

Climate Stress Testing Fact Sheet

Urgentem has developed an innovative methodology and model, which has contributed to the European Central Bank’s recent pioneering climate stress testing framework. It is a first of its kind exercise which represents a significant step forward in comprehensively understanding how climate risks (physical and transition) will fundamentally affect economic and financial stability, particularly from a quantitative and forward-looking perspective.

OVERVIEW

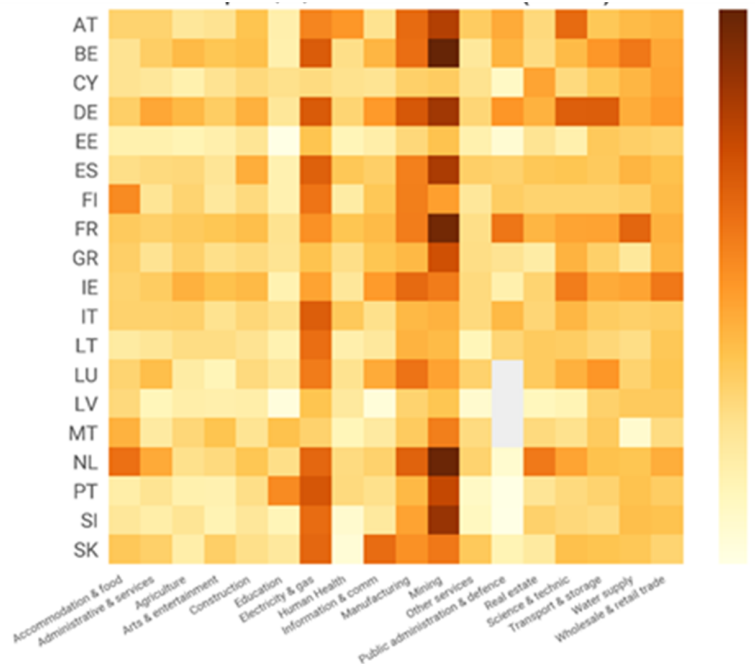
- Urgentem’s model can estimate future emissions of more than 4 million public and private companies up to 2100.
- The model utilises disclosed and modelled corporate emissions data as well as company specific GHG emissions profiles and emission reduction targets.
- Urgentem’s methodology is expected to form part of the ECB’s overall framework for the supervisory climate stress test that the ECB will conduct in 2022, setting the precedent for banks to incorporate climate in their broader stress tests in the coming years.

URGENTEM!

STRESS TESTING MODEL

FUTURE EMISSIONS ESTIMATES UP TO 2100	APPLICABLE TO MORE THAN 4 MILLION PRIVATE & PUBLIC COMPANIES
INCLUDES SCOPE 1, 2 & 3 EMISSIONS	INCORPORATES NGFS SCENARIOS

Transition risk: carbon footprint of European firms averaged by country-sector (2018)



Source: The ECB Blog; Luis de Guindos 18 Mar 2021; <https://bit.ly/2T5piis>
 ECB calculations based on the Urgentem dataset. For simplicity only euro area firms are displayed in the chart, although data are available for a much broader sample.

COMPREHENSIVE METHODOLOGY

At the crux of Urgentem's methodology is our inference of comprehensive emissions data, which is expanded beyond listed companies to also offer estimated Scope 1, 2 and 3 emissions data for non-listed companies. Working with the ECB, Urgentem has used this methodology to infer values for up to 4 million private companies.

This aligns with the listed universe methodology used by Urgentem, where companies' emissions are inferred based on an industry specific statistical model. The statistical model is calibrated using disclosed emissions data from a large sample of public companies.

FORWARD-LOOKING EMISSIONS MODEL: KEY FEATURES

Based on this methodology, our model can estimate future Scope 1, 2 & 3 emissions of public and private companies up to 2100, using disclosed and modelled corporate emissions data.

The projected future emissions of companies take into account regional and global emissions pathways from a suite of NGFS climate scenarios as well as emission reduction targets set by companies.

Lastly, the model also accounts for negative emissions as an outcome of (i) adopting carbon dioxide removal (CDR) technologies under different scenarios and (ii) from land use change (LUC).

Please get in touch with us to find out more about our climate stress testing work and how this can aid you in the transition to a low-carbon economy.