

# Internal carbon pricing: An emerging approach to building sustainable investment portfolios

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Rashi Geda

In the wake of rising awareness and concern over the social cost of business, an internal carbon pricing policy offers a quantitative approach for factoring in sustainability as an evaluation criterion in financing and investing decision making.

Changing stakeholder perceptions and the resultant regulatory shifts have put carbon-intensive industries at major impairment and longevity risk. Research conducted by the Carbon Tracker Initiative and the Grantham Research Institute on Climate Change and the Environment<sup>1</sup> estimates that 60-80% of coal, oil and gas reserves of listed companies should remain unburnable, if we are to achieve the environmental goal set under the Paris Agreement of 2016. Consequently, asset managers and general partners are facing escalating pressure to build and have more ESG-intensive investment portfolios<sup>2</sup>.

International bodies such as the Task Force on Climate-Related Financial Disclosures (TCFD) have also recognised the need for capital providers to make carbon emissions a consideration in their financing and investing decisions. The TCFD recommends internal carbon pricing (ICP) as a measure to incorporate climate considerations in an investment/financing portfolio.

***ICP can be defined as a company's voluntary practice of assigning a value to its carbon emissions to set off the social and economic cost of its greenhouse gas emissions<sup>3</sup>.*** In the more recent past, however, ICP has also been proposed as a potential risk-management tool for financial institutions and investors to evaluate the environmental sustainability of their investments and build greener, ESG-intensive portfolios.

ICP enables capital providers to incorporate the forecasted cost of carbon (emissions) to a business (capital seeker) in their evaluation process, including the future market price of carbon, potential regulatory costs and the passage of carbon costs through business value chains. The process can help investors and financiers assess carbon-related risks in their portfolios and take adequate steps to move from carbon-intensive to low-carbon opportunities, and gradually decarbonise their portfolios.

## Use cases and adoption methodologies

Some financial institutions have already taken steps to incorporate ICP in their financing decisions.

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In 2015, BNP Paribas<sup>1</sup> pledged to make ICP a part of its financing decision-making process, to take into account the changes and risks relating to the transition to a low-carbon economy. It developed a methodology, with an assumed carbon price of USD25-40 per ton of equivalent CO<sub>2</sub>, to test the sensitivity of pivotal sectors generating the maximum amount of emissions<sup>4</sup>.

Turkey's Garanti Bank<sup>5</sup>, too, developed an elaborate climate strategy, based on the 2015 Climate Change Action Plan, focusing on low-carbon investments. Due to its success, the methodology adopted by the bank is now a case study, enabling adoption by other institutions. Under this, the bank adopted a mix of three carbon-pricing approaches:

- Adjusting the profitability of fossil fuel-based investments, using sensitivity analysis
- Evaluating non-carbon-related risks of carbon-intensive investments
- Assigning a shadow price to each ton of projected carbon emissions, when evaluating electricity-generation projects. The bank priced the emissions at USD5-10 per ton until 2020 (expecting them to gradually rise to USD74 per ton by 2030), arrived at through benchmarking industry peers, monitoring the European Union Emissions Trading Scheme and adjusting prices in line with those in the respective jurisdictions

However, the most recent development in the field is a study published by Carbon Pricing Unlocked, a partnership between Navigant, The Generation Foundation and CDP<sup>6</sup>, proposing a comprehensive methodology for incorporating ICP in financing and investing decisions. The paper outlines a technique where ICP plays a crucial role in each stage of the investment and financing process. It presents a four-dimensional framework to arrive at the carbon costs of an investment and best practices to follow to decarbonise portfolios.



## Key challenges and the way forward

Although there have been instances of adoption of ICP by financing institutions, research on its adoption by capital providers is still quite limited. Setting a price for carbon emissions remains a challenge, being subject to individual assumptions and policies, creating disparity in the prices adopted by the various institutions<sup>7</sup>. For instance, while some organisations may choose to update their carbon prices regularly, others may opt for a fixed price over a period of time, creating a disparity in pricing even within the same industry. Moreover, it may be challenging to account for the carbon emissions of each company in the portfolio, as not all businesses, specially the small and medium-size ones, measure and disclose their carbon emissions. Therefore, the adoption of the approach by capital providers may not ensure complete departure from carbon-intensive projects.

Owing to this ambiguity, ICP alone may not be sufficient to achieve carbon-neutral portfolios. Even so, coupled with other tools such as ESG ratings and industry analysis, it can prove to be a useful

measure in providing direction and help investors and financiers weed out investments that do not fare well on environmental parameters, and build more carbon-neutral portfolios in the long run.

### **Acuity Knowledge Partners' (Acuity's) solution:**

Acuity offers customised research solutions to help clients achieve their ESG and sustainable business goals, including support in carbon strategy formulation, asset benchmarking and pre-investment screening to ensure investments are compatible with the firm's ESG goals.

### **Sources**

- <sup>1</sup> Carbon Tracker. Wasted capital and stranded assets press release. 19 Apr 2013. <https://carbontracker.org/wasted-capital-and-stranded-assets-press-release/>. Accessed 11 Mar 2021
- <sup>2</sup> IIGCC and PRI. "[A Guide On Climate Change For Private Equity Investors.](#)"
- <sup>3</sup> I4CE, and Entreprises pour l'Environnement (EpE). "[Internal carbon pricing: A growing corporate practice.](#)" Nov 2016.
- <sup>4</sup> Carbon Pricing Leadership Coalition. "[Carbon Pricing and the Task Force on Climate-related Financial Disclosures \(TCFD\).](#)" May 2018.
- <sup>5</sup> Mann, Whitney. Internal Carbon Pricing at Garanti Bank. 01 Oct 2018. <https://cbey.yale.edu/our-stories/internal-carbon-pricing-at-garanti-bank>. Accessed 01 Mar 2021.
- <sup>6</sup> Navigant, The Generation Foundation, and CDP. "[Internal Carbon Pricing for Low-Carbon Investment.](#)" Jul 2019. Prepared under the Carbon Pricing Unlocked partnership.
- <sup>7</sup> Climate Focus, Walburg & Partners, Climate Wedge, CDP, and GAIA Carbon Finance. "[Internal Carbon Pricing and Climate Finance Tracking for Banks.](#)" Sep 2017.

### About Acuity Knowledge Partners

Acuity Knowledge Partners is a leading provider of high-value research, analytics and business intelligence to the financial services sector. The company supports over 400+ financial institutions and consulting companies through a team of over 4,000+ subject matter experts who work as an extension of the clients' teams based out of various global delivery centres.

We empower our clients to drive revenues higher. We innovate using our proprietary technology and automation solutions. We enable our clients to transform their operating model and cost base.