



Quarterly  
Forecast Tracker  
Global progress against  
IPR policy scenarios

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# Quarterly Forecast Tracker

Update of energy and land use policy developments  
July 2023 to March 2024

April 9<sup>th</sup>, 2024

## EXECUTIVE SUMMARY: TRACKING POLICY DEVELOPMENTS

The last six months, especially Q1 2024, have seen a spike in policy announcements. This reflects COP 28, an upcoming major election year and preparation in EMDEs for a new climate finance regime.

### IPR Quarterly Forecast Trackers    Key Quarterly Forecast Tracker Findings

The **Inevitable Policy Response** makes realistic forecasts of climate policy in order to derive a pathway for investors called the **Forecast Policy Scenario (FPS)** which is aligned with a **below 2°C climate outcome at 1.8°C**.

Quarterly Forecast Trackers (QFT) track momentum in climate policy against the below 2°C IPR FPS scenario.

This QFT tracks key findings in energy, land and nature policies and developments since the **July 2023** Forecast Policy Scenario was constructed.

- IPR tracked **166 credible and material policy announcements between Q3 2023 and Q1 2024**, a 77% increase from cumulative policies tracked between Q1 2022 and Q2 2023. Cumulatively tracked credible and material policies for land **increased by 147% since Q3 2023 and energy policies by 71% since Q3 2023**. Out of the especially large uptick in policy announcements in Q1 2024, **53%** are centered around the **power sector, economy-wide decarbonization policies and new industrial decarbonization policies**.
- Countries positioning ahead of the **New Collective Quantified Goal COP 29 Negotiations & the mega election year** are likely driving the policy spike in this period. **70% of the policies announced in Q1 2024 are from countries with 2024 elections**. Other very active countries such as China and Nigeria are major players in the COP climate finance negotiations.
- More than **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 is in the land use sector.
- The **vast majority** of credible and material announcements tracked this period are **supportive of IPR FPS policy forecasts (146)** with some **evidence of acceleration (8)** but also some **signals of deceleration (12)**. While supportive or accelerating power, industry and nature & biodiversity policies have dominated over the period of Q3 2023 to Q1 2024, **progress in phasing out coal and advancing clean power in developing countries seems to be at risk due to funding gaps and delays in deploying renewables at pace**.
- Notably, India's new coal phase-out is likely to take longer than expected. Soaring national power demand and costly energy storage solutions for renewable energy have compelled India to increase their planned coal power capacity until 2032.
- Clean power deployment and coal phase-out dates in Just Energy Transition Partnership (JETP) countries may also be at risk. Total national energy demand and renewable shares defined in JETP agreements in South Africa, Indonesia, and Vietnam tend to exceed the ambitions set in national policies. Balancing competing national needs requires significantly more investment.
- While IPR forecasts that the "tripling renewables" COP28 pledge will be missed, we expect significant acceleration in renewables deployment relative to our 2023 forecast.



# TABLE OF CONTENTS

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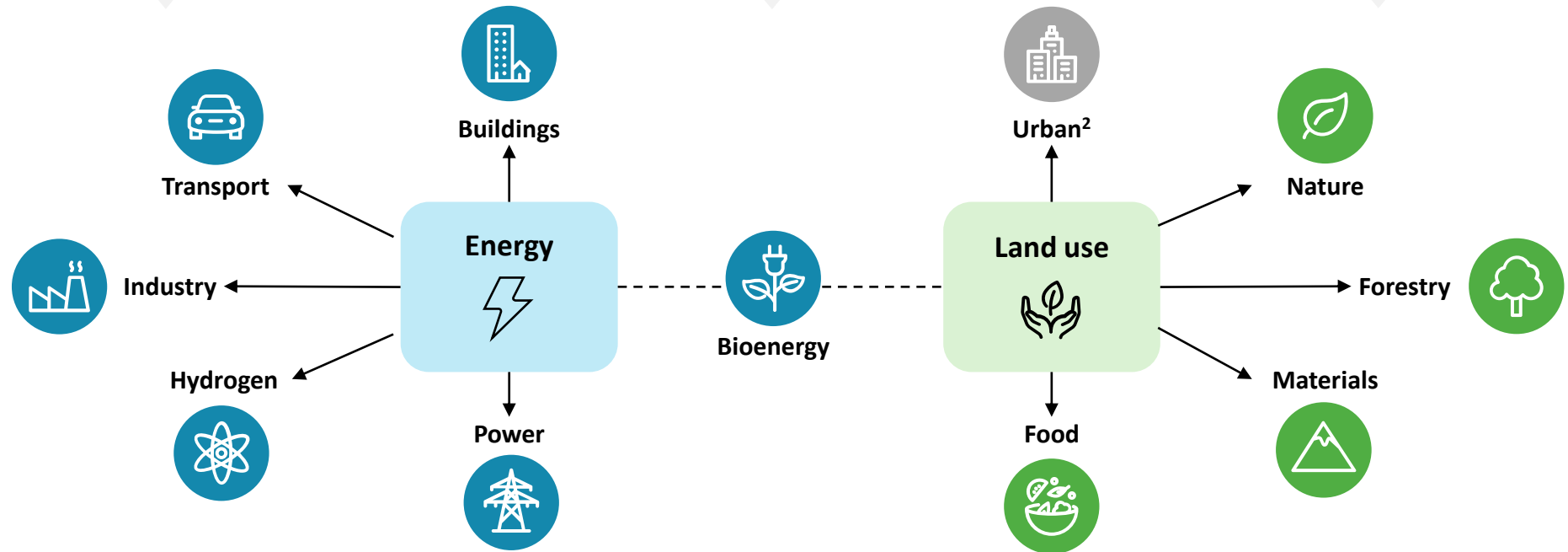
- X** **Executive summary & IPR background**
- 1 Energy and land use policy forecast tracking for Q3 2023, Q4 2023 and Q1 2024
- 2 Detailed individual policies & methods for key credible and material policy announcements

# 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 10 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 sectors<sup>1</sup>.

## 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

# 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><b>IPR 2023 Forecast Policy Scenario (FPS)</b></p> <ul style="list-style-type: none"> <li>Models impact of forecasted policies on the real economy</li> </ul>	<p><a href="#">IPR FPS 2023 Summary Report</a></p> <p><a href="#">IPR 2023 Policy Forecast</a></p> <p><a href="#">IPR FPS 2023 Detailed Energy Results</a></p> <p><a href="#">IPR FPS 2023 Detailed Land Use and Nature Results</a></p> <p><a href="#">IPR 2023 Bioenergy Report</a></p>	<p>Value Driver database under Review in April</p>
 <p><b>IPR 1.5°C Required Policy Scenario (RPS)</b></p> <ul style="list-style-type: none"> <li>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</li> </ul>	<p><a href="#">IPR 1.5°C RPS Energy and Land Use System Results including Policy Details</a></p>	<p><a href="#">IPR RPS 2021 Value Drivers</a></p>
 <p><b>IPR Forecast Policy Scenario + Nature (FPS + Nature)</b></p> <ul style="list-style-type: none"> <li>First integrated climate and nature scenario for use by investors</li> </ul>	<p><a href="#">IPR 2022 FPS + Nature detailed results</a></p>	<p><a href="#">IPR FPS + Nature Value Drivers</a></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.

## 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 reflect 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.



# 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.



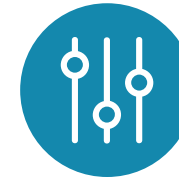
IPR categorizes policy announcements according to the following:

- **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.

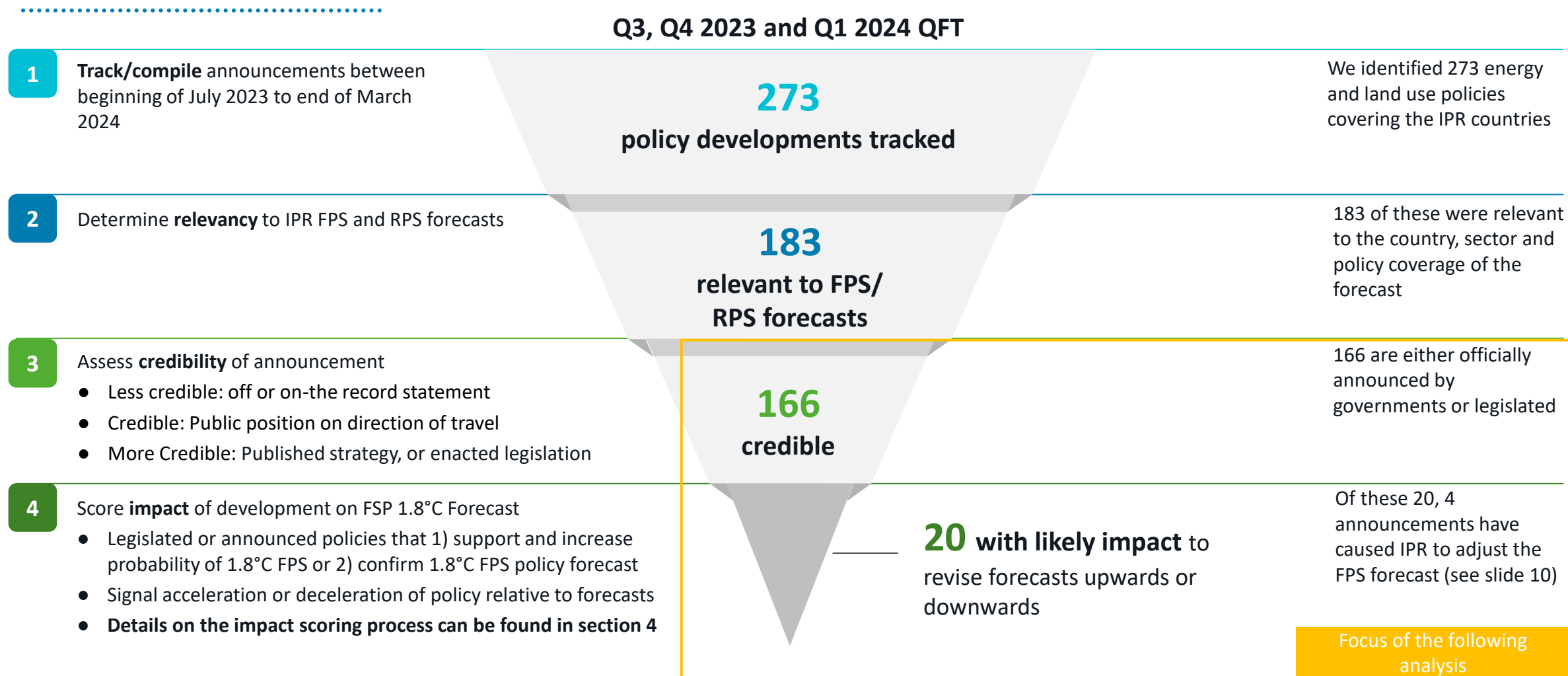
On top of this the IPR 1.8C FPS forecasts policies expected but not yet announced.

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



# POLICY DEVELOPMENTS FROM JULY 2023 UNTIL MARCH 2024

We identified 183 policies relevant to the IPR policy forecast, focusing on the 166 most credible and material, with 20 of these policies likely changing the FPS forecast



# POLICY TRACKING AGAINST THE FPS 2023 FORECAST

Due to significant coal phase-out policy announcements, IPR is downgrading its FPS 2023 forecasts for Indonesia, India and South Africa but upgrading its outlook for Vietnam

	Economy wide		Power			Buildings	Transport		Industry	Agri	Land use	Nature		
	Net Zero CO <sub>2</sub> 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														
Indonesia	2060	\$50	2025	2050	2050	N/A	2045	2050	>2070	2035	2030	>2035	>2040	2035
India	2065	\$50	2025	2060	2060	N/A	2040	2045	>2070	2035	2025-35	>2035	2040	>2035
Vietnam	2060	\$50	2025	2050	2050	N/A	2040	2045	>2070	2030	2025	>2035	>2040	2030
Middle East and Africa														
South Africa	>2065	\$30	2025	2050	2050	2050	2040	2045	>2070	2035	2035	>2035	2040	2035

Knock on effect for clean power

## Key changes compared to the FPS 2023

### Indonesia ↓ 2050 to 2055

- Current national policy documents<sup>1</sup> lag behind ambitions outlined in the Comprehensive Investment and Policy Plan (CIPP), published in Q4 2023.
- Off-grid captive coal power plants (14 GW, or nearly 28% of total installed capacity) were excluded from Indonesia's CIPP decarbonization targets. More than 20 GW off-grid capacity could potentially be added by 2030.<sup>4</sup> This represents a risk to Indonesia's ability to meet the conditional targets outlined in the JETP Joint Statement as well as the IPR target for all coal phase out (2050).

### Vietnam ↑ 2050 to 2045

- Vietnam will receive \$15.5 billion from G7 governments, primarily as commercial loans, over the next three to five years to boost their renewable energy and reduce their current coal reliance by building no new coal plants after 2030.
- The coal share in energy mix is targeted to decrease from 31% in 2020 to 20% by 2030. Hence, the capacity share targets set out in the eight Power Development Plan (PDP8) indicate that Vietnam will achieve their coal-phase out plans up to 5 years earlier than forecast in the FPS 2023.

### India ↓ 2025 to 2030

- India has recently increased its forecast power demand for the period between 2024 and 2032 and aims to cover the projected difference by significantly increasing its planned coal capacity from 259 GW<sup>2</sup> (NEP 2022) to 283 GW<sup>3</sup>. Such an expansion of coal capacity involves addressing delays in construction, with a focus on completing stalled projects and urging private investment in coal-based power generation to meet growing nighttime demand.
- This development signals a deceleration to the IPR new coal phase out target in 2025

### South Africa ↓ 2025 to 2030 and 2050 to 2055

- South Africa's Integrated Resource Plan (IRP) outlines possible national energy pathways for 2023-30 and 2030-50 to overcome the significant electricity shortages, which are expected to last until at least 2027.
- The plan proposes postponing the decommissioning of some coal plants beyond 2035, and that 5GW in new coal capacity should be added.
- This policy announcement contradicts with the JETP, wherein South Africa planned to use the \$8.5bn investment to transition to a low-carbon economy and accelerate its coal phase-out.

In light of these findings, we are reviewing the value driver database

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

1: JETP Indonesia (2023): [Comprehensive Investment and Policy Plan 2023](#); 2: [India NEP \(2022\)](#); 3: [Ministry of Power Capacity Announcement \(Feb '24\)](#); 4: Further monitoring and analysis planned to determine impact on the new coal phase-out target



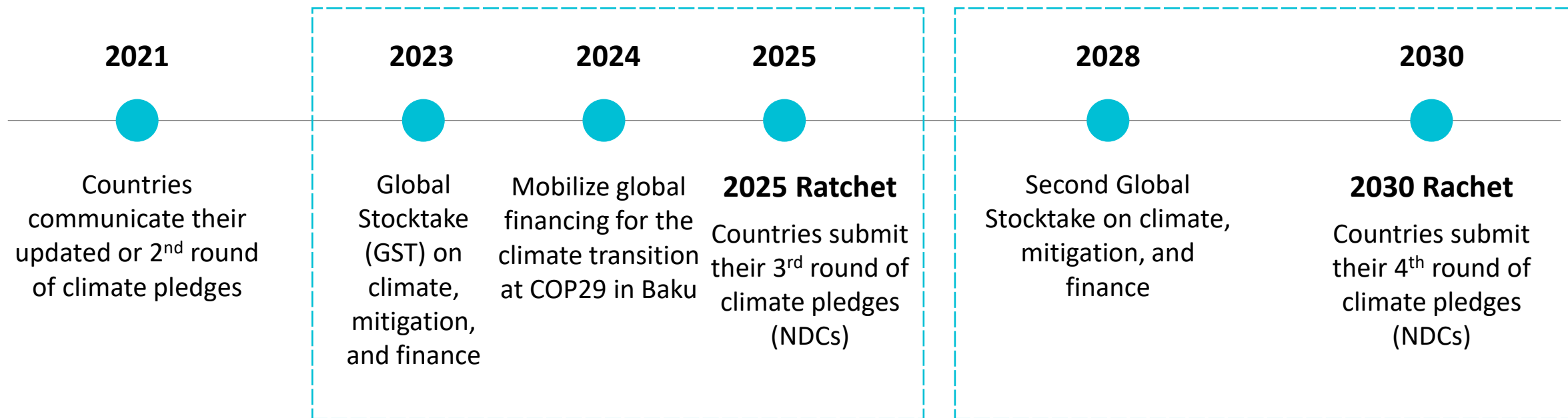
# TABLE OF CONTENTS

---

- x Executive summary & IPR background
- 1 **Energy and land use policy forecast tracking for Q3 2023, Q4 2023 and Q1 2024**
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# PARIS RATCHET PRESSURES INCREASE THE LIKELIHOOD OF STRENGTHENED POLICY ACTION

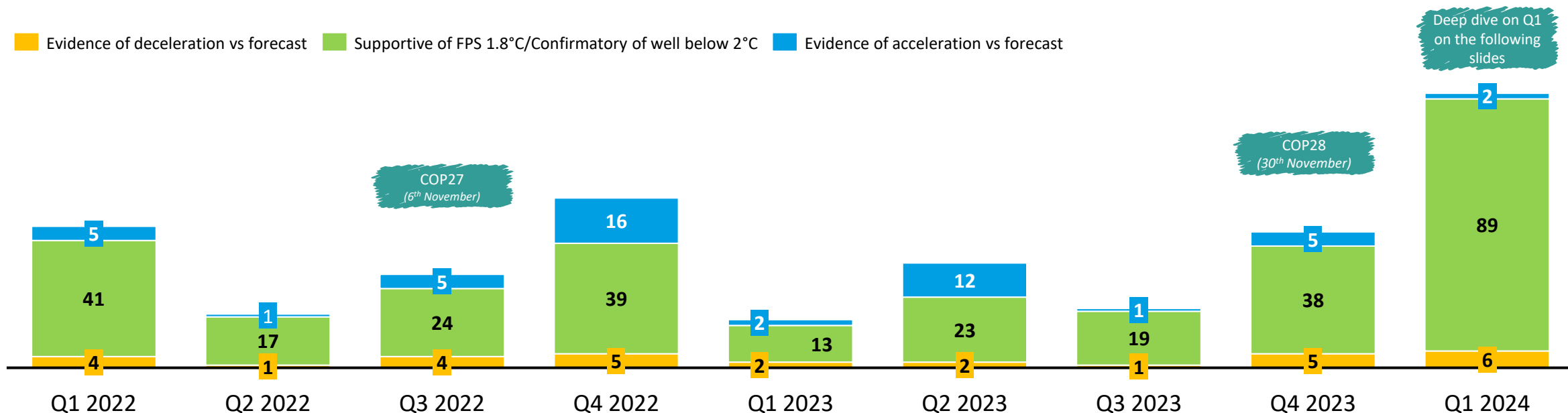
The COP29 will see a push towards a New Collective Quantified Goal on Climate Finance, following which the Paris Ratchet process will trigger a cumulating policy response into 2025, 2030, and beyond



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

# IPR TRACKED 166 CREDIBLE & MATERIAL POLICY ANNOUNCEMENTS FROM Q3 2023 TO Q1 2024, A 77% INCREASE IN CUMULATIVE POLICIES TRACKED COMPARED TO Q1-2022 - Q2 2023

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



The amount of credible and material policy announcements tend to increase towards the end of the years, with a significant jump in announcements recorded in Q1 2024. This is amongst others due to a **more detailed tracking process and system**, which not only document legislated regulations but also the progress of announced policies. In addition, we can see a clear peak of policy announcement around the **COP27 and COP28**, which underlines the impact of the published declarations and mutual alignments.

# CUMULATIVELY TRACKED CREDIBLE AND MATERIAL POLICIES FOR LAND INCREASED BY 147% SINCE Q3 2023 AND ENERGY POLICIES BY 71% SINCE Q3 2023

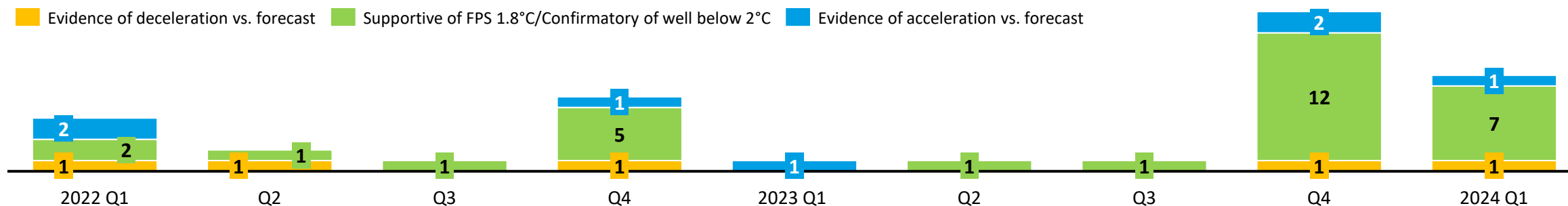
## Land use and nature Policies



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

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

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

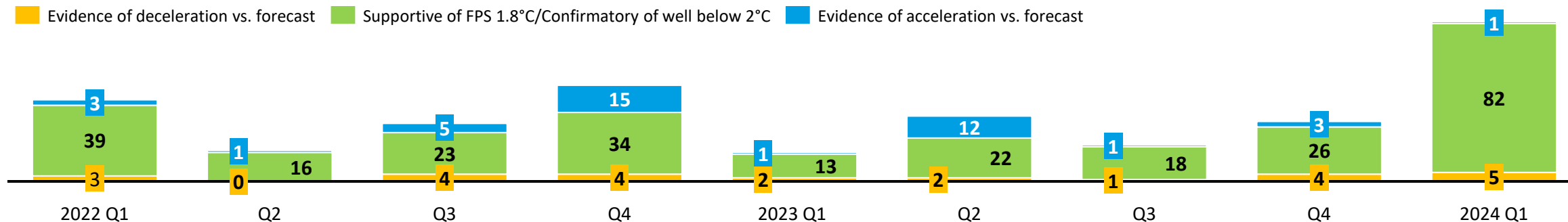


## Energy Policies



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

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



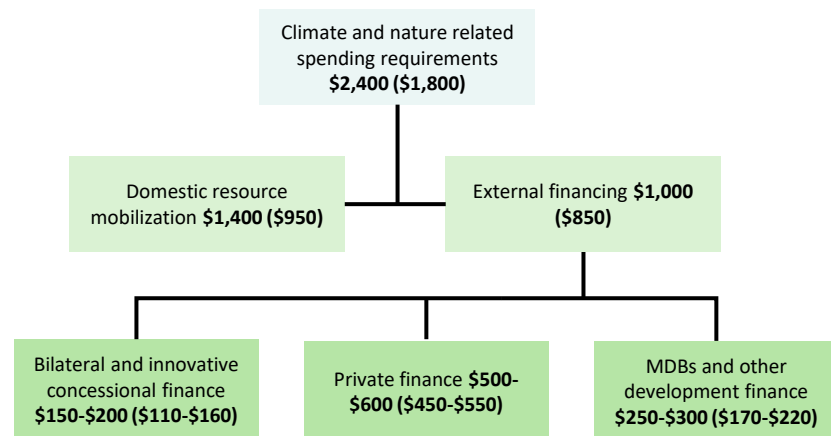
# NEGOTIATION PARTIES' POSITIONING AHEAD OF THE NEW COLLECTIVE QUANTIFIED GOAL COP NEGOTIATIONS & THE MEGA ELECTION YEAR ARE DRIVING THE POLICY SPIKE IN Q1 2024

Deep dive on Q1

## COP29 Climate Finance Negotiations

- At COP29, a new climate finance goal will be negotiated. The “New Collective Quantified Goal” (NCQG) is one of the most important negotiation pieces of the “Paris Ratchet”.
- The aim of the NCQG is to further develop the **global climate finance commitments** of developed to developing countries from the current **\$100B to up to \$1,000B**.
- The new commitment could represent up to **40% of the total developing countries needs** for mitigation, adaptation, nature-based solutions and loss and damage of about \$2,400B (excl. China).
- Ahead of the landmark negotiations, developing countries seem to positioning themselves by improving their regulatory environments and more explicitly tying their commitments to concessional funding flows from developed countries.

### What it takes to finance the green transition (\$ billion per year by 2030)


 Source: [Songwe and Stern et al. \(2023\)](#)

## Mega Election Year 2024

- In 2024, ¼ of the global population will be voting.
- Upcoming elections likely shape this years early peak in energy and land related policy-making.
- Major upcoming elections that will shape the energy and land agenda, are:



### US Presidential Election

**Date:** Nov 5 2024

**Major Nominees:** Joe Biden (Democrat), Donald Trump (Republicans)


### EU Parliament Election

**Date:** June 6 – 9 2024

**Major Groups:** EPP, S&D, Renew Europe, Greens, ID, ECR, The Left


### India Parliament Election

**Date:** Apr 19 – 1 June 2024

**Major Nominees:** Narendra Modi (BJP), Mallikarjun Kharge (INC)


### Brazil São Paulo Mayoral Election

**Date:** 6 Oct 2024

**Major Nominees:** Ricardo Nunes (MDB), Guilherme Boulos (PSOL)


### Indonesia Elections

**Date:** 14 Feb 2024

**Winner:** Prabowo Subianto (58.6%)


### Mexico Elections

**Date:** June 2 2024

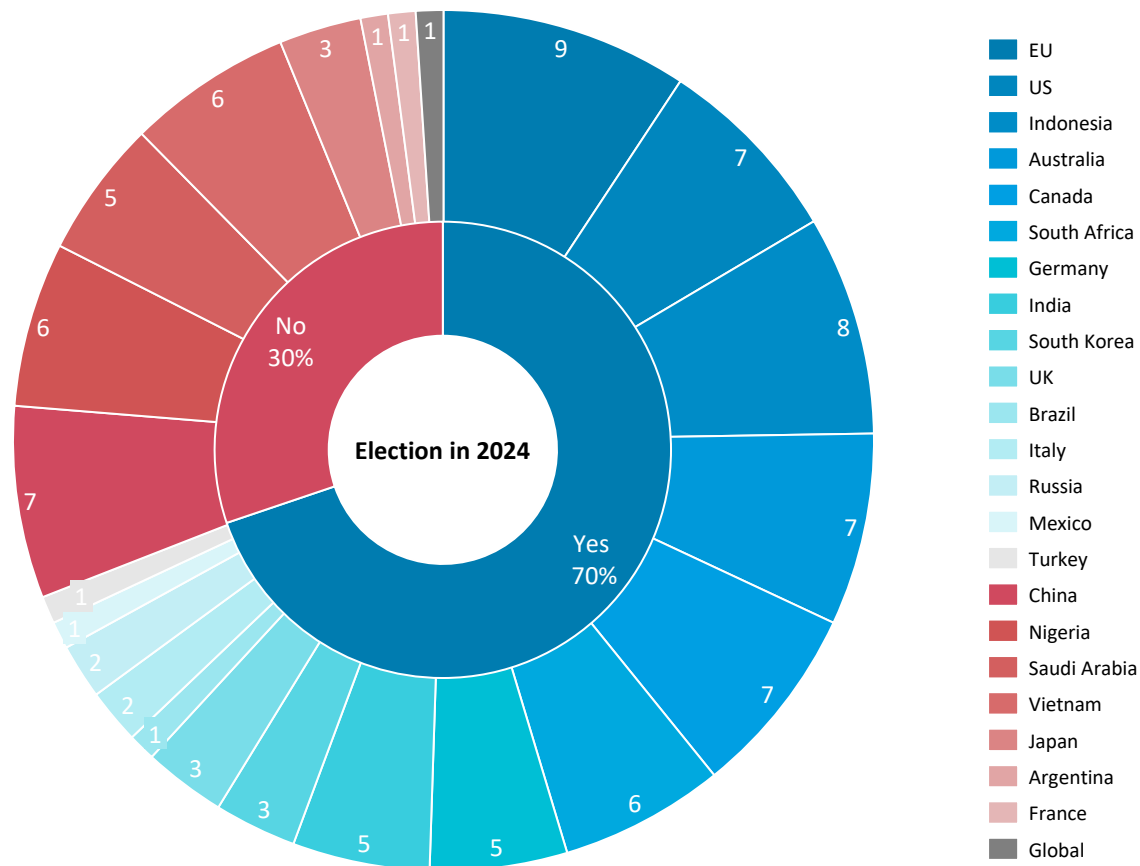
**Major Nominees:** Claudia Sheinbaum (MORENA), Xóchitl Gálvez (PAN), Jorge Álvarez (MC)

# GETTING READY FOR THE 'MEGA ELECTION YEAR' 2024

70% of the credible and material policies announced in Q1 2024 were communicated by countries with 2024 elections. Other very active countries such as China and Nigeria are major players in the COP climate finance negotiations

Deep dive on Q1

Policy issuances by political entity



## A dynamic global policy environment

- A quarter of the global population is voting in 2024
- **70% of credible and material policies** announced are in countries that are part of this mega election year.
- 30% of policies are in countries without an election. However, **China, Nigeria, Saudia Arabia and Vietnam** have been as active as Indonesia, Australia and Canada.
- China, as the world's biggest economy is **actively driving policy developments** and could potentially position itself as power player in the next COP negotiations.
- Nigeria and Saudia Arabia are also potentially shaping up their policies to **co-negotiate with China** in this years COP NCQG negotiations.
- **Vietnam and Indonesia** are likely very active due to their **Just Energy Transition Partnership (JETP)** commitments.

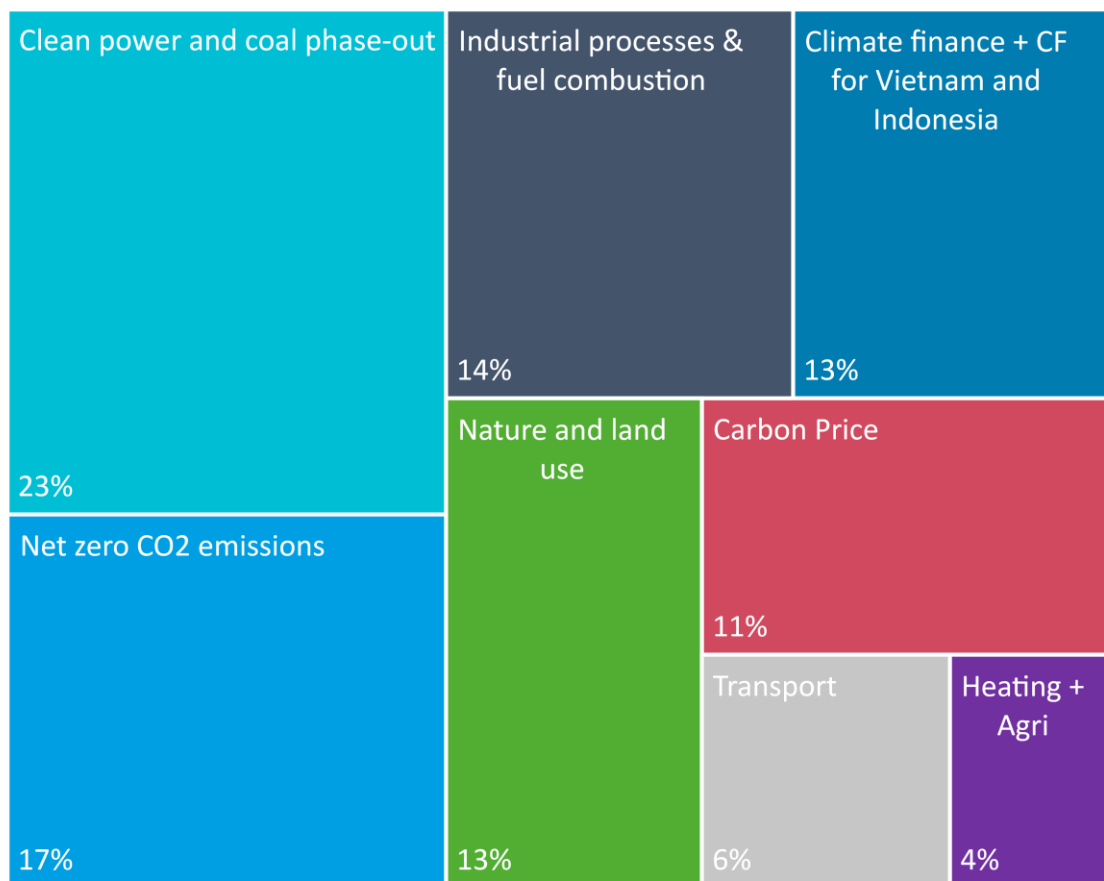


# A PUSH FOR POWER, INDUSTRY AND CARBON PRICING POLICIES

53% of the Q1 2024 policy announcement “frenzy” is centered on the power sector, economy-wide decarbonization policies and new industrial decarbonization policies

Deep dive on Q1

## Share of policy issuances by sector



## Key trends for tracked policies

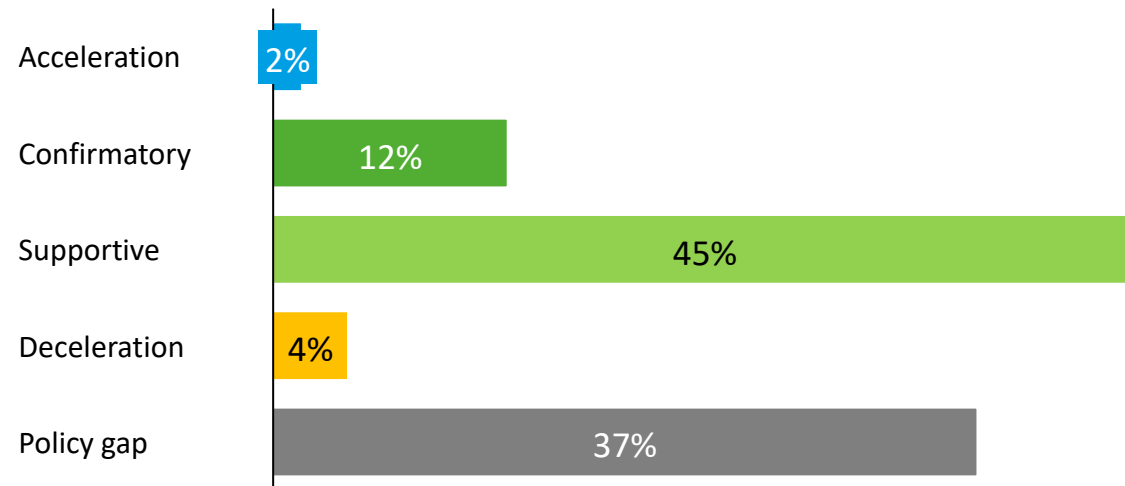
- Out of **97 credible and relevant policies** tracked in Q1 2024, **56 (53%)** focus on power, economy wide net zero policies and policies targeting industrial processes.
- 13 focus on **climate finance activities**, 9 of which are **bilateral agreements** between Indonesia, Vietnam and several other industrialized countries, likely linked to **Just Energy Transition Partnerships (JETPs)**
- Another 13 cover **nature protection, restoration and net deforestation**.
- 11 are related to **carbon pricing**. Notably the **first** Russian carbon budget policy.

# WEIGHTED BY EMISSIONS, 60% OF 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. Most emissions gaps in advanced economies are from land.....

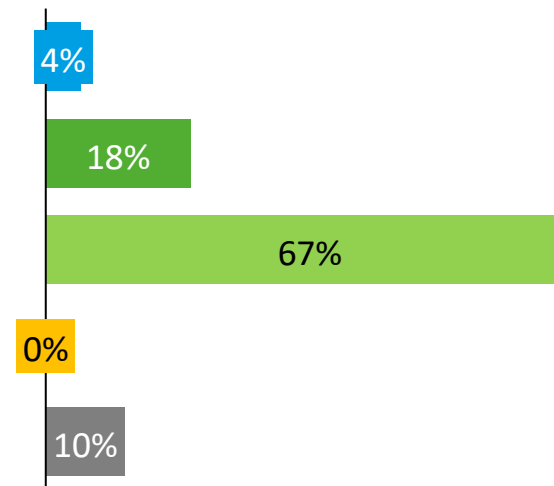
## All 21 IPR countries

2022 CO<sub>2</sub>e emissions distribution of energy, agricultural and LULUCF emissions<sup>1</sup> across all 21 countries and tracked policy areas, covering 40.66 Gt CO<sub>2</sub>e



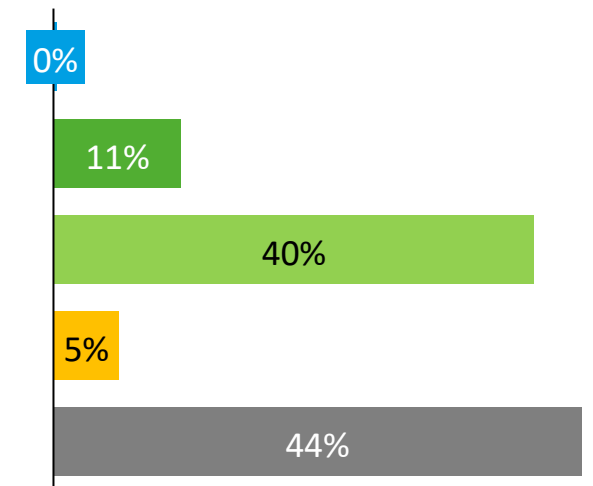
## IPR Advanced Economies

Covering 11.20 Gt CO<sub>2</sub>e



## IPR EMDE

Covering 26.93 Gt CO<sub>2</sub>e



**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.

- 59% of emissions of the 21 IPR countries are covered by announced or legislated<sup>2</sup> climate policy that is faster, confirmatory or supportive of the IPR FPS 1.8°C.
- 41% of emissions are decelerating in ambition or not covered by climate policy

- 22% 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 markets and developing economies (EMDE) are responsible for 66% of all emissions in the IPR countries.
- 51% of emissions are covered by policies that at least support the IPR FPS forecast, which is representative for the increasing policy coverage among EMDE
- 49% 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 22 and in the annex/previous publications

# POLICY TRACKING AGAINST THE FPS 2023 FORECAST: GAP ANALYSIS

















		Economy wide		Power			Buildings	Transport		Industry	Agri	Land use	Nature		
		Net Zero CO <sub>2</sub> 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	FPS policy gap	FPS policy gap	Announced	FPS policy gap	Announced	FPS policy gap	Legislated	Legislated	Legislated	FPS policy gap	Announced	Announced
	Indonesia	Announced	Announced	Announced	Announced	Announced	N/A	Announced	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	Legislated	FPS policy gap
	India	Announced	Announced	Announced	FPS Policy gap	Announced	N/A	FPS policy gap	FPS policy gap	Legislated	FPS policy gap	Announced	FPS policy gap	Legislated	FPS policy gap
	Japan	Announced	Announced	FPS policy gap	Announced	Announced	Announced	Announced	FPS policy gap	Announced	Legislated	FPS policy gap	FPS policy gap	Legislated	FPS policy gap
	South Korea	Legislated	Legislated	Announced	Announced	Announced	FPS policy gap	Announced	FPS policy gap	Announced	Announced	FPS policy gap	FPS policy gap	Legislated	FPS policy gap
	Vietnam	Announced	Announced	Announced	Announced	Legislated	N/A	Announced	Announced	Announced	Announced	Announced	FPS policy gap	Legislated	Legislated
China	China	Announced	Legislated	FPS policy gap	FPS policy gap	Announced	Announced	Announced	FPS policy gap	Legislated	Legislated	Announced	FPS policy gap	Legislated	Legislated
Europe	France	Legislated	Legislated	Legislated	Legislated	Legislated	Announced	Legislated	Legislated	Legislated	Legislated	Legislated	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	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	Legislated	FPS policy gap
Middle East and Africa	Nigeria	Legislated	FPS policy gap	FPS policy gap	FPS policy gap	Announced	N/A	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	Legislated	FPS policy gap
	Saudi Arabia	Announced	FPS policy gap	N/A	N/A	Announced	N/A	FPS policy gap	FPS policy gap	Announced	N/A	Announced	FPS policy gap	Announced	FPS policy gap
	South Africa	Announced	Announced	Announced	Announced	Announced	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	Legislated	Announced
	Turkey	Announced	Announced	FPS policy gap	FPS policy gap	Announced	FPS policy gap	FPS policy gap	FPS policy gap	Announced	FPS policy gap	Announced	FPS policy gap	Legislated	FPS policy gap
North America	Canada	Legislated	Legislated	Legislated	Legislated	Announced	Announced	Announced	Announced	Legislated	Legislated	Legislated	FPS policy gap	Announced	Legislated
	Mexico	FPS policy gap	Legislated	FPS policy gap	FPS policy gap	FPS policy gap	N/A	Announced	FPS policy gap	FPS policy gap	FPS policy gap	Announced	FPS policy gap	Legislated	Announced
	US	Announced	FPS policy gap	Legislated	Announced	Announced	Announced	Announced	Announced	Legislated	Legislated	Announced	FPS policy gap	Announced	Legislated
Latin America	Argentina	Announced	FPS policy gap	FPS policy gap	FPS policy gap	FPS policy gap	Announced	Announced	FPS policy gap	FPS policy gap	FPS policy gap	Announced	FPS policy gap	Announced	Legislated
	Brazil	Announced	Announced	FPS policy gap	FPS policy gap	Announced	N/A	FPS policy gap	FPS policy gap	Announced	Announced	Announced	FPS policy gap	Legislated	Announced

\* Covered in the special land use and nature QFT [here](#)

Notes: Changes from IPR's previous Gap Analyses are the result of new policy developments. Countries/regions ranked by current emissions ([EDGAR](#)). 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, Q4 2023 AND Q1 2024: GLOBAL POLICY UPDATE BY POLICY AREA















While power, industry, and nature & biodiversity policies have dominated, the clean energy transition in EMDEs seems to be at risk due to funding gaps

Policy area	What needs to happen to validate IPR Forecast <sup>1</sup> ?	Tracked policy developments <sup>2</sup>	Impact on IPR forecast <sup>3</sup>	Synthesis
 Economy-wide	Countries have to enhance regulation of current carbon markets and set explicit carbon pricing mechanisms.	New carbon removal certificate framework in the EU and presidential regulation on carbon capture and storage in Indonesia.		Carbon emissions trading is becoming more common, but clear carbon prices are still missing in many countries.
 Power	EMDEs require significantly more investment to balance competing national energy needs such as demand, cost, and funding.	Slower coal phase-out due to energy security, demand, and concessional funding in India, Indonesia, Vietnam, and South Africa.		Delayed coal phase-outs in Asia Pacific and Middle East decelerate clean power deployment.
 Industry	New mechanisms to reduce CO2 emissions in heavy industries, such as CCUS or carbon-free materials need to be further pushed.	New efficiency targets and funding for new technologies/hydrogen aimed at reducing CO2 emissions, mainly in Germany, China, India, and Brazil.		Increasing number of measures and investment to boost the greening of heavy industries.
 Transport	Providing incentives to increase the sales of EVs as well as effective regulations to reduce vehicles with CO2 emissions.	New standards and incentive schemes for light-duty vehicles planned in Canada, France, and the US. Additional deal to boost number of zero-emission trucks and buses reached in the EU.		Focus on electric cars and vans while policies for heavy-duty vehicles are trailing behind.
 Buildings	Accelerated deployment of heat pumps in residential buildings and more fossil fuel boiler bans.	Phase-out of fossil fuel heating systems in the US and increased decarbonization plans for the building sector in the EU.		Western countries are on track to end sales of fossil fuel heating systems, while policy gaps for EMDEs remain.
 Agriculture	Need to increase the protein efficiency per hectare, especially in the global south.	New incentive schemes are introduced in UK and Canada, with a possible large impact policy announced in Brazil, that still lacks funding.		Costly incentive schemes in global north, while other countries struggle for required financing.
 Land use	Countries with large tropical forest cover must end legal deforestation and stop illegal deforestation.	The follow-up to the Kunming-Montreal Global Biodiversity Framework and its 30 by 2030 targets are taking up speed, with China aiming for an implementation earlier than forecasted.		More land use focused policies need to be implemented globally to legally end deforestation.
 Nature & biodiversity <sup>4</sup>	Guarantee protection and restoration of valuable ecosystems as well as funding for nature incentives.	Enhanced protection and restoration of valuable ecosystems, restoration of degraded areas in the EU and China and NBS-focused carbon market schemes globally.		After ambitious announcements the implementation of protected areas remains to be monitored.

1. See IPR FPS 1.8°C forecast set out in slide 23; 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](#); 4. For further detail on nature and land, see the [Special Focus QFT](#)

# TRACKING Q3, Q4 2023 AND Q1 2024: GLOBAL POLICY UPDATE BY REGION

Europe and North America lead on supportive and confirmatory policy announcements, while the Middle East, South America, and Eurasia lag behind their climate ambitions

Policy area	What needs to happen to validate IPR Forecast <sup>1</sup>	Tracked policy developments <sup>2</sup>	Impact on IPR forecast <sup>3</sup>	Synthesis
 <b>Asia Pacific</b>	Clean power should be utilized over coal to reconcile competing national demands such as energy demand, costs, and funding.	Tracked policies show a clean energy push, with investments in renewables, nuclear, and green hydrogen.		Delayed coal phase-out plans put the clean power transition at risk in some countries.
 <b>China</b>	China needs to address their existing policy gaps, especially for coal phase-out and deforestation.	China made notable advances in reducing methane emission, boosting emissions trading, setting new energy efficiency targets and adopting nature-based solutions (NBS).		China is stepping up its net zero policies, but did not yet make progress towards a phase-out of coal.
 <b>Europe</b>	Uniform implementation of climate targets set on EU-level across all countries with focus on decarbonizing all heavy industries.	Europe moves on with their ambition and gets ahead of their forecast with the nature restoration law and NZIA legislated in the EU. Further greening of heavy industries announced in Germany, UK, and France.		While on track so far, more ambitious policies are needed to confirm the forecast for some European countries.
 <b>Eurasia</b>	The number of material policy announcements needs to increase to close existing policy gaps in majority of the sectors.	Russia announced its first regional carbon budgeting policy but has yet to legislate major policies supportive or confirmatory of their climate targets.		Russia largely continues to be a decarbonization and climate laggard.
 <b>Middle East and Africa</b>	South Africa needs to adjust their energy security crisis and increase their renewable energy share instead of increasing their coal power plans.	As Saudi Arabia continues to announce ambitious protection and restoration policies, South Africa delays their coal phase-out in face of electricity shortages.		To guarantee long-term national energy security, a transition towards renewable energy needs to be prioritized,.
 <b>North America</b>	The US needs to increase their number of confirmatory and accelerating policies to meet their ambitious energy and nature targets.	More detailed net zero CO2 emission reduction targets in the power, building, and industry sector in the US.		Focus on clean energy transition through solar, EVs, heat pumps, and carbon-free manufacturing.
 <b>South America</b>	The tropical amazon forests needs to be maintained (for carbon sink). The Brazilian ETS should be linked to high standard VCM markets.	While Brazil goes ahead announcing ambitious climate policy, the Argentinian government is trying to roll back environmental protection norms <sup>4</sup> .		The Amazon rainforest needs additional incentive schemes to help reforestation efforts.

1. See IPR FPS 1.8°C forecast set out in Slide 23; 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](#); 4. For further detail on nature and land, see the [Special Focus QFT](#)

# ADJUSTED POLICY FORECAST BASED ON THE FPS 2023 FORECAST

Based on the significant policy announcements discussed beforehand, the IPR FPS 2023 forecast needs to be adjusted

Adjusted baseline

		Economy wide		Power			Buildings	Transport		Industry	Agri	Land use	Nature		
		Net Zero CO <sub>2</sub> 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	<2023	<2030	2035	2035	2035	2040	2065	2025	2025	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	<2023	<2030	2035	2035	2030	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	2030	2045	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	2023	2045	2050	2045	2040	2045	>2070	2035	2030	>2035	2040	2035
	Brazil	2050	\$50	2025	2045	2050	N/A	2045	2050	2070	2030	2030	2035	2030	2030

1. Based on major announcements and developments tracked in IPR 20XX Policy Forecast Detailed resource (MONTH YYYY) and YYYY and YYYY QFTs.

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



## Deep Dive: Energy policy development

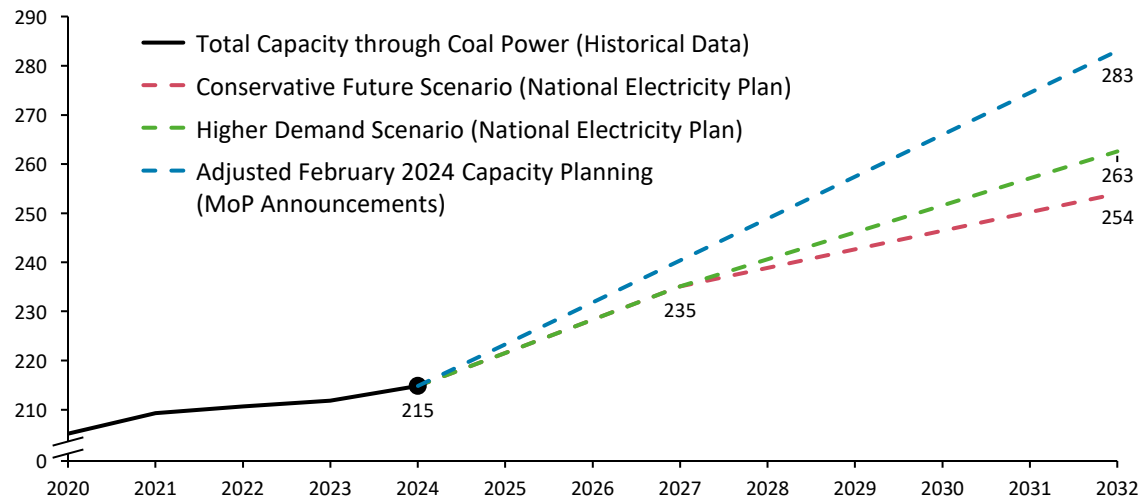
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Focus on India's phase-out of new coal, JETP renewable energy ambitions, and tripling of renewables COP28 pledge

# INDIA'S PHASE-OUT OF NEW COAL IS LIKELY TO TAKE LONGER THAN EXPECTED

Soaring national power demand and expensive energy storage solutions for renewable energy have compelled India to increase their planned coal power capacity until 2032

## Energy Production through Coal Power (in GW)



## Expansion of coal power plants in India

- Due to recent developments, the timeline for the New Coal Phase-Out in India, initially projected in the IPR Policy Forecast 23 to be achieved by 2025 has been revised to 2030.
- In 2024 India's **coal-fired generating capacity stands at 215 GW**, contributing to about half of the country's presently installed power generation capacity.
- Despite the announced five year pause on new coal plant proposals to prioritize renewable energy sector development, **2023 witnessed an increase in coal plant permitting** with 61 GW in the pipeline and another 17 GW planned.
- The National Electricity Plan of India outlines scenario-based projections for 2032, estimating coal-powered plant production requirements to range from **254GW in a conservative scenario** (based on historical trend of capacity addition) to **263GW in a scenario of higher demand** (Increase of 5% in both the estimated peak demand as well as energy requirement). Recent ministry of electricity announcements have further increased this planned capacity to **283 GW**<sup>4</sup>.
- Following this QFT, IPR will further review the trajectory for India's coal power and associated emissions in the FPS 2023 scenario.

## Reasons for continued expansion of coal power

- Continuously rising energy demand and increasing electricity consumption in India have necessitated an **increase in peak capacity** to ensure reliable supply.
- To accommodate for a rising peak power demand, deploying energy **storage solutions** for renewable energy sources will be **crucial**. Progress however is slower than anticipated due to **higher than expected costs and subsequently lower returns on investment (ROI)**.
- Despite energy storage delays, India continues to build renewable capacity as planned and **will likely reach 69% of grid-connected power generation** from solar and wind by 2030, which should keep India on track relative to the FPS forecast of achieving close to 100% clean power by 2060.



# GAP BETWEEN RENEWABLE ENERGY AMBITIONS AND NATIONAL RESOURCE PLANNING

Announced coal and renewable energy plans in recent policies from South Africa and Indonesia fall short of Just Energy Transition Partnership (JETP) expectations; new Vietnam policies signal an acceleration in phasing out coal relative to FPS



**South Africa**

*Deceleration*



**Indonesia**

*Deceleration*



**Vietnam**

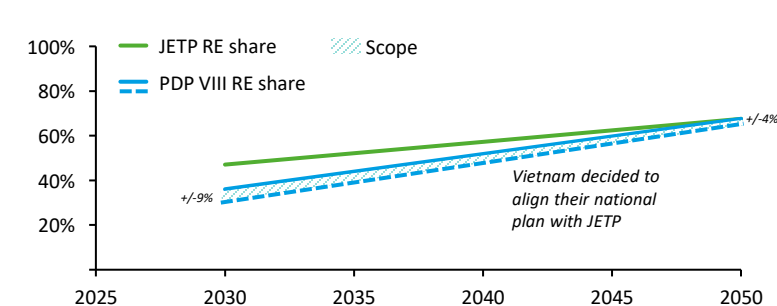
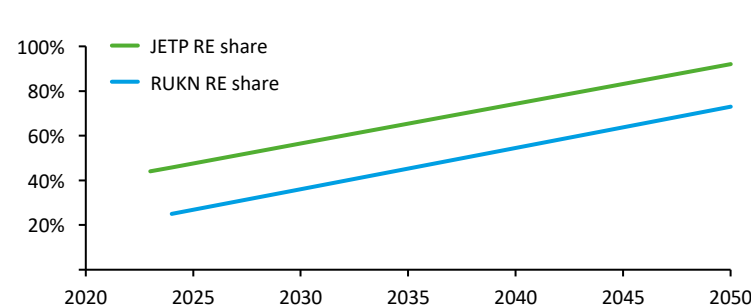
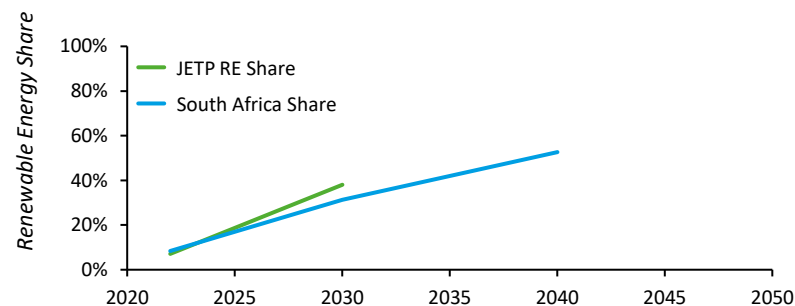
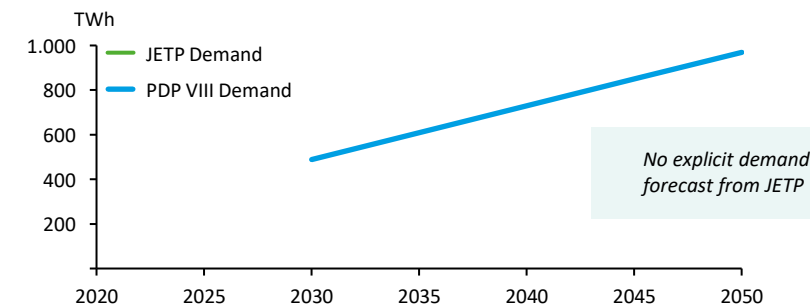
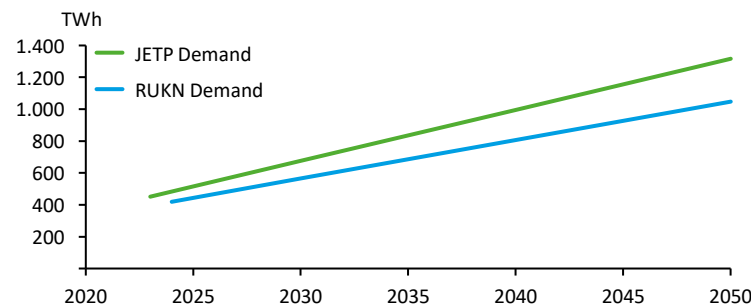
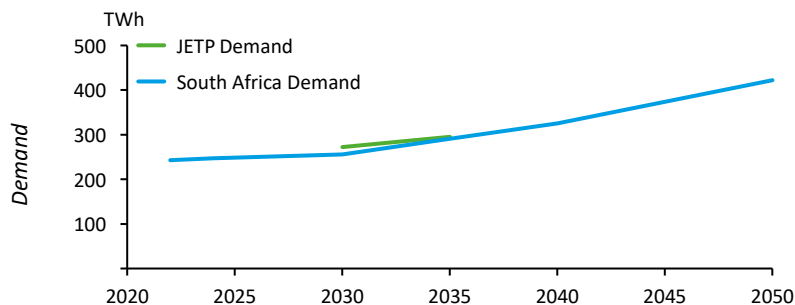
*Acceleration*

JETP vs. Regional Policy

- South Africa’s recent Integrated Resource Plan (IRP) <sup>1</sup> proposes to **postpone** the decommissioning of some **coal power plants beyond 2035**, including one scenario that features the addition of 5.5 GW of coal capacity until 2040.
- This policy announcement contradicts the country’s earlier JETP commitments, which included a plan to use the \$8.5bn investment to accelerate South Africa’s coal phase-out. <sup>2,3</sup>

- Current national policy documents lag behind ambitions outlined in the Indonesia’s JETP document<sup>4</sup>.
- Off-grid captive coal power plants (14 GW, or nearly 28% of total installed capacity) were excluded from Indonesia’s CIPP<sup>4</sup> decarbonization targets. More than **20 GW of off-grid capacity** could potentially be added by 2030. This represents a risk to Indonesia’s ability to meet the conditional targets outlined in the JETP Joint Statement as well as the IPR target for all coal phase out (2050).

- Vietnam will receive \$15.5 billion, primarily as commercial loans, over the next three to five years to boost their renewable energy and reduce their current coal reliance by building no new coal plants after 2030. <sup>5</sup>
- Only coal-fired power plants planned under the seventh Power Development Plan (PDP) will be constructed until 2030. The **overall coal share** in the power mix is targeted to decrease from 31% in 2020 to **20% by 2030**, giving IPR an indication to adjust the clean power forecast to 2045.



1: Republic of South Africa (2023): [Integrated Resource Plan](#); 2: South Africa (2023): [South Africa’s Just Energy Transition Investment Plan \(JET IP\)](#); 3: KFW (2022): [Supporting South Africa’s energy transition](#); 4: JETP Indonesia (2023): [Comprehensive Investment and Policy Plan 2023](#); 5: Minh Ha-Duong (2023): [Vietnam’s Just Energy Transition Partnership: a background report](#);

# BALANCING COMPETING NATIONAL NEEDS REQUIRES SIGNIFICANTLY MORE INVESTMENT

Nations need more concessional funding than has been provided under the JETPs to ensure sufficient energy security and decarbonization

## Key Factors of the Energy Transition

Examples

Closing the gap




South Africa

### Energy Security

South Africa is facing a persistent energy crisis, with the most recent draft Integrated Resource Plan (IRP) strongly emphasizing a reduction in unserved energy.

To address the **declining availability of power**, the plan has adjusted the national renewables target downwards, citing cost and stability concerns as a primary driver, while **planned coal capacity for 2030 is up 21% from 2019**.

 Actual JETP investment: \$8.5bn

 Desired investment to close the gap: \$89.7bn (2023-2027)

- Electricity sector: **\$47.2bn**
- Green Hydrogen(GH<sub>2</sub>): **\$21.2bn**
- Municipal capacity: **\$21.3bn**

Investment gap: \$81.2bn




Indonesia

### Energy Demand and Costs

Indonesia is on a steady growth trajectory, with industry & transportation consuming >80% of energy and driving most new demand.

A major challenge is finding a solution to **getting remote industry off of coal power**. Current national renewables targets do not include these captive plants, which make up 28% of total current coal power generation capacity (> 20 GW still planned).

 Actual JETP investment: \$20bn

 \$20bn from JETP act as a catalyst – additional investment by 2030 is needed for the following areas<sup>1</sup>:

- Transmission Lines and Grid Deployment: **\$19.7bn**
- Coal-fired Power Plant Managed Phase-out: **\$2.4bn**
- Renewable Energy Acceleration: **\$49.2bn**
- Minimum of **\$66.9bn** needed to realize 400 projects across all five areas

Investment gap: \$46.9bn




Vietnam

### Concessional Funding

Vietnam has the potential to become a regional leader in renewable energy development. The country's strategy to replace coal outlined in their 8<sup>th</sup> Power Development Plan however hinges on the appropriate amount of international financing.

Without **sufficient concessional funding**, the country could instead decide to opt for more fossil fuel-based approaches to meet its growing energy needs.

 Actual JETP investment: \$15.5bn

 Desired investment until 2030: **\$134.7bn<sup>2</sup>**

- Electricity: \$119.8bn
- Transmission grids: \$14.9bn

**Desired investment for 2031-2050: \$399.2bn-523.1bn<sup>2</sup>**

- Electricity: \$364.4bn – \$511.2bn
- Transmission grids: \$34.8bn – \$38.6bn

Investment gap: \$119.2bn

## WHILE IPR FORECASTS THAT THE “TRIPLING RENEWABLES” COP28 PLEDGE WILL BE MISSED, WE EXPECT SIGNIFICANT ACCELERATION IN RENEWABLES DEPLOYMENT RELATIVE TO OUR 2023 FORECAST

- The second part of 2023 saw three major pledges focused on ‘tripling renewables’ by 2030: the G20 Leaders Declaration, the US-China “Sunnylands Statement”, and the COP28 “Global Renewables and Energy Efficiency Pledge”, boasting over 120 signatories.
- **At this stage, IPR forecasts, consistent with the IEA renewables forecast, that this COP pledge amounting to 11,000 GW global target will be missed significantly. However, we do expect that the ‘tripling of renewables’ will be achieved in a number of jurisdictions, notably China, United States, India, and Indonesia.**
- **However, the tripling of renewable energies raises a number of issues:**
  - *Domestic implications:* Contrary to media coverage, **signatories** of the various ‘tripling’ pledge **are not required to triple renewables domestically**. Indeed, research by Theia Finance Labs shows that ‘tripling’ renewables would require significantly higher growth rates in some jurisdictions (e.g. China, USA), whereas other jurisdictions do not have to triple renewables to achieve the global goals given the existing structure of their energy system (e.g. Brazil, Iceland, Canada, European Union).
  - *The consistency with 1.5°C:* There is some disagreement as to what levels of deployment would actually be required to meet the 1.5°C goal e.g. IRENA technically requires increase of renewables deployment by 3.3x, consistent with the IPR Required Policy Scenario (IPR RPS). While the COP28 pledge specifically references +11,000 GW, the other pledges do not.
- IPR is in the process of reviewing and revising its forecasts across a number of countries and will release updated forecasts of renewables deployment. While we do not consider that the pledge will be met, we do anticipate revising our renewable deployment forecast upward in light of parallel domestic policy announcements and a reassessment of the global renewables trajectory. At the same time, as outlined on the previous slide, we are also reassessing coal power deployment.



# TABLE OF CONTENTS

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- X Executive summary & IPR background
- 1 Energy and land use policy forecast tracking for Q3 2023, Q4 2023 and Q1 2024
- 2 Detailed individual policies & methods for key credible and material policy announcements**

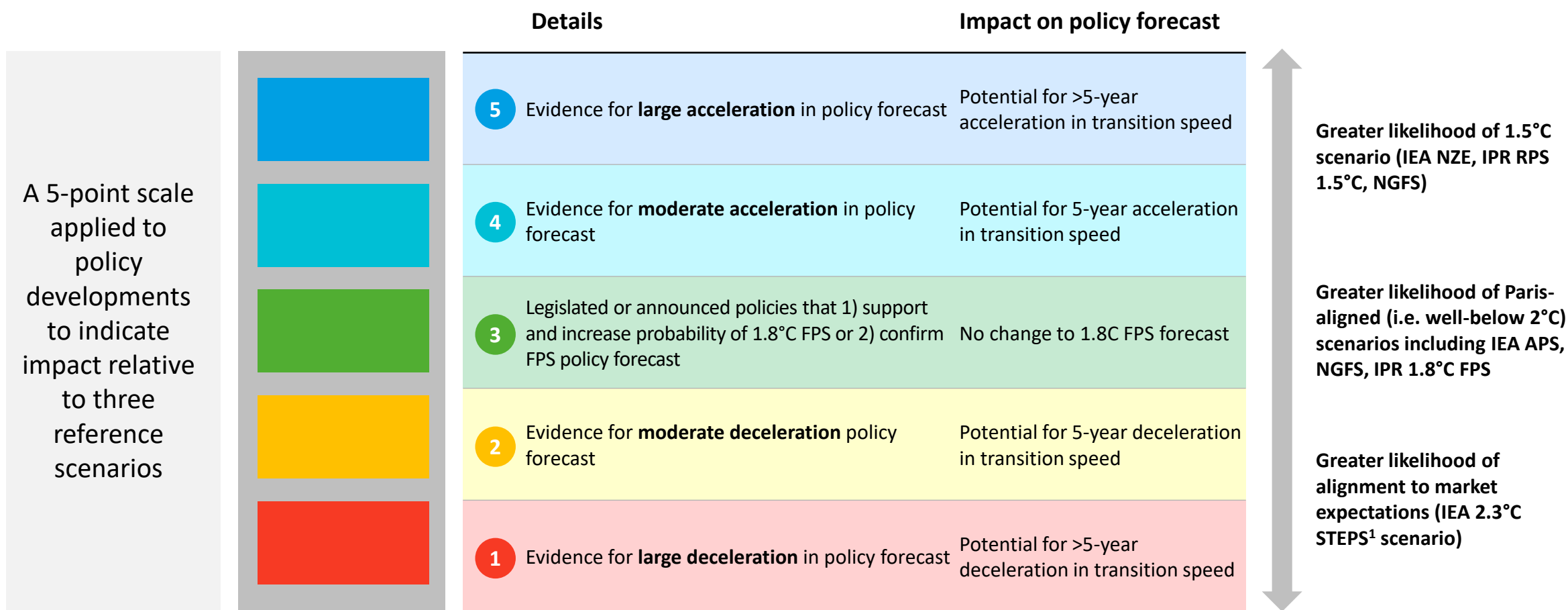
*This section focuses on detailed **energy** policy developments during **Q4 2023 and Q1 2024** covered by this QFT.*

*Please see the **IPR website** for a detailed list of material policy announcements from **Q3 2023**.*

*Please see **Land use and Nature QFT [here](#)** for a detailed list of material **land and nature** policy announcements.*


# IMPACT SCALE FOR IPR FORECAST

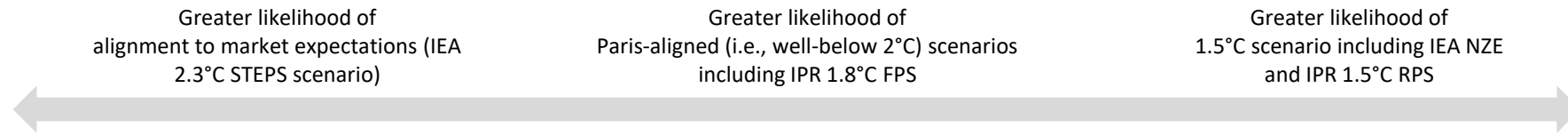
Assessing policy impact on 5-step scoring scale relative to three reference scenarios



# IPR QFT: KEY POLICY DEVELOPMENTS Q3, Q4 2023 AND Q1 2024 PER 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

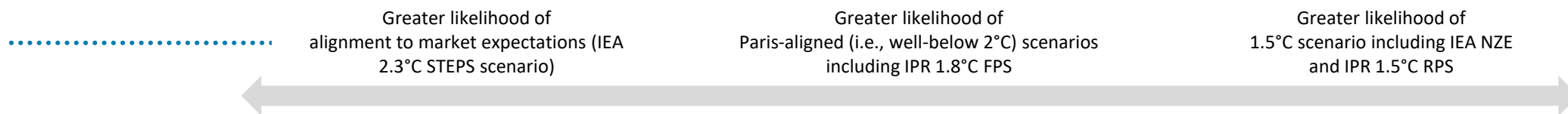
 Please see the IPR website for a detailed list of the material policy announcements from Q3 2023.




Region / score	Significant deceleration	Moderate deceleration	No change to policy forecast	Moderate acceleration	Significant acceleration	Total
	1	2	3	4	5	
Global	0	1	6	0	0	9
Asia Pacific	1	1	43	2	0	49
China	0	0	10	1	0	13
Europe	1	3	33	2	0	5
Eurasia	0	2	2	0	0	41
Middle East and Africa	0	2	21	1	0	25
North America	0	1	27	2	0	33
South America	0	1	4	0	0	8
<b>Total</b>	<b>1</b>	<b>11</b>	<b>146</b>	<b>8</b>	<b>0</b>	<b>166</b>

# IPR QFT: KEY POLICY DEVELOPMENTS Q3, Q4 2023 AND Q1 2024 PER COUNTRY

While 16 countries have implemented supportive climate policies, 3 countries did not announce or legislate new policies



 Please see the IPR website for a detailed list of the material policy announcements from Q3 2023.

Region / score	Significant deceleration	Moderate deceleration	No change to policy forecast	Moderate acceleration	Significant acceleration	Total
	1	2	3	4	5	
Global	0	1	6	0	0	7
EU	0	0	13	2	0	15
Australia	0	0	9	0	0	9
India	1	0	10	0	0	11
Indonesia	0	1	9	1	0	11
Japan	0	0	3	0	0	3
South Korea	0	0	4	0	0	4
Vietnam	0	0	8	1	0	9
China	0	0	10	1	0	11
France	0	1	2	0	0	3
Germany	0	1	8	0	0	9
Italy	0	0	3	0	0	3
UK	0	1	7	0	0	8
Russia	0	2	2	0	0	4
Nigeria	0	0	6	1	0	7
Saudi Arabia	0	0	9	0	0	9
South Africa	0	2	5	0	0	7
Turkey	0	0	1	0	0	1
Canada	0	1	12	0	0	13
Mexico	0	0	1	0	0	1
USA	0	0	14	2	0	16
Argentina	0	1	1	0	0	2
Brazil	0	0	3	0	0	3
<b>Total</b>	<b>1</b>	<b>11</b>	<b>146</b>	<b>8</b>	<b>0</b>	<b>166</b>








# Key policy developments for Q4 2023

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Detailed overview of the most important credible and material policy developments











# BRAZIL & CANADA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Brazil 	Carbon Price 	<b>Brazil is launching a regulated carbon market</b> <ul style="list-style-type: none"> <li>Brazilian lawmakers are advancing a bill to establish a cap-and-trade system operating from 2027.</li> <li>The bill mandates emission limits and requires high emitters to purchase carbon credits.</li> <li>About 5,000 companies with emissions above 10,000 tCO<sub>2</sub>e in regulated sectors would be affected.</li> <li>The bill is excluding livestock and primary agriculture sectors from the carbon market.</li> <li>The draft law mention rights of indigenous peoples and traditional communities regarding carbon crediting. It includes the right to commercialize carbon credits generated on lands they traditionally occupy, as well as the compensation for any damages resulting from carbon credit projects.</li> </ul>	Explicit carbon price (\$50) signal or backstop covering industry and power in 2030	<b>Announced and supportive.</b> Carbon prices exceeding US\$ 20/t of CO <sub>2</sub> captured by natural regeneration in the Amazon would significantly transform the region's landscape towards forest restoration.	<b>Score 3</b>
Canada 	Carbon Price 	<b>Canada unveils cap and trade system for oil and gas emissions</b> <ul style="list-style-type: none"> <li>Emissions cap for oil and gas to be phased in from 2026 to 2030, decreasing to align with 2050 net-zero goal.</li> <li>Cap-and-trade applies to liquid natural gas and upstream oil and gas installations, excluding petroleum refining. Covers direct GHG emissions (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, etc.), excluding transportation and other fossil fuel uses by the sector.</li> <li>Initial free allocation based on baseline production levels.</li> <li>Public consultation underway for draft regulations, expected in mid-2024, enforcement scheduled for 2025.</li> </ul>	Explicit carbon price (\$100) signal or backstop covering industry and power in 2030	<b>Announced and supportive.</b> If the cap and trade system for oil and gas emissions is enforced in 2025 and explicit carbon prices are set, Canada is likely to achieve their target.	<b>Score 3</b>
	Light duty vehicles 	<b>Canada finalizes Electric Vehicle Availability Standard to increase supply of zero-emission vehicles</b> <ul style="list-style-type: none"> <li>The standard is in support of the national 100% zero-emission vehicle sales by 2035 target, with interim targets for 2026 and 2030.</li> <li>The Government of Canada is also investing \$1.2 billion for 84,500 chargers by 2029.</li> <li>Standard supported by \$34 billion investment in automotive and battery manufacturing.</li> </ul>	Policy ends the sale of 97% of new cars and vans with CO <sub>2</sub> emissions by 2035. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV	<b>Announced and confirmatory.</b> The finalized Electric Vehicle Availability Standard is supportive of the 2035 target, with two clear intermittent targets being set.	<b>Score 3</b>






# CANADA & CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Canada 	Net Zero CO2 Emissions 	<b>Canada: Draft Oil and Gas Methane Regulations Amendments published in December 2023 to reduce emissions by 75 percent</b> <ul style="list-style-type: none"> <li>At COP26, Canada committed to reducing methane emissions from the oil and gas sector by 75 per cent by 2030 and reaffirmed this commitment at COP28.</li> <li>The draft amendments published in December 2023 aim for a substantial reduction in methane emissions</li> <li>Enhanced emissions monitoring and risk-based inspections are key features of the new regulations</li> <li>Implementation of the new measures is scheduled for January 2027</li> <li>A \$30 million investment in a Methane Centre of Excellence supports these ambitious goals</li> </ul>	Policy delivers net zero CO2 emissions by 2050	<b>Announced and supportive.</b> The bill propels Canada toward achieving economy-wide net CO2 emissions reductions, with similar progress being desirable across all other sectors.	
China 	Industrial Process 	<b>China published its action plan to reduce methane emissions</b> <ul style="list-style-type: none"> <li>The plan contains 20 key tasks in emissions monitoring, technological innovation, development of policy frameworks, global cooperation, and other areas.</li> <li>In agriculture, the methane emissions intensity per unit of agricultural product is announced to decline.</li> <li>Utilization of methane from livestock waste is to reach 80% by 2025 and 85% by 2030.</li> <li>The document announces the regulation of both enteric fermentation, which refers to the digestive process in ruminant livestock, and the release of methane from rice paddies.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions after 2070	<b>Announced and supportive.</b> Setting ambitious targets for reducing methane emissions from livestock waste in a manner akin to other industries could enable China to surpass its forecast.	






# COP & FRANCE POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
COP 	Clean Power 	<b>COP 28: 120 countries endorse global renewables and energy efficiency pledge</b> <ul style="list-style-type: none"> <li>120 countries endorse global renewables and energy efficiency pledge: commitment to triple renewable energy capacity and to double energy efficiency improvements by 2030.</li> <li>Key goals: Reach 11,000 GW of renewable energy capacity and over 4% annual energy efficiency improvements by 2030.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power	<b>Announced and supportive.</b> While the tripling of renewables in all countries I likely to be missed, significant acceleration in renewables deployment relative to the 2023 forecast can be expected.	
	Zero-carbon heating 	<b>COP 28: 66 nations sign global cooling pledge</b> <ul style="list-style-type: none"> <li>66 nations sign global cooling pledge, which aims to reduce cooling-related emissions by 68% by 2050 &amp; increase global average efficiency rating of new air conditioning equipment by 50% by 2030.</li> <li>Signatories pledge to incorporate cooling in existing strategies or to develop a Heat Action Plan by 2026.</li> </ul>	Policy ends the sale of 97% of new fossil fuel heating systems in all buildings	<b>Announced and supportive.</b> Good progress towards reducing CO2 emissions, however a clear implementation strategies on a country level needs to be deployed.	
France 	Light duty vehicles 	<b>New tax/support scheme for purchasing electric vehicles based on carbon emission of manufacturing process.</b> <ul style="list-style-type: none"> <li>In September, France announced new green eligibility rules for awarding electric vehicle subsidies – a first in environmental policymaking. Starting in 2024, the government incentive of €5,000-€7,000 will only be awarded to electric cars with a production carbon footprint below 14.75 tons of CO2.</li> </ul>	Policy ends the sale of 97% of new cars and vans with CO2 emissions by 2035. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV	<b>Legislated and supportive.</b> 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)	






# GERMANY & INDIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Germany 	Zero-carbon heating 	<b>Germany updated its building heating law and reduces possibilities to install purely carbon based heating.</b> <ul style="list-style-type: none"> <li>From 2026 (large conurbations) and 2028 (rural areas, smaller towns), all newly installed heating systems must be powered by at least 65% renewable energy.</li> <li>The law is to be accompanied by significant subsidies for installing renewable heating systems</li> <li>The falls short of earlier versions, and will likely not lead to achieving Germanys sectoral targets for the building sector.</li> </ul>	Policy ends the sale of 97% of new fossil fuel heating systems in all buildings by 2030	<b>Legislated and supportive.</b> Delayed regulation of installed heating systems could put Germany at risk of not achieving their 2030 goal on time, especially in rural areas.	<b>Score 3</b>
India 	New coal phase out 	<b>India plans to add 17 gigawatts of coal-based power generation in the next 16 months</b> <ul style="list-style-type: none"> <li>Expansion aims to meet rising power demand and prevent outages</li> <li>India revises up its coal-fired power demand to 283 gigawatts by fiscal year 2031 (+5%)</li> </ul>	Actual policy and anticipated policy signals end new unabated coal from being built by 2030. Coal is abated when installed with CCS with a capture rate of 90% or equivalent	<b>Announced.</b> Soaring national power demand and costly energy storage solutions for renewable energy have compelled India to increase their planned coal power capacity until 2032.	<b>Score 1</b>
	Clean Power 	<b>India enhances NDC targets: 50% cumulative electric power from non-fossil fuels by 2030</b> <ul style="list-style-type: none"> <li>India has revised its Nationally Determined Contributions (NDC), increasing the target for reducing the emissions intensity of its GDP to 45% by 2030 from the 2005 level, and elevating the target for non-fossil fuel-based energy resources to constitute 50% of the cumulative electric power installed capacity by 2030.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2080	<b>Announced and supportive.</b> Despite the increase of non-fossil fuel-based energy resources, the achievement of clean power targets is jeopardized by the delayed phase-out of coal.	<b>Score 3</b>

# INDONESIA & UNITED KINGDOM POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Indonesia 	Clean Power 	<b>Indonesia launches \$20 billion renewable energy investment plan</b> <ul style="list-style-type: none"> <li>Plan aims to decarbonize Indonesia's power sector, targeting a reduction in carbon dioxide emissions to 250 million metric tons by 2030.</li> <li>Current emissions are over 350 million metric tons.</li> <li>Renewable energy's share in power to increase to 44% by 2030 from 12% in 2022.</li> <li>The objective is to utilize the funds over the next three to five years to expedite the retirement of coal plants and promote the development of renewable energy.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2055	<b>Announced.</b> This policy has the potential to accelerate Indonesia's clean power development. However, captive plants need to be addressed to adjust the forecast.	<b>Score 4</b>
United Kingdom 	Carbon Price 	<b>Introduction of UK CBAM by 2027</b> <ul style="list-style-type: none"> <li>The UK's Carbon Border Adjustment Mechanism (CBAM) will levy a price on imports of iron, steel, aluminum, ceramics and cement by 2027, equalizing the cost with UK-produced goods and reducing carbon leakage.</li> </ul>	Explicit carbon price (\$120) signal or backstop covering industry and power in 2030	<b>Announced and supportive.</b> Explicit carbon prices for the mentioned material need to be set and enforced to determine whether the target can be sufficiently met.	<b>Score 3</b>
	Zero-carbon heating 	<b>UK plans to ban fossil fuel heating</b> <ul style="list-style-type: none"> <li>The UK government has supported plans to prohibit gas and hydrogen-ready boilers in new homes in England from 2025 as part of low-carbon building standards, leading to heat pumps likely becoming standard installations.</li> </ul>	Policy ends the sale of 97% of new fossil fuel heating systems in all buildings by 2035	<b>Announced and confirmatory.</b> If followed through and adapted for other buildings this policy is confirmatory of the zero-carbon heating target.	<b>Score 3</b>

# USA & VIETNAM ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
USA 	Light duty vehicles 	<b>Guidance for IRA released</b> <ul style="list-style-type: none"> <li>The U.S. Treasury and Internal Revenue Service (IRS) have issued proposed guidance on the Inflation Reduction Act's clean vehicle provisions, aiming to reduce costs, boost U.S. manufacturing, and enhance energy security through resilient supply chains.</li> <li>Since the IRA's enactment, the clean vehicle and battery supply chain has seen nearly \$100 billion in private-sector investments.</li> </ul>	Policy ends the sale of 97% of new cars and vans with CO2 emissions by 2040. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV	<b>Announced and supportive.</b> Additional guidance material supportive of the IRA.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
Vietnam 	Clean power 	<b>Vietnam introduces new rules for FITs</b> <ul style="list-style-type: none"> <li>Vietnam's new policy introduces regional variation in feed-in tariffs (FITs) for new solar and wind projects, depending on the average annual solar radiation intensity.</li> <li>It aims to create a more region-specific, fair, and balanced economic incentive for the development of new renewable energy projects across the country.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2050	<b>Legislated and supportive.</b> The direction of the bill supports the forecast, but insufficient information on intermittent targets does not allow for a confirmatory rating.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
	All coal phase out 	<b>At COP 28, Vietnam's Prime Minister, Pham Minh Chinh, announces plan for using \$15.5 billion to reduce coal use</b> <ul style="list-style-type: none"> <li>Vietnam to receive \$15.5 billion, primarily as commercial loans, over three to five years.</li> <li>Funds dedicated to enhancing renewable energy and reducing coal reliance.</li> <li>Coal share in energy mix targeted to decrease from 31% in 2020 to 20% by 2030.</li> </ul>	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal by 2045. Coal is abated when installed with CCS with a capture rate of 90% or equivalent	<b>Announced.</b> Vietnam has the potential to become a regional leader in renewable energy development. The country's strategy to replace coal however hinges on the appropriate amount of international financing.	<div style="background-color: #00BCD4; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 4</div>








# Key policy developments for Q1 2024

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Detailed overview of the most important credible  
and material policy developments

# ARGENTINA & AUSTRALIA POLICY ANNOUNCEMENTS/DEVELOPMENTS







			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Argentina 	Protection & restoration 	<b>Argentinian government announces to end incentive scheme for forest owners</b> <ul style="list-style-type: none"> <li>Amendments to the Native Forests Law, which established minimum standards and objectives for protection and restoration, and sustainable management of forests.</li> <li>Subsidies that were previously issued woodland owners for the preservation and sustainable management of forests would be ended.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2040	<b>Announced.</b> 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.	<b>Score 2</b>
Australia 	Net zero CO2 emissions 	<b>Australian Government aims for net zero in it's own operations by 2030</b> <ul style="list-style-type: none"> <li>The "Net Zero in Government Operations Strategy" aims to reach net zero emissions in Australian Government operations by 2030, excluding defense and security agencies.</li> <li>Entities are required to start reporting emissions from 2022-23 and develop emissions reduction plans by 2024, with a mid-term review planned for 2026-27.</li> <li>The strategy integrates with existing Australian policies and supersedes the 2007 Energy Efficiency in Government Operations Policy, with actions contributing to the Commonwealth Climate Disclosure initiative.</li> </ul>	Policy delivers net zero CO2 emissions by 2050	<b>Legislated and supportive.</b> Makes up about 0.7% of total national emissions. A necessary target but heavy industry must remain in focus.	<b>Score 3</b>
	Clean power 	<b>\$1.3bn Southeast Asia Fund to boost clean energy investments</b> <ul style="list-style-type: none"> <li>The Australian government has announced a \$1.3 billion fund to increase trade and investment in Southeast Asia, as part of its new round of economic initiatives. The fund will provide loans, guarantees, equity, and insurance to support the region's clean energy transition and infrastructure development.</li> <li>A further \$140 million will be used to extend the existing Partnerships for Infrastructure scheme to drive sustainable growth through quality infrastructure in Southeast Asian countries. The government also plans to improve access to long-term business visas for Southeast Asian nationals and establish regional technology "landing pads" in Jakarta and Ho Chi Minh City.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2045	<b>Announced and supportive.</b> Committed funds are positive, but overall funding committed by developed nations is insufficient.	<b>Score 3</b>









# AUSTRALIA & BRAZIL POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Australia 	Clean power 	<b>Electricity sector rule passes Australian Parliament</b> <ul style="list-style-type: none"> <li>The Electricity Industry Amendment Bill 2023, amending the Electricity Industry Act 2004, is the first major update to electricity regulations in 20 years and aims to provide a flexible, responsive and future-focused framework to support the uptake of new technologies in the move toward net-zero emissions.</li> <li>The Bill introduces a new State Electricity Objective that will guide the sector, requiring decision-makers to consider the environment, greenhouse gas emissions, reliability and price when promoting the long-term interests of the energy consumers. Furthermore, the legislation will consolidate the codes, rules and regulations governing the power system and electricity market, eliminating duplication.</li> <li>The legislation will establish a regulatory framework to enable customer devices such as batteries, electric vehicles, and solar panels to support the State's power systems.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2045	<b>Legislated and supportive.</b> The direction of the bill supports the forecast, but insufficient information on intermittent targets does not allow for a confirmatory rating.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
Brazil 	Industrial process 	<b>Brazil launches new industrial policy with development goals and measures up to 2033</b> <ul style="list-style-type: none"> <li>The policy defines strategic areas for investment according to potential impacts to the country's social and economic development.</li> <li>Between the targets concerning health, digital transformation and defense, a central goal with a focus on bioeconomy, decarbonization and energy transition and security (mission 5) is to increase the share of biofuels in the transport energy matrix by 50%—currently, green fuels are 21.4% of this matrix.</li> <li>An increase in the use of biodiversity by the industry and a reduction in carbon emissions from national industry by 30% (now 107 million tons of CO2 per trillion dollars produced) are also expected.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions by 2070	<b>Announced and supportive.</b> Industry policy heavily reliant on biological energy sources must be balanced critically. A step towards decarbonization but electrification is foundational.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>





# CANADA & CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Canada 	Clean power 	<b>Approval process for nuclear projects expediated</b> <ul style="list-style-type: none"> <li>Canada will streamline the approval process for new nuclear projects but will maintain federal environmental review requirements under the Impact Assessment Act (IAA)</li> <li>The revisions to the IAA will focus on addressing concerns raised by the Supreme Court, with the government aiming to expedite the process without compromising environmental considerations. The lengthy regulatory process has posed challenges for projects such as NexGen Energy's uranium mine in Saskatchewan, highlighting the need for collaboration between government and industry to expedite project approvals.</li> <li>Reducing the approval timeline could aid Prime Minister Justin Trudeau's Liberal government in achieving its target of transitioning Canada's electricity grid to net-zero carbon emissions by 2035, aligned with the broader goal of achieving nationwide net-zero emissions by 2050.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2035	<b>Announced and supportive.</b> The global median construction time of nuclear power was 7.5 years in 2022, with permitting and development adding another potential decade. This could reduce waiting times in a relevant fashion.	
China 	Industrial process 	<b>New Policy Document promotes greening of manufacturing sector</b> <ul style="list-style-type: none"> <li>The central government has published a wide-ranging policy document to facilitate the green transformation of China's mammoth manufacturing sector, highlighting the need to accelerate the green and low-carbon transition of the nation's traditional industries.</li> <li>Key measures outlined in the policy document include promoting the green and low carbon restructuring of traditional industries and accelerating the use of green and low-carbon technologies to transform such sectors.</li> <li>Manufacturing businesses will be encouraged to adjust their product, energy use and raw material structures, as well as their reengineering processes. Meanwhile, the use of coal will be gradually reduced and replaced in key energy-consuming sectors.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions after 2070	<b>Announced and supportive.</b> While emissions are a key component of the definition of "green manufacturing", it does not equal net zero or near-zero production.	





# CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
China 	<b>Industrial process</b> 	<b>China increases Energy efficiency target for 2024</b> <ul style="list-style-type: none"> <li>China vows to cut energy intensity by 2.5% in 2024, instead of 2% as previously planned.</li> <li>In 2023 China's energy intensity only fell by 0.5%, less than the set target of 2%.</li> <li>China's energy use per unit of economic growth declined by 2% between 2020 and 2023. However, this reduction falls significantly short of the country's target of a 13.5% cut for the 2021-2025 period outlined in its five-year plan.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions after 2070	<b>Legislated and supportive.</b> Having missed their efficiency targets previously, the country would have to cut energy intensity by 6% and carbon intensity by 7% in both 2024 and 2025.	
	<b>Nature incentives</b>  <b>Carbon price</b> 	<b>Chinas rebooted voluntary carbon market started trading again in January 2024</b> <ul style="list-style-type: none"> <li>The scheme is titled China Certified Emission Reduction (CCER) and the issuance of certificates had been halted in 2017 to review the methodology of the scheme.</li> <li>Four types of projects can issue certificates for sale: forestation, mangrove cultivation, solar thermal power and grid-connected offshore wind power projects.</li> <li>Companies covered by the Chinese ETS can now offset up to 5% of their emissions with certificates from the CCER.</li> </ul>	Policy delivers significant nationwide market incentives to landowners to preserve nature by 2030  Explicit carbon price (\$50) signal or backstop covering industry and power in 2030	<b>Legislated and supportive.</b> The revised carbon market strategy can lead to a significant push for preserve existing natural carbon sinks and ecosystems, however clear price levels are missing.	






# CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
China 	<b>Industrial process</b> 	<b>Major electrolyser to be build by Chinese state company</b> <ul style="list-style-type: none"> <li>In January, local authorities approved the construction of a \$2.9bn project to produce green hydrogen in the city of Ulanqab in Inner Mongolia province.</li> <li>The electrolyser is to have a capacity of 100,000 tons of green hydrogen per year and to be operational by 2027 and to be fed by onsite solar and wind electricity production.</li> <li>The plant is being built by state-owned oil and energy company Sinopec</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions before 2070	<b>Legislated and supportive</b> - Policy supports the development of hydrogen production infrastructure which in turn supports hard-to-abate sectors in decarbonizing.	<b>Score 3</b>
	<b>Protection &amp; restoration</b> 	<b>China Commits to Revitalizing 30% of Degraded Ecosystems by 2030 in New Biodiversity Plan</b> <ul style="list-style-type: none"> <li>China has launched an ambitious action plan to restore 30% of its degraded ecosystems by the end of the decade, aiming to stabilize fragile ecosystems and combat biodiversity loss.</li> <li>Measures include enhanced surveying, monitoring, and a compensation mechanism for ecological damage with the target of regular surveying of key ecosystems, species, and genetic resources by 2030.</li> <li>Enterprises will be required to disclose information on biodiversity conservation and work towards sustainable utilization of biodiversity resources and conduct regular biodiversity risk assessments.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2035	<b>Announced</b> - If followed through until 2030 as announced, this could contribute to achieving the land protection forecast 5 years earlier.	<b>Score 4</b>
	<b>Carbon price</b> 	<b>China to add cement and aluminum to national ETS in 2025</b> <ul style="list-style-type: none"> <li>China's ETS is expected to expand to more than 3,500 companies by the end of 2025 with the inclusion of new sectors like cement and aluminum, according to an outlook report released by the Beijing Institute of Technology last month.</li> </ul>	Explicit carbon price signal or backstop covering industry and power in 2030	<b>Announced and supportive.</b> Goal is an explicit carbon price signal on backstop covering industry and power in 2030 (\$50). The inclusion of heavy industry supports this process.	<b>Score 3</b>




# EU POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
EU 	Zero-carbon heating 	<b>European Parliament accepts Energy Performance of Buildings Directive</b> <ul style="list-style-type: none"> <li>The European Parliament has adopted the law requiring EU Member States to increase their efforts to decarbonize the building sector</li> <li>What started as a rigorous plan to systematically renovate the bloc's worst-performing buildings, turned into a vague set of targets, giving EU countries leeway to achieve their 20% to 22% reduction in residential buildings' energy use by 2035. 55% of the gains must come from the bottom 43% of worst-performing buildings.</li> <li>Non-residential buildings on the other hand remain on a stricter path. By 2030, the bottom 16% of worst-performing buildings like offices and schools must be renovated, by 2033 the bottom 26%. The council still needs to accept the directive as well, before it becomes legislation.</li> </ul>	Policy ends the sale of 97% of new fossil fuel heating systems in all buildings	<b>Announced and supportive.</b> Signifies another step in the legislation process. However, the political process has watered down initial policy ambition.	Score 3
	Clean power 	<b>EU countries leave Energy Charter Treaty, but agree to reduce protection period for foreign energy investments</b> <ul style="list-style-type: none"> <li>EU member states agreed to jointly quit the international energy treaty over concerns that it undermines efforts to fight climate change.</li> <li>The Treaty, which allows energy companies to sue governments over policies that damage their investments, has in recent years been used to challenge moves that require shutting down fossil fuel plants.</li> <li>The key reform is the reduction to 10 years from 20 of the period energy firms from non-EU signatories enjoy protection of existing investments in the bloc.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power	<b>Announced and supportive.</b> The departure from the treaty will have minimal impact, as existing investors will be protected for a further 20 years.	Score 3
	Protection & restoration 	<b>Nature restoration law</b> <ul style="list-style-type: none"> <li>EU countries are mandated to restore a minimum of 30% of habitats in poor condition by 2030, escalating to 60% by 2040 and 90% by 2050.</li> <li>There's a provision allowing temporary suspension of restoration efforts for agricultural ecosystems under exceptional circumstances.</li> <li>More than 80% of European habitats are currently in poor condition, necessitating urgent restoration actions to address environmental degradation.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored	<b>Legislated.</b> Signals a much needed acceleration in EU habitat restoration efforts.	Score 4






# EU POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
EU 	Industrial process 	<b>EU agrees on Net Zero Industry Act (NZIA)</b> <ul style="list-style-type: none"> <li>The regulation prioritizes permitting and funding for technologies deemed necessary to make the EU climate-neutral by 2050, and aims to achieve target of 40% of clean technologies used for the sustainable transition in EU to be manufactured in EU.</li> <li>While NZIA was proposed as a European answer to the American IRA policy, its funding from the STEP financial instrument was significantly reduced within the legislative process.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions	<b>Legislated.</b> While the original draft was more ambitious, the legislated policy promises to set significant clean energy investment in industry in motion.	
	Heavy duty vehicles 	<b>Deal reached to boost number of zero-emission trucks and buses on EU roads</b> <ul style="list-style-type: none"> <li>According to the provisional agreement, manufacturers of HDVs must achieve a 45% reduction in carbon emissions for new vehicles starting in 2030. This reduction target is set to increase to 65% by 2035 and ultimately to 90% by 2040.</li> <li>Targets are based on fleet averages, manufacturers of trucks will still have the option to produce combustion engine vehicles, but they will constitute a minority of their offerings.</li> </ul>	Policy ends the sale of 97% of new heavy-duty vehicles with CO2 emissions. (i.e., 97% of new sales are ZEVs)	<b>Announced.</b> Required for the overarching EU climate neutrality goal.	

# EU POLICY ANNOUNCEMENTS/DEVELOPMENTS




			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
EU 	<b>Protection &amp; restoration</b> 	<b>Over 233 million investment in Climate Projects across Europe</b> <ul style="list-style-type: none"> <li>The European Commission is investing over €233 million in 12 new Strategic Projects across Europe under the LIFE program to support the EU's environmental and climate ambitions as part of the European Green Deal.</li> <li>These projects, spanning ten EU Member States will mobilize additional funds from various EU sources, national governments, and private sector investments. They include: Ireland: 30% of marine territories should be categorized as Marine Protected Areas until 20230, Finland: Roll-out of regional biodiversity action plans, Italy: Enhancement of biodiversity and ecological corridors in over 500 sites, Austria: restore more than 1,400 hectares of peatland, including 13 habitats and 37 high conservation value species, Bulgaria: Sustainable Urban Mobility Plans to achieve zero-emissions mobility.</li> <li>The projects aim to address environmental and climate challenges, such as marine ecosystem protection, air and water quality improvement, biodiversity conservation, and climate change mitigation.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored	<b>Legislated and supportive.</b> Broken down by individual countries, the investment is helpful but not very significant.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; text-align: center;">Score 3</div>
	<b>Carbon price</b> 	<b>Carbon removal certificate framework</b> <ul style="list-style-type: none"> <li>An agreement to establish the first EU-level certification framework for permanent carbon removals, carbon farming, and carbon storage in products has been reached between Council and European Parliament negotiators. The regulation includes an open definition of carbon removals and covers four types of carbon removal and emission reduction activities.</li> <li>The scope of the regulation has been extended to include soil emission reductions. The regulation does not include activities that do not result in carbon removals or soil emission reductions, such as avoided deforestation or renewable energy projects.</li> <li>Certified carbon removal and soil emission reduction activities will generate corresponding units (one unit being equal to one metric tonne CO2 equivalent of certified net benefit generated by one of the carbon removal or soil emission reduction activities).</li> </ul>	Explicit carbon price signal or backstop covering industry and power in 2030	<b>Announced and supportive.</b> Indicates a positive development in the formalization of NBS. Final judgement is pending further progress in the political process.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; text-align: center;">Score 3</div>

# FRANCE & GERMANY POLICY ANNOUNCEMENTS/DEVELOPMENTS






			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
France 	Industrial process 	<b>France introduces tax credit scheme for green industrial production.</b> <ul style="list-style-type: none"> <li>A French tax credit scheme of EUR 2.9 billion (USD 3.17 billion) has been introduced to bolster the manufacturing of solar panels, batteries, wind turbines, and heat pumps, along with their essential components and crucial raw materials.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions by 2065	<b>Legislated and supportive.</b> Supportive, but does not directly confirm the target of >97% of fossil fuel heating system sale end until 2065.	<b>Score 3</b>
Germany 	Industrial process 	<b>Germany launches green subsidies for industry</b> <ul style="list-style-type: none"> <li>Germany has initiated a €4 billion (\$4.37 billion) funding round to offer subsidies to energy-intensive companies, in order to encourage a transition to environmentally friendly production methods. The initiative, backed by the European Commission, is aimed at sectors including steel, glass, paper, and chemicals by promising 15-year subsidies for reduced carbon emissions.</li> <li>The program, originally slated to offer a higher amount, faced a setback due to a constitutional court ruling that prevented the government from using around €60 billion of debt for climate protection projects. Despite this, the scheme, known as climate protection contracts, will compensate firms for the additional costs associated with green production in sectors where such processes cannot yet compete in the open market.</li> </ul>	Policy or anticipated policy signals deliver >80% reduction in all heavy industry process emissions by 2060	<b>Announced and supportive</b> - The investment initiative, while much less well funded than originally planned, does introduce economic incentives for a transitioning into hard-to-abate sectors.	<b>Score 3</b>
	Fuel combustion 	<b>German government announces new powerplant strategy</b> <ul style="list-style-type: none"> <li>The government earmarks \$17bn to incentivize the construction of hydrogen ready gas powerplants, with 10GW of capacity to be auctioned out in four rounds.</li> <li>The new plants must switch to hydrogen before 2040, but there is no specification to use green hydrogen.</li> <li>In addition, a yet to be defined capacity mechanism is to be implemented by 2028 to add further dispatchable capacity.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2060	<b>Announced and supportive.</b> Aligned with the 2040 clean energy target, when assuming that blue hydrogen share is not going to cover more than 3% of total power production.	<b>Score 3</b>







# GERMANY & INDIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
India 	Clean Power 	<b>\$67 billion investment over the next 5-6 years</b> <ul style="list-style-type: none"> <li>Prime Minister Narendra Modi announced plans for substantial investments in India's energy sector over the next five years, totaling nearly \$67 billion.</li> <li>PM Modi emphasized India's aim to double its oil demand by 2045 and outlined efforts to increase natural gas in the primary energy mix from 6% to 15%. He stated that around \$67 billion would be invested in achieving this goal over the next 5-6 years.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2080	<b>Announced and supportive.</b> While renewables benefit from the allocated funds, the expansion of fossil fuel reliance needs to be monitored closely going forward.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; text-align: center;">Score 3</div>
	Clean Power 	<b>India invites firms to invest \$26billion in its nuclear energy sector</b> <ul style="list-style-type: none"> <li>India plans to invite private firms to invest approximately \$26 billion in its nuclear energy sector to increase electricity production from non-carbon-emitting sources, aiming to achieve 50% of its installed electric generation capacity from non-fossil fuels by 2030.</li> <li>This marks the first time New Delhi is seeking private investment in nuclear power, with discussions ongoing with major firms including Reliance Industries, Tata Power, Adani Power, and Vedanta Ltd to invest around \$5.30 billion each.</li> <li>The investment aims to build 11,000 megawatts (MW) of new nuclear power generation capacity by 2040.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2080	<b>Announced and supportive.</b> Deploying nuclear power at scale to manage base load concern could support regional expansion of renewable energy and contributes to clean power provision.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; text-align: center;">Score 3</div>




# INDIA & INDONESIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
India 	Clean Power 	<b>Streamlined approval process for solar energy to boost investments</b> <ul style="list-style-type: none"> <li>The government has simplified the approval process, facilitated subsidy claims, and allocated significant funds, including the recent announcement of \$9 billion, to accelerate the adoption of technology essential for India to achieve its clean-energy objectives.</li> <li>Currently only 11 gigawatts of rooftop solar has been set up, meaning that India has not met its goal of achieving 40 gigawatts of rooftop solar power by 2022.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2080	<b>Announced and supportive.</b> India must close a widening gap in renewables deployment, which requires significantly more investment.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
Indonesia 	Net zero CO2 emissions 	<b>New CCS rule on storage capacity from overseas</b> <ul style="list-style-type: none"> <li>Indonesia has issued a presidential regulation on carbon capture and storage (CCS), allowing CCS operators to reserve 30% of their storage capacity for imported carbon dioxide (CO2) while utilizing depleted reservoirs or aquifers in their blocks for CCS operations.</li> <li>The regulation aims to potentially store over 400 gigatonnes of CO2 equivalent and mandates the collection of royalties from storage fees charged by CCS operators. CO2 for CCS operations could originate from emissions by various industrial activities, both domestic and overseas.</li> <li>Several CCS projects are already underway in Indonesia, including initiatives by BP, Pertamina, Exxon Mobil, and Chevron, with a combined investment of nearly \$8 billion.</li> </ul>	Policy delivers net zero CO2 emissions by 2060	<b>Announced and supportive.</b> Utilizing natural potential for CCS deployment could support regional decarbonization efforts.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
	Clean Power 	<b>Reduction of renewable energy targets</b> <ul style="list-style-type: none"> <li>Indonesia is considering reducing the target share of renewables in its energy mix.</li> <li>Under the proposed plan by the National Energy Council (DEN), the new target for renewables by 2025 would range between 17 and 19 percent, down from the previous target of 23 percent for the same period.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2055	<b>Announced.</b> Threatens a potential delay of 2050 target (97% low-carbon power)	<div style="background-color: #FFC107; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 2</div>






# INDONESIA & ITALY POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Indonesia 	New coal phase out 	<b>Green investment rulebook (including coal-fired power plants)</b> <ul style="list-style-type: none"> <li>Indonesia has launched a revised taxonomy for green investments, categorizing coal-fired power plants used in nickel facilities as part of the global transition to a green economy.</li> <li>The new taxonomy defines sectors as "green," "amber," or "red," with investments in coal power plants classified as "amber" if they meet certain criteria, such as being built before 2031, shutting down before 2050, and committing to a 35% reduction in greenhouse gas emissions within 10 years of operation.</li> <li>Furthermore, amber mining contributes to the extraction of critical minerals essential for clean technology, like nickel used in electric vehicle batteries, provided it adheres to criteria such as post-mining land restoration.</li> <li>The taxonomy also categorized green investments in the early retirement of existing coal power plants, aligning with Indonesia's efforts within the G7-led climate funding initiative called the Just Energy Transition Partnership.</li> </ul>	Actual policy and anticipated policy signals end new unabated coal from being built by 2025. Coal is abated when installed with CCS with a capture rate of 90% or equivalent	<b>Announced (Supportive)</b> - While the new coal phase-out in the electricity sector is set to 2025 in the FPS, the policy treats industrial usage for energy (industry – fuel combustion), which has a forecast goal of 2070, therefore being supportive.	<div style="background-color: #4CAF50; color: white; padding: 5px; text-align: center; border-radius: 5px;">Score 3</div>
Italy 	All coal phase out 	<b>Italy vowing to phase out coal with exception of Sardinia</b> <ul style="list-style-type: none"> <li>The energy minister Pichetto informed parliament on Wednesday that Italy is dedicated to ending coal-based electricity generation nationwide by 2025, with the exception of Sardinia.</li> <li>The government intends to enhance the utilization of gas-fired power plants.</li> <li>On Sardinia the coal powerplants will phase out between 2026 and 2028, Pichetto said.</li> </ul>	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal before 2030. Coal is abated when installed with CCS with a capture rate of 90% or equivalent	<b>Announced (Confirmatory)</b> - It needs to be discussed how to handle small national exceptions, in this case Sardinia. Also note that the phase out still would not be slowed by more than 5 years (at the latest 2028 vs the 2025 national target in the forecast).	<div style="background-color: #4CAF50; color: white; padding: 5px; text-align: center; border-radius: 5px;">Score 3</div>









# JAPAN POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Japan 	Clean Power 	<b>Japan expanding offshore wind to exclusive economic zone</b> <ul style="list-style-type: none"> <li>The Japanese government has approved an amendment allowing for the installation of offshore wind power in exclusive economic zones (EEZ), contributing to the country's aim of carbon neutrality by 2050. They plan to have 10 gigawatts (GW) of offshore wind power projects by 2030 and up to 45 GW by 2040.</li> <li>The industry ministry will select the installation area considering elements like wind conditions, water depth, and distance to territorial waters. After initial approval, official sanction will be given following consultations with relevant parties and the legislation is expected to pass in the current parliamentary session due by late June.</li> <li>This move is significant as until now the major rounds of state auctions have involved turbines fixed to the ocean floor. The new legislation would expand installation areas further out to sea and should expedite the offshore wind expansion. This approval process is expected to enable creation of stable and large-scale projects.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power 2045	<b>Announced and supportive</b> - The measure facilitates the construction of off-shore wind and is another element in Japan's transition.	<b>Score 3</b>
	Net zero CO2 emissions 	<b>2.4bn climate bonds to be issued</b> <ul style="list-style-type: none"> <li>Japan's government plans to issue its first climate transition bonds worth 350 billion yen (\$2.37 billion) this month, targeting four such issuances yearly for a total of 1.4 trillion yen, as part of Japan's Green Transformation (GX) program. The program aims to mobilize 150 trillion yen over the next decade to meet the country's 2030 greenhouse gas reduction targets and achieve carbon neutrality by 2050.</li> <li>The intention is to reduce the issue size of each issuance to better respond to investor demand. However, attracting more investors might prove challenging as 40% of past investments in GX bonds ended up in the Bank of Japan's holdings. Finance Minister Shunichi Suzuki expressed hopes that this initiative, being the first transition bonds issued by a country, would expand transition finance within and beyond Japan and facilitate understanding towards its GX policy.</li> </ul>	Policy delivers net zero CO2 emissions by 2050	<b>Announced and supportive</b> - While strongly beneficial to intermediate target achievement, the proposed investment does not directly confirm the forecast.	<b>Score 3</b>




# MEXICO & SAUDI ARABIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
<b>Mexico</b> 	<b>Protection &amp; restoration</b> 	<b>Mexico announces 20 new protected areas despite budget cuts</b> <ul style="list-style-type: none"> <li>Mexico has recently declared the establishment of 20 new protected zones, encompassing approximately 2.3 million hectares, covering about 1.2% of its land surface.</li> <li>These designated areas, comprising national parks, sanctuaries, and zones for flora and fauna protection, are situated in states such as Quintana Roo, Oaxaca, Zacatecas, Chiapas, and eight additional regions, including the Gulf of Mexico and the Gulf of California.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2040	<b>Legislated and supportive.</b> The policy covers about 1.2% of Mexico's land surface, which is a step into right direction.	<b>Score 3</b>
<b>Saudi Arabia</b> 	<b>Net deforestation</b> 	<b>Saudi Arabia announced a tree-planting roadmap</b> <ul style="list-style-type: none"> <li>Saudi Arabia announced a roadmap to increase their planting efforts and reach their goal of 10 Billion trees as part of the Saudi Green Initiative.</li> <li>The initiative has set a revised target to rehabilitate 74.8 million hectares of land, contributing to 1 per cent of the global greening target and 20 per cent of the Middle East.</li> </ul>	Policy delivers an end to net deforestation and delivers afforestation or reforestation at scale by 2030	<b>Announced and supportive.</b> While the policy sets ambitious tree-planting goals, clear intermittent targets and rollout steps are missing.	<b>Score 3</b>
	<b>Protection &amp; restoration</b> 	<b>Rainwater Harvesting Project to rehabilitate degraded land</b> <ul style="list-style-type: none"> <li>The National Center for Vegetation Development and Combating Desertification (NCVC) in Saudi Arabia has initiated a project to restore 620,000 hectares of degraded land using rainwater harvesting techniques across nine regions.</li> <li>The project involves studying the feasibility of rehabilitation in different climatic regions, collecting climate data, conducting field visits for soil and water analysis, and analyzing satellite imagery.</li> <li>Expected outputs include identifying causes of land degradation, cataloging plant species, recommending suitable plants for restoration, determining optimal planting methods and timings, and establishing effective rainwater harvesting systems.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2040	<b>Announced and supportive.</b> Good step in the right direction, but more measures are needed to restore degraded land.	<b>Score 3</b>





# MEXICO & SAUDI ARABIA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
South Africa 	All Coal Phase Out 	<b>South African government announces slower coal phase-out in face of electricity shortages</b> <ul style="list-style-type: none"> <li>The draft Integrated Resource Plan 2023 outlines the energy pathway for 2030-50.</li> <li>The plan proposes that the decommissioning of some coal plants should be postponed beyond 2035, and that new coal capacity amounting to 5GW should be added.</li> <li>The new plan contradicts the vision of the Just Energy Transition Partnership, whereby South Africa was to receive \$8.5bn to support to accelerate its phase-out of coal.</li> </ul>	Actual policy and anticipated policy signals deliver 97% of dispatched power generation from sources other than unabated coal by 2055. Coal is abated when installed with CCS with a capture rate of 90% or equivalent	<b>Announced.</b> Decelerates previous ambitions, which has prompted a forecast adjustment. Policy document is still subject to finalization and will be closely monitored.	
United Kingdom 	Low Carbon Agriculture 	<b>Update of agricultural transition plan</b> <ul style="list-style-type: none"> <li>The UK government's new policy focuses on enhancing agricultural productivity and sustainability through farmer-led innovation and infrastructure investments.</li> <li>It aims for at least 70% of farmers to undertake environmental actions by 2028, incentivized by the increasing payouts by 10% from Sustainable Farming Incentive (SFI) and Countryside Stewardship schemes, which support recovery of habitats, precision farming and further biodiversity measures.</li> </ul>	Policy delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock by 2025	<b>Legislated and supportive.</b> Includes 50% of UK farmers by early 2024 (39000 farmers). Boosting productivity of farms is main objective. 70 % participating farmers is not too ambitious.	
	Nature incentives 	<b>England brings in biodiversity rules to force builders to compensate for loss of nature</b> <ul style="list-style-type: none"> <li>England is launching a biodiversity credit scheme called biodiversity net gain (BNG), regulating that all new building projects must achieve a 10% net gain in biodiversity or habitat.</li> <li>If a woodland is destroyed by a construction project, another needs to be recreated on site or elsewhere in England.</li> <li>Most of the off-site habitat protection is expected to take place on agricultural land, and may involve wetlands, woodlands and wildflower meadows.</li> </ul>	Policy delivers significant nationwide market incentives to landowners to preserve nature by 2025	<b>Legislated and supportive.</b> Only covers part of land sector on a sub-national scale, but is a move into the right direction.	

# USA POLICY ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
USA 	Clean power 	<b>Biden administration announces proposed rules to reduce methane emissions from U.S. oil and gas industry</b> <ul style="list-style-type: none"> <li>EPA's new policies include banning routine flaring at new oil wells and introducing a Waste Emissions Charge on large oil and gas methane emitters starts in 2024.</li> <li>Charge begins at \$900 per metric ton of wasteful emissions in 2024, increasing to \$1,200 per metric ton in 2025 and to \$1,500 per metric ton in 2026 and beyond.</li> <li>Applies to facilities emitting more than 25,000 metric tons of CO2 equivalent per year.</li> <li>Estimated to prevent 58 million tons of methane emissions from 2024-2038.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2040	<b>Announced and supportive.</b> Implements part of the IRA.	<b>Score 3</b>
	Clean power 	<b>US updates roadmap for solar development</b> <ul style="list-style-type: none"> <li>The Department of the Interior today announced an updated roadmap for solar energy development across the West, designed to expand solar energy production in more Western states and streamline siting and permitting on public lands.</li> <li>Identifying areas with high solar potential and low resource conflicts to guide solar development and provide certainty to developers.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2040	<b>Announced and supportive.</b> Implements part of the IRA.	<b>Score 3</b>
	Light duty vehicles 	<b>The Biden-Harris administration releases first-ever blueprint to decarbonize America's transportation sector</b> <ul style="list-style-type: none"> <li>Developed by the Departments of Energy, Transportation, Housing and Urban Development, and the Environmental Protection Agency, the Blueprint serves as strategy for cutting all greenhouse emissions from the transportation sector by 2050</li> <li>It recommends the use of Transportation Demand Management strategies, policies and regulation in to increase efficiency of transportation.</li> </ul>	Policy ends the sale of 97% of new cars and vans with CO2 emissions by 2040. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV	<b>Announced and supportive.</b> Sets a strategic outline for a national decarbonization but would require more ambition to confirm the forecast.	<b>Score 3</b>
	Zero-carbon heating 	<b>9 states band together to phase out fossil fuel heating in homes</b> <ul style="list-style-type: none"> <li>Nine states, including California, Colorado, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, and Rhode Island, signed a MoU, committing to gradually phase out the sale of new fossil fuel boilers for residential properties.</li> <li>The targets that 65 percent of new sales of heating and cooling systems in these states will comprise heat pumps by 2030, with the percentage rising to 90 percent by 2040.</li> </ul>	Policy ends the sale of 97% of new fossil fuel heating systems in all buildings by 2040	<b>Announced and supportive.</b> Supports low carbon heating development but does not establish a nation-wide coverage.	<b>Score 3</b>

# USA & VIETNAM ANNOUNCEMENTS/DEVELOPMENTS

			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
USA 	Light duty vehicles 	<b>Ease of EV Mileage Rule</b> <ul style="list-style-type: none"> <li>The Biden administration has eased proposed rules on automakers regarding the production of gas-guzzling vehicles, delaying the phase-out of existing regulations that provided fuel-economy credits for electric vehicles.</li> <li>Initially, the administration aimed for stricter emission standards with the goal of pushing EV market share to 67% of all new cars sold by 2032. However, pressure from automakers led to a retreat, with the final rules gradually reducing EV fuel-economy credits through 2030, giving automakers more time to adjust.</li> <li>The decision has faced criticism from environmentalists who argue that the previous rules assigned unrealistically high fuel-economy values to electric vehicles, effectively offsetting the values of gas-guzzling vehicles. However, the auto industry and union representatives welcomed the decision, as it would ease the financial burden on automakers and prevent potential fines for not meeting fuel-economy requirements.</li> </ul>	Policy ends the sale of 97% of new cars and vans with CO2 emissions by 2040. (I.e., 97% of new sales are ZEVs). ZEV = BEV, PHEV, FCEV	<b>Announced and supportive.</b> This policy could lead to a slight delay in ending the sales of new cars with CO2 emissions until 2040. Nevertheless, if the US continues to push the sales of EV's as announced, the targets can still be achieved.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>
Vietnam 	Clean power 	<b>Hydrogen Energy Strategy deployed by MoIT</b> <ul style="list-style-type: none"> <li>The Ministry of Industry and Trade (MoIT) emphasizes the goal of developing the hydrogen energy ecosystem based on renewable sources to ensure energy security and meet climate change goals.</li> <li>To realize these objectives, the hydrogen energy strategy suggests several new mechanisms and policies, which include: Expanding capital sources and investment forms to attract interest from non-state enterprises and support from international partners, enhancing investments in science, technology, and human resource development, giving priority to international cooperation and communication efforts to promote awareness of the benefits of the hydrogen economy and the government's guidelines and policies in the clean energy sector to society as a whole.</li> </ul>	Policy delivers dispatched generation of 97% low-carbon power by 2050	<b>Legislated and confirmatory.</b> While hydrogen development is key and supports overall cross-sector decarbonization efforts, the strategy did not feature very specific targets, investment details or rates of expansion.	<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Score 3</div>



# TRACKED POLICY SOURCES

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1	<a href="https://www.batimes.com.ar/news/argentina/enrique-viale-the-urgent-decree-and-omnibus-law-combo-is-an-invitation-to-destruction.phtml">https://www.batimes.com.ar/news/argentina/enrique-viale-the-urgent-decree-and-omnibus-law-combo-is-an-invitation-to-destruction.phtml</a>
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4	<a href="https://thediplomat.com/2024/03/australia-announces-1-3-billion-fund-to-boost-investment-in-southeast-asia/">https://thediplomat.com/2024/03/australia-announces-1-3-billion-fund-to-boost-investment-in-southeast-asia/</a>
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10	<a href="https://www.canada.ca/en/environment-climate-change/news/2023/12/new-electric-vehicle-availability-standard-will-give-canadians-better-access-to-more-affordable-cars-and-cleaner-air.html">https://www.canada.ca/en/environment-climate-change/news/2023/12/new-electric-vehicle-availability-standard-will-give-canadians-better-access-to-more-affordable-cars-and-cleaner-air.html</a>
11	<a href="https://www.canada.ca/en/environment-climate-change/news/2023/12/canada-introduces-framework-to-cap-greenhouse-gas-pollution-from-oil-and-gas-sector.html">https://www.canada.ca/en/environment-climate-change/news/2023/12/canada-introduces-framework-to-cap-greenhouse-gas-pollution-from-oil-and-gas-sector.html</a>
12	<a href="https://www.canada.ca/en/environment-climate-change/news/2023/12/draft-oil-and-gas-methane-regulations-amendments-published-in-december-2023-to-reduce-emissions-by-75-percent.html">https://www.canada.ca/en/environment-climate-change/news/2023/12/draft-oil-and-gas-methane-regulations-amendments-published-in-december-2023-to-reduce-emissions-by-75-percent.html</a>
13	<a href="https://www.reuters.com/business/energy/canada-expedite-approval-new-nuclear-projects-energy-minister-says-2024-02-29/">https://www.reuters.com/business/energy/canada-expedite-approval-new-nuclear-projects-energy-minister-says-2024-02-29/</a>
14	<a href="https://www.carbonbrief.org/qa-what-does-chinas-new-methane-plan-mean-for-its-climate-goals/">https://www.carbonbrief.org/qa-what-does-chinas-new-methane-plan-mean-for-its-climate-goals/</a>
15	<a href="https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/012224-chinas-national-voluntary-carbon-market-starts-trading-jan-22">https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/012224-chinas-national-voluntary-carbon-market-starts-trading-jan-22</a>
16	<a href="https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/012224-chinas-national-voluntary-carbon-market-starts-trading-jan-22">https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/012224-chinas-national-voluntary-carbon-market-starts-trading-jan-22</a>
17	<a href="https://www.carbonbrief.org/china-briefing-september-21-new-power-market-rules-1000gw-of-solar-by-2026-impact-of-ev-wars/?_thumbnail_id=37376">https://www.carbonbrief.org/china-briefing-september-21-new-power-market-rules-1000gw-of-solar-by-2026-impact-of-ev-wars/?_thumbnail_id=37376</a>
18	<a href="https://www.cet.energy/2023/08/17/china-energy-policy-newsletter-august-2023/">https://www.cet.energy/2023/08/17/china-energy-policy-newsletter-august-2023/</a>
19	<a href="https://www.reuters.com/business/energy/china-sets-tougher-energy-efficiency-goal-after-falling-behind-2025-targets-2024-03-05/">https://www.reuters.com/business/energy/china-sets-tougher-energy-efficiency-goal-after-falling-behind-2025-targets-2024-03-05/</a>
20	<a href="https://asia.nikkei.com/Business/Energy/China-goes-big-on-green-hydrogen-using-renewable-energy-surplus">https://asia.nikkei.com/Business/Energy/China-goes-big-on-green-hydrogen-using-renewable-energy-surplus</a>
21	<a href="https://www.chinadaily.com.cn/a/202401/18/WS65a923b8a3105f21a507d184.html">https://www.chinadaily.com.cn/a/202401/18/WS65a923b8a3105f21a507d184.html</a>
22	<a href="https://www.reuters.com/sustainability/boards-policy-regulation/china-crack-down-emissions-data-fraud-co2-market-expansion-nears-2024-02-05/">https://www.reuters.com/sustainability/boards-policy-regulation/china-crack-down-emissions-data-fraud-co2-market-expansion-nears-2024-02-05/</a>
23	<a href="https://www.chinadaily.com.cn/a/202403/13/WS65f1061ca31082fc043bc5cb.html">https://www.chinadaily.com.cn/a/202403/13/WS65f1061ca31082fc043bc5cb.html</a>
24	<a href="https://www.euractiv.com/section/energy-environment/news/european-parliament-votes-through-controversial-buildings-law/">https://www.euractiv.com/section/energy-environment/news/european-parliament-votes-through-controversial-buildings-law/</a>
25	<a href="https://finance.yahoo.com/news/eu-countries-exit-energy-treaty-110949335.html?guccounter=1">https://finance.yahoo.com/news/eu-countries-exit-energy-treaty-110949335.html?guccounter=1</a>

# TRACKED POLICY SOURCES

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.....

26	<a href="https://www.europarl.europa.eu/news/en/press-room/20240223IPR18078/nature-restoration-parliament-adopts-law-to-restore-20-of-eu-s-land-and-sea">https://www.europarl.europa.eu/news/en/press-room/20240223IPR18078/nature-restoration-parliament-adopts-law-to-restore-20-of-eu-s-land-and-sea</a>
27	<a href="https://www.politico.eu/article/europe-net-zero-industry-act-climate-change-green-technology/">https://www.politico.eu/article/europe-net-zero-industry-act-climate-change-green-technology/</a>
28	<a href="https://www.euractiv.com/section/freight/news/deal-reached-to-boost-number-of-zero-emission-trucks-and-buses-on-eu-roads/">https://www.euractiv.com/section/freight/news/deal-reached-to-boost-number-of-zero-emission-trucks-and-buses-on-eu-roads/</a>
29	<a href="https://ec.europa.eu/commission/presscorner/detail/en/IP_24_949">https://ec.europa.eu/commission/presscorner/detail/en/IP_24_949</a>
30	<a href="https://www.consilium.europa.eu/en/press/press-releases/2024/02/20/climate-action-council-and-parliament-agree-to-establish-an-eu-carbon-removals-certification-framework/">https://www.consilium.europa.eu/en/press/press-releases/2024/02/20/climate-action-council-and-parliament-agree-to-establish-an-eu-carbon-removals-certification-framework/</a>
31	<a href="https://renewablesnow.com/news/ec-clears-eur-29bn-french-tax-credit-scheme-for-green-industries-845209/">https://renewablesnow.com/news/ec-clears-eur-29bn-french-tax-credit-scheme-for-green-industries-845209/</a>
32	<a href="https://www.reuters.com/sustainability/sustainable-finance-reporting/germany-earmark-4-bln-eur-industry-decarbonization-subsidies-source-2024-02-16/">https://www.reuters.com/sustainability/sustainable-finance-reporting/germany-earmark-4-bln-eur-industry-decarbonization-subsidies-source-2024-02-16/</a>
33	<a href="https://www.reuters.com/business/energy/germany-agrees-subsidy-plans-hydrogen-ready-gas-power-plants-2024-02-05/">https://www.reuters.com/business/energy/germany-agrees-subsidy-plans-hydrogen-ready-gas-power-plants-2024-02-05/</a>
34	<a href="https://www.reuters.com/sustainability/sustainable-finance-reporting/germany-launches-green-subsidies-industry-2024-03-12/">https://www.reuters.com/sustainability/sustainable-finance-reporting/germany-launches-green-subsidies-industry-2024-03-12/</a>
35	<a href="https://economictimes.indiatimes.com/news/india/india-to-invest-67-billion-in-energy-sector-in-over-next-five-years-pm-modi/articleshow/107449336.cms">https://economictimes.indiatimes.com/news/india/india-to-invest-67-billion-in-energy-sector-in-over-next-five-years-pm-modi/articleshow/107449336.cms</a>
36	<a href="https://www.reuters.com/business/energy/india-seeks-26-bln-private-nuclear-power-investments-sources-say-2024-02-20/">https://www.reuters.com/business/energy/india-seeks-26-bln-private-nuclear-power-investments-sources-say-2024-02-20/</a>
37	<a href="https://economictimes.indiatimes.com/industry/renewables/india-wants-to-hook-its-population-onto-clean-energy-by-boosting-rooftop-solar/articleshow/107918356.cms">https://economictimes.indiatimes.com/industry/renewables/india-wants-to-hook-its-population-onto-clean-energy-by-boosting-rooftop-solar/articleshow/107918356.cms</a>
38	<a href="https://www.reuters.com/markets/carbon/indonesia-issues-ccs-rules-allowing-30-carbon-storage-overseas-2024-01-31/">https://www.reuters.com/markets/carbon/indonesia-issues-ccs-rules-allowing-30-carbon-storage-overseas-2024-01-31/</a>
39	<a href="https://asianews.network/indonesia-to-abandon-23-renewable-energy-target-by-2025/">https://asianews.network/indonesia-to-abandon-23-renewable-energy-target-by-2025/</a>
40	<a href="https://www.reuters.com/sustainability/sustainable-finance-reporting/indonesias-new-green-investment-rulebook-includes-coal-power-plants-2024-02-20/">https://www.reuters.com/sustainability/sustainable-finance-reporting/indonesias-new-green-investment-rulebook-includes-coal-power-plants-2024-02-20/</a>
41	<a href="https://www.reuters.com/sustainability/climate-energy/italy-phase-out-coal-2025-excluding-sardinia-island-2024-03-06/">https://www.reuters.com/sustainability/climate-energy/italy-phase-out-coal-2025-excluding-sardinia-island-2024-03-06/</a>
42	<a href="https://www.msn.com/en-us/money/markets/japan-plans-to-issue-237-bln-climate-bonds-this-month-sources/ar-BB1jM8z5">https://www.msn.com/en-us/money/markets/japan-plans-to-issue-237-bln-climate-bonds-this-month-sources/ar-BB1jM8z5</a>
43	<a href="https://news.mongabay.com/2024/01/mexico-announces-20-new-protected-areas-despite-budget-cuts/">https://news.mongabay.com/2024/01/mexico-announces-20-new-protected-areas-despite-budget-cuts/</a>
44	<a href="https://gulfnnews.com/world/gulf/saudi/saudi-arabia-to-plant-10-billion-trees-in-a-major-step-towards-environmental-sustainability-1.98658743">https://gulfnnews.com/world/gulf/saudi/saudi-arabia-to-plant-10-billion-trees-in-a-major-step-towards-environmental-sustainability-1.98658743</a>
45	<a href="https://www.spa.gov.sa/en/N2050700">https://www.spa.gov.sa/en/N2050700</a>
46	<a href="https://www.argusmedia.com/en/news/2527281-s-africa-eyes-slower-coal-phaseout">https://www.argusmedia.com/en/news/2527281-s-africa-eyes-slower-coal-phaseout</a>
47	<a href="https://energycentral.com/news/electricity-regulation-amendment-bill-believed-be-line-unbundling-eskom">https://energycentral.com/news/electricity-regulation-amendment-bill-believed-be-line-unbundling-eskom</a>
48	<a href="https://www.gov.uk/government/publications/agricultural-transition-plan-2021-to-2024/agricultural-transition-plan-update-january-2024">https://www.gov.uk/government/publications/agricultural-transition-plan-2021-to-2024/agricultural-transition-plan-update-january-2024</a>
49	<a href="https://www.theguardian.com/environment/2024/feb/12/england-brings-in-biodiversity-net-gain-rules-to-force-builders-to-compensate-for-loss-of-nature#:~:text=England%20is%20launching%20a%20biodiversity,gain%20in%20biodiversity%20or%20habitat">https://www.theguardian.com/environment/2024/feb/12/england-brings-in-biodiversity-net-gain-rules-to-force-builders-to-compensate-for-loss-of-nature#:~:text=England%20is%20launching%20a%20biodiversity,gain%20in%20biodiversity%20or%20habitat</a>

# TRACKED POLICY SOURCES

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50	<a href="https://www.reuters.com/sustainability/climate-energy/us-lays-out-plan-cop-28-slash-climate-super-pollutant-oil-gas-2023-12-02/">https://www.reuters.com/sustainability/climate-energy/us-lays-out-plan-cop-28-slash-climate-super-pollutant-oil-gas-2023-12-02/</a>
51	<a href="https://www.doi.gov/pressreleases/biden-harris-administration-announces-significant-progress-catalyze-solar-energy-0">https://www.doi.gov/pressreleases/biden-harris-administration-announces-significant-progress-catalyze-solar-energy-0</a>
52	<a href="https://www.transportation.gov/priorities/climate-and-sustainability/us-national-blueprint-transportation-decarbonization">https://www.transportation.gov/priorities/climate-and-sustainability/us-national-blueprint-transportation-decarbonization</a>
53	<a href="https://insideclimatenews.org/news/09022024/todays-climate-state-coalition-heat-pumps-climate-change/#:~:text=In%20a%20memorandum%20of%20understanding,properties%20over%20the%20coming%20decades.">https://insideclimatenews.org/news/09022024/todays-climate-state-coalition-heat-pumps-climate-change/#:~:text=In%20a%20memorandum%20of%20understanding,properties%20over%20the%20coming%20decades.</a>
54	<a href="https://www.reuters.com/business/autos-transportation/automakers-get-win-us-reverses-course-ev-mileage-rule-2024-03-19/">https://www.reuters.com/business/autos-transportation/automakers-get-win-us-reverses-course-ev-mileage-rule-2024-03-19/</a>
55	<a href="https://vietnamnews.vn/economy/1650813/moit-implements-the-hydrogen-energy-strategy.html">https://vietnamnews.vn/economy/1650813/moit-implements-the-hydrogen-energy-strategy.html</a>

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