

MEASURING PARIS AGREEMENT ALIGNMENT AND FINANCIAL RISK IN FINANCIAL MARKETS

(Paris Agreement Capital Transition Assessment – PACTA)

THE PACTA PROJECT

The Paris Agreement defined the global objective of aligning financial flows with the commitment to limit global warming to well-below 2°C. An increase in temperature above that goal will result in major environmental upheavals. To achieve this goal, governments are designing public policy objectives, programs, and initiatives aiming to increase investments in low-carbon and resilient assets, manage climate-related risks and opportunities, and monitor the alignment of financial flows with the Paris Agreement goals.

The Paris Agreement Capital Transition Assessment (PACTA) project, funded by the German government and the European Commission, provides climate and economic policymakers, financial supervisory authorities / central banks, institutional investors, and banks, with an assessment framework to measure the alignment of financial assets, portfolios, and markets more generally with climate goals, as well as the transition risk associated with climate goals. The assessment framework:

- i. Enables an assessment of the asset and investment profile of financial portfolios and markets across key “transition” sectors and asset classes relative to economic decarbonization pathways;
- ii. Identifies the potential scale of risk exposure to these portfolios in case of financial disruption associated with an abrupt or ‘unexpected’ transition; and
- iii. Provides options for action to mitigate risks and achieve climate goals.

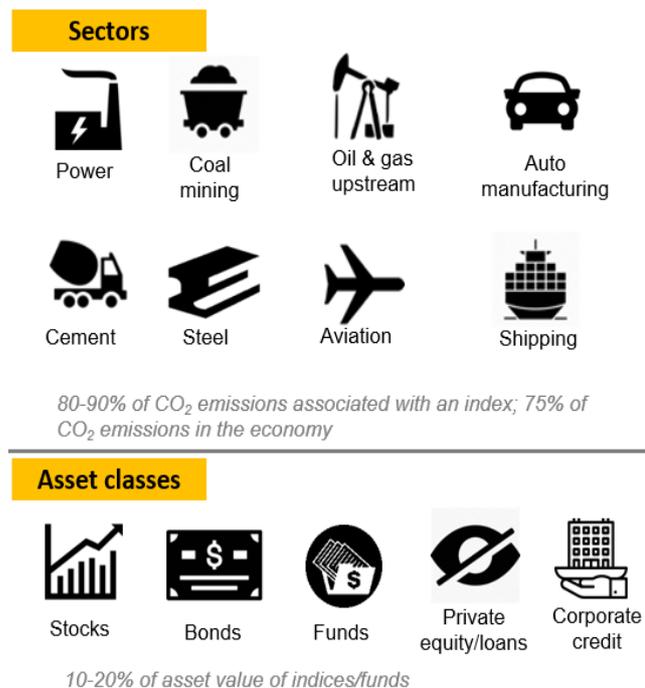
Coverage. The assessment framework covers corporate credit (bonds, loans) and equity, with an emphasis on key “transition” sectors (75-85% of CO₂ emissions in the typical portfolio, 15-25% of the portfolio in terms of asset value).

Basics of the framework. The open-source software and tool used in this project can automatically process, assess, and create transparency on tens of thousands of financial portfolios, millions of individual securities, and their ownership and financing of 100,000s of physical assets in the real economy, including automatically generated individualized portfolio and financial institution reports that can be used to inform shareholders and beneficiaries through traditional communication channels. The assessment has been applied on an estimated EUR 10 trillion of financial assets to date.

Outputs. The project outputs include both macro ‘market reports’ for financial supervisors and policymakers, as well as automatically generated and free tailored reports for individual portfolios or financial institutions. The project can rely on existing regulatory data and thus involves zero additional reporting costs or burdens for financial institutions or regulatory partners.

Project results. The results of the project are the following:

- i. **Financial supervisory authorities** will be able to monitor the climate-related risk and exposure to the transition to the low-carbon economy of their sector and their regulated entities (e.g. banks, insurance companies, pension funds);



- ii. **Climate policymakers** will be equipped with tools to monitor the integration of climate policy signals into the decision-making frameworks of financial institutions invested in capital markets and integrate finance in the UNFCCC stock-take, as well as inform more efficient policy design;
- iii. **Industry associations** will be able to convene its members to apply the scenario analysis tools with the objective to assess the consistency of their members' investments with the Paris Agreement and understand if they are accumulating or reducing the exposure to climate-related risks;
- iv. **Banks** can join the scenario analysis working group. The working group is piloting the use of the assessment framework for corporate loan books portfolios. Currently 7 banks make part of the working group; and
- v. **Institutional investors** can use the tools and benchmarks developed in this project to i.) analyse their alignment with the Paris Agreement and how there are building or reducing their exposure to transition risks; ii.) use the results as part of their financial and non-financial reporting; and iii.) to inform investment decisions (e.g. mandate de-sign, strategic asset allocation, portfolio management, etc.).

PROJECT PLAN

- i. **Definition of project scope & implementation plan.** The project partner, together with 2ii, will define the project scope in terms of entities covered (e.g. banks, insurance, pension funds, retail market), integrate technical input, and define the timeline.
- ii. **Data sharing and transmission.** If applicable, 2ii will sign non-disclosure agreements with the organisations participating in the project. These agreements will set up the framework for the management and transmission of data from the organisation to 2ii. 2ii will send .csv templates specifying the data points required for the analysis. If data cannot be shared, 2ii can mobilize staff to the financial institution premises (in particular in the case of banks).
- iii. **Analysis.** Based on the jointly agreed project schedule, 2ii will execute the analysis. For equity and corporate bonds portfolios the analysis is fully automated, while for corporate lending portfolios it is semi-automated. Main tasks relate to data portfolio preparation, so it can be read by the software code (populating the data template, adding – where missing – financial data information, and ensuring data quality control). The data templates are then read by the software, which generates output .csv files that provide detailed exposure assessment, as well as automatically generated charts and individual portfolio reports for each of the portfolios read into the software.
- iv. **Discussion of results & macro report.** Based on the analytical data, 2° Investing Initiative in partnership with the project partner will develop a short macro report summarizing the key findings (click [here](#) for an example) and organize a ½ day briefing at the project partners premise, including a discussion of potential next steps. Further actions – where relevant – can then be discussed at that stage.

ABOUT 2° INVESTING INITIATIVE

The 2° Investing Initiative (2°ii) is the global think tank for developing climate and long-term risk metrics and related policy options in financial markets. 2°ii coordinates the world's largest research projects on climate metrics in financial markets, with over 40 research partners in the public, private and philanthropic sector, and over € 3 million re-granted to research partners to date. As part of this work, we developed the first science-based target setting and 2°C scenario analysis tool for financial portfolios, applied by over 200 financial institutions and three financial supervisory authorities to date. 2°ii also initiated the first climate-related financial regulation in Europe in the context of the French mandatory climate-related disclosure by financial institutions (Art. 173), in addition partnering with the Swiss government on 2°C scenario analysis, involving two-thirds of the Swiss pension funds and insurance market.

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