

IPCC PUTS THE WORLD ON HIGH ALERT

NGFS PROVIDES A PATH FOR THE BANKING
INDUSTRY TO FIGHT BACK

Climate Risk Perspectives

CODE RED INSIGHTS

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The Network for Greening of the Financial System (NGFS) recently published the second phase of its framework for the economic impact of climate change and mitigation policies. In this article we review the framework and its importance in fighting climate change.

NGFS started in 2017 as a working group of central banks and regulators with the mission to translate the scientific pathways (being created by groups such as the IPCC) and policy commitments and announcements made by governments into economic scenarios and outcomes. There are currently 95 members of the NGFS, including the US, EU, Brazil, Japan, UK, and China.

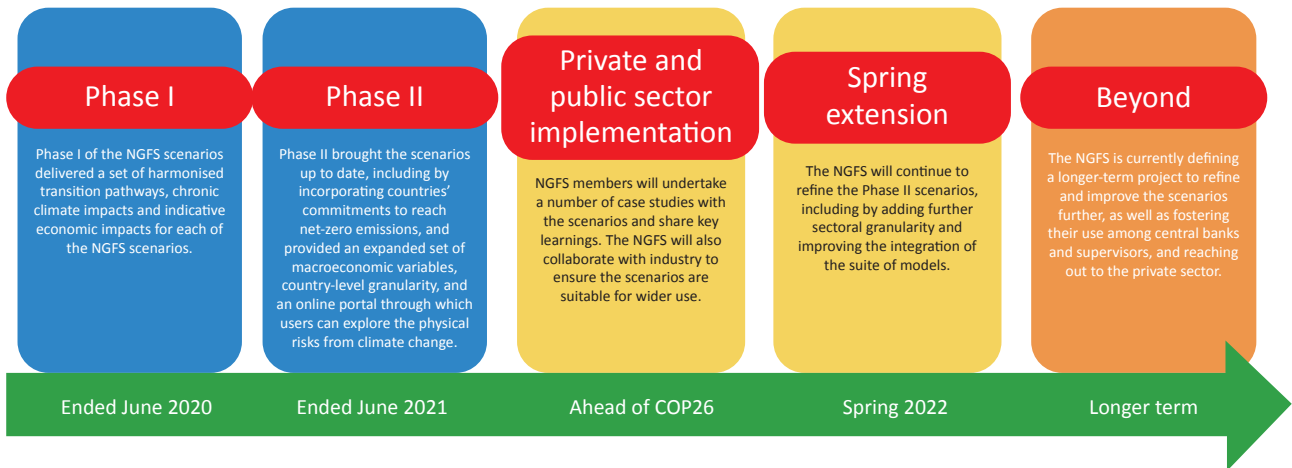
NGFS scenarios are defined by the resultant global temperature rise by 2100 and designated by the manner they are achieved. The scenarios are also split between physical (actual impact from climate change) and transition (impact from mitigation strategies and policies) risks.

This is an effective working framework that is continually refined and is working towards COP26 (The next big climate change conference to be held in Glasgow in November 2021) and beyond.

Category	Scenario	Physical risk		Transition risk		
		Policy ambition	Policy reaction	Technology change	Carbon dioxide removal	Regional policy variation*
Orderly	Net Zero 2050	1.5°C	Immediate and smooth	Fast change	Medium use	Medium variation
	Below 2°C	1.7°C	Immediate and smooth	Moderate change	Medium use	Low variation
Disorderly	Divergent Net Zero	1.5°C	Immediate but divergent	Fast change	Low use	Medium variation
	Delayed transition	1.8°C	Delayed	Slow/Fast change	Low use	High variation
Hot House World	Nationally Determined Contributions (NDCs)	~2.5°C	NDCs	Slow change	Low use	Low variation
	Current Policies	3°C+	None - current policies	Slow change	Low use	Low variation

Color coding indicates whether the characteristic makes the scenario more or less severe from a macro-financial risk perspective*

■ Lower risk
 ■ Moderate risk
 ■ Higher risk

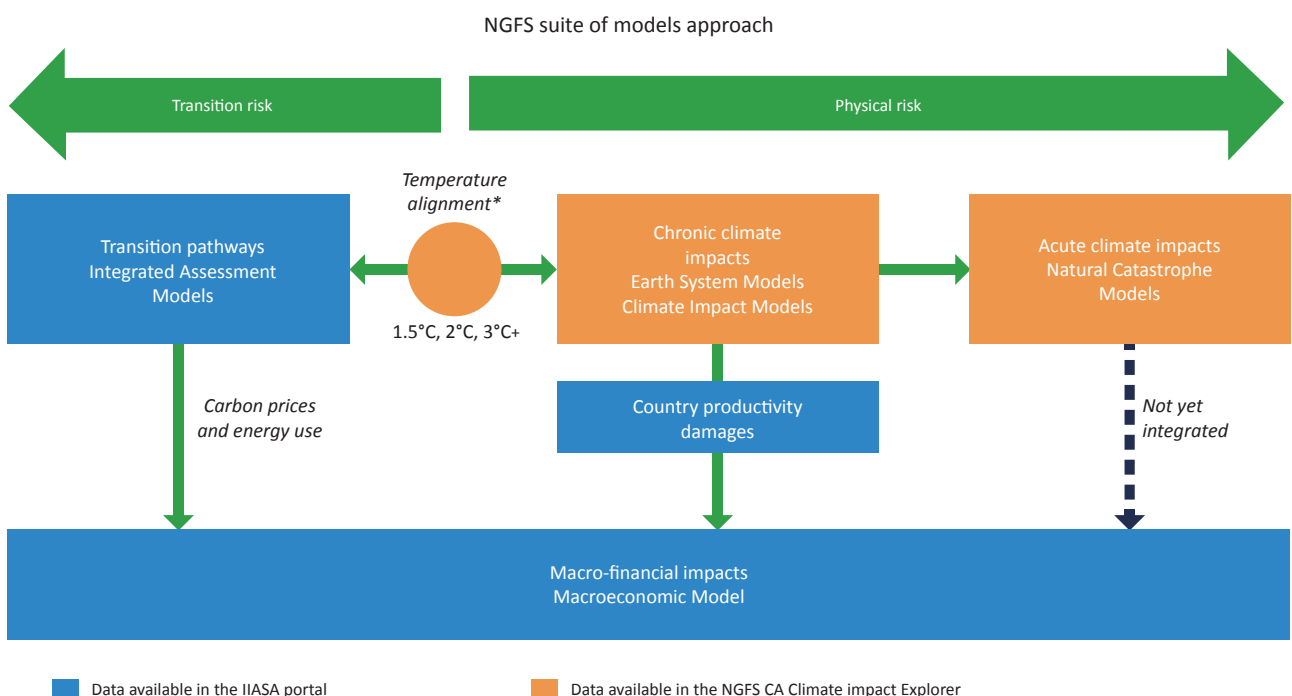


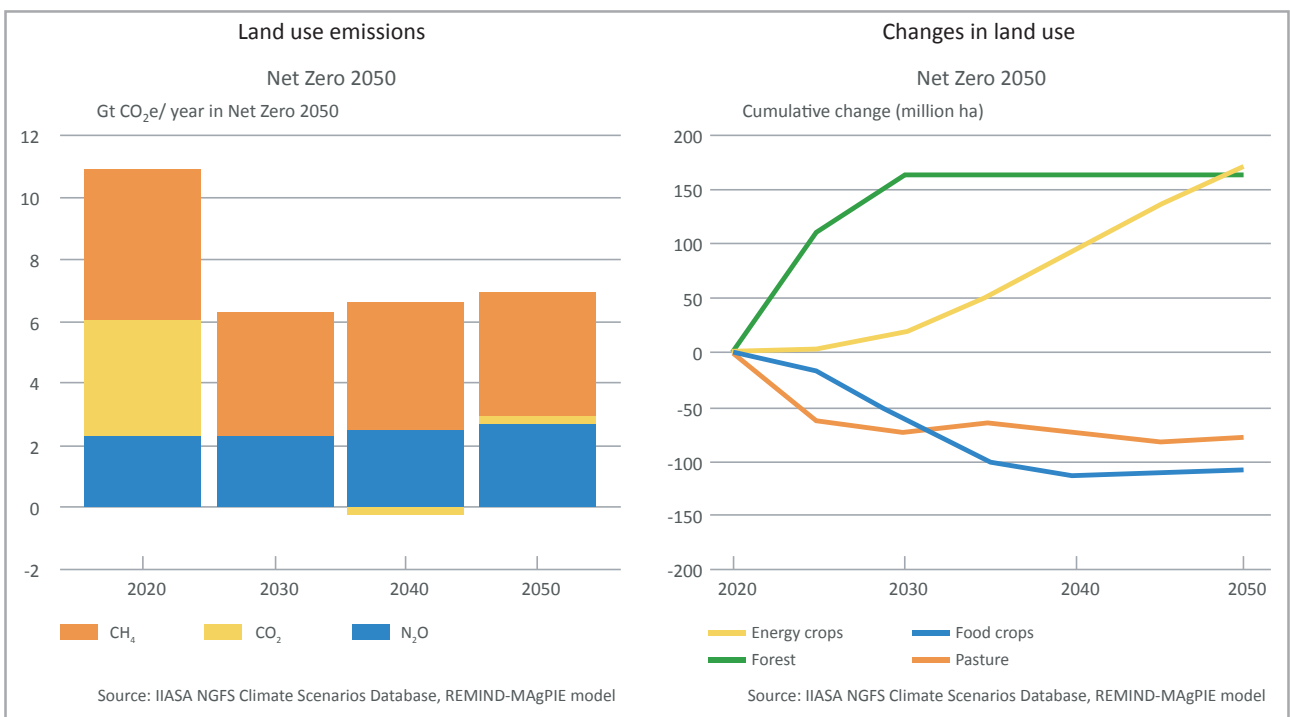
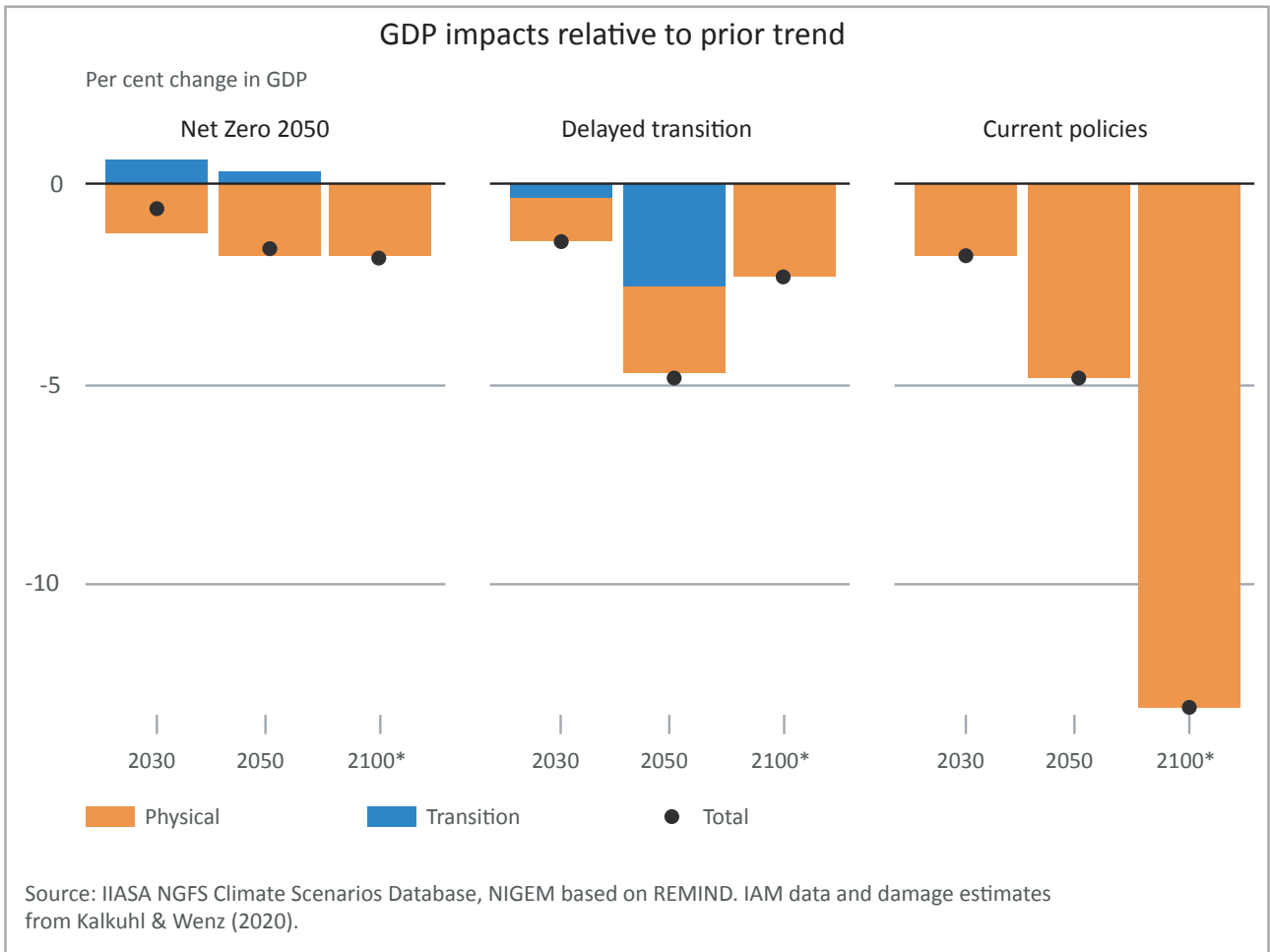
NGFS' mission is to create a viable top-down approach that can first be used as a common framework for central banks and planners, but can also be progressively adopted by the private sector.

illustrates how the top-down impacts on GDP are estimated. These are then transformed into overall GDP impact based on policy status and implementation speed across various countries.

The applicability and effectiveness of the scenarios become apparent in the second stage of the adoption by the private sector. A high-level overview of the framework

Importantly, the NGFS examines the economic indicators in each country, including, inflation, interest rates, unemployment, and across the sectoral span of those economies.





NGFS is an evolving undertaking – the second phase has more refined scenarios as well as their usage and explanations.

For banks, these scenarios are an ideal starting point for their individual climate-based analysis. They are created by the regulatory bodies that have jurisdiction over banks. The scenarios encompass much of the work involved in translating established science into tangible economics.

To utilize these scenarios, banks have to translate their balance sheets into correlated impacts as starting points to assess potential impacts to credit profiles of their underlying obligors. This impact is likely to create liquidity impact as scenarios become real. Deterioration in obligor creditworthiness would require higher capital provision, in turn impacting their overall capital base. The aggregate impact on systemic capital would impact the a sustainable future for the climate.

Banks are advised to study and apply these scenarios and take an active role in the fight against climate change.



ABOUT GREENCAP

- GREENCAP is a turnkey 'Risk as a Service' (RaaS) solution, designed for banks to include climate change as a category in their risk management frameworks.
- The solution allows banks to replicate climate pathways within their scenarios for economic impact and risk analysis.
- Using GreenCap, banks can modify pathways and scenarios to include the timing effects of delayed sustainability transition measures.
- Loans and credit facilities are measured and monitored against risks arising from both 'physical' and 'transition' impacts.
- GreenCap provides support for risk reporting and governance in the areas of 'Responsible Banking' and climate change.
- With GreenCap, banks can ensure that their climate strategies are financially grounded, and loan pricing is optimized throughout the transition to a green global economy.



ABOUT GREENPOINT FINANCIAL

- GreenPoint Financial is a division of GreenPoint Global, which provides software-enabled services, content, process and technology services, to financial institutions and related industry segments.
- GreenPoint is partnering with Finastra across multiple technology and services platforms.
- Founded in 2006, GreenPoint has grown to over 400 employees with a global footprint. Our production and management teams are in the U.S, India and Israel with access to subject matter experts.
- GreenPoint has a stable client base that ranges from small and medium-sized organizations to Fortune 1000 companies worldwide. We serve our clients through our deep resource pool of subject matter experts and process specialists across several domains.
- As an ISO certified by TÜV SÜD South Asia, GreenPoint rigorously complies with ISO 9001:2015 and ISO 27001:2013 standards.
- GreenPoint is owned by its founders and principals and is debt free.



Marcus Cree

MANAGING DIRECTOR AND
CO-HEAD OF FINANCIAL TECHNOLOGY AND SERVICES

Marcus has spent 25 years in financial risk management, working on both the buy and sell side of the industry. He has also worked on risk management projects in over 50 countries, gaining a unique perspective on the nuances and differences across regulatory regimes around the world.

As Managing Director, Marcus co-heads GreenPoint Financial Technology and Services and has been central in the initial design of GreenPoint products in the loan book risk area, including CECL and sustainability risk. This follows his extensive experience in the Finastra Risk Practice and as US Head of Risk Solutions for FIS. Marcus has also been a prolific conference speaker and writer on risk management, principally market, credit and liquidity risk. More recently, he has written and published papers on sustainability and green finance.

Marcus graduated from Leicester University in the UK, after studying Pure Mathematics, Psychology and Astronomy. Since graduation, Marcus has continually gained risk specific qualifications including the FRM (GARP's Financial Risk Manager) and the SCR(GARP's Sustainability and Climate Risk). Marcus's latest academic initiative is creating and teaching a course on Green Finance and Risk Management at NYU Tandon School of Engineering.



Sanjay Sharma, PhD

FOUNDER AND CHAIRMAN

Sanjay is the Founder and Chairman of GreenPoint Global - a risk advisory, education, and technology services firm headquartered in New York. Founded in 2006, GreenPoint has grown to over 380 employees with a global footprint and production and management teams located here in the U.S, India and Israel.

During 2007-16 Sanjay was the Chief Risk Officer of Global Arbitrage and Trading Group and Managing Director in Fixed Income and Currencies Risk Management at RBC Capital Markets in New York. His career in the financial services industry spans over two decades during which he has held investment banking and risk management positions at Goldman Sachs, Merrill Lynch, Citigroup, Moody's and Natixis. Sanjay is the author of "Risk Transparency" (Risk Books, 2013), Data Privacy and GDPR Handbook (Wiley, 2019) and co-author of "The Fundamental Review of Trading Book (or FRTB)- Impact and Implementation" (RiskBooks, 2018).

Sanjay was the Founding Director of the RBC/Hass Fellowship Program at the University of California at Berkeley and is an Adjunct Professor at EDHEC, Nice in France. Sanjay is also Adjunct Professor at Fordham University where he teaches a similar master's capstone course and at Columbia University. He has served as an advisor and a member of the Board of Directors of UPS Capital (a Division of UPS) and is a frequent speaker at industry conferences and at universities. He served on the Global Board of Directors for Professional Risk International Association (PRMIA).

He holds a PhD in Finance and International Business from New York University and an MBA from the Wharton School of Business and has undergraduate degrees in Physics and Marine Engineering. Sanjay acquired his appreciation for risk firsthand as a merchant marine officer at sea where he served for seven years and received the Chief Engineer's certificate of competency for ocean-going merchant ships. Sanjay lives in Rye, NY with his wife and two teenage sons.