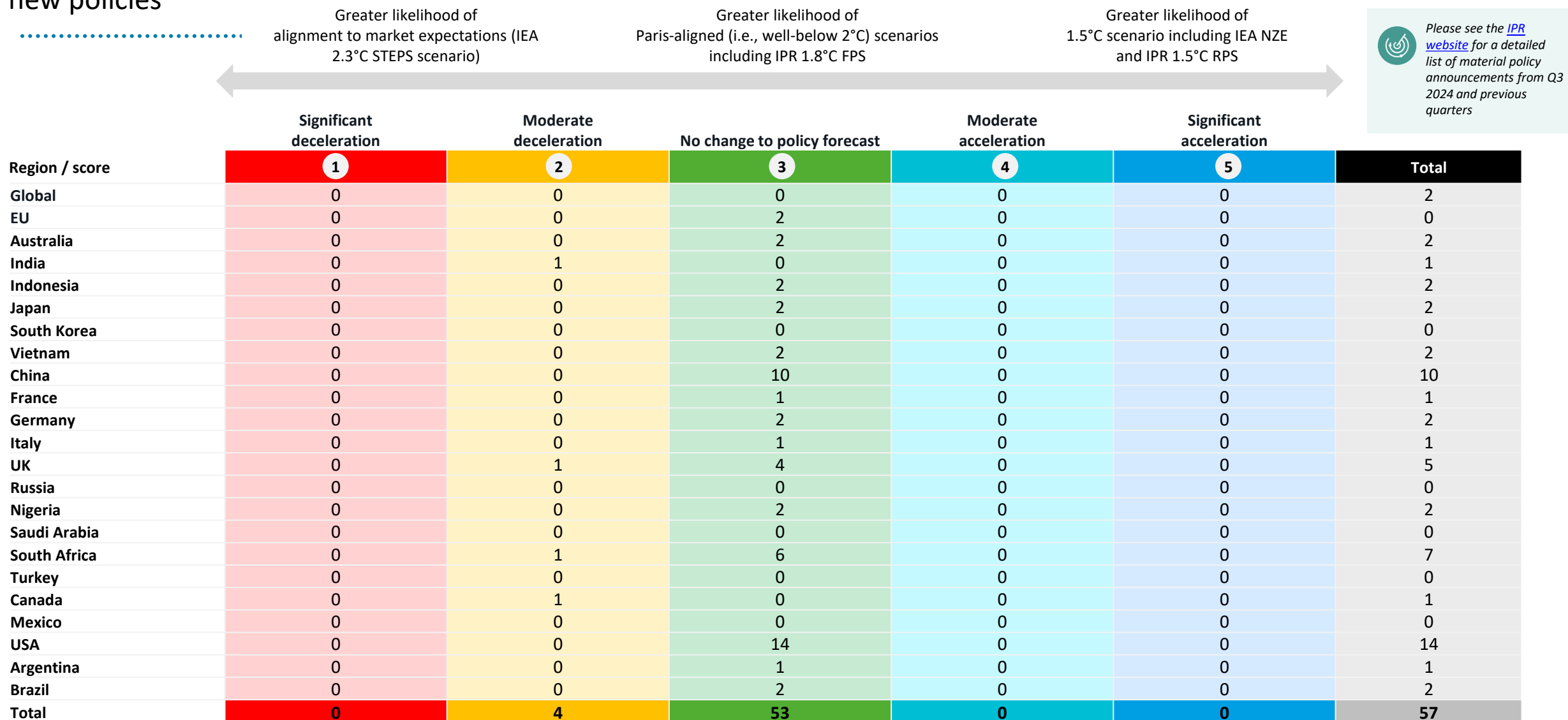
 Please see the [IPR website](#) for a detailed list of material policy announcements from Q3 2024 and previous quarters



Region / score	Significant deceleration	Moderate deceleration	No change to policy forecast	Moderate acceleration	Significant acceleration	Total
	1	2	3	4	5	
Global	0	0	0	0	0	0
Asia Pacific	0	1	8	0	0	9
China	0	0	10	0	0	10
Europe	0	1	10	0	0	11
Eurasia	0	0	0	0	0	0
Middle East and Africa	0	1	8	0	0	9
North America	0	1	14	0	0	15
South America	0	0	3	0	0	3
Total	0	4	53	0	0	57

IPR QFT: KEY Q3 2024 POLICY DEVELOPMENTS BY COUNTRY

While 16 countries announced or implemented supportive climate policies, 5 countries did not announce or legislate new policies















Key policy developments for Q3 2024

Detailed overview of the most important credible and material policy developments




AUSTRALIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Australia 	Net zero CO₂ emissions 	Net Zero Economy Authority Bill passed <ul style="list-style-type: none"> Australia introduced the Safeguard Mechanism (Crediting) Amendment Bill 2024 to strengthen its carbon reduction framework. The bill targets 215 large industrial facilities, responsible for 28% of Australia’s emissions, by imposing emissions limits. The bill aims to reduce emissions from these facilities by 5 million tons annually, contributing to Australia's overall target of 43% emissions reduction by 2030. Companies that outperform their emissions reduction targets can earn credits, incentivizing further carbon reduction efforts. 	Policy delivers net zero CO2 emissions by 2050.	Legislated and supportive. This bill is supportive of Australia's goal to achieve net zero CO2 emissions by 2050. However, more industries need to be addressed to confirm that the country will actually meet its goal.	
	Clean power 	MoU with South Korea on clean energy <ul style="list-style-type: none"> South Korea and Western Australia signed a Memorandum of Understanding (MOU) on cooperation in critical minerals and clean energy projects. The agreement focuses on securing minerals crucial for electric vehicles (EVs) and renewable energy technologies. South Korea aims to boost its supply chain for minerals like lithium, nickel, and rare earth elements, key to the country’s green energy transition. Western Australia supplies 48% of the world’s lithium production and a significant share of other critical minerals. 	Policy delivers dispatched generation of 97% low-carbon power by 2045.	Announced and supportive. The signed declaration of intent marks a good step toward advancing the energy transition. However, it is essential that this agreement is accompanied by concrete actions and detailed implementation plans to ensure its success..	




INDONESIA & INDIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Indonesia 	Net zero CO₂ emissions 	Carbon capture storage to be accelerated <ul style="list-style-type: none"> Indonesia aims to boost carbon storage capacity by 10 million tons per year by 2030. The government is investing \$2 billion to develop carbon capture and storage (CCS) technology and related infrastructure. Indonesia is targeting a 50% increase in the carbon storage sector's capacity over the next five years. 	Policy delivers net zero CO2 emissions by 2060.	Announced and supportive. Boosting carbon storage capacity is essential for reducing CO2 emissions and therefore supportive of the forecast.	Score 3
	Clean power 	\$25bn in green hydrogen investment by 2060 <ul style="list-style-type: none"> The Indonesian government targets \$25.2 billion in private sector investment for green hydrogen by 2060. Indonesia aims to produce 3.4 million tons of green hydrogen annually by 2060. The investment is part of the broader national strategy to achieve net-zero emissions by 2060. Green hydrogen will be utilized in the industrial sector and to support a 29% reduction in carbon dioxide emissions by 2030. Indonesia plans to utilize its 400 GW renewable energy potential, including 75 GW of hydropower and 60 GW of solar, to support green hydrogen production. 	Policy delivers net zero CO2 emissions by 2060.	Announced and supportive. Indonesia's big investment in hydrogen is an important step in decarbonizing heavy industries and increase the renewable energy potential.	Score 3
India 	New coal phase out 	Plan to add 31GW coal power in the next 5-6 years <ul style="list-style-type: none"> India plans to accelerate coal-fired power capacity by ordering equipment worth \$33 billion this year, aiming to add 31 GW over the next 5-6 years. This unprecedented move involves major power firms like NTPC and SJVN, as well as private companies such as Adani Power and Essar Power. The decision to expedite equipment orders was driven by high electricity demand and power shortages exacerbated by economic growth and heatwaves. Bharat Heavy Electricals Ltd (BHEL) is likely to secure most contracts, benefiting from recent policy changes favoring domestic equipment suppliers. 	Actual policy and anticipated policy signals end new unabated coal from being built. Coal is abated when installed with CCS with a capture rate of 90% or equivalent by 2030.	Announced. IPR previously adjusted their forecast to 2030 as India planned to add 17GW to their already permitted 61 GW of coal. The new policy aims to add 31GW over the next 5-6 years, confirming IPR's previous Forecast adjustment.	Score 2 <i>* No impact on forecast</i>





JAPAN POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
<p>Japan</p> 	<p>Economy-wide</p> 	<p>70 MOUs with partners on energy transition</p> <ul style="list-style-type: none"> • Japan signed 70 Memorandums of Understanding (MOUs) with various countries and companies to support energy transition efforts. • The agreements focus on renewable energy, hydrogen, and ammonia as alternative energy sources. • Japan aims to reduce its carbon emissions by 46% by 2030 and achieve net-zero emissions by 2050. • The MOUs are expected to facilitate investments totaling JPY 10 trillion (approx. USD 70 billion) in energy transition projects over the next decade. • Japan's focus includes developing 30 GW of offshore wind energy by 2040. 		<p>Announced and supportive. The signed declarations of intent are a positive measure to pave the way for the energy transition. However, they must be followed by strategic plans with clear objectives that can be used to turn the plans into reality.</p>	<p>Score 3</p>
	<p>Clean power</p> 	<p>Alignment with US and Europe over offshore wind</p> <ul style="list-style-type: none"> • Japan targets to install 10 gigawatts (GW) of offshore wind capacity by 2030 and 30-45 GW by 2040. • The cooperation with the US and Europe aims to leverage investments worth billions of dollars in offshore wind projects. • Japan's offshore wind capacity stood at approximately 20 megawatts (MW) in 2021, highlighting the need for rapid expansion. • The partnership is expected to generate significant economic benefits and create thousands of jobs in the renewable energy sector. 	<p>Policy delivers dispatched generation of 97% low-carbon power by 2045.</p>	<p>Announced and supportive. This policy will help Japan to meet its energy demand. However, given Japan's population size, more renewable energy sources need to be deployed to confirm the 2045 target.</p>	<p>Score 3</p>



VIETNAM POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Vietnam 	Clean power 	Direct Power Purchase Agreement approved <ul style="list-style-type: none"> The DPPA mechanism allows businesses to enter into contracts for up to 1,000 MW of renewable energy initially. Vietnam aims to increase the share of renewable energy in its total energy mix to 30% by 2030. The DPPA is projected to attract investments worth over \$1 billion in renewable energy projects. Vietnam's electricity consumption is growing at an annual rate of approximately 10%, underscoring the need for new energy sources. 	Policy delivers dispatched generation of 97% low-carbon power by 2050.	Legislated and supportive. This policy is supportive of the forecast as it could potentially lower energy costs and provide a stable and predictable energy supply for Vietnam.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
	Low-carbon agriculture 	Sustainable path in agriculture with Brazil <ul style="list-style-type: none"> Vietnam and Brazil aim to enhance bilateral trade in the agriculture sector, valued at \$6.78 billion in 2022.; The two countries are working toward sustainable agricultural practices and reducing carbon footprints in their production.; Brazil is a significant supplier of agricultural products to Vietnam, and they aim to further increase trade through sustainable development initiatives. 	Policy delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock by 2030.	Announced and supportive. The intended cooperation between Vietnam and Brazil to decarbonize the agriculture sector is promising. However, without more detailed information on the specific implementation plans, it is challenging to assess how this partnership will impact the countries' objectives.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>




CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
China 	Net zero CO ₂ emissions 	70 new standards to be issued for carbon footprint and capturing <ul style="list-style-type: none"> China is set to issue 70 new national standards for measuring carbon footprints and carbon capture technologies by 2024. The standards aim to improve the accuracy of emissions reporting and boost the effectiveness of carbon capture initiatives. The new regulations are part of China's broader strategy to enhance its climate action and achieve carbon neutrality by 2060. 	Policy delivers net zero CO ₂ emissions by 2060.	Announced and supportive. This policy is supportive of the forecast as it will improve the accounting of carbon footprints.	Score 3
	Net zero CO ₂ emissions 	Hard targets for setting emissions <ul style="list-style-type: none"> China's State Council has issued a plan to establish a carbon emission control system, focusing on setting strict targets to reduce greenhouse gas emissions. The system will include quotas for carbon-intensive industries and enhanced oversight of key sectors. The plan aligns with China's goal to reach peak carbon emissions by 2030 and achieve carbon neutrality by 2060. The initiative is part of broader efforts to transition to a low-carbon economy and address climate change challenges. 	Policy delivers net zero CO ₂ emissions by 2060.	Announced and supportive. Introducing stricter measures to regulate carbon emissions, particularly in high-polluting industries is a supportive step to limit net zero CO ₂ emissions.	Score 3
	Net zero CO ₂ emissions 	Continued low-carbon reforms <ul style="list-style-type: none"> China's energy regulator reaffirmed the country's commitment to continuing low-carbon reforms. The focus is on increasing the share of non-fossil fuel energy, currently at 17.5%, to meet the target of 25% by 2030. The country also aims to cap carbon emissions by 2030 and achieve carbon neutrality by 2060. China is on track to install 1,200 GW of renewable energy capacity, including wind and solar, by 2030. 	Policy delivers net zero CO ₂ emissions by 2060.	Announced and supportive. China's reaffirmed commitment to continue its low-carbon reforms is supportive of the forecast.	Score 3



CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Net zero CO₂ emissions 	Low-carbon upgrades planned for the coal power sector <ul style="list-style-type: none"> China plans to implement low-carbon upgrades to its coal power plants to reduce their environmental impact. The initiative aims to reduce coal consumption by 10% in power plants by 2025 and cut carbon emissions. The upgrades will involve the use of advanced technologies such as carbon capture and storage (CCS) and ultra-low emissions equipment. Significant investments will be directed toward retrofitting existing coal plants and enhancing their efficiency. Despite being the world's largest producer and consumer of coal, China is committed to peaking its carbon emissions by 2030 and achieving carbon neutrality by 2060. 	Policy delivers net zero CO2 emissions by 2060.	Announced and supportive. This policy aims to cut carbon emissions from existing coal power plants, which will be operating until the coal phase-out by 2045. The planned low-carbon technology upgrades are supportive of reducing China's net zero CO2 emissions.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
	Net zero CO2 emissions 	Low-carbon lending tool extended to end of 2027 <ul style="list-style-type: none"> China's central bank will extend its low-carbon lending tool, initially set to expire in 2024, to the end of 2027. The lending tool provides low-interest loans to financial institutions that support green projects. As of mid-2024, the tool has facilitated over CNY 2 trillion (approx. USD 274 billion) in loans for low-carbon projects. The extended timeline aims to accelerate China's transition to a low-carbon economy and help achieve its goal of peaking carbon emissions by 2030. 	Policy delivers net zero CO2 emissions by 2060.	Announced and supportive. By extending the duration of the low-carbon lending tool, China provides a useful tool which can help to accelerate the country's transition to a low-carbon economy.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>









CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	Lower renewable subsidies set for 2024 <ul style="list-style-type: none"> China has set its 2024 renewable power subsidy at 5.4 billion yuan (\$\$1 billion), down from 7.4 billion yuan in 2023 and 6.19 billion yuan in 2022. The 2024 subsidies include 1.96 billion yuan for solar power, 3.43 billion yuan for wind, and 17 million yuan for biofuel. The reduction in subsidies reflects China's strategy to encourage renewable power generators to compete in the market without heavy state support. In April, China ended a policy guaranteeing that grid operators would buy nearly all renewable power at coal-indexed rates, subjecting renewable generators to less favorable market pricing and reducing their profit margins. 	Policy delivers dispatched generation of 97% low-carbon power by 2050.	Announced and supportive. China reduced its renewable power subsidies by 27% compared 2023. This policy is supportive of other measures that China has implemented to push renewable energies.	Score 3
	Clean power 	3-year plan to upgrade power systems <ul style="list-style-type: none"> China's state planner, the National Development and Reform Commission (NDRC), has outlined a three-year plan (2024-2027) aimed at upgrading the country's power system to better integrate renewable energy and manage increasing electricity demand. This plan is crucial for China to meet its goal of peaking carbon emissions by 2030. Key priorities include enhancing the transmission and distribution systems, and improving demand response capabilities, which involve encouraging consumers to shift electricity usage away from peak times. The plan targets a demand response capacity of 5% of the maximum electric load, with a more ambitious goal of 10% in certain areas. 	Policy delivers dispatched generation of 97% low-carbon power by 2050.	Announced and supportive. Modernizing the power system by upgrading grids is a supportive measure to enhance integration of renewable energy sources.	Score 3
	Clean power 	Guidelines on green power trading <ul style="list-style-type: none"> China issued new guidelines for green power trading, focusing on a market-based approach. Green certificates, representing 1,000 kWh of renewable energy, will influence pricing. No price limits on transactions except state-specified ones. Green power trading grew by 283% from 2021-2023, reaching 69.7 billion kWh, about 1% of China's electricity consumption in 2022. The guidelines standardize trading across regions and include wind, solar, hydro, and geothermal power. The aim is to support export-oriented businesses and unify the national power market by 2030. 	Policy delivers dispatched generation of 97% low-carbon power by 2050.	Announced and supportive. The new guidelines for green power trading are supportive of the forecast as they aim to increase the trading and therefore use of renewable energies.	Score 3






CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	<p>Clean power</p> 	<p>Call for more investments in energy upgrades</p> <ul style="list-style-type: none"> China's government has called for increased investment in energy infrastructure to support the country's ongoing transition to a low-carbon economy. The Chinese government plans to upgrade 200,000 kilometers of power transmission lines by 2025. China's National Development and Reform Commission (NDRC) is focusing on modernizing the energy grid to support the integration of renewable energy, which currently makes up 30% of the country's energy mix. By 2030, China aims to have 1,200 GW of installed solar and wind capacity, requiring significant upgrades to the national grid. The push for energy infrastructure investment is part of China's broader goal to peak carbon emissions by 2030 and achieve carbon neutrality by 2060. 	<p>Policy delivers dispatched generation of 97% low-carbon power by 2050.</p>	<p>Announced and supportive. China's endeavor to invest more in the energy sector is generally a positive project.</p>	<p>Score 3</p>
	<p>Clean power</p> 	<p>Renewals plan for the energy sector</p> <ul style="list-style-type: none"> Chinese authorities unveiled a plan to boost large-scale equipment renewals in the energy sector. Equipment investment in key energy areas is expected to rise by over 25% by 2027 compared to 2023. The plan focuses on upgrading coal-fired power generation units, renewing and upgrading technology for wind, solar, and hydropower, and improving power transmission, distribution, and clean energy heating equipment. Enhanced fiscal, tax, and financial support will be provided, with encouragement for financial institutions to increase medium- and long-term loans to the manufacturing sector. A related March action plan addressed large-scale equipment renewal and consumer goods trade-ins. 	<p>Policy delivers dispatched generation of 97% low-carbon power by 2050.</p>	<p>Announced and supportive. This policy aims to renew facilities in the energy sector on a large scale by upgrading them for clean energy. Building and providing a good infrastructure with modernized technologies is important to ensure a clean energy transition.</p>	<p>Score 3</p>






EU & FRANCE POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
EU 	Clean power 	Tighter rules to ensure funding for hydrogen <ul style="list-style-type: none"> The European Union is tightening subsidy rules for hydrogen projects to address concerns over Chinese competition. The new rules are intended to prevent state-backed Chinese firms from gaining a dominant position in the EU's green hydrogen market. The EU aims to produce 10 million tons of renewable hydrogen by 2030 and import an additional 10 million tons. The EU's €3 billion hydrogen investment plan is part of the broader Green Deal to reach carbon neutrality by 2050. 	Policy delivers dispatched generation of 97% low-carbon power.	Announced and supportive. This initiative aims to ensure that both hydrogen as a resource and the related expertise are developed within the EU.	
	Economy-wide 	Sustainable Investment Facilitation Agreement <ul style="list-style-type: none"> It is the EU's first-ever agreement focused on investment facilitation, aiming to boost foreign investments to meet sustainable development goals. SIFA aims to create a more transparent, efficient, and predictable business environment for investors in Angola, with a focus on EU businesses. Key measures include improving transparency of investment regulations, promoting e-government services for authorizations, and increasing stakeholder involvement. The agreement is part of the EU's broader Africa-EU Global Gateway Investment Package, which includes €150 billion for African investments. 	-	Announced and supportive. This policy aims to attract foreign investment to accelerate the energy transition, which is supportive of the forecast.	
France 	Clean power 	EU approves \$11.6bn aid package for offshore wind projects <ul style="list-style-type: none"> The European Commission has approved \$11.6 billion in French state aid to develop renewable energy projects, particularly offshore wind. The funding aims to support France's transition towards sustainable energy sources, contributing to EU climate goals. This decision underscores the EU's commitment to facilitating green energy investments and reducing reliance on fossil fuels. The aid package includes measures to promote innovation and job creation in the renewable energy sector. 	Policy delivers dispatched generation of 97% low-carbon power by 2035.	Announced and supportive. Sizeable financial investment, however, a concrete plan on how the investment will be used to ensure that 97% of power generation comes from low-carbon power by 2035 needs to be established.	




GERMANY & ITALY POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Germany 	Clean power 	Hydrogen import strategy <ul style="list-style-type: none"> Germany plans to import up to 3 million tons of green hydrogen annually by 2030. The strategy includes investments of €9 billion in hydrogen projects, with €2 billion allocated for international partnerships. Germany aims to reduce its carbon emissions by 65% by 2030, compared to 1990 levels, with hydrogen playing a critical role in achieving this target. The country currently produces around 55 million tons of CO2 annually from industries that could switch to hydrogen. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Legislated and supportive. This policy is in line with Germany's previous hydrogen developments and therefore supportive of the 2040 clean power target as it ensures that sufficient low-carbon power will be available.	Score 3
	Clean power 	\$3.2bn EU hydrogen support <ul style="list-style-type: none"> The EU has approved €3.2 billion in support for German hydrogen infrastructure, including pipelines. Funding aims to expand hydrogen transport and storage capacities, crucial for scaling up green hydrogen production. It facilitates cross-border trade and integration of hydrogen into Europe's energy system, enhancing energy security. The investment underscores EU's commitment to hydrogen as a key element of decarbonization and economic recovery. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Announced and supportive. Concrete financial investment of \$3.2bn for Germany, however, a concrete plan how the investment will be used needs to be established.	Score 3
Italy 	Clean power 	Permits for clean energy projects <ul style="list-style-type: none"> Italy is introducing stricter regulations for permitting green energy projects, aiming to cut approval times by 25%. The new regulations include a 12-month cap on the review period for renewable energy project applications. The government plans to streamline the permitting process to reduce delays and support an increase in renewable energy projects. 	Policy delivers dispatched generation of 97% low-carbon power by 2045.	Announced and supportive. Cutting approval time for renewable energy projects is beneficial to accelerate the permitting of green energy projects as it lowers bureaucratic hurdles.	Score 3




UK POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
UK 	Net zero CO ₂ emissions 	Planning and Infrastructure Bill <ul style="list-style-type: none"> The Planning and Infrastructure Bill includes a £10 billion investment in sustainable infrastructure projects over the next decade. The bill sets a target for reducing carbon emissions from new infrastructure developments by 40% by 2030 compared to current levels. It mandates that at least 60% of new public infrastructure projects must meet high environmental sustainability standards, including energy efficiency and low-carbon materials. The bill includes provisions to streamline the planning process, reducing approval times for sustainable projects by up to 30%. It allocates £3 billion specifically for green transportation initiatives, including the development of electric vehicle charging networks and improvements to public transit systems. The bill requires all new infrastructure projects to undergo rigorous environmental impact assessments and adhere to guidelines that ensure the protection of natural habitats and biodiversity. 	Policy delivers net zero CO ₂ emissions by 2050.	Announced and supportive. Reducing carbon emissions from new infrastructure by investing £10bn and setting tougher environmental standards for infrastructure projects is supportive of the UK clean power target. However, more investment over the next 10 years needs to be provided.	
	Clean power 	National Wealth Fund Bill <ul style="list-style-type: none"> The National Wealth Fund Bill proposes an investment of £1 billion to unlock private capital for sustainable infrastructure projects. The fund aims to generate up to £10 billion in total private investment by attracting matching funds from private sector investors over the next decade. The bill includes a target for investing at least 50% of the fund's capital in green and renewable energy projects, including clean technology and low-carbon infrastructure. The fund is expected to achieve annual returns of up to 8%, with a significant portion of these returns reinvested into further sustainability initiatives. The investment strategy includes a focus on projects that contribute to the UK's net-zero emissions target by 2050, supporting initiatives that reduce carbon footprints and enhance energy efficiency. 	Policy delivers dispatched generation of 97% low-carbon power by 2035.	Announced and supportive. Matching private investment with sustainable infrastructure projects is supportive approach to generate more funding for the clean power transition.	





UK POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	Great British Energy Bill <ul style="list-style-type: none"> The Great British Energy Bill outlines a £15 billion investment in renewable energy infrastructure over the next decade. The bill sets a target to increase the UK's offshore wind capacity by 30 GW by 2030. It includes a commitment to deploy 5 million smart meters across households by 2027 to enhance energy efficiency and reduce consumption. The bill mandates that 50% of the energy generated from new projects must come from low-carbon sources, including wind, solar, and hydroelectric power. It provides funding of £2 billion for energy storage solutions to improve grid stability and integration of intermittent renewable sources. 	Policy delivers dispatched generation of 97% low-carbon power by 2035.	Announced and supportive. Investing £15bn over the next 10 years to accelerate the renewable energy infrastructure is supportive of the 2035 target.	Score 3
	Clean power 	Crown Estate Bill <ul style="list-style-type: none"> The bill includes a commitment to invest £500 million over the next five years into green energy projects, with a focus on offshore wind farms. This investment aims to support the UK's transition to renewable energy. The Crown Estate is tasked with developing renewable energy projects that contribute to a target of generating 20 GW of renewable energy by 2030. This aligns with the UK's broader goals for increasing clean energy capacity. The bill mandates comprehensive environmental impact assessments for all new projects, ensuring that development activities do not negatively affect local ecosystems and biodiversity. 	Policy delivers dispatched generation of 97% low-carbon power by 2035.	Announced and supportive. Combining offshore wind projects with nature protection is a good sustainable management practice. However, bigger investments and more funding is needed.	Score 3
	Light duty vehicles 	New hybrid car sales allowed until 2035 <ul style="list-style-type: none"> The UK government plans to reinstate a 2030 ban on new petrol and diesel cars, while sales of some hybrid cars will be allowed until 2035. The final decision on which hybrid cars will be allowed between 2030 and 2035 will follow consultations with carmakers and other stakeholders. Carmakers have been lobbying to extend petrol sales due to slowing demand for electric cars, which has led to price drops and impacted profits. Hybrid cars range from mild hybrids to plug-in hybrids, with the latter offering better carbon emission reduction. 	Policy ends the sale of 97% of new cars and vans with CO2 emissions by 2030. (i.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV.	Announced. The policy extends hybrid vehicle sales by five years, delaying the 2030 ban on new emission vehicles. Since hybrids aren't fully electric, the UK's target is pushed by 5 years to 2035.	Score 2



NIGERIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Nigeria 	Clean power 	\$800m in power sector upgrades <ul style="list-style-type: none"> The Nigerian government plans to invest \$800 million to upgrade its power sector.; Investments will focus on rehabilitating and expanding electricity transmission and distribution infrastructure. The goal is to reduce power losses, improve reliability, and construct super grids to support future energy sector goals. Nigeria's electricity generation capacity currently stands at 12,500 MW, but only 4,500 MW is reliably distributed due to infrastructural limitations. 	Policy delivers dispatched generation of 97% low-carbon power by 2050.	Announced and supportive. Upgrading the power system by expanding transmission and distribution infrastructure is a crucial step in strengthening the integration of renewable energy sources, particularly in the context of growing energy security concerns.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
	Clean power 	Integrated electricity policy <ul style="list-style-type: none"> Nigeria introduced a new National Integrated Electricity Policy to address the country's power sector challenges. The policy focuses on expanding electricity access to the 43% of Nigerians currently without power. The government aims to increase installed generation capacity from the current 12,500 MW to 30,000 MW by 2030. The policy includes targets for renewable energy, aiming to contribute 30% of total energy generation by 2030. 	Policy delivers dispatched generation of 97% low-carbon power by 2050.	Legislated and supportive. The new policy targets achieving a 30% share of renewable energy by 2030, while also expanding electricity access to currently underserved regions. While this is a positive step forward, additional policies will be necessary for Nigeria to meet its 2050 clean energy goals.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>





SOUTH AFRICA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
South Africa 	Net zero CO ₂ emissions 	Climate change bill signed <ul style="list-style-type: none"> South Africa's new climate change law, enacted on July 23, 2024, sets ambitious goals to address climate change. The law aims to transition to a low-carbon and climate-resilient economy, ensuring a just transition that is fair and equitable for affected communities. The law establishes strong governance, with responsibilities assigned to national, provincial, and municipal authorities for developing and implementing climate response plans. It sets up a framework for greenhouse gas mitigation, including a national emissions trajectory and sectoral emissions targets. 	Policy delivers net zero CO ₂ emissions by later than 2065.	Legislated and supportive. This climate change law contains a broad set of rules addressing South Africa's CO ₂ emissions. This policy sets the basic architecture and basis to speed up the progress.	Score 3
	Carbon price 	Carbon market proposal <ul style="list-style-type: none"> South Africa's proposals for carbon market regulation are part of its effort to meet the target of reducing greenhouse gas emissions by 42% by 2025 compared to business-as-usual levels. The regulations will impact industries responsible for over 80% of the country's emissions. South Africa's current carbon tax rate stands at approximately \$9 per ton of CO₂, with plans to increase it to align with global standards. The government aims to have a fully operational carbon market by 2026, facilitating the trading of carbon credits and offsets. 	Explicit carbon price signal or backstop covering industry and power in 2030 by \$30.	Announced and supportive. This policy is in line with the recently signed climate change law, aiming to reduce CO ₂ emissions by increasing the regulation of carbon markets.	Score 3
	Clean power 	Renewable energy plans <ul style="list-style-type: none"> South Africa is focusing on a renewable energy revolution to diversify its energy mix and reduce carbon emissions. Significant investments are being made in wind, solar, and hydropower projects, with the government aiming to increase renewable energy capacity. The country targets to have renewables account for at least 30% of its energy mix by 2030. Current and planned projects include large-scale wind farms, solar parks, and hydroelectric plants, with a combined capacity of thousands of megawatts. 	Policy delivers dispatched generation of 97% low-carbon power by 2055.	Announced and supportive. The focus on renewable energies is supportive of the forecast. However, more tailored rollout plans are needed to expediate the transition towards clean energy by 2055.	Score 3






SOUTH AFRICA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	Approval of nuclear power plant for 20-years <ul style="list-style-type: none"> South Africa's Koeberg nuclear power plant has received approval to extend the operation of one of its units for an additional 20 years. The unit will continue to contribute 920 megawatts to the national grid, supporting energy stability. The extension follows significant upgrades and safety improvements to ensure the plant meets regulatory standards. Nuclear energy is part of South Africa's strategy to diversify its energy sources and reduce carbon emissions. The Koeberg plant is the only nuclear power facility in Africa and plays a crucial role in the country's energy landscape. 	Policy delivers dispatched generation of 97% low-carbon power by 2055.	Legislated and supportive. Given the lengthy timelines typically associated with nuclear projects, this policy's impact on the 2055 target is supportive as it enhances South Africa's energy stability.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
	All coal phase out 	Coal pact to be altered <ul style="list-style-type: none"> South Africa is seeking to renegotiate a deal with Climate Investment Funds (CIF) to delay the decommissioning of three coal-fired power plants until March 2030 due to energy security concerns. The potential renegotiation could affect approximately \$2.6 billion in financing, with \$500 million from CIF's Accelerating Coal Transition program, part of a larger \$9.3 billion climate pact. The renegotiation underscores the difficulty for developing nations, like South Africa, which relies on coal for about 80% of its electricity, to transition to cleaner energy sources while maintaining stable power supply. South Africa's JETP investment partners remain broadly supportive but have expressed concerns about the implications of delaying coal plant closures on emissions-reduction targets and the credibility of the Just Energy Transition Partnership program. 	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal. Coal is abated when installed with CCS with a capture rate of 90% or equivalent by 2055.	Announced. The policy represents another step confirming South Africa's current course of a largely delayed energy transition. If funding is revoked, this may lead to a further near-term slowdown of decarbonization, albeit long-term changes seem unlikely.	<div style="background-color: #FFC107; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 2</div> <i>* On watch</i>



SOUTH AFRICA & CANADA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	10% import duty on solar panels <ul style="list-style-type: none"> South Africa has introduced a 10% import duty on solar panels to stimulate local manufacturing. The move aims to reduce reliance on imports and boost domestic solar panel production. It aligns with broader industrial policy objectives to enhance local economic development. Critics argue it may increase solar panel costs initially but could benefit the local economy in the long run. 	Policy delivers dispatched generation of 97% low-carbon power by 2055.	Announced and supportive. Though the import duty may increase the costs initially it will probably benefit local solar panel production companies in the long run.	Score 3
	Clean power 	Electricity Regulation Amendment Act signed into law. <ul style="list-style-type: none"> President Cyril Ramaphosa signed the Electricity Regulation Amendment Act into law. The Act allows private companies to generate and distribute electricity, aiming to improve energy supply. It introduces a competitive electricity market and an independent transmission system operator. The law is part of South Africa's efforts to address its ongoing energy crisis, driven by frequent blackouts. The Act supports the transition to a more sustainable and reliable electricity system. 	Policy delivers dispatched generation of 97% low-carbon power by 2055.	Legislated and supportive. This policy is a supportive measure to attract more investment into the electricity sector, which still needs to transition towards renewable energies.	Score 3
Canada 	Light duty vehicles 	100% tariffs on Chinese EVs <ul style="list-style-type: none"> Canadian Prime Minister Justin Trudeau stated that Canada could impose a 100% tariff on Chinese electric vehicles (EVs). The potential tariff is a response to concerns over China's dominance in the EV market and its impact on domestic manufacturers. Canada's EV market is growing rapidly, with sales expected to reach 500,000 units by 2025. Chinese EV exports to Canada have been increasing, and such tariffs could significantly impact market dynamics. 	Policy ends the sale of 97% of new cars and vans with CO2 emissions. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV by 2035.	Announced. Similar to tariffs announced by the US and EU, this may negatively affect the dynamic of EV sales in the short term. However, assessing the impact on the ultimate forecast targets for Canada requires further observation and evidence.	Score 2 <i>*On watch</i>



US POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
US 	Economy wide 	\$4.3bn in climate grants <ul style="list-style-type: none"> The Biden-Harris Administration announced \$4.3 billion in grants to support community-driven projects aimed at cutting climate pollution. These projects target sectors such as transportation, electric power, buildings, industry, agriculture, and waste management, with the goal of reducing 971 million metric tons of CO2 by 2050. Initiatives include RISE PA for industrial greenhouse gas reduction, electric vehicle infrastructure on I-95, and renewable energy siting in Michigan. The funding aims to create jobs, reduce energy costs, and support disadvantaged communities, enhancing environmental justice and clean energy transitions. 	Multiple including Clean power.	Announced and supportive. Funding commitment is supportive of FPS forecast but further details on the specific use of the investment are currently not available.	 Score 3
	Net zero CO2 emissions 	\$27bn in GHG Reduction Fund Grants <ul style="list-style-type: none"> The EPA awarded \$27 billion in grants from the Greenhouse Gas Reduction Fund. Funding is divided among three programs: \$14 billion for the National Clean Investment Fund, \$6 billion for the Clean Communities Investment Accelerator, and \$7 billion for the Solar for All program. These grants aim to support clean energy projects, reduce greenhouse gas emissions, and benefit disadvantaged communities. The Solar for All program will help bring solar energy to over 900,000 low-income households. The initiative aligns with the Biden administration's Justice40 initiative, focusing on aiding marginalized communities. 	Policy delivers net zero CO2 emissions by 2050.	Announced and supportive. The grants aim to accelerate the deployment of clean energy technologies, focusing on projects that benefit low-income and disadvantaged communities.	 Score 3




US POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	New bill to speed the approval of energy projects <ul style="list-style-type: none"> Senators Joe Manchin and John Barrasso introduced a bill to expedite permitting for power transmission, mining, and LNG export projects. The legislation aims to strengthen the power grid, maintain low power prices, and support both renewable and fossil fuel energy production. Key points include improving transmission capacity to integrate nearly 2,000 MW of clean energy, expanding offshore oil and gas leasing, and setting a 90-day deadline for LNG export approvals. This initiative supports the Biden administration's goal to decarbonize the U.S. power sector by 2035 and addresses supply chain issues for critical minerals used in energy infrastructure. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Announced and supportive. This policy is supportive of the forecast as it aims to strengthen the power grid and maintain low power prices, improving transmission capacity to integrate nearly 2,000 MW of clean energy.	Score 3
	Clean power 	\$2.2bn for grids <ul style="list-style-type: none"> The Biden-Harris administration is committing \$2.2 billion to enhance the U.S. electric grid, a critical move to protect the nation's energy infrastructure from increasingly severe weather events. The plan includes modernizing over 35,000 miles of transmission lines, aiming to improve reliability and reduce the risk of blackouts. This investment is part of a broader strategy to transition the U.S. energy system towards cleaner sources, while also boosting resilience against climate-induced disruptions. It reflects the administration's commitment to addressing both climate change and infrastructure vulnerabilities. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Legislated and supportive. Upgrading and expanding grids is vital for ensuring energy security. The Biden-Harris commitment is therefore one supportive element to ensure that the US reaches its 2040 target.	Score 3




US POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	<p>Clean power</p> 	<p>\$800 Million ADVANCE Act</p> <ul style="list-style-type: none"> The U.S. Senate passed the Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy (ADVANCE) Act on June 18, 2024, aiming to speed up the deployment of nuclear energy capacity, particularly advanced nuclear reactor technologies such as small modular reactors. The ADVANCE Act, which enjoys broad bipartisan support, passed the House by a vote of 393-13 and the Senate by a vote of 88-2, and is now awaiting President Joe Biden's signature to become law. The Act contains six titles focused on various aspects of nuclear energy. The Biden administration supports advanced nuclear technologies, evidenced by the Department of Energy's announcement of \$900 million in funding for the initial U.S. deployment of Generation III+ small modular reactors and the NRC's proposal for a new licensing pathway for advanced reactors. 	<p>Policy delivers dispatched generation of 97% low-carbon power by 2040.</p>	<p>Legislated and supportive. The policy helps to speed up the deployment of nuclear energy capacity by advancing nuclear reactor technology. Nevertheless, the investment is not sufficient enough to confirm that the target.</p>	<p>Score 3</p>
	<p>Clean power</p> 	<p>Higher solar cell imports allowed</p> <ul style="list-style-type: none"> President Joe Biden authorized the import of an additional 5.4 gigawatts (GW) of solar cells without being subject to Trump-era tariffs. This decision is a response to the ongoing shortages of solar cells in the U.S., which could delay the installation of thousands of megawatts (MW) of solar energy projects. The exemption is critical as the U.S. aims to increase its solar installation capacity to 30 GW in 2024, up from 20 GW in 2023. The U.S. solar industry has been heavily reliant on imports, particularly from Southeast Asia, which supplies about 80% of the solar panels used in the U.S. The Biden administration's move is also part of a broader strategy to triple U.S. solar capacity by 2035 to meet climate goals. 	<p>Policy delivers dispatched generation of 97% low-carbon power by 2040.</p>	<p>Announced and supportive. The approval of additional solar cell import is an important step to increase solar installation and dispatch more energy from low-carbon sources.</p>	<p>Score 3</p>



US POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	\$31M for clean energy projects led by tribal and local governments <ul style="list-style-type: none"> The Department of Energy announced \$31 million in funding for 10 innovative clean energy projects across 9 national laboratories. These projects aim to develop technologies such as hydrogen and fuel cells, renewable power, energy storage, and advanced grid controls. A portion of the funding supports cross-lab teams to drive the deployment of clean energy technologies and improve infrastructure resilience. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Announced and supportive. Funding clean energy projects led by tribal and local governments is a good step towards helping all communities transition to clean power.	Score 3
	Clean power 	\$78M for tribes in Alaska to accelerate clean energy transition <ul style="list-style-type: none"> The U.S. Environmental Protection Agency (EPA) announced \$78 million in grants for 18 tribal nations in Alaska, Idaho, Oregon, and Washington. The grants are part of the Climate Pollution Reduction Grants (CPRG) program under the Inflation Reduction Act. \$69 million is allocated for climate pollution reduction, while \$9 million will help tribes adapt to climate change impacts. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Announced and supportive. Assisting Alaska's tribal nations in adapting to the impacts of climate change will contribute to the nation's overall progress in meeting its climate goals.	Score 3
	Clean power 	\$3.5bn for clean energy in low-income communities <ul style="list-style-type: none"> The Treasury Department will provide \$5.3 billion in clean energy tax credits to 12 projects. These projects focus on manufacturing, including wind, solar, and battery technology across 11 states. This is part of a broader \$10 billion program under the Inflation Reduction Act to encourage domestic clean energy production. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Announced and supportive. Investing \$5.3bn in wind, solar, and battery technology to accelerate the renewable energy production is supportive of the 2040 target.	Score 3






US POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Clean power 	\$7.3bn for rural clean energy projects <ul style="list-style-type: none"> The U.S. Department of Agriculture (USDA) will invest \$7.3 billion in 2024 to support rural clean energy projects. This funding is part of a broader federal initiative to boost renewable energy infrastructure in underserved and rural communities. A major portion of the funding will be directed to renewable energy generation, storage systems, and grid modernization projects. 	Policy delivers dispatched generation of 97% low-carbon power by 2040.	Announced and supportive. Enhancing renewable energy infrastructure to ensure that clean power reaches rural areas is good for advancing the clean energy transition and supports achieving the forecasted goals.	Score 3
	Light duty vehicles 	\$521M to boost EV charging stations <ul style="list-style-type: none"> The U.S. Department of Energy has awarded \$521 million in grants to build out a national electric vehicle (EV) charging network. The funding supports 88 projects across 35 states and will install thousands of new charging stations. This is part of a broader \$7.5 billion initiative under the Bipartisan Infrastructure Law to create a nationwide EV charging network by 2030. 	Policy ends the sale of 97% of new cars and vans with CO2 emissions. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV by 2040.	Announced and supportive. Installing new EV charging stations is essential in supporting the U.S. target by establishing the necessary infrastructure to improve the adoption of electric vehicles.	Score 3
	Protection & restoration 	New Amazon basin <ul style="list-style-type: none"> U.S. Treasury Secretary Janet Yellen announced a new initiative targeting environmental crimes in the Amazon Basin. The effort focuses on disrupting illegal activities that lead to the loss of around 13 million hectares of forest annually. The initiative includes funding and cooperation between U.S. agencies and Amazon Basin countries, with a multi-year commitment to reduce deforestation and protect biodiversity. 	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2035.	Legislated and supportive. This policy aims to fight illegal environmental crimes in the Amazon Basin to reduce deforestation and enhance biodiversity.	Score 3

US POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
	Protection & restoration 	28million acres of land in Alaska to be protected <ul style="list-style-type: none"> The U.S. government has designated new protections for Alaska lands crucial to Native American tribes' hunting and fishing rights, which is in line with Biden's goal to conserve 30% of US land and waters. Measures aim to preserve traditional subsistence practices, cultural heritage, and ecological sustainability, not allowing development on 28million acres of land. The decision follows extensive consultation with local tribes and environmental considerations. It reflects efforts to balance conservation with indigenous rights and sustainable land use practices. 	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2035.	Announced and supportive. Protecting 28million acres of land in Alaska is supportive of the 2035 goal, however only 6.6% of Alaska's land are covered by this policy, which is not sufficient enough to meet Biden's goal to preserve 30% of land and water by 2030.	Score 3
	Protection & restoration 	Updated Climate Adaption and Resilience Plan <ul style="list-style-type: none"> The U.S. Department of Agriculture (USDA) has updated its Climate Adaptation Plan, aligning with the Biden-Harris Administration's National Climate Resilience Framework to enhance federal operations' resilience to climate change. President Biden's administration is investing over \$50 billion to build climate resilience, addressing extreme weather impacts through initiatives like the Investing in America agenda and the Justice40 Initiative. The updated adaptation plans for 2024 to 2027 integrate climate risk assessment, management of federal assets and supply chains, mainstreaming adaptation into agency operations, and linking actions to other administration priorities such as environmental justice and climate mitigation. 	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2035.	Legislated and supportive. The updated Climate Adaption Plan includes restoration and rehabilitation measures to increase the resilience of ecosystems. Nevertheless, more concrete actions and plans are needed to ensure that the US meets its 2035 target.	Score 3

ARGENTINA & BRAZIL POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Argentina 	Industry decarbonization 	\$216mn hydrogen fund from EU and Germany planned <ul style="list-style-type: none"> Argentina may receive a €200 million (\$216 million) hydrogen-focused fund to attract investment, as announced by EU commissioner for energy Kadri Simson. This initiative aims to replicate a similar €200 million funding platform in Chile for renewable hydrogen projects, led by the European Investment Bank and German development bank KfW. Argentina's new leadership plans to provide a regulatory framework for the hydrogen sector but lacks public funding, making external sources crucial. Blended finance funds, which de-risk projects and attract investment in developing countries, have been launched in Namibia and South Africa, and may also be considered for Argentina. 	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions later than 2070.	Announced and supportive. While significant for the project, in the context of total IPCEI funding already earmarked for hydrogen (17.5 bn Euros), the measure only supports industry decarbonization activities.	Score 3
Brazil 	Clean power 	Hydrogen bill signed into law <ul style="list-style-type: none"> Brazil's President Luiz Inácio Lula da Silva signed the Hydrogen Legal Framework into law. The new law aims to create a comprehensive legal structure to foster the development of Brazil's hydrogen industry, especially green hydrogen. Brazil is positioned to become a global leader in hydrogen production due to its vast renewable energy resources, including 170 GW of hydropower capacity and significant potential in wind and solar energy. The framework is expected to attract billions of dollars in investments, potentially leading to the creation of thousands of jobs in the emerging hydrogen sector. The law also emphasizes the importance of exporting hydrogen, tapping into a global market projected to be worth \$201 billion by 2030. 	Policy delivers dispatched generation of 97% low-carbon power by 2030.	Legislated and supportive. The legislation of the announced legal framework for industry decarbonization, with a particular provision for hydrogen production & usage, is supportive of the IPR forecast.	Score 3
	Clean power 	National Energy Transition Policy <ul style="list-style-type: none"> Brazil's National Energy Transition Policy is aimed at reducing carbon emissions while ensuring energy security. The country plans to increase its share of renewables, particularly in hydropower, wind, and solar, which already make up 83% of its electricity matrix. Brazil aims to add 12 GW of renewable energy capacity by 2025. The policy includes efforts to promote energy efficiency and encourage investment in green hydrogen and biofuels. 	Policy delivers dispatched generation of 97% low-carbon power by 2030.	Legislated and supportive. The policy is supportive of the forecast as it further increases the share of clean power in Brazil's energy mix.	Score 3



Technical Annex

Methodology, deep dive assessments, and references

WEIGHTED POLICY GAP ANALYSIS (SLIDE 3) METHODOLOGY AND KEY FINDINGS

[Back to main FPS policy gap analysis section](#)

Legend (chart of Slide 20)

- **Acceleration:** Policy increases likelihood of 1.5°C scenario (IEA NZE, IPR RPS 1.5°C).
- **Confirmatory:** Policy fulfils forecasted IPR outcome, increasing likelihood of Paris-aligned (i.e. well-below 2°C) scenarios including IEA APS, IPR 1.8°C FPS.
- **Supportive:** Policy increases likelihood of Paris-aligned scenarios, but requires further policy to comply with IPR FPS.
- **Deceleration:** Greater likelihood of alignment to market expectations (IEA 2.3°C STEPS1 scenario).
- **Policy gap:** Emissions are not covered by climate policy.

Global

- 60% of emissions of the 21 IPR countries are covered by announced or legislated² climate policy that is faster, confirmatory or supportive of the IPR FPS 1.8°C
- 40% of emissions are decelerating in ambition or not covered by climate policy

Advanced Economies

- 23% of emissions in advanced economies are covered climate policy that meets at least the forecasted IPR targets
- 67% of emissions are addressed by policies that are supportive but not yet sufficient to meet the IPR FPS 1.8°C
- A majority of the 10% of gaps by emissions for advanced economies fall into the LULUCF, agriculture and power

Emerging and Development Economies

- Emerging markets and developing economies (EMDE) are responsible for 66% of all emissions in the IPR countries
- 49% of emissions are covered by policies that at least support the IPR FPS forecast, which is representative for the increasing policy coverage among EMDE
- 50,5% of emissions are not yet covered or fall under policies with potentially decelerating effects



* Weighted by emissions coverage of tracked policies

1. Sources for emission data: EDGAR Database (2022); FAOstat (2021); 2. Data on announced/legislated status of policies can be found at page 25 and in the annex/previous publications

Q1 2024 POLICY IMPACT ON WATCH – POTENTIAL DECELERATION

In the first quarter of the 2024, IPR has tracked two policies which were deemed to have a potentially decelerating effect in the short-term and are henceforth being monitored more closely





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Region	Policy Area	Development	Forecast	Impact	Details
 Argentina	Protection and restoration	Argentinian government announces to end incentive scheme for forest owners	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2040	2	Taking back financial incentives for sustainable forest managements undermines trust in state support programs in the long term, making it harder to achieve 2035 target.
 France	Light duty vehicles	New tax/support scheme announced for purchasing electric vehicles based on carbon emission of manufacturing process.	Policy ends the sale of 97% of new cars and vans with CO ₂ emissions by 2035. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV	2	Could be considered a hinderance for EV adoption in some cases, as the measure has a protectionist character (higher emissions producers are mostly situated outside of the EU)

Q1 2024 POLICY IMPACT ON WATCH – POTENTIAL ACCELERATION





For Q1 2024, five policies were logged as signaling potential acceleration in the short term, warranting closer monitoring



Region	Policy Area	Development	Forecast	Impact	Details
 Indonesia	Clean power	Indonesia launches \$20 billion renewable energy investment plan to decarbonize power sector.	Policy delivers net zero CO ₂ emissions by 2045.	4	This policy has the potential to accelerate Indonesia’s clean power development. However, captive plants need to be addressed to adjust the forecast.
 China	Protection & restoration	China commits to revitalizing 30% of degraded ecosystems by 2030 in new biodiversity plan.	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2035.	4	Announced - If followed through until 2030 as announced, this could contribute to achieving the land protection forecast 5 years earlier.
 EU	Protection & restoration	Nature restoration law mandates EU countries to restore a minimum of 30% of habitats in poor condition by 2030, escalating to 60% by 2040 and 90% by 2050.	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored.	4	Signals a much needed acceleration in EU habitat restoration efforts.
	Industrial process	EU agrees on Net Zero Industry Act.	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions.	4	While the original draft was more ambitious, the legislated policy promises to set significant clean energy investment in industry in motion.
 UK	Carbon pricing	The UK ETS Authority announced new steps for increasing the cap stringency of the UK ETS and expanding its coverage.	Explicit carbon price signal or backstop covering industry and power of US\$120 by 2030.	4	The expansion, which includes new sectors and gases, is likely to improve carbon market depth and diversity, which in turn could drive up carbon prices by increasing demand for allowances while tightening supply.

Q2 2024 POLICY IMPACT ON WATCH – POTENTIAL DECELERATION



During the second quarter of 2024, 8 policies were placed on a watch-list to be further assessed at year end for a potential deceleration or acceleration based on cumulative policy evidence and IPR’s annual forecast survey

Region	Policy Area	Development	Forecast	Impact	Details
 EU	Low carbon agriculture	EU Parliament backed proposals to relax green conditions for farming subsidies.	Policy delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock (by 2025 for France, Italy and Germany).	2	Easing farming subsidy sustainability conditions puts decarbonization of the sector in the EU at risk.
	Light duty vehicles	The EU introduced a proposed 38.1% tariff on Chinese EVs, up from 10% previously.	Policy ends the sale of 97% of new cars and vans with CO ₂ emissions by 2035 (for FR, IT, DE).	2	Tariffs could negatively affect the dynamic of EV sales in the short term. However, assessing the impact on the ultimate forecast targets for EU states requires further observation and evidence.
 Germany	Net zero emissions	Changes in Climate Protection Act.	Policy delivers net zero CO ₂ emissions by 2045.	2	Controversial decision shifts focus from sector-specific to cross-economy emissions targets which could lead to a lagged decarbonization for some sectors.
 Italy	Clean power	Italy introduces regulation adding additional hurdles to agrovoltatics deployment.	Policy delivers dispatched generation of 97% low-carbon power by 2045.	2	This decree is disruptive to distributed solar power deployment in the short term, potentially slowing the addition of multiple GW of solar PV in Italy.
 Russia	Clean power	Russia is contemplating the relaxation of environmental fuel standards to address potential domestic gasoline shortages.	Policy delivers dispatched generation of 97% low-carbon power by 2060.	2	This adjustment could increase the domestic gasoline supply by additional 10%, potentially leading to a delay of Russia’s net zero transition.

Q2 2024 POLICY IMPACT ON WATCH – POTENTIAL DECELERATION AND ACCELERATION

The US and EU initiative to introduce tariffs on manufactured goods relevant to the transition (see [summary of Kaya paper](#) for further details). In addition, 1 policy with the potential to accelerate the forecast was identified

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Region	Policy Area	Development	Forecast	Impact	Details
 US	Light duty vehicles	U.S. announced tariffs on Chinese imports, including EVs, batteries, critical minerals, and steel, due to concerns about Chinese manufacturing 'overcapacity'.	Policy ends the sale of 97% of new cars and vans with CO ₂ emissions by 2040. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV.	2	This policy captures trade war dynamics further analyzed in Kaya Partner's paper (link). Although electric vehicle prices are falling while the U.S. develops domestic capacity and is importing EVs and components from other markets, and given the Chinese market accounts for only 2% of U.S. imports, this policy could slightly decrease the speed at which technologies like solar panels, batteries or EVs are taken up in the US.
	Low-carbon agriculture	U.S. House committee advances contentious \$1.5 trillion farm bill which would expand farm commodity supports while reducing SNAP funding and reallocating \$20 billion intended for climate-smart farm practices.	Policy delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock by 2030.	2	This would shift away focus away from 'climate-smart' agriculture funding, signaling a deceleration in the policy forecast for U.S. agriculture, but would direct funding towards nature conservation activities on farm, and therefore support the policy forecast for U.S. protection and restoration.
 Japan	All coal phase-out	G7 jointly pledged to phasing out unabated coal power.	Policy delivers net zero CO ₂ emissions by 2045.	4	The communiqué has formalized the previously discussed coal exit, which could indicate a significant acceleration of Japan's unabated coal phase-out, currently forecasted for 2045. However, before adjusting the Japanese forecast, direct national communication on and legislative formalization of said pledge is needed to justify the change.

1. Upcoming UK elections may significantly affect target dates of key UK forecasts, most prominently the ICE phase-out dates. Adjustments to the forecast in this (and other) therefore depend on the results of the July 4 vote.

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