Hi there participant!

As a major bank, ING has an impact on climate action through financing. We are committed to steering the most-carbon intensive parts of our portfolio towards net zero carbon emission by 2050. This is called the 'Terra approach'.

You have just started working as a data engineer or data analyst on the Terra approach. Your team's task is to build a solution that provide insights on how ING can remain profitable, whilst adhering to climate commitments.

There are three types of user personas interested in your solution:

The **sustainability board**, that steers ING:
- How can you effectively **visualize** INGs performance with regards to profitability and climate commitments, for steering purposes?
- Example*:* a solution that depicts key performance indicators (KPIs) for effective decision making

The **front-office**, that makes deals with new and existing clients:
- How can you **classify** the impact of a new deal on profitability and climate commitment?
- Example: a solution that simulates the impact of a new loan on the portfolio

The **risk department**, that wants to mitigate climate risk:
- How can you **optimize** the portfolio so that profit is maximized, but carbon emissions do not increase?
- Example: a solution that tells which clients to invest or divest

In groups of 5-6 people, please pick one of these user personas and work on your solution for about 50 minutes. Please remember the user persona you have chosen and focus on illustrating the (potential) impact of your solution.

We don't expect the case to be finished within this time frame. It's meant to familiarize you with ING and have some fun. Feel free to take it home and work on it later.

Data and concepts
You are given an Excel file with data on INGs clients (the portfolio), and the market (all companies). Here are some general (simplified) banking concepts that should get you started:

The *outstanding amount* is the amount withdrawn by a client from a loan.

The *limit* is the maximum amount a client can withdraw from a loan.

INGs profit on a loan is the *interest rate* multiplied by the *outstanding amount*. There are different types of interest rates, for instance: yearly and daily.

Hints

Think about cleaning the data before running your analysis, wherever necessary.

You are free to choose any tool of your liking to build your solution, but please align with your team members which tool is most fit. For instance, Python, R or Excel.

It’s perfectly fine if your solution is not entirely correct or incomplete. The goal is to convince the user persona of the impact that the solution could have, or the insights it conveys.

Don’t be shy: reach out to the mentors in case of questions.