

THE EMERGENCE OF BORDER CARBON ADJUSTMENTS MUST BE ON BANKS' RADARS

BORDER CARBON ADJUSTMENTS (BCAs) ALTER THE IMPACT OF CARBON PRICING ON CREDIT RISK MANAGEMENT. BANKS MUST UNDERSTAND THESE NUANCES TO PROPERLY MANAGE THEIR BALANCE SHEET RISKS.



Climate Risk Perspectives

EMERALD PATHWAYS

January 28, 2022

Series 2 • Issue 7

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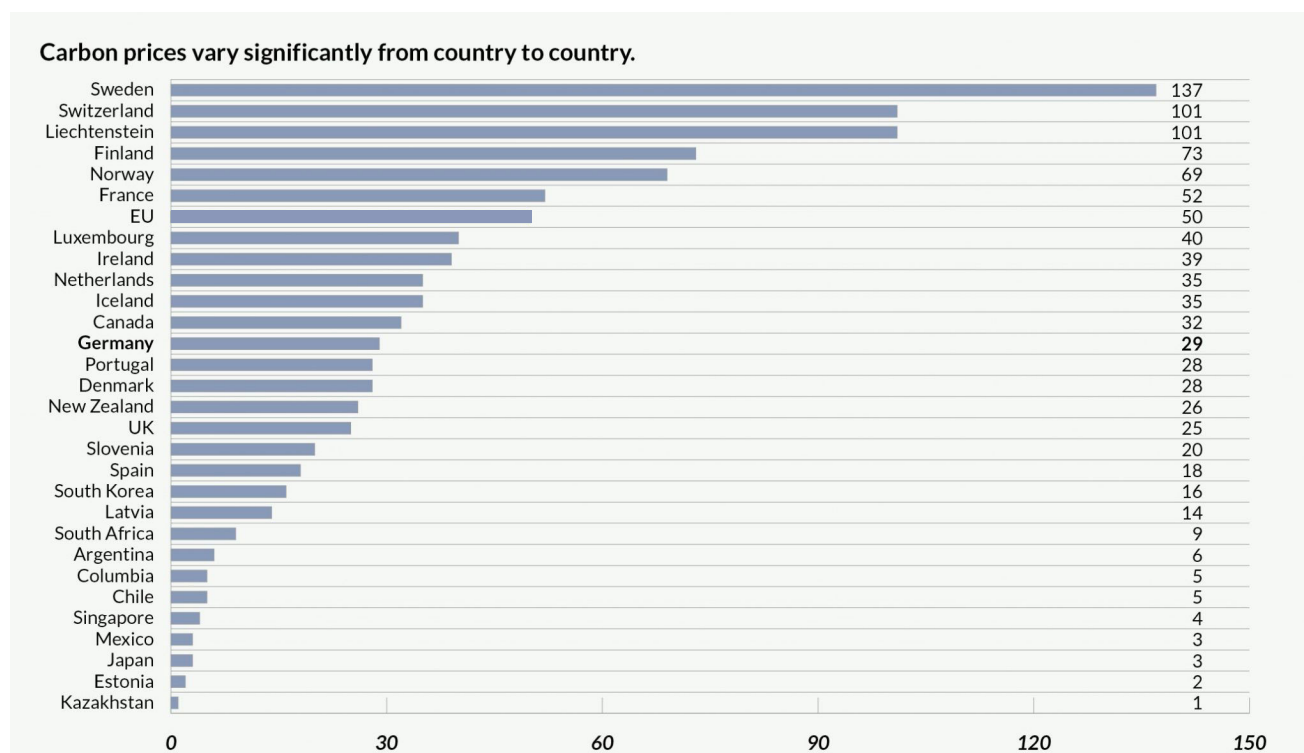
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Carbon pricing increases the risk of carbon leakage...

The ultimate goals for reducing CO₂ and other Greenhouse Gases (GHGs) are agreed upon at a global level, at the Conferences of Parties (COPs). Importantly, in 2015, at the Paris COP, one of the most celebrated outcomes was the establishment of nationally self-determined targets. This meant that rather than have limits imposed upon them, each government would decide what it could commit to, and monitor that target accordingly.

Once individual governments have set their own targets and systems to monitor them, they will typically create policies that are designed to meet those goals. The two most common policy tools are carbon taxes, whereby a price is imposed on per tonne of carbon produced, or, the development of an Emission Trading Scheme (ETS). Differential GHG policies around the world create a situation where there is a very wide range of carbon 'prices'.



Source: World Bank. State and Trends of Carbon Pricing (nominal prices in US Dollars, as of April 1, 2021)

One unintended consequence of these regional carbon pricing schemes is carbon leakage.

Carbon leakage refers to the tendency of companies to move high GHG emitting production between regulatory regimes to avoid paying higher costs associated within the region with more aggressive climate change mitigation targets. In effect, such activity creates two problems:

- Economic damage to countries with ambitious climate goals
- Targets being met regionally, but an overall increase in GHG emissions globally

BCAs are designed to remove this risk...

BCAs, sometimes referred to as Border Tax Adjustments (BTAs) or Carbon Border Adjustment Mechanisms (CBAMs), are taxes aimed at ensuring that goods entering a carbon-regulated country are charged an equivalent amount as though they are produced in the country.

BCAs have proponents and critics. Proponents argue that they are required to ensure that the result of progressive climate policies in developed countries avoid:

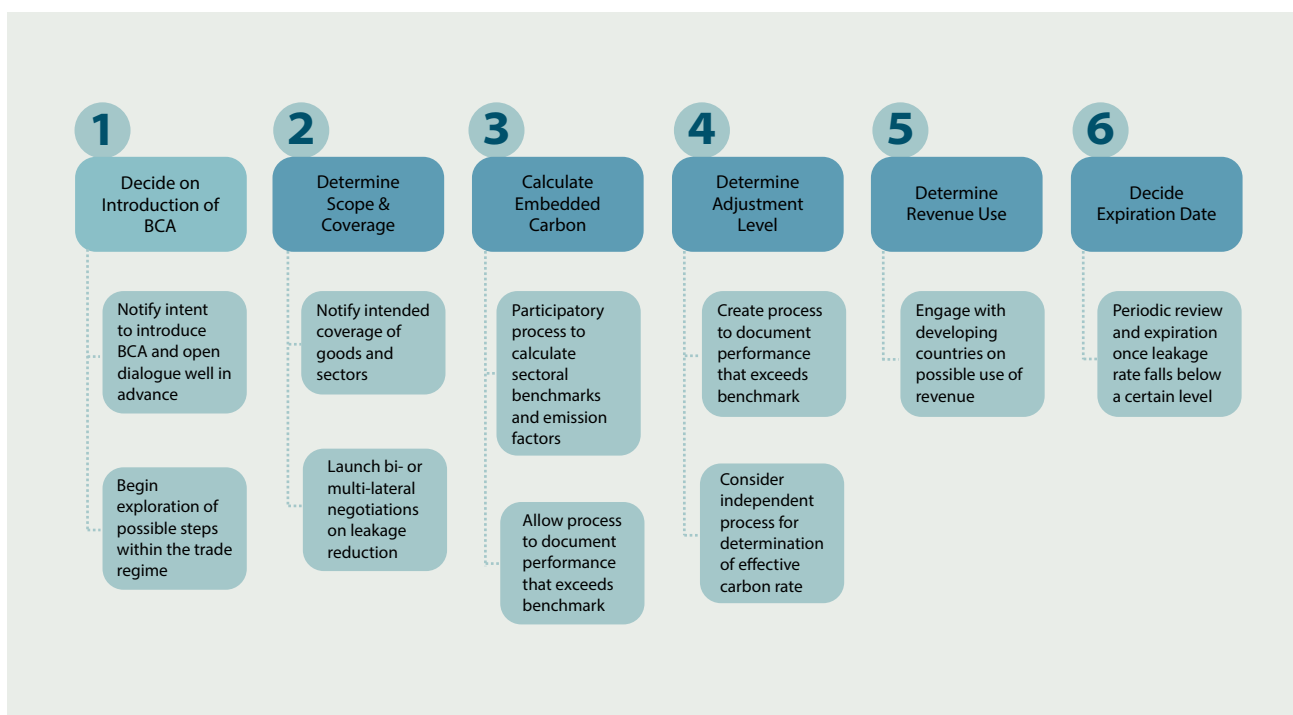
- Exporting emissions to less-developed nations and destabilizing industries in the regulated country
- Creating systems where the effective price, including free carbon credits and subsidies, is too high to act as a disincentive to GHG emitters

Meanwhile, critics point to the possibility of BCAs:

- Disproportionately impacting less developed countries
- Negating COP15's introduction of individual nations setting and monitoring their own climate targets
- Violating existing trade agreements

There is a blueprint for constructing BCAs...

Climate Strategies, an international, not-for-profit research network published a guide to BCA design and implementation, which can be read [here](#). The report recommends specific steps and considerations that must be taken into account for a scheme to be fair and effective.



The crucial point is that, if the overall goal of reducing GHG emission is to be reached in a globally fair manner, then the resultant carbon price must be carefully monitored. In this scenario, the harder hit countries must become stakeholders rather than victims of the scheme.

Governments are exploring BCAs...

Currently, California runs the only active BCA, but in 2021, the EU introduced legislation for its own CBAM to support the EU Green Deal. The bloc states that 'the CBAM will equalize the price of carbon between domestic products and imports and ensure that the EU's climate objectives are not undermined by production relocating to countries with less ambitious policies'.

The EU's CBAM will use a system of certificates that cover the cost of 'embedded carbon' in imports into the bloc. EU importers will need to purchase the certificates, whose pricing will be based on the EU's ETS carbon price. Areas where it can be shown that a carbon price has already been paid, this cost will be deducted from the importer outside of the EU.

Other leading economies looking closely at BCAs include Japan and Canada. In the US, [BCA legislation](#) was also introduced to the Congress in July 2021 that was substantially similar to the European plan.

Banks need to keep track of BCAs...

Policies designed to mitigate climate change through the regulation of GHGs create additional costs for firms in impacted industries. These costs have a knock-on effect on the business models and credit profiles of the firms. Lending officers and risk managers must ensure that any risk-related effects are understood and built into the risk management systems and processes.

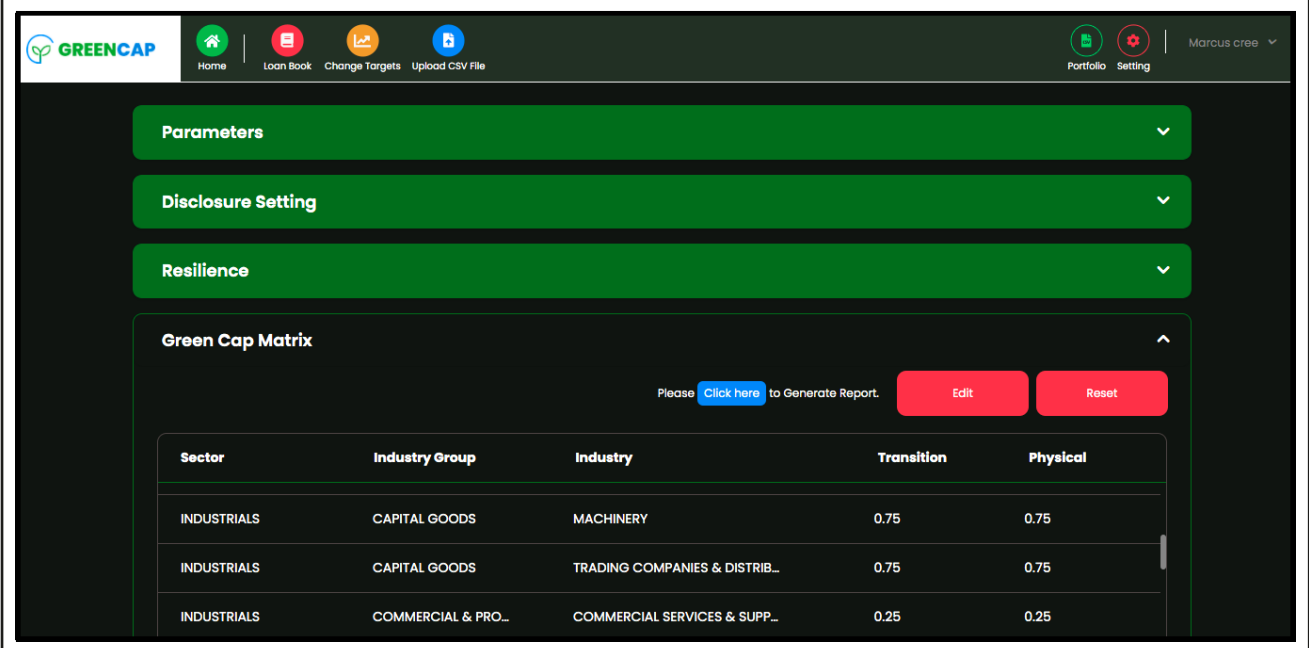
Including climate change risk within the risk frameworks of financial institutions involves a number of steps, which include:

- Building scenarios based upon IPCC climate pathways, which cover global and regional routes to net-zero economies
- Costing of the scenarios using Network for Greening the Financial System (NGFS) estimates, which are given as GDP impacts
- Determining the speed at which the scenarios may become a reality
- Applying the fully-costed scenarios to the existing assets to ensure that impacts on the Risk-weighted assets (RWA) of banks are estimated
- Pricing new loans to incorporate the climate risk 'spread'

BCAs mean that carbon pricing schemes in one regulatory jurisdiction will impact regions with different prices, plans, and goals. This means that banks must include additional nuances within their scenarios to reflect the new export tax.

GreenCap can help...

GreenCap is a 'Risk as a Service' (RaaS) solution that enables banks to construct climate pathways as scenarios to be applied to their balance sheets. Industry and firm-level exposure to the policy routes is reflected within matrices that represent each scenario.



The screenshot displays the GreenCap web application interface. At the top, there is a navigation bar with the GreenCap logo and several menu items: Home, Loan Book, Change Targets, and Upload CSV File. On the right side of the navigation bar, there are icons for Portfolio and Setting, along with the user name Marcus Cree.

The main content area features three large green buttons with white text and downward arrows: Parameters, Disclosure Setting, and Resilience. Below these buttons is the Green Cap Matrix section, which includes a table and two red buttons labeled Edit and Reset.

Please [Click here](#) to Generate Report.

Sector	Industry Group	Industry	Transition	Physical
INDUSTRIALS	CAPITAL GOODS	MACHINERY	0.75	0.75
INDUSTRIALS	CAPITAL GOODS	TRADING COMPANIES & DISTRIB...	0.75	0.75
INDUSTRIALS	COMMERCIAL & PRO...	COMMERCIAL SERVICES & SUPP...	0.25	0.25

The system allows scenarios to be fine-tuned in a way that captures the full spectrum of exposure, including the cross-border effects of BCAs, and hence provides a full 360-degree view of the financial risks that banks will need to deal with as we move through the green economic transition.

Visit GreenCap.live for details about the solution, as well as more insights and resources to assist banks in navigating the road to net zero.



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.