Code to replicate the results of: Burato, M, Tang, S, Vastola, V. And Cenci✉, S. *Organizational system thinking as a cognitive framework to meet climate targets*, Proc.Natl.Acad.Sci. USA (2023)

The code requires access to the following datasets:

- COMPUSTAT Annual Fundamentals North America
- COMPUSTAT Annual Fundamentals Global
- Refinitiv Annual Fundamentals
- Trucost Emission Data
- Trucost Paris Alignment
- Carbon Disclosure Project Climate Change Questionnaire

Because these datasets are covered by licenses, they cannot be shared by us. The link to the webpages of the data providers can be found in table S4 in the Supplementary Information. The name of the variables used in the analysis can be found in the Material and Methods section in the main text of the paper. This folder includes our derived measure of organizational system thinking in the *local_data/* subfolder. The dataset includes several columns. The most relevant are: (1) *Pred_label*, which is the classification of a CDP answer into a system thinking or not system thinking answers. Values are either 0 (total agreement that the answer does not contain system thinking clues), 0.33, 0.66 (partial agreement that the answer contains system thinking clues), 1 (total agreement that the answer contains system thinking clues); (2) *Year* This is the year in which the answer has been submitted to CDP; and (3) *ISIN* which is the International Securities Identification Number. The other variables are the complexity measures of the answers calculated as explained in the Supplementary Information. Notice that the file has already been filtered to remove observations for firms with less than 10 answers per year, as explained in the main text.

Once all the datasets are collected the following two functions can be used to reproduce the results of the paper:

- *main_bootstrapped.py*: This function can be used to reproduce Figure 3 and 4 in the main text.
- *main_full_sample.py*: This function can be used to reproduce the full sample results (Table 6 and 7 in the SI)

All the other files in the folder are auxiliary files necessary to run the main files.