



The CERM - Climate Extended Risk Model - January 2021

A climate risk multi horizon approach

In the context of its mission to support banks in financing the green transformation, the Association Green RWA has partnered with Professor Josselin Garnier (Ecole Polytechnique, Lusenn) to develop a climate-extended risk model (the CERM) to assess forward looking climate risks in lending books.

The CERM principles and objectives:

- The model is an extension of Basel-compliant credit models;
- Takes as an input the term structure of the economic and the climate risks intensities.
- Helps banks to address the complex challenge of new climate risk factors with scarce data;
- Models book dynamic in terms of credit/climate ratings, loans rebalancing and distribution across groups with homogeneous climate profiles;
- Measures the forward looking incremental cost of risk and capital charge cost;
- Contributes to the optimisation of the banks' climate strategy:
 - financing adaptation and mitigation plans of existing clients;
 - rebalancing towards greener borrowers and greener collateral assets.

Green RWA along with its partners (FORRS, Square, Ginini Antipode, Carbon4 Finance and Lusenn) proposes pilot programs on sample portfolios, specifically targeted to corporate banking in order to evaluate climate risk through this innovative framework and/or to put in place related quantitative disclosures. With our experienced partners, combining banking project, data and reporting expertise, we work on pilot programs:

- To address climate stress tests, such as those required by the Bank of England and the European Central Bank (ECB);
- To provide climate-related financial risk disclosures under TCFD's Risk Management and Metrics/Target pillars;
- For internal economic-climate capital and to extend Risk-Adjusted Return on Capital (RAROC) frameworks to steer the portfolio mix;
- To fast-track the development of specialized skills and expertise;
- For case studies towards an internal or external audience, in support of strategy and communication.

Are you interested in understanding more about the CERM, pilot programs, in getting the full documentation or about partnering with us? Reach out to our Executive Team cerm@greenrwa.org and visit the Association's website for latest updates <https://greenrwa.org>.

Olivier Vinciguerra, Jean-Baptiste Gaudemet, Anne Gruz, Adrian Sargent.

