Invest Europe ESG Reporting Template: Machine Readable Format *(in partnership with VentureESG)*

Technical specifications

19 March 2025

A. How data moves

At this stage, portfolio companies and GPs are the handlers of export files to ensure data privacy and security. Direct platform-to-platform transfer is not currently possible.

Platforms implementing the MRF will need to build both import and export functionality. The validator web-app and open-source code can assist with developing this.

This flowchart PDF is a detailed overview of how the MRF assists GPs and portfolio companies to fulfil multiple reporting requests:
Invest Europe MRF Flowchart

In short:

1. Export from ESG reporting platform

a. Portfolio companies and GPs may obtain export files compliant with the ***Machine-Readable Format*** from an ESG reporting platform provider.
b. We advise all data handlers to ensure they have appropriate consent to move data.

2. Validate

a. We recommend both exporting and importing platforms to check export files are valid by using the validator [Currently only available to run locally: InvestEurope-VentureESG-MRF-2025].

3. Import

a. Files can then be imported into supported ESG data platforms by those with consent.

What about if there is a dispute between platforms?

All platforms are to familiarise themselves and agree with this process: Invest Europe MRF Dispute.

B. Encoding

Compliant with Microsoft Excel CSV exports

The default CSV export of Microsoft Excel produces files in a compliant encoding.

Compliant with Google Sheets CSV exports

The default CSV export of Google Sheets produces files in a compliant encoding.

Microsoft Excel's locale dependency

When creating CSV files, Microsoft Excel observes a system setting called "list separator".

- If your local operating system is set to American or British English, the default field delimiter is a comma (,) and the decimal separator is a dot (.).
- Field delimiters may vary between semicolon (;) and comma (,).
- Decimal separators may vary between comma (,) and (.).
- **The Machine-Readable Format currently supports only comma (,) as field delimiters and only dot (.) as decimal separator.**

Important guidelines when creating export files in software

- Files must be encoded in UTF-8 or UTF-16.
- Field delimiters MUST be commas (,).
- Lines are delimited with CRLF characters (\r\n , "Windows line endings").
- Line breaks inside fields use the LF character (\n). They're not escaped! For reporting purposes, no fields require multiple lines and so we recommend not using line breaks inside fields.
- Numbers don't use digit grouping. Decimals are delimited with a dot (.).

C. Columns: field specification

Export files have exactly the 6 columns described as follows:

a. The COMPOUND_ID column

The values of this column are predefined and cannot be changed.

b. The REPORTING_PERIOD column

The reporting calendar year, e.g. 2023, 2024, or 2025, the value in this row relates to. This must be the same for all values in the .csv file. Note: for metrics which reference 'previous reporting year', the *Reporting Period* is still the same as all others.

c. The UNIT column

Denotes the unit of the value of this row. This is only applicable for numerical values. With the exception of monetary values (which are always in the currency defined in 0.1.12), the values of this column are predefined, cannot be changed, and are for reference only.

d. The VALUE column

The submitted value for the metric defined in the row.

Numerical values

Numbers are formatted with a . as decimal separator, and no digit separation. For example:

- ✗ 1,5
- ✗ 123,00.5
- ✗ 123.00,5
- ✗ 100_342_231.4567
- ☑ 5
- ☑ 0.1
- ☑ 7.333
- ☑ 100342231.4567

Units for numerical values

The Conceptual Framework may use units like “Millions €”. For reasons of simplicity and consistency, the Machine-Readable Format avoids such unit prefixes. Please double-check that the units match your data.

The Value will be ignored unless Status is set to provided.

Most rows have additional constraints on what’s permissible, documented in the row specification.

String values (free_text**)**

- Strings may be up to 20,000 characters long.
- Tab (\t) and newline (\n) characters inside string values must **not** be escaped.

Percentages (%**)**

Please note that 100% is represented by 100, **not** 1.0.

e. The STATUS column

The status of every row can be one of the following:

provided	Indicates that there is compliant data for this row in the Value field.
not_available	Indicates that this row’s data point has not been shared because the data point is not available. Note: If this is a required metric, this is not sufficient. ! If this Status is set, the row’s Value is ignored and not imported.
not_applicable	Indicates that this row’s data point has not been shared because it is not applicable. For example, the metric 'listed_ticker' is only needed if 'listed' = 'yes', and otherwise can be marked as not_applicable. ! If this Status is set, the row’s Value is ignored and not imported.

f. The COMMENTS column

An open text field for comments on the metric. Note that important data should not be in here as it is not required to be reviewed on data import. A good use case is an explanation of why a metric is not provided. A bad use case is explaining that the unit differs from that specified in the template — this would not be acceptable.

D. Specification of rows and values

a. General

- The first row (”header row”) of the Export File contains the column names as documented in the specifications: COMPOUND_ID,REPORTING_PERIOD,UNIT,VALUE,STATUS,COMMENTS
- The order of rows (except for the header row) is arbitrary, though sticking to the order proposed in the row specification is recommended.

Explicit Omissions

Data points cannot be omitted by leaving out rows, but only by explicitly marking them as not_available or not_applicable.

b. Granularity, interpretation & methodology

Values and Units must match the metric definition and calculation method. Never submit a value if its meaning/calculation method does not exactly correspond to what is stated in the *Conceptual Framework* and the *Machine-readable Format*.

- To enable machine-readable imports and comparability of data sets, **precision is key.** Please observe permissible Values.

E. Notes on the development of the MRF from the conceptual framework

The MRF has been designed to map precisely to the Invest Europe Excel ESG Reporting Template (the ‘conceptual framework’). This has resulted in a couple of small things of note:

1. The list of valid values in country_of_domicile, primary_country_of_operations, other_EU_country_of_operation_1, and other_EU_country_of_operation_2 has been predetermined and are listed as tabs in the specification. There was an early suggestion to use ISO

country codes, however, this was not acceptable for those filling in the conceptual framework directly, and so the change was made to use the same list.

2. The conceptual framework allows for input of scope 3 emissions by category and for scope 2 emissions by market-based and location-based. It does not, however, allow for input of scope 1 emissions by category. This is because this level of granularity was not deemed relevant for reporting purposes. It would have been advantageous for interoperability between platforms, but as outlined in "A. How data moves", the primary purpose of interoperability is to ease reporting, and so it was decided that the MRF ought to stick to the conceptual framework.

3. The conceptual framework has space for reporting SFDR PAI metrics at the bottom. Some of these metrics are already captured in the other sections, and are repeated here so that the PAI section is complete in its own right. For the purposes of the MRF however, these have not been repeated. As a result, the MRF specification follows the order of the conceptual framework until it reaches the PAI section, where the following metrics are omitted from the MRF as they have already been captured:

PAI Reference	Compound ID	Invest Europe Metric Number
PAI 1.1	total_scope_1_emissions	2.2.3
PAI 1.4	total_scope_3_emissions	2.2.5
PAI 5.1	total_energy_consumption	2.4.1
PAI 5.3	energy_consumption_renewable	2.4.2
PAI 7.1	activities_affecting_biodiversity_areas	2.6.1
PAI 8.1	emissions_to_water	2.5.1
PAI 9.1	hazardous_radioactive_waste_generated	2.5.2
PAI 12.1	unadjusted_gender_pay_gap	3.2.1
PAI 13.1	number_of_female_board_members	4.1.2
PAI 13.2	number_of_male_board_members	4.1.5
PAI 13.3	total_number_of_board_members	4.1.1