

EU'S GREEN POLICIES NEED ESSENTIAL SUPPORT BY FINANCIAL INSTITUTIONS

FOR THE EU TO BE FIT FOR 55,
BANK RISK MANAGEMENT NEEDS TO BE FIT FOR 22

Climate Risk Perspectives

CODE RED INSIGHTS

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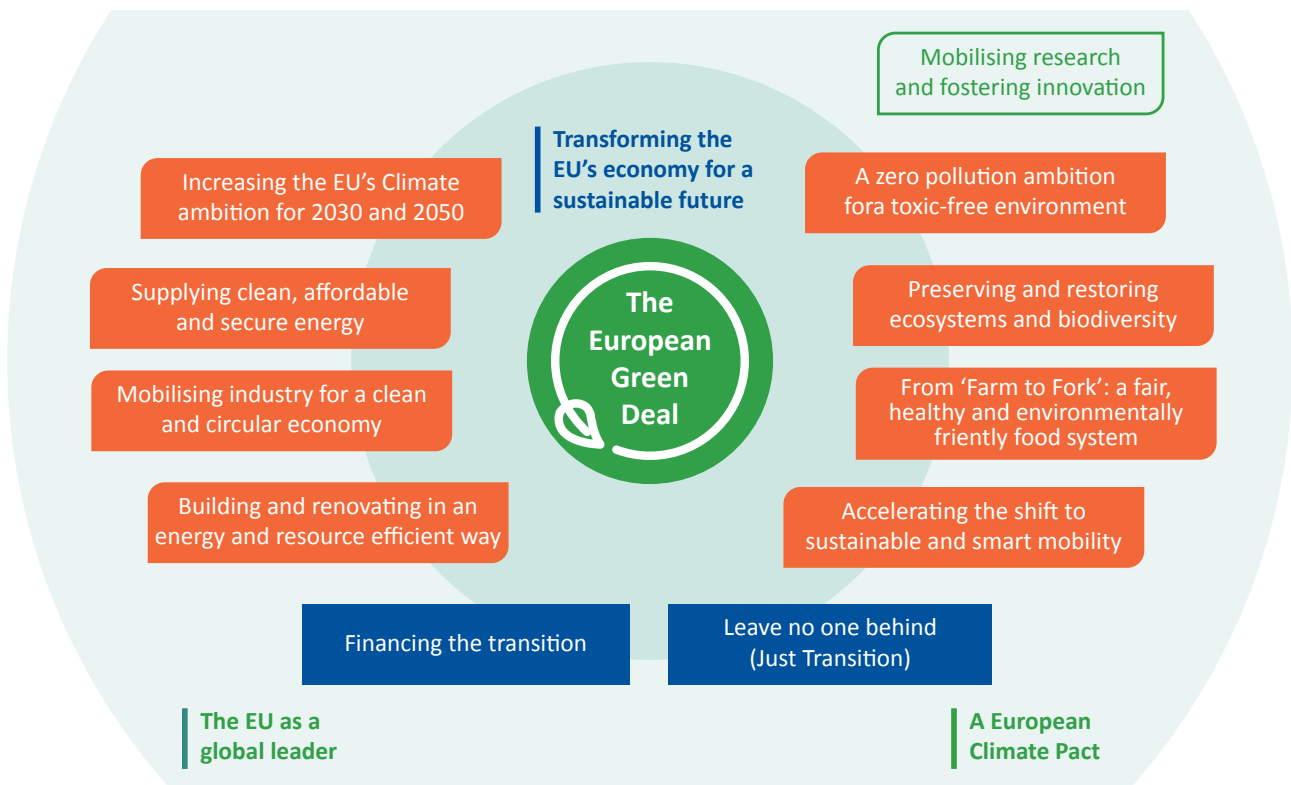
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In the run-up to the COP26, The EU has published numerous policies to support its 'Green Deal'. 'Fit for 55'. These policies aim to reduce The EU's CO2 production by 55% (relative to 1990-level), with the goal to achieve this by 2030.

The policies cover multiple economic areas including:

- Expanding the scope of EU ETS (Emissions Trading System)
 - Include the maritime sector and implement CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) for aviation
 - Cover emissions from buildings and road transport
- Introducing new CO2 emission targets for new cars and vans from 2030
- Reforming the regulation on Land Use, Land Use Change, and Forestry

The EU had begun the legal process to meet or surpass its 'Paris' commitments, referred to as the 'European Green Deal'. A preview of its implications for The EU banking sector is provided below:



EU's fight against climate change is a critical case study given the complexities involved in achieving the radical transformation required to hold global warming to 2 degrees or less by 2100. The EU must maintain economic growth and competitiveness while transforming heavy industry, supply chain management, agriculture, transport, and energy infrastructure across and between its 27 member states.

A key point here is that the 'just transition' included in the plan applies to everyone equally and leaves no one behind. Creating an economic environment that supports green jobs is central to transitional planning. The vital need for this is clear in light of cost estimates and funding plans for the transition. Indeed, in its 2020 report, McKinsey estimated a total investment of \$28 trillion over 30 years (\$800 billion per year) to decarbonize the European economy.

Significant investments are required in several areas to meet EU's goals:

- **Power Grid**

The EU power grid is a complex web but The EU has a well-established renewable sector. Further investment in storage, renewable production, and alternatives such as nuclear and green hydrogen is needed. Within the EU, there are rules that govern the power sector around production and purchase from neighbouring states. Banks and lenders play a major part in this process, ranging from funding power infrastructure to providing credit facilities for hedging, and forward purchasing of power by supply and energy trading firms.

- **Transportation**

This sector largely relates to the electrification of vehicles. With ambitious targets for electrical vehicles and economic growth, major changes have been witnessed and need to be accelerated to transform the automobile industries. From a policy perspective, tighter restrictions on combustion engines by 2030 will greatly impact the transportation industry.

- **Shipping**

The EU is a major exporter and importer, with shipping being one of its core industries. This sector is exposed in two ways: directly—to decarbonize through its fuel use; and indirectly—via restrictions on the production of goods being transported. Also, innovations such as biofuel use and fixed sails on merchant ships, are being actively explored. The shipping industry has long relied on bank credit facilities to fund its operations and manage its complex cashflows. Banks need to offer finance-related incentives to support the 'greening' of this sector.

- **Agriculture**

Farming and land management is perhaps the most complex of all sectors as EU's growing population requires increasing food production also to become more sustainable This includes fertilizer and land use, as well as changes to areas such as beef production, which contribute significantly to methane production. Banks play a major role in managing the cashflow for the farming sector and are in the prime position to work with farmers to make it sustainable.

- **Built Environment**

Constructing a sustainable and energy-efficient building is well generally well-understood however, renovating the existing building stock across 27 countries is a daunting task. This is economically and politically challenging, but can be achieved through a mix of regulations where the onus is put on the building owners, but they will need banks to aid in financing for compliance.

- **Industry**

The EU's GDP of around 15 Trillion Euros, the major contributor being its well-established industrial sector. This sector needs cautious policy planning as it impacts the culture and living standards across the union. Banks would need to finance the transition as policies

'orphan' existing firms and industries while creating high growth opportunities in the new green economy. Understanding the timing of the transition and the possibilities for innovation and adaptation would determine if banks' balance sheets determine a greener future, or a potential credit crisis.

The EU budget and the NextGenerationEU provides roughly 140 billion Euros per year. Thus, EU would need private-sector finance for its 'Green Deal' to the tune of 660 billion a year for 30 years. Managing financing in the transition process through an ongoing series of policy announcements would require banks to determine:

- **Regulation Timing**

This includes both timing of the introduction and the allowed compliance period.

- **Adaptation**

Firms will be able to refocus on greener production rather than become extinct during the transition. Adaptation can often be cheaper as it reuses existing equipment and land. Therefore financing should be encouraged for existing companies to adapt to the needs to be a significant part of the green mix.

- **Competition**

The EU has strong history of protecting its markets, but these effort are limited to its internal markets from external competition. This needs to be considered when viewing the credit risk profile of commercial, exporting, borrowers.

- **Innovation**

Recently, the EEA released: 'With People and for People: Innovating for Sustainability.' This report discussed the contribution of social and technological innovation towards more sustainable societies. The EU will undoubtedly encourage innovation in this sector but this carries risks for banks as competing technologies create big winners and losers from the perspective of financial lending.

- **Non-CO2 Reduction Policies**

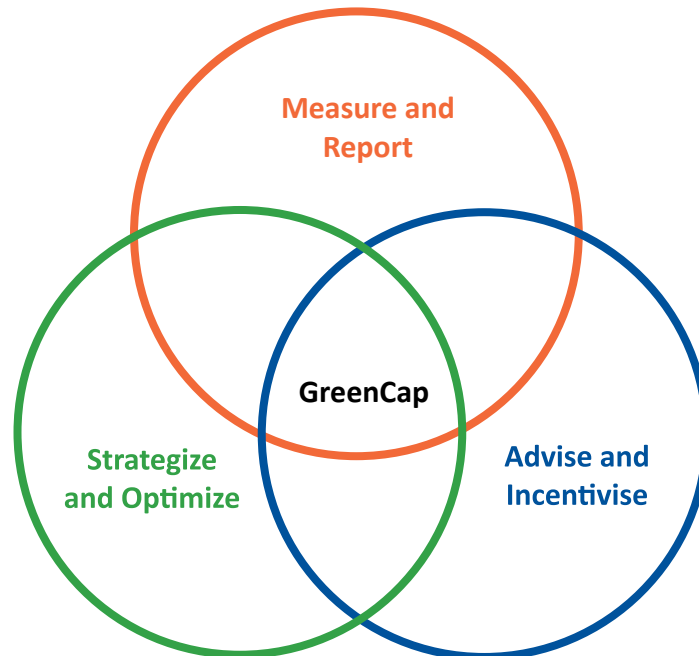
Climate-related policies are often viewed as an equivalent to CO2 reduction measures. However, this ignores other greenhouse gases that are also being addressed. An example of this is the methane pledge recently made by the US and EU, with the aim of a collective 30% cut in methane production by 2030. Stringent policies on agriculture, industry, and waste management are needed to meet this pledge.

There is no doubt that the current system of scope 3 disclosures (which asks banks to audit their balance sheets and report on the CO2 production they have financed) is only a small tip of a large iceberg in terms of financial risks caused by climate change and the policies designed to combat it in the EU. These material risks to banks' balance sheets and profitability need to be measured and managed as a specific risk category.

GreenCap believes that banks must be able to:

- Measure the impact of known and expected climate policy on their current balance sheet.
- Compare the financial impact of climate change documented to the reported 'scope 3' disclosures, so that the emissions reporting is consistent with the actual risks to the bank, and where it is not, the discrepancy can be explained to the management and investors.

- Put in place strategies that are understandable and well-communicated to manage the transition from a bank liquidity perspective by implementing hard green targets for the balance sheets.
- Encourage new borrowers and existing customers to adapt or innovate from the old 'brown' economy to the new 'green' one.



With a framework in place to achieve these goals, banks can become the engine of change that could realize the ambitions of the EU 'Green Deal', from implementing its recent policies through to the 55% CO₂ and 30% Methane reductions by 2030 and beyond.

For the EU to be fit for 55, bank risk management needs to be fit for 22.

Please visit www.GreenCap.live for details on its framework and to explore the resources available for banks to be ready for the climate change challenge.



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, Phycology 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 Cheif Engineer's certificate of competency for ocean-going merchant ships. Sanjay lives in Rye, NY with his wife and two teenage sons.