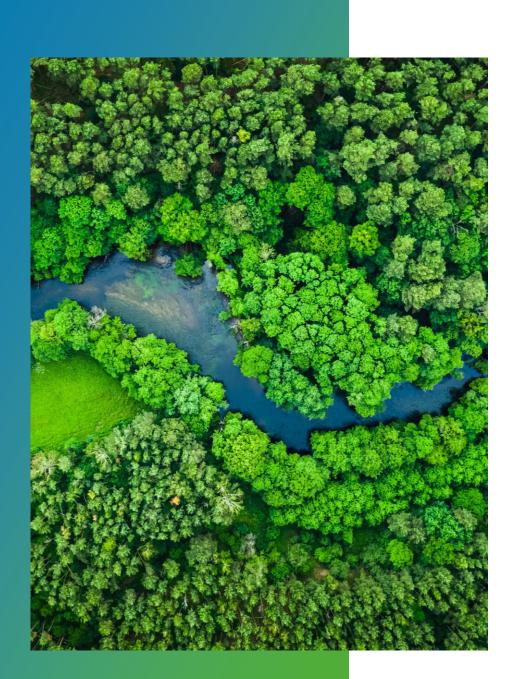


Quarterly Forecast Tracker Global progress against IPR policy scenarios

# **Quarterly Forecast Tracker** Special Focus: Update of global land and nature policy developments Q3 2023 - Q1 2024

March 14<sup>th</sup>, 2024





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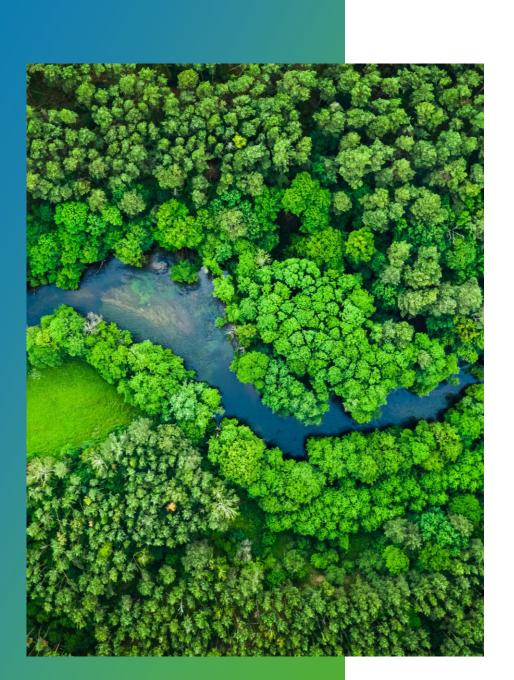


**1** July 2023 Forecasts – the starting base

2 Land and nature policy forecast tracking since July 2023

3 Investor impact

4) <u>Annex – Individual Policies & Methods</u>





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## EXECUTIVE SUMMARY: TRACKING LAND AND NATURE POLICY DEVELOPMENTS



Major progress has been made in land and nature policy in the last 12 months. IPR expects increasing policy momentum against the IPR well below 2°C Forecast Policy Scenario, alongside increasing investor opportunities

#### IPR Quarterly Forecast Trackers

Key Land and Nature 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 objective 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 on land and nature policies and developments since the **July 2023** Forecast Policy Scenario was constructed.

- The **rate of material and credible national policy announcements** tracked by IPR on the land and nature transition has **doubled in in last 12 months**, with a significant uptick in policy momentum following recent COPs.
- Growing land and nature policy momentum at COP 28, the COP29 process to achieve a New Collective
   Quantified Goal on Climate Finance and the COP30 taking place near the Amazon, will bring a stronger focus on
   Nature Based Solutions (NBS) and help deploy billions in capital towards carbon sequestration and biodiversity.
- The magnitude of land and nature policies is growing with the EU landmark deforestation regulation (EUDR) legislated and the UK and US announcing similar policies.
- **Brazil, China, the EU and the US lead** on land and nature policy announcements, with Brazil announcing launch of a regulated carbon market and China committing to 30% nature protection in line with Global Biodiversity Framework; Asia Pacific, South America and East Africa will be significantly impacted by supply chain regulation.
- More than **two-thirds of tracked policies** to date are **in line with the well below 2°C FPS forecast**, but only **1% advancing even further towards 1.5°C**<sup>1</sup>.
- Overall land utilized for NBS could grow **10-fold by 2035**, nearly equal to 10% of global agricultural land.
- Companies sourcing commodities from areas with high risk of deforestation face increased financially material compliance and reputational risk. If land and nature transition risks are unmitigated, firms exposed to global food supply system could lose on **average 7% in value**, equivalent to permanent, non-cyclical **USD\$150 billion**.

## 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



**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 Advisers (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 analytic 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

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.



<u>Core philanthropic support</u> 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.





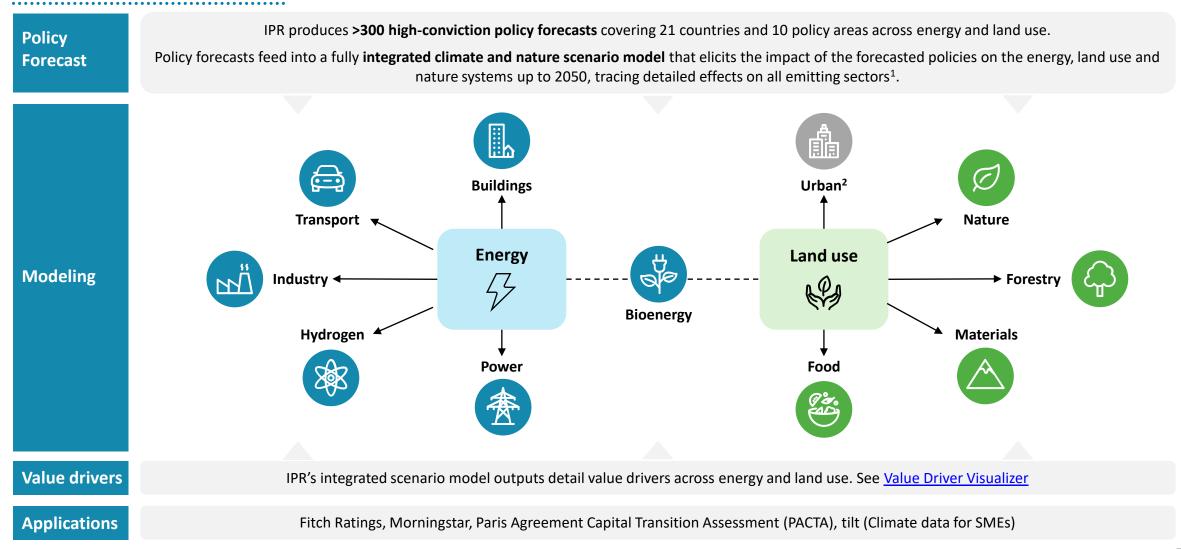






# IPR OFFERS A RANGE OF APPLICATIONS TO HELP FINANCIAL INSTITUTIONS NAVIGATE THE CLIMATE TRANSITION





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, LAND AND NATURE

## Please see the IPR <u>Home Page</u> for further details

	Scenario	Policy Forecast Details	Open Access Database
	IPR 2023 Forecast Policy Scenario (FPS)	IPR FPS 2023 Summary Report	IPR FPS 2023 Value Drivers
	<ul> <li>Models impact of forecasted policies on the</li> </ul>	IPR 2023 Policy Forecast	IPR Scenario Explorer
	real economy	IPR FPS 2023 Detailed Energy Results	
		IPR FPS 2023 Detailed Land Use and Nature Results	
		IPR 2023 Bioenergy Report	
	IPR Forecast Policy Scenario + Nature (FPS + Nature)	IPR 2022 FPS + Nature detailed results	IPR FPS + Nature Value Drivers
	<ul> <li>First integrated climate and nature scenario for use by investors</li> </ul>		

IPR has published a set of publicly available outputs from the FPS 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.

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

The Quarterly Forecast Tracker has the aim to compare current policies trends to the forecast to understand the state, speed and quality of the land transition as well as the remaining policy gaps. Most important policies will be used to update the forecast to adjust for changed 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:

- Be supportive of our policy forecasts, but where 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 legislated policy, IPR policy forecasts rest on a view that selected announced policies that are supportive or confirmatory will either become directly legislated or impact the real-world 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.

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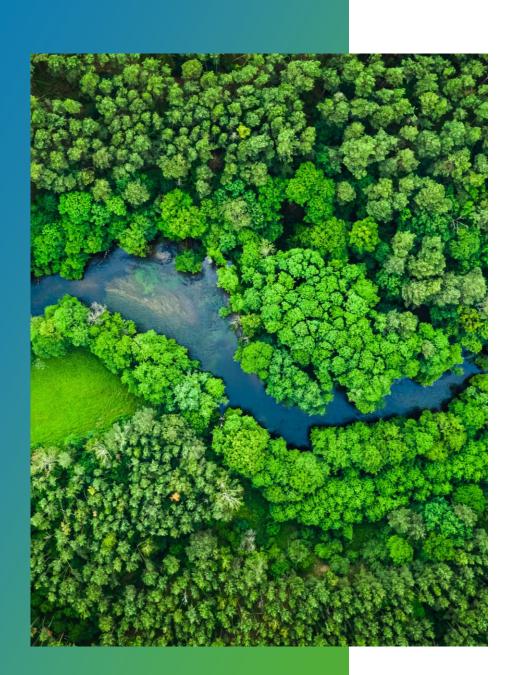
## LAND AND NATURE USE POLICY DEVELOPMENTS FROM JULY 2023 TO JANUARY 2024



We identified 40+ land policies relevant to the IPR Land and Nature policy forecast, focusing on the 22 most credible and material, with 7 of these policies likely changing the FPS forecast

	2024 QFT 1		
1 <b>Track/compile</b> announcements between beginning of July 2023 to end of January 2024	<b>40+</b> policy developments tra	acked	We identified 40+ land use policies covering the IPR countries
2 Determine <b>relevancy</b> to IPR FPS and RPS forecasts	<b>30+</b> relevant to FPS/ RPS forecasts		30+ of these were relevant to the country, sector and policy coverage of the forecast
<ul> <li>Assess credibility of announcement</li> <li>Less credible: off or on-the record statement</li> <li>Credible: Public position on direction of travel</li> <li>More Credible: Published strategy, or enacted legislation</li> </ul>	22 credible		22 are either officially announced by governments or legislated
<ul> <li>4 Score impact of development on FSP 1.8°C Forecast</li> <li>Legislated or announced policies that 1) support and inclusion probability of 1.8°C FPS or 2) confirm 1.8°C FPS policy for</li> <li>Signal acceleration or deceleration of policy relative to for</li> <li>Details on the impact scoring process can be found in second seco</li></ul>	recast orecasts	<b>7 with likely impact</b> to revise forecasts upwards or downwards	7 are very powerful and could lead to an adjustment of our forecast in the future
			Focus of the following analysis

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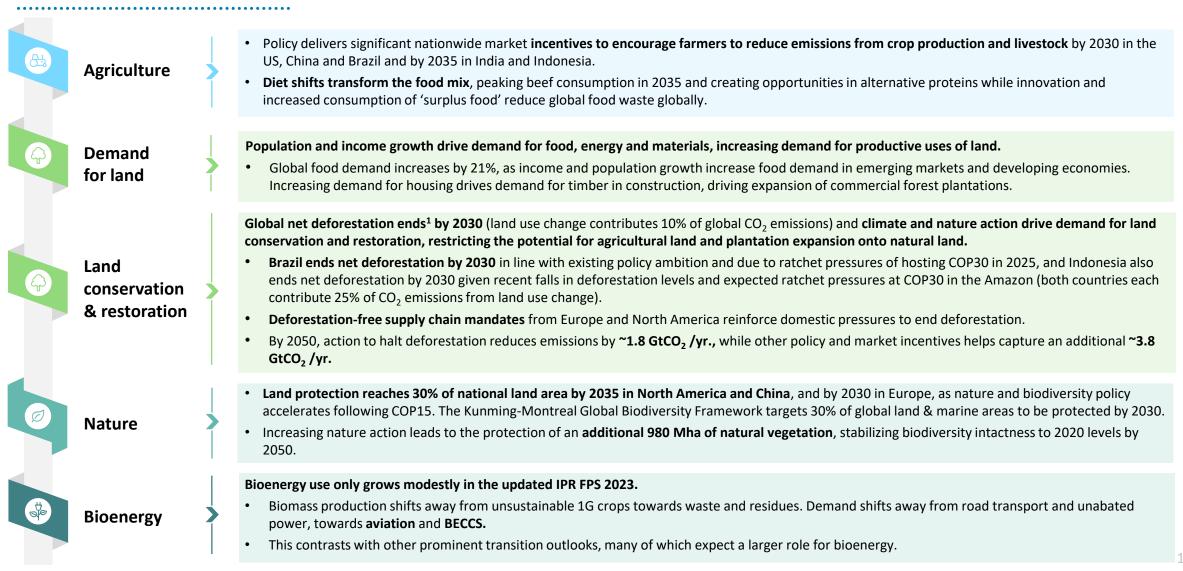
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## MOST IMPORTANT IPR FORECAST ASSUMPTIONS

## IPR 2023 Top Land Forecasts cover agriculture, land use, and nature policy assumptions



## SUMMARY OF IPR FORECASTS



IPR forecasts major land-related policy developments in the areas of land use and nature, defining three tiers of ambition to differentiate the speed of the land and nature transition across countries

## IPR 1.8°C Forecast Policy Scenario (FPS) target dates

orecast define	d in September 2023	Agri	🖓 Land use		🖉 Nature	🖉 Nature		
		Low-carbon agriculture	Net deforestation	Deforestation free supply	Protection & restoration	Nature incentives		
Asia	Australia	2030	2025-30	2030	2030	2025		
Pacific excl.	India 📃	2035	2025-35	>2035	2040	>2035		
China	Indonesia	2035	2030	>2035	>2040	2035		
	Japan 🔶	2025	2025	2035	2030	2030		
	South Korea 🛛 🍣	2030	2030	>2035	2040	2030		
	Vietnam 🔀 📩	2030	2025	>2035	>2040	2030		
China	China 🎽	2030	2025	2035	2035	2030		
Europe	France	2025	2025	2030	2030	2025		
	Germany	2025	2025-30	2030	2025	2030		
	Italy	2025	2025	2030	2030	2030		
	UK	2025	2025	2030	2030	2025		
Eurasia	Russia	2035	2025-35	>2035	>2040	>2035		
Middle East	Nigeria	2035	2035	>2035	>2040	>2035		
and Africa	Saudi Arabia	n/a	2030	>2035	2040	>2035		
	South Africa 🛛 ≽	2035	2035	>2035	2040	2035		
	Turkey C*	2035	2025	>2035	>2040	>2035		
North	Canada 🛛 🛃	2025	2025	2035	2035	2030		
America	Mexico	2035	2030	>2035	2040	2035		
	USA	2030	2025	2035	2035	2030		
South	Argentina	2035	2030	>2035	2040	2035		
America	Brazil 📀	2030	2030	2035	2030	2030		
licy tiers refle	– ct level of climate ambitio	n: Tier 1	Tier 2	Tier 3				

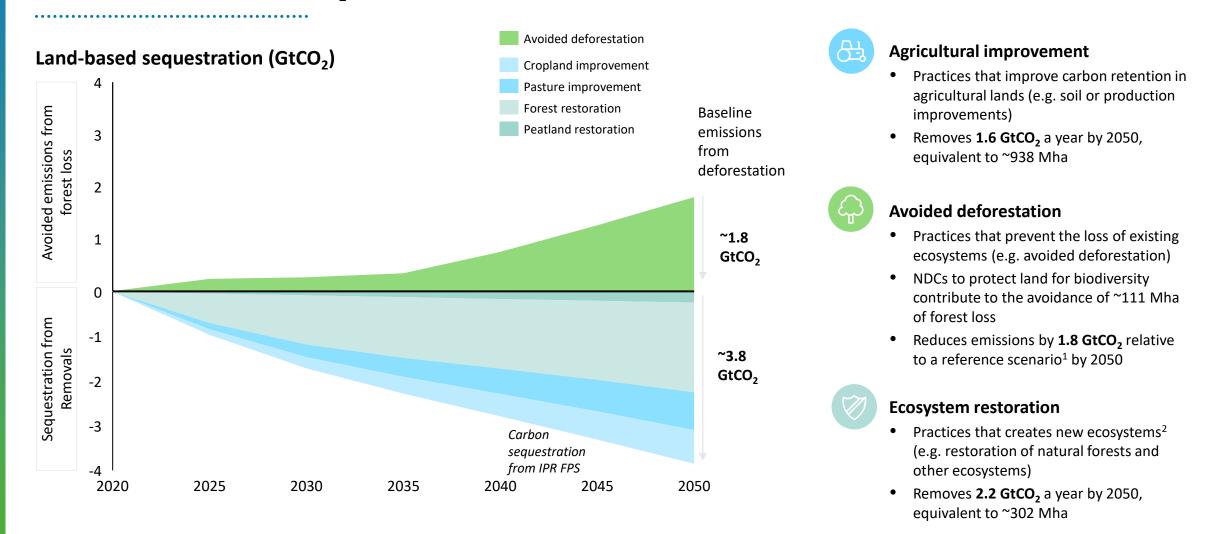
### **FPS** forecast target definitions

Target	Definition
Low-carbon agriculture	Significant nationwide market incentives to reduction of emissions from crop production and livestock
Net deforestation	End to net deforestation
Deforestation free supply	Deforestation-free supply chains are achieved
Protection & restoration	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored
Nature incentives	Significant market incentives to landowners to preserve nature

## LAND POLICY CATEGORIES TO REDUCE GLOBAL EMISSIONS



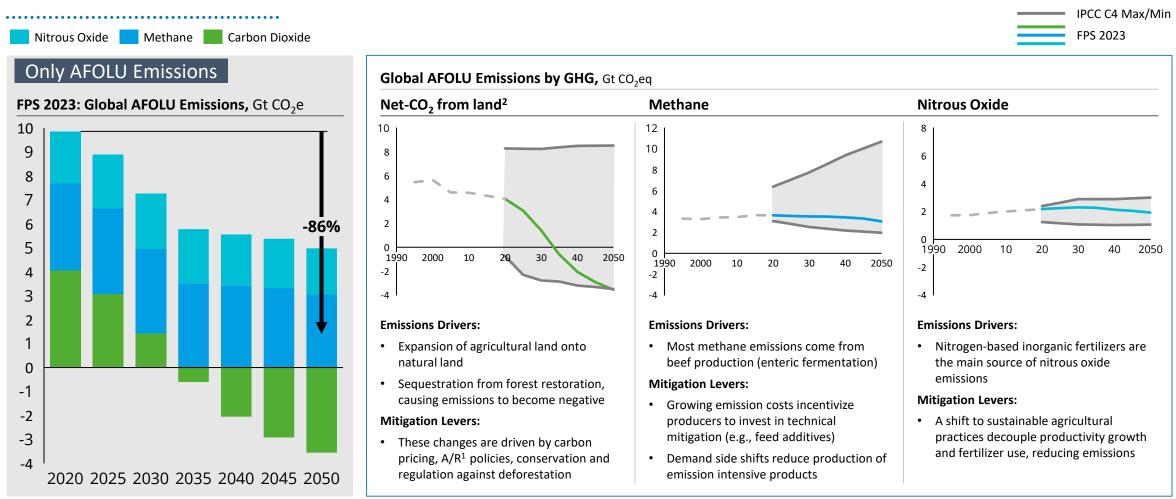
By 2050, action to halt deforestation reduces emissions by 1.8  $GtCO_2/yr$ , while other policy and market incentives helps capture an additional ~3.8  $GtCO_2/yr$ 



1. The reference scenario projects the land use change we would expect to see without NBS policies that conserve forest land, improve practices to optimize sequestration, and create new ecosystems. These values represent the difference in removals and reduction between the FPS 2023 scenario and this reference scenario, as a baseline. 2. Ecosystems described here refer to major land-based and carbon-rich ecosystems (e.g. forests, peatland, mangroves, pastureland)

## EMISSION REDUCTION DRIVERS IN THE LAND USE SECTOR

Carbon sequestration drives emission reductions in the land use sector, while mitigation policies in the agriculture sector stabilize other GHG emissions - - - Historical values



#### 1. Afforestation and reforestation

2. This encapsulates both land use change and changes in carbon density on the same land use type (e.g., land may not change use, but may have negative emissions due to the growing of trees that sequester over time) as well as sequestration from nature-based solutions

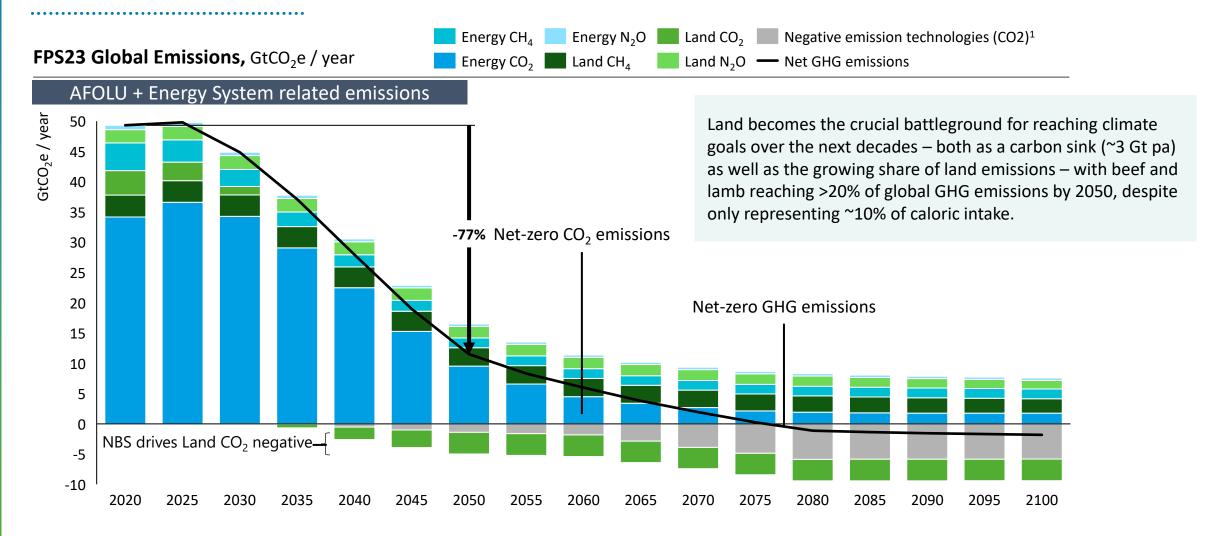
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RESPONSE



# LAND PLAYS A CRUCIAL ROLE IN ENSURING TEMPERATURE STABILIZATION IN IPR FPS 2023

Greenhouse gas emissions drop 77% by 2050 and reach net-zero by 2080, but only because negative emissions technologies remove 6 GtCO<sub>2</sub> per year by 2080



## FORECASTED EMISSIONS IMPACT OF KEY LAND/NATURE POLICIES



Nature Based Solutions could drive land CO<sub>2</sub> emissions negative, reducing residual emissions in 2050 by 50%, while residual emissions from livestock are set to account for 26% of all emissions in 2050

Р	Policy Area	IPR Forecast Policy Levers	2030	2050	2050 residual & negative Emissions
8	Low carbon agriculture	<b>Agricultural improvement:</b> Practices that improve carbon retention in agricultural lands (e.g. soil or production improvements)	Removes <b>0.5 MtCO<sub>2</sub></b> per year	Removes <b>1.6 GtCO<sub>2</sub></b> per year	Reduces 2050 emissions by <b>9%</b> relative to reference scenario
		<ul> <li>Livestock emissions reduction</li> <li>Growing emission costs incentivize producers to invest in technical mitigation (e.g., feed additives)</li> <li>Diet shifts starting in 2030 transform the food mix, increasing use of alternative proteins</li> <li>Global beef production peaks in 2035 and begins to decline slowly, driven by declining demand from OECD countries</li> </ul>	Livestock emissions peak in 2025 (3.6 GtCO2e) and fall sightly to <b>3.5 GtCO<sub>2</sub>e</b> by 2030	Emissions from livestock fall to <b>3.0 GtCO<sub>2</sub>e</b> but remain at that level through to 2100	26% of total 2050 GHG residual emissions Livestock emissions fall 16% from 2020 levels due to efficiencies, waste reduction and diet shift towards alternative proteins But share of total emissions grows from 7% to 26% due to increased population/protein consumption and rapid reductions in rest of economy
چ ج	End to net forestation Deforestation free supply chains	Avoided forest loss: Practices that prevent the loss of existing ecosystems (e.g. avoided deforestation) NDCs to protect land for biodiversity contribute to the avoidance of ~111 Mha of forest loss by 2050	Reduces emissions by <b>0.6 GtCO<sub>2</sub></b> relative to reference scenario	Reduces emissions by <b>1.8 GtCO<sub>2</sub></b> relative to reference scenario	Reduces 2050 emissions by <b>11%</b> relative to reference scenario
	Protection & restoration Nature incentives	<b>Afforestation and peatland restoration</b> Practices that creates new ecosystems (e.g. restoration of natural forests and other ecosystems)	Removes <b>0.3 GtCO<sub>2</sub></b> a year	Removes <b>2.2 GtCO<sub>2</sub></b> a year	Reduces 2050 emissions by <b>13%</b> relative to reference scenario





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## COP 28: LAND USE OUTCOMES

Growing land use momentum at COP 28 focused on protection and restoration and additional agriculture initiatives

## **COP28** commitments



#### al Protection and restoration

Over **\$186 million** pledged towards driving climate action and protecting nature to halt deforestation and reverse nature loss by 2030. Key outcomes include **new joint commitments** focusing on the protection & restoration of forests, mangroves and the ocean as well as a recognition of the critical role that indigenous communities, businesses and financial institutions play.



#### Global roadmap for sustainable agriculture (Part 1)

The 20 targets include reducing methane emissions from livestock by 25% by 2030, ensuring all the world's fisheries are sustainably managed by 2030, safe and affordable drinking water for all by 2030, halving food waste by 2030, and eliminating the use of traditional biomass for cooking by 2030.



#### I Forest conversation fund

Brazil proposes a global forest conservation fund at COP28, aiming to raise \$250 million.



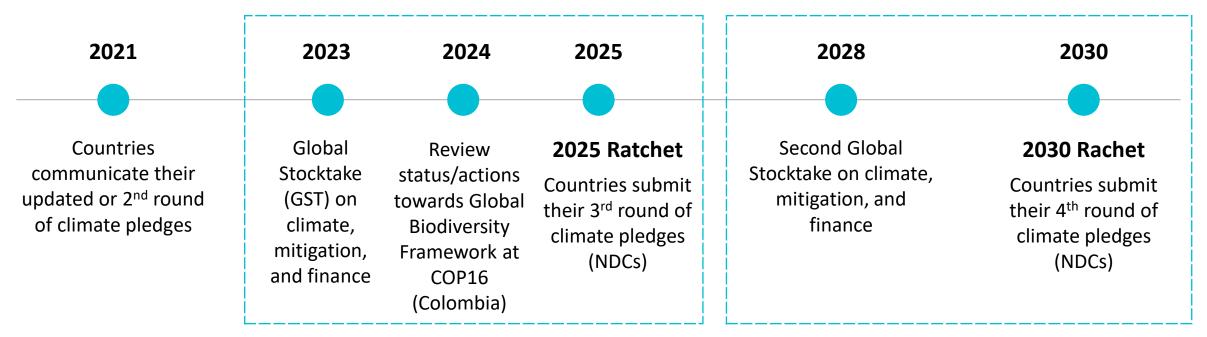
#### Nature Solutions Hub

The Asia Development Bank launched the Nature Solutions Hub for Asia and the Pacific to amplify the flow of public and private finance towards conserving nature and curbing biodiversity loss in the region. The Hub aims to attract at least \$2 billion towards NBS from capital markets/private capital.

# PARIS RATCHET PRESSURES INCREASE THE LIKELIHOOD OF STRENGTHENED POLICY ACTION



The COP29 process towards a New Collective Quantified Goal on Climate Finance and the COP30 taking place in Brazil will likely bring a stronger focus on Nature Based Solutions over the next two years







COP30 to take place in Belem, near Amazon, **heightening focus on deforestation** and protecting indigenous rights

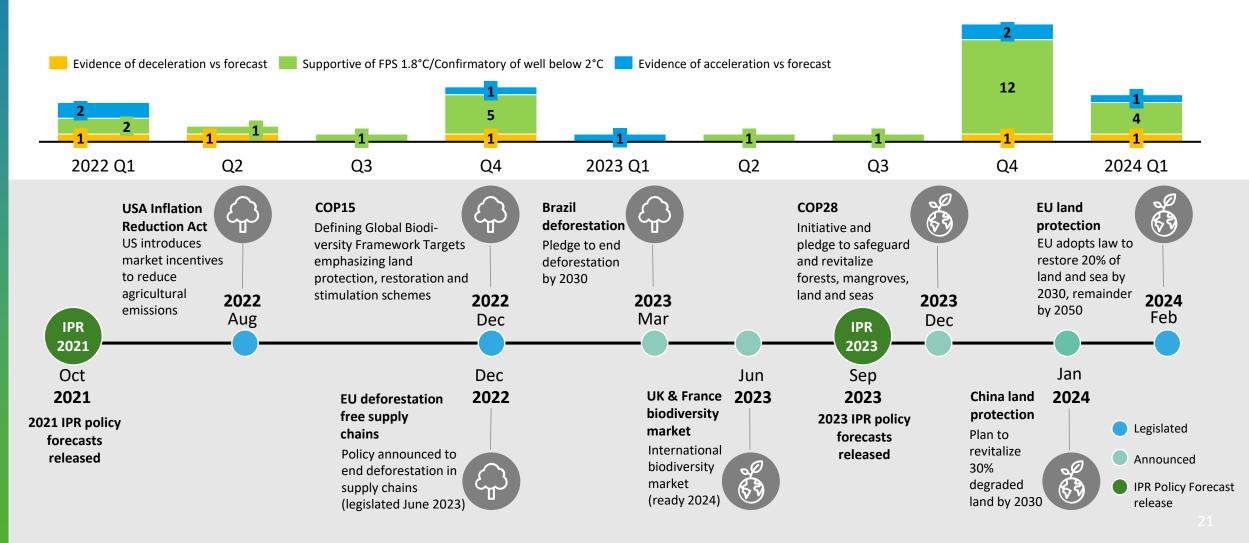


COP29 to define a **New Collective Quantified Goal** on Climate Finance, likely with a stronger focus on Nature Based Solutions.

#### INEVITABLE POLICY RESPONSE

# THE RATE OF CREDIBLE & MATERIAL POLICY ANNOUNCEMENTS ON LAND & NATURE TRANSITION ANNOUNCED HAS DOUBLED IN LAST 12 MONTHS

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



## TRACKING SINCE JULY 2023: GLOBAL LAND & NATURE POLICY UPDATE BY POLICY AREA



The magnitude of policies is growing with the UK and US announcing deforestation free supply chain policies, China targeting earlier adoption of the Global Diversity Framework and new carbon market schemes being introduced in Brazil

···· 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
Low carbon agriculture	Need to increase the protein efficiency per hectar, 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.
Net deforestation	Countries with large tropical forest cover (Brazil) must end legal deforestation and stop illegal deforestation.	While most regions are on the forecasted track, Russia and Argentina are rolling back environmental protection regulations.		Anti-Deforestation measures are reducing speed of deforestation in Brazil, while other countries increase logging allowances.
Deforestation free supply	Large economies need to stop importing goods that drive deforestation.	New rules against Deforestation linked imports in EU, UK and possibly the US can be a game-changer, if implemented thoroughly.		Long term impact of policies unclear, more evidence on enforcement required.
Protection & restoration	Regulation must guarantee protection of valuable ecosystems and restoration of degraded areas.	The follow-up to the Kunming-Montreal Global Biodiversity Framework and its 30 by 2030 targets are taking up speed, with China aiming for implementation earlier than forecasted.		After ambitious announcements the degree implementation of protected areas remains to be monitored.
Nature incentives	Funding for providing incentives for protection carbon rich and biodiverse ecosystems is required.	New carbon market designs in Brazil and China have the potential to deliver incentive structures for nature based solutions in forestry.		Links between regulatory Emission Trading Schemes and Voluntary Carbon Markets can be key for providing capital to

protect carbon rich ecosystems.

Link ETS globally.

# TRACKING SINCE JULY 2023 FPS UPDATE GLOBAL LAND & NATURE POLICY UPDATE BY REGION

Brazil, China, Europe and the US lead on supportive/accelerating land policy announcements, Argentina and Russia lag behind

INEVITABLE POLICY

Dol	icy area	What needs to happen	Tracked policy developments <sup>2</sup>	Impact on	Synthesis
FUI	icy area ·····	to validate IPR Forecast <sup>1</sup> ?	nackeu policy uevelopments	IPR forecast <sup>3</sup>	Jynchesis
	Asia Pacific	Industrial countries need to free their supply chains from deforestation linked products, while Vietnam and Indonesia need to achieve net zero deforestation.	Forest protection measures are emerging in developing economies, partially with financial support from industrial economies.		Industrial and developing countries need to work together to end deforestation.
-	China	China needs to limit deforestation caused by its imports and limit emission caused by land use-change.	China addresses ecosystem protection faster than expected, aims to regulate agricultural carbon emissions and reinstates voluntary carbon market.		China is stepping up its climate policy in the land use sector, but remains a major factor in deforestation.
	Europe	Reduce meat consumption and shift from monocultural forestry to old growth forest. Shift away from first generation biofuel crops.	Europe moves on with the forecasted ambition, and gets ahead of th forecast with the EUDR, that limits imports linked to deforestation.	e	While on track so far, the bloc eyes a slowdown of climate policy ahead of the European elections.
	Eurasia	Russia's immense boreal forests are a valuable carbon sink that need protection from deforestation and wildfires.	Russia is reducing protection measures for forests.		Russia is focusing on military efforts, deprioritizing climate policy.
The second secon	Middle East and Africa	Need to shift to low carbon climate resilient agriculture.	Saudi Arabia's tree planting plans are scaled up, both domestically and in the region.		Developing countries are lacking funds to invest in low carbon agriculture.
	North America	Reduce meat consumption and legislate better protection of old growth forests that are biodiversity and carbon-intensive.	The continent advances with Canadian agricultural incentives, enlarged natural parks in Mexico and US ban on logging old growth forests. Passing the proposed US Forest act would be big win.		Significant progress made in the US, but federal election puts progress at risk. Canada on track.
100	South America	The tropical amazon forests needs to be maintained due to its key function as 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.		The amazon forests, the most important carbon sink on a global level, is being protected better again, but additional incentive scheme could help reforestation efforts. 23

1. See IPR FPS 1.8°C forecast set out in section x; 2. See detailed policy tracking in section 1; 3. See impact on IPR forecast in section 3 and legend on the impact scales in the annex

## POLICY TRACKING LAND & NATURE AGAINST THE FPS 2023 FORECAST

While we see momentum particularly in protection & restoration and net deforestation, nature incentives, low-carbon agriculture and deforestation free supply chains still require significant policy action to get towards the 1.8°C FPS

### IPR 1.8°C Forecast Policy Scenario (FPS)

recast defined	d in September 20	23	Agri	C Land use		🖉 Nature			Agri	슈 Land use		🖉 Nature		Target	Definition
			Low-carbon agriculture	Net deforestation	Deforestation free supply	Protection & restoration	Nature incentives		Low-carbon agriculture	Net deforestation		Protection & restoration	Nature incentives	Low-carbon agriculture	Significant nationwide market
Asia Decifie	Australia	*	2030	2025-30	2030	2030	2025	*	$\checkmark$	$\checkmark$		*	*	ugneuture	incentives to
Pacific excl.	India	۲	2035	2025-35	>2035	2040	>2035	۲		*	**	$\checkmark$			reduction of
china	Indonesia		2035	2030	>2035	>2040	2035			*	**	$\checkmark$			emissions from cro production and
	Japan	٠	2025	2025	2035	2030	2030	٠	$\checkmark$			$\checkmark$			livestock
	South Korea	<b>**</b> *	2030	2030	>2035	2040	2030	<b>*</b> •*	*			$\checkmark$			
	Vietnam	*	2030	2025	>2035	>2040	2030	*	*	*	**	$\checkmark$	$\checkmark$	Net defores-	End to net
China	China	*)	2030	2025	2035	2035	2030	*2	*	*		*	$\checkmark$	tation	deforestation
Europe	France		2025	2025	2030	2030	2025		$\checkmark$	$\checkmark$	$\checkmark$	*	$\checkmark$		
	Germany		2025	2025-30	2030	2025	2030		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Deforestation	Deforestation-free supply chains are achieved
	Italy		2025	2025	2030	2030	2030		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	free supply	
	UK		2025	2025	2030	2030	2025		$\checkmark$	$\checkmark$	*	*	$\checkmark$		
Eurasia	Russia		2035	2025-35	>2035	>2040	>2035				**	$\checkmark$		Protection &	30% protection of
Middle East	Nigeria		2035	2035	>2035	>2040	>2035				**	$\checkmark$		restoration	land achieved, and 30% of degraded land under effective
and Africa	Saudi Arabia	252689 	n/a	2030	>2035	2040	>2035	5-2899 	n/a	*	**	*			
	South Africa		2035	2035	>2035	2040	2035				**	$\checkmark$	*		restoration or
	Turkey	<b>C</b> *	2035	2025	>2035	>2040	>2035	C*		*		$\checkmark$			restored
North	Canada	*	2025	2025	2035	2035	2030	*	$\checkmark$	$\checkmark$		*	$\checkmark$		
America	Mexico	۲	2035	2030	>2035	2040	2035	۲		*	**	$\checkmark$	$\checkmark$	Nature	Significant market
	USA		2030	2025	2035	2035	2030		$\checkmark$	*	*	*	$\checkmark$	incentives	incentives to landowners to
South	Argentina	٠	2035	2030	>2035	2040	2035	-		*	**	*	$\checkmark$		preserve nature
America	Brazil		2030	2030	2035	2030	2030		*	*	**	$\checkmark$	*		

### Policy tracking against the IPR 1.8°C FPS

**FPS forecast definitions** 

(other policies)



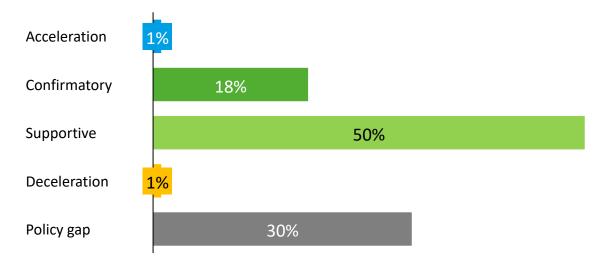
## MORE THAN TWO-THIRDS OF TRACKED POLICIES ARE IN LINE WITH THE WELL BELOW 2°C\*

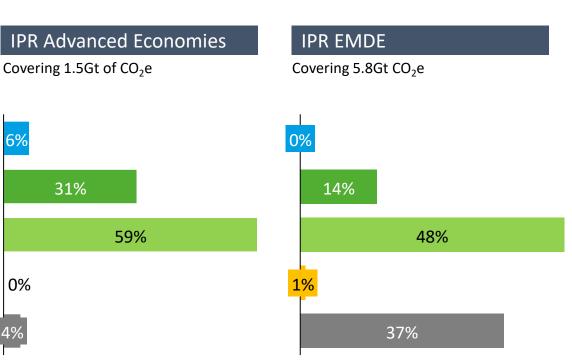


Most land use emissions are located in emerging markets, so policy action in emerging markets as well as more extensive deforestation free supply chain regulation are major levers of emissions reductions

#### All 21 IPR countries

2022  $CO_2e$  emissions distribution of agricultural sector and LULUCF emissions<sub>1</sub> (CH<sub>4</sub>, N<sub>2</sub>O, & CO<sub>2</sub>) across countries and tracked policy areas, covering 7.3Gt of 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 target, 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 targets.

**Deceleration**: Greater likelihood of alignment to market expectations (IEA 2.3°C STEPS1 scenario)

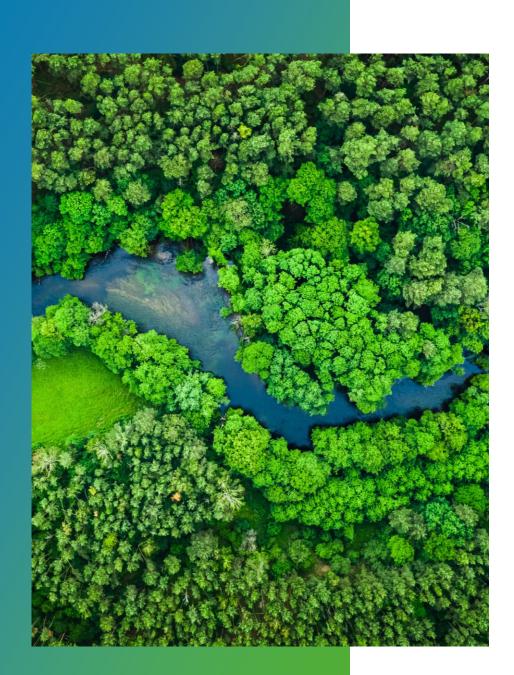
Policy gap: Emissions are not covered by climate policy.

- 69% of emissions in the agriculture and LULUCF sectors of the **21 IPR countries** are covered by announced or legislated<sub>2</sub> climate policy that is faster, confirmatory or supportive of the IPR FPS 1.8°C.
- 31% of emissions are decelerating in ambition or not covered by climate policy.
- 37% of emissions from agricultural sector and LULUCF in advanced economies are covered climate policy that meets at least the forecasted IPR targets.
- 59% of emissions are adressed by policy that is supportive but not yet sufficient to meet the IPR FPS 1.8°C.
- The policy gaps of 4% are largely due to imported deforestation linked products.

- Emerging markets and developing economies (EMDE) are responsible for 79% of all agricultural and LULUCF emissions in the IPR countries.
- 62% of CO<sub>2</sub> emissions in IPR EMDE are covered by existing climate policy that meets, or moves in the direction of meeting IPR's FPS 1.8°C
- 38% of GHG emissions in IPR EMDE are decelerating or not covered by climate policy that aims to reduce them according to the IPR targets.

\* 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 24 and in the annex/previous publications





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**2** Land and nature policy forecast tracking since July 2023



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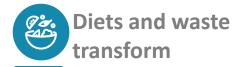
## THE IPR FPS HAS IDENTIFIED RISKS AND OPPORTUNITIES FOR INVESTORS



These past months, the IPR policy tracking observed policy momentum on supply chain risk, carbon markets and nature based solutions



Policy that encourages deforestation-free supply chains has significant risk implications for downstream companies in tropical commodities



Diet shifts transform the food mix, creating opportunities in alternative proteins while innovation and increased consumption of 'surplus food' reduce global food waste globally





Climate policy and incentives increase the uptake of NBS while increasing demand for housing drives opportunities in timber for construction



Land competition, sustainable guardrails and cheaper, cleaner alternatives lead to a **modest growth opportunity in bioenergy** 



Supported by emerging policy frameworks, **voluntary carbon markets** are opening for trade across all geographies at **a significantly increased rate**.

C Deep dive 3

Q Deep dive 1

Q Deep dive 2

## **REGULATION ON DEFORESTATION-FREE SUPPLY CHAINS INCREASE RISK**

The legislated EUDR increases compliance and reputational risk for companies. UK FRC and US Forest look to be more lenient in design and penalties

EU Deforestation-Free Regulation (EUDR)

- EU initiative to limit deforestation through forestry and agricultural production of commodities – the implementation will start on 30 December 2024
- Aims to ban the import and trade of products derived from certain commodities (cattle, soy, oil palm, coffee, cocoa, wood, and rubber) that originate from areas that were deforested after 2020
- Due diligence includes the collection of information, including data on the geolocation of production areas, risk assessment measures, and, if necessary, risk mitigation<sup>1</sup>
- Reduce carbon emissions by at least 32 million t/yr<sup>1</sup> and enhance the contribution of forests to tackle climate change<sup>1</sup>

### US Forest Act

 Introduced to the US Senate and House of Representative in November 2023

Proposed

- Aims to prohibit the importation of products linked to illegal deforestation, as defined by the rules and regulations of respective countries (different to EUDR)
- Included products (initial list) are palm oil, soy beans, cocoa, cattle, and rubber
- Aims to enforce greater transparency and accountability in global markets<sup>3</sup>

## UK Forest Risk Commodities (FRC) regime

- FRC regime, released in December 2023, was introduced through Environment Act 2021 to tackle illegal deforestation in UK supply chains.
- Secondary legislation to implement these requirements is expected in early 2024, it will align with the EUDR
- Commodities in scope (initial): cattle products (excluding dairy), cocoa, palm oil and soy beans / While some clarity has been provided with the published details, the scope of commodities has reduced, other details are awaited. The use of illegally harvested timber in supply chains is regulated separately in UK Timber Regulations<sup>4</sup>
- Will address more than half of the UK's estimated deforestation footprint<sup>4</sup>

#### Definition of deforestation:

- Defines illegal deforestation by legal system in country of origin (different from EUDR), making for a complicated enforcement for customs. This is also a loophole of the policy is countries allowing deforestation, as currently planned in Argentina
- The four commodities represent approx. 64% of the UK's tropical deforestation footprint; up to 93% of this deforestation is expected to violate local laws<sup>4</sup> meaning high potential to combat
- Insecurity about legislation and implementation date, since secondary legislation is needed

#### Definition of deforestation

- Not only illegal deforestation is excluded, but deforestation in general, i.e. also deforestation that is legal in producer country
- Penalties & trade impact

Investor specifics

- Potential penalties for non-compliance for companies of 4% of annual revenue
- A higher impact on low income countries with highly disaggregated supply chains (smallholders and traditional communities compared to medium and large-scale producers through additional costs incurred during the due diligence process)
- No multilateral forums to coordinate with commodity-producing nations on the compatibility of food production & environmental protection. Concerns exists about WTO combability<sup>2</sup>

#### Definition of deforestation:

 Defines illegal deforestation by legal system in country of origin (different from EUDR), making for a complicated enforcement for US customs. This is also a loophole in the policy for countries allowing deforestation, as currently planned in Argentina

#### Penalties & trade impact

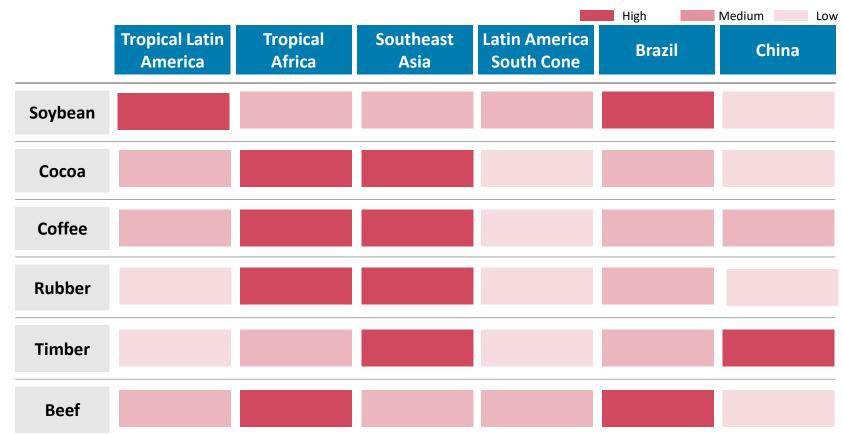
- Potential prosecution of individuals and organizations that engage in illegal deforestation
- The US legislative process on the Forest Act is still in its early stages, with no guarantee given that it will pass

#### Link to NBS market

 Establish a fund to help countries move away from deforestation and create effective enforcement and protection programs<sup>4</sup>

## THE LAND AND NATURE TRANSITION COULD POSE SIGNIFICANT FINANCIAL RISKS TO FIRMS EXPOSED TO GLOBAL FOOD SUPPLY SYSTEMS

Case Study: Companies sourcing commodities from deforestation areas face increased financially material compliance and reputational risk during 2024-2026<sup>1</sup>. Revenues at risk



Understanding commodity risk requires a granular view of regional dependencies on

a commodity<sup>1</sup>.

Across all nature transition risk drivers, firms exposed to global food supply system and not prepared to adapt to the policies and market trends outlined in the IPR FPS forecast could lose up to 26% of their value by 2035, with an average sector loss ~7%<sup>2</sup>.

This is equivalent to \$150 billion in losses to investors.

1. IPR (2023): <u>The Inevitable Policy Response Forecast Policy Scenario 2023: Detailed land use and nature results</u> 2. UNFCC and IPR (2022): <u>Assessing the financial impact of the land use transition on the food and agriculture sector</u>



Deep dive 1

#### 1. FAO (2020): Land use in agriculture by the numbers | Sustainable Food and Agriculture | Food and Agriculture Organization of the United Nations (fao.org) 2. UNEP (2023) State of Finance for Nature: UNEP scenario examines investment needs for 1.5°C climate objective compared to IPR well below 2°C FPS.

## NBS IMPACT ON LAND USE

1,000

900

We estimate that overall land area utilized for NBS is set to grow 10 fold by 2035. This compares to ~5% of global agricultural and forest surface area, or +10% of global agricultural land

917

Cumulative land area used for NBS (Mha) (IPR Land Forecast 2023)

#### Pasture improvement 800 749 700 25 583 600 24 Other NBS 26 500 24 437 400 26 25 24 Forest restoration 293 300 24 26 25 Cropland 200 165 13 25 improvement 26 26 25 100 Avoided 12 26 11 deforestation 14 Peat restoration 2035 2021 2025 2030 2040 2045 2050

## Key estimates on NBS growth

- Overall land area utilized for NBS increase almost 10fold from 2021 to 2035
- We expect that 917 million ha will be covered by NBS in 2050. Thus the NBS land coverage corresponds to 10% of global agricultural and forest surface area in 2050<sup>1</sup>
- Today 69% of global land surface area is covered by forest and agricultural land (4.06 billion ha forest and five billion hectares of agricultural land)<sup>1</sup>
- Note, the land area does not correspond one-to-one to their relative contributions to emissions. In addition, we count only 'explicit' nature based solutions resulting from active interventions by policymakers and market actors
- A recent UNEP report estimates annual investment in NBS must scale from ~\$150 billion today to \$674 billion by 2050 in a 1.5°C scenario<sup>2</sup>





## **BRAZILIAN CARBON MARKET**

INEVITABLE POLICY RESPONSE

Carbon prices exceeding US\$ 20/t of CO2 captured by natural regeneration in the Amazon would significantly transform the region's landscape towards forest restoration

#### Legislation process and scope of bill



**Announced**, accepted in the house of representatives, still expects vote in the senate

- Brazilian lawmakers are advancing a bill to establish a cap-and-trade system operating from 2027
- The bill mandates emission limits and requires high emitters to purchase carbon credits
- About **5,000 companies** with emissions **above 10,000 tCO2e** in regulated sectors, would be affected
- Includes industry and power sectors
- The bill is **excluding livestock and primary agriculture sectors** from the compliance carbon market
- 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<sup>1</sup>

#### Why is it important for protection and afforestation of Brazil's forests?



#### Occurring problems in Brazilian forests

- Recent Amazon deforestation alarms researchers. By 2022, the Brazilian Amazon lost 21% of its original forest
- Illegal logging and forest fires degrade portions of the remaining forest that might push the forest toward a tipping point, reaching it cause consequences for climate stability and biodiversity protection
- In the Brazilian Amazon cattle ranching is a leading driver of deforestation
- The Amazon comprises ca. 9% of the nation's GDP while contributing to ca. 50% of all GHG emissions



#### How could carbon prices be connected to afforestation?

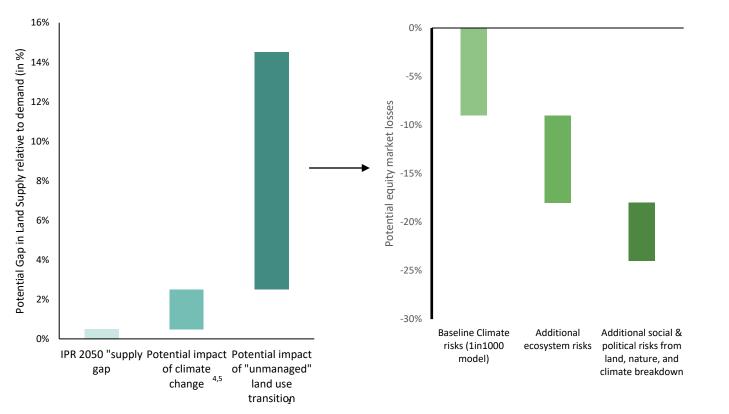
- Governments and major corporations globally seek to buy forest carbon credits to counter the threat, they are particularly interested in capturing carbon through forest restoration
- Essential is determining **the carbon price** that would induce the government and rural producers **to transition from cattle ranching to large-scale forest restoration** in the Amazon
- CPI indicates that carbon prices exceeding **US\$ 20/t CO2** captured by natural regeneration of deforested areas would significantly transform the region's landscape
- Offsets for captured carbon would ensure forest integrity, forest restoration and the capture of **16 Gt CO2** over **30 years**
- It would become economically advantageous to convert most cattle ranching areas into forest restoration
- The revenue generated from carbon (**US\$ 320 billion over 30 years**) would compensate for the loss of revenue from cattle

## THE POTENTIAL LAND CRUNCH CREATES SIGNIFICANT RISKS



IPR expects improvements in crop yield, food waste, and changes to diets to help mitigate the growing demand for land. However, without market transformation, the gap between the supply and demand for land will grow dramatically

An unmanaged land use deviating from our forecast transition risks creating a dramatic mismatch between the supply and demand for land ... ... potentially amplifying climate related risks by 2-3x in terms of GDP growth and equity market losses (Theia Finance Labs 2024)<sub>3</sub>



#### **Key findings**

- IPR forecasts that land supply will roughly meet land demand by 2050, thanks to significant improvements in yield, movement towards alternative protein, constraints on urban sprawl, limits to the deployment of bioenergy based on sustainability guardrails, as well. While nature based solutions will grow dramatically, limitations remain. **Overall demand / supply mismatch** is thus limited to ~1% by 2050<sub>5.1</sub>.
- However, without major investments and market transformation underpinning this forecast, the land demand-supply mismatch could grow dramatically. A more pessimistic view on land demand, coupled with the expected reduction in land supply from climate change identified by the IPCC<sub>4</sub>, the mismatch could grow to ~15%, with major ramifications for food security and land prices.

Such a scenario would create significant downside risks for both political and ecosystem stability, potentially **increasing the financial risks** from climate change **by a factor of 2-3x**<sub>3</sub>. Therefore, we think policymakers will act. This reinforces the need for integrated land and energy analysis.

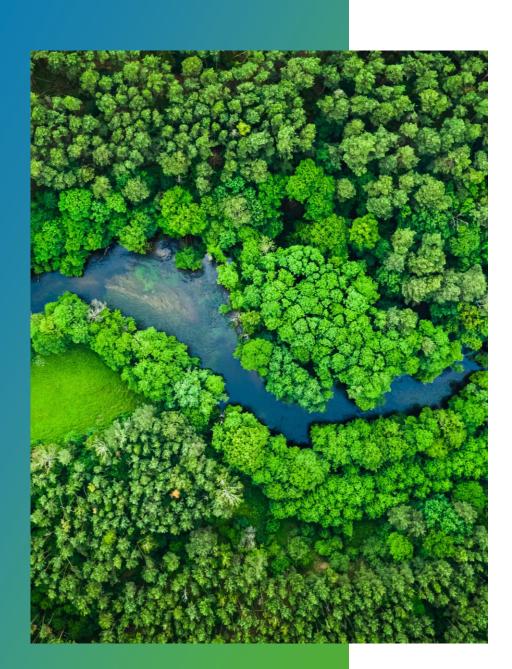
1. World Resource Institute (2023): What's Causing the Global Land Squeeze? | World Resources Institute (wri.org)

2. IPR Land Use forecast

3. Theia Finance Lab (2023): 1in1000 Finstab Final

4. IPCC: Special Report on Climate Change and Land — IPCC site

5. IOP Science (2011): <u>Climate change impacts on global agricultural land availability (iop.org)</u>; AGU (2018): <u>Quantifying Land and People</u> Exposed to Sea-Level Rise with No Mitigation and 1.5°C and 2.0°C Rise in Global Temperatures to Year 2300 - Brown - 2018 - Earth's Future -<u>Wiley Online Library</u>; Our World in Data (2019): <u>Land Use - Our World in Data</u>





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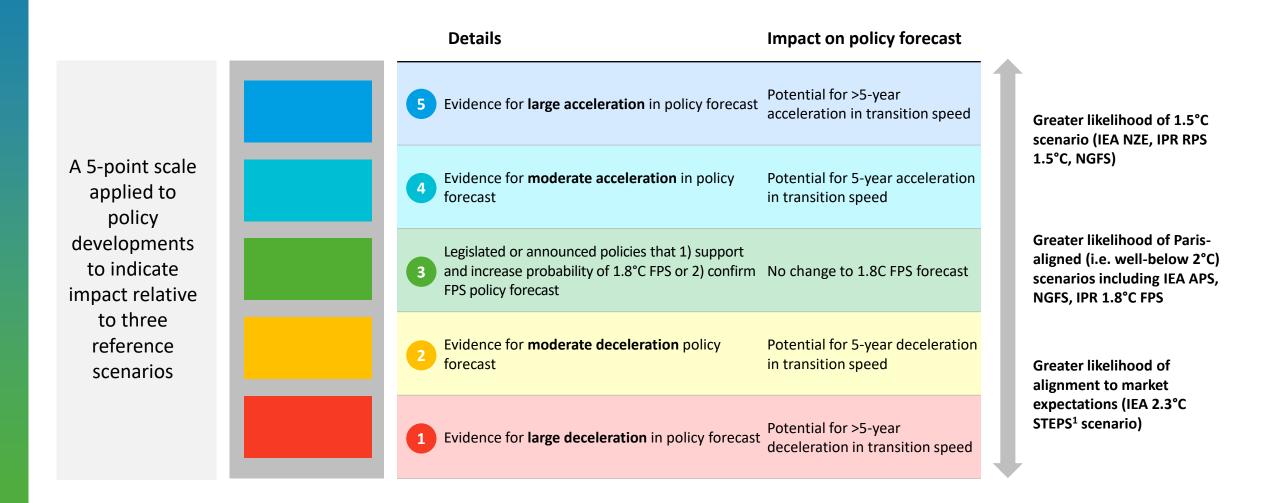
- **Executive summary & IPR Background**
- **1** July 2023 Forecasts the starting base
- **2** Land and nature policy forecast tracking since July 2023
  - 3 Investor impact



**Annex – Individual Policies & Methods** 

## IMPACT SCALE FOR IPR FORECAST

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





## IPR QFT: LAND USE POLICY DEVELOPMENTS 2023 Q3 - Q1 2024 PER REGION



The findings of IPR's Quarterly forecast tracker for 2023 Q3 - Q1 2024 show that most policies are in line with the Paris Agreement

	Greater likeliho alignment to market exp 2.3°C STEPS scer	ectations (IEA	Greater likelihood of Paris-aligned (i.e., well-below 2°C) scer including IPR 1.8°C FPS	narios 1.5°C	Greater likelihood of 1.5°C scenario including IEA NZE and IPR 1.5°C RPS		
	Significant deceleration	Moderate deceleration	No change to policy forecast	Moderate acceleration	Significant acceleration		
Region / score	1	2	3	4	5	Total	
Global	0	0	2	0	0	2	
Asia Pacific	0	0	2	0	0	2	
China	0	0	2	1	0	3	
Europe	0	0	5	1	0	6	
Eurasia	0	1	0	0	0	1	
Middle East and Africa	0	0	1	0	0	1	
North America	0	0	3	1	0	4	
South America	0	1	2	0	0	3	
Total	0	2	17	3	0	22	

## IPR QFT: LAND USE POLICY DEVELOPMENTS 2023 Q3 - Q1 2024 PER COUNTRY



## While 10 countries have implemented supportive climate policies, 9 countries did not announce or legislate policies

	Greater likelihood of alignment to market expectations (IEA 2.3°C STEPS scenario)		Greater likelihood of aris-aligned (i.e., well-below 2°C) scena including IPR 1.8°C FPS		Greater likelihood of scenario including IEA NZE and IPR 1.5°C RPS		
	Significant deceleration	Moderate deceleration	No change to policy forecast	Moderate acceleration	Significant acceleration		
Region / score	1	2	3	4	5	Total	
Global	0	0	2	0	0	2	
EU	0	0	1	1	0	2	
Australia	0	0	0	0	0	0	
India	0	0	1	0	0	1	
Indonesia	0	0	1	0	0	1	
Japan	0	0	0	0	0	0	
South Korea	0	0	0	0	0	0	
Vietnam	0	0	0	0	0	0	
China	0	0	2	1	0	3	
France	0	0	1	0	0	1	
Germany	0	0	0	0	0	0	
Italy	0	0	0	0	0	0	
UK	0	0	3	0	0	3	
Russia	0	1	0	0	0	1	
Nigeria	0	0	0	0	0	0	
Saudi Arabia	0	0	1	0	0	1	
South Africa	0	0	0	0	0	0	
Turkey	0	0	0	0	0	0	
Canada	0	0	1	0	0	1	
Mexico	0	0	1	0	0	1	
USA	0	0	1	1	0	1	
Argentina	0	1	0	0	0	2	
Brazil	0	0	2	0	0	2	
Total	0	2	17	3	0	22	

### COP28 POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
COP28	Protection and restoration	<ul> <li>COP28 Spurs Initiatives to Safeguard and Revitalize Forests, Mangroves, Land, and Seas</li> <li>COP28's Nature, Land Use and Ocean Day saw leaders endorse over \$186 million towards driving climate action and protecting nature, building upon previous commitments to halt deforestation and reverse nature loss by 2030.</li> <li>Key outcomes included new joint statements and commitments focusing on the protection and restoration of forests, mangroves and the ocean, recognizing the critical role that indigenous communities, businesses and financial institutions play in stewarding these assets, and the unveiling of a strategic partnership between the UAE and Brazil to bridge COP28 to COP30.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored.	Supportive	Score 3
	Low carbon agriculture	<ul> <li>FAO published part 1 of global roadmap for sustainable agriculture</li> <li>The 20 targets include reducing methane emissions from livestock by 25% by 2030, ensuring all the world's fisheries are sustainably managed by 2030, safe and affordable drinking water for all by 2030, halving food waste by 2030, eliminating the use of traditional biomass for cooking by 2030</li> <li>The remaining three parts of the document are to be rolled out over the coming years.</li> </ul>	Policy delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock.	Supportive	Score 3

### EU & FRANCE POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
EU	Deforestation free supply	<ul> <li>In May 2023 the EU adopted a new regulation on deforestation-free products</li> <li>The European Union Deforestation-Free Regulation (EUDR) aims to ban the import and trade of products derived from certain commodities — cattle, soy, oil palm, coffee, cocoa, wood, and rubber — that originate from areas that were deforested after 2020.</li> <li>Implementation starts in 2024, when importers need to demonstrate that products are free from deforestation before making them available on the European market.</li> </ul>	Policy delivers 100% deforestation-free supply chains by 2030	Legislated, confirmatory. If implemented thoroughly, EUDR would reduce the largest part of remaining imports linked to deforestation ahead of the forecasted timeframe.	Score 4
	Protection and restoration	<ul> <li>Council and European Parliament reach agreement on new rules to restore and preserve degraded habitats in the EU</li> <li>The law aims to put measures in place to restore at least 20% of the EU's land and sea areas by 2030, and all ecosystems in need of restoration by 2050.</li> <li>Member states must also establish measures to restore at least 60% of habitats in poor condition by 2040 and at least 90% by 2050.</li> <li>Under the agreed text, member states will be required to put measures in place to enhance the biodiversity of forest ecosystems and work towards enhancing certain indicators at the national level, such as standing and lying deadwood and the common forest bird index.</li> <li>A number of derogations from the targets are foreseen, notably for very common and widespread habitat types.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2025- 2030	Legislated, confirmatory. If the regulations passed by the EU organs, it would provide targets that come close to the Kunming-Montreal Global Biodiversity Framework.	Score 3
France	Protection and restoration	<ul> <li>France published new biodiversity strategy in November 2023</li> <li>France aims to restore 30% of degraded terrestrial and maritime ecosystems by 2030 and to protect 30% of the national territory, land and sea, including 10% in strong protection.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2025- 2030	Announced, confirmatory. If French policy makers act according to their strategy, the forecasted targets would be achieved.	Score 3

### ARGENTINA POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Argentina	Net deforestation Protection & restoration	<ul> <li>Argentinian government announces roll-back in environmental protection</li> <li>On 27 December the Argentinian government submitted an omnibus bill with 644 articles relating to multiple laws from different policy-areas, that the legislators are to approve</li> <li>The reform includes changes to the 2010 Glaciers Law and the 2009 Environmental Protection Law for the Control of Burning Activities</li> <li>It facilitates the deforestation and ignition of grasslands for agricultural or real estate purposes, even without formal authorization</li> <li>It weakens 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 to woodland owners for the preservation and sustainable management of forests would be ended.</li> </ul>	Policy delivers an end to net deforestation and delivers afforestation or reforestation at scale by 2030 30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2040	Announced, deceleration for both policy areas. If the environmental aspects of the proposal are legislated, this would have an adverse impact on target. As of 01 March 2024, the law has not yet been passed by the senate.	Score 2

### CHINA POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
China *:	Low carbon agriculture	<ul> <li>China published its action plan to reduce methane emissions</li> <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 delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock by 2030	Announced, supportive. Is expected to reduce methane emissions by regulation.	Score 3
	Nature incentives	<ul> <li>Chinas rebooted voluntary carbon market started trading again in January 2024</li> <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	Legislated, supportive. The possibility to issue carbon credits for afforestation and mangrove cultivation gives incentive to preserve ecosystems for some landowners. The linkage to the ETS offers additional capital to flow into the CCER market.	Score 3
	Protection and restoration	<ul> <li>China Commits to Revitalizing 30% of Degraded Ecosystems by 2030 in New Biodiversity Plan</li> <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	Annouced, acceleration. China announces to fulfil the 30x30 by targets of the Kunming-Montreal Global Biodiversity Framework earlier than previously expected.	Score 4

# INDIA, INDONESIA & SAUDI ARABIA POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
India (****	Protection and restoration	<ul> <li>Indian Forest &amp; Wood Certification Scheme launched by Ministry of Environment, Forests and Climate Change</li> <li>The new scheme promotes responsible forest management and agroforestry practices.</li> <li>Voluntary certification for a range of forest and wood-based activities.</li> <li>Certification is based on the Indian Forest Management Standard, consisting of 8 criteria, 69 indicators and 254 verifiers.</li> </ul>	30% protection of all land achieved, and 30% of degraded land under effective restoration or restored by 2040	Legislated, supportive. Standard setting is a step towards regulation.	Score 3
Indonesia	Net deforestation	<ul> <li>Indonesia and Norway strengthen joint efforts to address climate change</li> <li>Norway contributes \$100 Million to support Indonesia's deforestation reduction efforts, bolstering Indonesia's FOLU Net Sink 2030.</li> <li>Part of Indonesia-Norway Climate and Forest Partnership, the original MOU having been signed in 2022.</li> </ul>	Policy delivers an end to net deforestation and delivers afforestation or reforestation at scale by 2030	Announced, supportive. The results based Norwegian contribution supports the net zero deforestation target.	Score 3
Saudi Arabia	Net deforestation	<ul> <li>Saudi Arabia announced a tree-planting roadmap</li> <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	Announced, supportive. If implemented sustainably, the policy can achieve reforestation at scale.	Score 3

## USA POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
USA	Deforestation free supply	<ul> <li>FOREST Act introduced to US Senate</li> <li>The FOREST Act was introduced to the US Senate and House of Representative in November.</li> <li>The act aims to prohibit the importation of products linked to illegal deforestation, as defined by the rules and regulations of respective countries.</li> </ul>	Policy delivers 100% deforestation-free supply chains by 2035	Announced, acceleration. If implemented thoroughly, could lead to earlier achievement of forecasted targets. Definition of illegality of country of origin is a positive sign for global souths trade interests, but could undermine the target if legislation in country of origin allows deforestation.	Score 4
	Net deforestation	<ul> <li>Biden announces to ban logging in US old-growth forests in 2025</li> <li>The plan would prohibit cutting down old-growth trees for economic reasons.</li> <li>Old growth forests are especially carbon rich, and support high biodiversity.</li> <li>The scheme is expected to be implemented by 2025.</li> </ul>	Policy delivers an end to net deforestation and delivers afforestation or reforestation at scale by 2025	Announced, supportive. Supports the achievement of target, and increases biodiversity and carbon richness in American forests.	Score 3

### CANADA & MEXICO POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Canada	Low carbon agriculture	<ul> <li>Canada introduces incentives for beef cattle farms to reduce methane emissions</li> <li>The new REME protocol is added to Canada's Greenhouse Gas Offset Credit System, aiming to incentivize farmers to reduce methane emission by selling offset credits.</li> <li>The protocol focuses on improving animal diets and management for efficient growth, reducing enteric methane.</li> </ul>	Policy delivers significant nationwide market incentives to encourage farmers to reduce emissions from crop production and livestock by 2025	Announced, supportive. Offers an financial incentive for farmers reduce emission of GHG methane.	Score 3
Mexico	Protection and restoration	<ul> <li>Mexico announces 20 new protected areas despite budget cuts</li> <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	Legislated, supportive. The new protected areas cover ca. 1.2% of Mexican land mass, bringing the country closer to achieving the forecasted protection targets.	Score 3

### UK POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
UK	Low carbon agriculture	<ul> <li>Update of agricultural transition plan</li> <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	Legislated, supportive. The policy offers incentives for sustainable agricultural practices.	Score 3
	Nature incentives	<ul> <li>England brings in biodiversity rules to force builders to compensate for loss of nature</li> <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	Legislated, supportive. The scheme gives incentives to protect biodiversity in some areas, when it is reduced in other areas by construction.	Score 3
	Deforestation free supply	<ul> <li>UK government to ban imports of goods linked to illegal deforestation</li> <li>Following the EU and US examples, the UK is to ban imports of Palm oil, cocoa, beef, leather and soy that were produced in connection to illegal deforestation.</li> <li>The definition of legality depends on the legislation in the country of origin of the goods.</li> </ul>	Policy delivers 100% deforestation-free supply chains by 2030	Announced, confirmatory. If implemented thoroughly, could lead to earlier achievement of forecasted targets. Definition of illegality of country of origin is a positive sign for global souths trade interests, but could undermine the target if legislation in country of origin	Score 3

## RUSSIA POLICY ANNOUNCEMENTS/DEVELOPMENTS



			2023 IPR 1.8°C		
Region	Policy area	Development	Forecast	Impact on forecast	Impact assessment
Russia	Net deforestation	<ul> <li>New bill eases logging at lake Baikal</li> <li>Russia's lower house approves new bill that eases the logging restrictions along the UNESCO World Heritage site Lake Baikal.</li> </ul>	Policy delivers an end to net deforestation and delivers afforestation or reforestation at scale by 2025-35	Legislated, deceleration. The law has only local, rather symbolic implications due to Lake Baikal's UNESCO status. It is a deceleration in relation to the net zero deforestation target.	Score 2

#### TRACKED POLICY SOURCES



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1	https://www.cop28.com/en/news/2023/12/United-for-Nature-COP28-mobilizes-action-to-protect
2	https://www.fao.org/interactive/sdg2-roadmap/en/
3	https://www.climatepolicyinitiative.org/publication/brazilian-environmental-policies-and-the-new-european-union-regulation-for-deforestation-free-products-opportunities-and-challenges/#_ftn1
4	https://www.consilium.europa.eu/en/press/press-releases/2023/11/09/nature-restoration-council-and-parliament-reach-agreement-on-new-rules-to-restore-and-preserve-degraded-habitats-in-the-eu/
5	https://biodiversite.gouv.fr/la-strategie-nationale-biodiversite-2030
6	https://www.batimes.com.ar/news/argentina/enrique-viale-the-urgent-decree-and-omnibus-law-combo-is-an-invitation-to-destruction.phtml
7	https://www.bloomberg.com/news/articles/2023-10-24/brazil-is-in-talks-for-2-billion-in-funding-to-boost-crop-land
8	https://www.ft.com/content/0a7b017a-c54e-48e8-8c86-0654ed63979b
9	https://www.carbonbrief.org/qa-what-does-chinas-new-methane-plan-mean-for-its-climate-goals/
10	https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/012224-chinas-national-voluntary-carbon-market-starts-trading-jan-22
11	http://english.scio.gov.cn/pressroom/2024-01/19/content_116951603.htm
12	https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1985119#:~:text=The%20Ministry%20of%20Environment%2C%20Forests,and%20agroforestry%20in%20the%20country.
13	https://www.regjeringen.no/en/aktuelt/indonesia-and-norway-strengthen-joint-efforts-to-beat-climate-change2/id3016606/
14	https://gulfnews.com/world/gulf/saudi/saudi-arabia-to-plant-10-billion-trees-in-a-major-step-towards-environmental-sustainability-1.98658743
15	https://www.forest-trends.org/blog/progress-on-bipartisan-policy-to-tackle-global-deforestation-the-forest-act-has-been-reintroduced-to-the-us-senate-and-house-of-representatives/
16	https://www.washingtonpost.com/climate-environment/2023/12/19/old-growth-logging-forest-service/
17	https://www.reuters.com/sustainability/canada-offer-incentives-cattle-farms-reduce-methane-emissions-2023-12-10/
18	https://news.mongabay.com/2024/01/mexico-announces-20-new-protected-areas-despite-budget-cuts/
19	https://www.gov.uk/government/publications/agricultural-transition-plan-2021-to-2024/agricultural-transition-plan-update-january-2024
20	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
21	https://www.gov.uk/government/news/supermarket-essentials-will-no-longer-be-linked-to-illegal-deforestation
22	https://www.themoscowtimes.com/2023/08/03/new-bill-puts-russias-lake-baikal-at-risk-of-deforestation-harmful-urbanization-a82048

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