

CRIF Synesgy Ratings

ESG RATING OPEN METHODOLOGY

v 1.0.0



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1. Summary

This document summarizes the key qualitative and quantitative factors applied by CRIF Synesgy Ratings when assigning ESG Ratings to companies. The ESG Rating Open provides an unsolicited automated ESG assessment addressed by impact materiality principles by combining proprietary ESG data and publicly available information. The ESG Rating Open reflects the company's overall ESG profile and is expressed on a five-level rating scale ranging from A to E, where A indicates the strongest ESG performance and E the weakest. The evaluation does not have a forward-looking nature and refers solely to the date on which it was produced. The issuance of the ESG Rating Open is initiated by CSR.

2. Definitions

ESG Rating Open

The ESG Rating Open is a statistical and automated ESG assessment addressed by impact materiality principles, based on statistical information. The assessment evaluates the company's most significant actual impacts on environmental, social and governance matters arising from its activities, operations and business practices. The methodology is aligned with the principles of the European Sustainability Reporting Standards (ESRS) and draws on the Voluntary Sustainability Reporting Standard for SMEs (VSME) developed by EFRAG, which provides the reference framework for identifying and assessing sustainability topics. ESG Ratings are expressed on a five-level scale ranging from A (strongest sustainability profile) to E (weakest sustainability profile). The issuance of the ESG Rating Open is initiated by CSR.

ESRS

ESRS refers to the European Sustainability Reporting Standards developed under the Corporate Sustainability Reporting Directive (CSRD). Within this methodology, ESRS topics represent the building blocks used to structure and aggregate ESG information.

VSME

VSME refers to the Voluntary Sustainability Reporting Standard for Small and Medium-sized Enterprises issued by EFRAG. The VSME data points constitute the starting framework for the selection of the variables included in the ESG Rating Open model.

Analytics Variables

Analytics Variables are indicators derived from public data elaborated by CRIF Group, statistical models and external data sources. These variables are calculated independently from the participation of the assessed company.

Single-Name Variables

Single-Name Variables are company-specific indicators reflecting the characteristics, performance and sustainability practices of the assessed company.

Geo-Sectoral Variables

Geo-Sectoral Variables are indicators calculated based on the company's country and sector of operation. These variables capture structural sustainability characteristics and risks associated with a specific geographical and industrial context.

NFC

The non-financial companies are “corporations and quasi-corporations not engaged in financial intermediation but principally in the production of market goods and non-financial services according to the ECB BSI Regulation”¹.

ESG Pillars

The ESG Pillars represent the three main dimensions of the assessment: Environmental (E): environmental impacts, risks and management practices; Social (S): workforce, human rights and stakeholder-related aspects; Governance (G): governance structures, business conduct and management practices.

Impact materiality

Impact materiality refers to the relative relevance of a sustainability topic for a given sector based on the significance of the actual impacts that companies may have on the environment, society and business conduct. Within this methodology, only the impact materiality dimension is considered. Impact materiality is used to determine the weights assigned to ESRS topics in the calculation of ESG pillars.

Sector-Specific Weights

Sector-Specific Weights represent the relative importance assigned to each ESRS topic within a given sector. These weights are derived through the methodology described in Section 4.4 and are used in the calculation of E, S and G pillars.

Benchmark Sample

The Benchmark Sample refers to the representative population of EU27 companies used for the calibration and normalization of variables included in the ESG Rating Open model.

3. Scope of application and exclusions

The methodology is applicable to Non-financial Companies (NFC) that meet the following requirements:

- Classified as Micro and Small, according to the European definition ex 2003/361/CE;
- Having their registered office in one of the EU27 countries;
- Being active;

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0680>

- Having available information on the NACE classification, either at the headquarters level or for at least one local unit.
- Having recent balance sheet information to be used, to produce a reliable evaluation

More specifically, the following companies are excluded from the scope:

- Companies with NACE codes related to financial and insurance activities, specifically:
 - 64: Financial service activities (excluding insurance and pension funding);
 - 65: Insurance, reinsurance and pension funding (excluding compulsory social security);
 - 66: Activities auxiliary to financial services and insurance activities;
 - 70.1: Activities of head offices;
- Companies with the following NACE codes:
 - 97: Activities of households as employers of domestic personnel;
 - 98: Undifferentiated goods- and services-producing activities of private households for own use;
 - 99: Activities of extraterritorial organizations and bodies;
- Companies with legal form OTHER in the list in Appendix.

4. Methodology

This section summarizes the methodology adopted for the calculation of the ESG Rating Open developed by CRIF Synesgy Rating (CSR), aimed at assessing micro and small enterprises.

The CSR Rating Open is designed for companies operating within the EU27 countries, providing a standardized and comparable measure of environmental, social and governance performance. The assessment is based exclusively on the concept of impact materiality that, in line with the European Sustainability Reporting Standards (ESRS) and the VSME framework developed by EFRAG, is used to identify and weigh the sustainability topics most relevant to the company's sector of activity.

The rating is based on a comprehensive set of variables, divided into two main categories:

- single-name variables, collected at the individual company level from official open data sources;
- geo-sectoral variables, calculated based on the company's sector classification (NACE) and country of operation, also considering any existing local units.

The selection of variables originates from the data points defined under the VSME (Voluntary Sustainability Reporting Standard for SMEs) framework. These data points are subsequently mapped to the corresponding ESRS (European Sustainability Reporting Standards) domains to ensure alignment with the European regulatory framework.

All variables undergo a normalization process to ensure comparability and consistency. For each ESRS domain, a normalized factor is then computed through a weighted average of the underlying variables. The weights assigned to the variables reflect their relative importance within the rating framework. This weighting approach aims to give greater emphasis to indicators that directly capture the sustainability performance of the assessed company, while still incorporating sector-specific information deemed relevant for the evaluation.

The resulting values are subsequently transformed into rating classes, as described in Section 4.3.

Each ESRS factor contributes to the calculation of the corresponding ESG pillar (Environmental, Social, Governance) through a weighted aggregation of normalized ESRS values. The weights assigned to each component vary by sector and are determined through a combined quantitative and qualitative approach, as detailed in Section 4.4.

Once the pillars are obtained, they are also converted into rating classes.

The final ESG rating is calculated as a weighted average of the three pillars (E, S, G), providing an overall and integrated assessment of the company's sustainability profile.

4.1. Sampling

The ESG Rating Open framework has been developed and calibrated on a representative sample of EU27 active non-financial companies, stratified by economic sector to ensure adequate coverage of the different industry profiles included in the analysis.

As a result, the ESG Rating Open framework is designed to incorporate business information database and public ESG raw data, elaborated from CRIF Group.

This approach ensures maximum coverage of the target population while allowing the integration of additional companies.

4.2. ESG Variables

The selection of the variables underlying the rating was driven by the VSME data points. Specifically, each data point was mapped to one or more variables available within the analytics variables, with the objective of maximizing coverage of the VSME requirements while leveraging available data sources. At the end of this process, more than 30 variables were selected and included in the final algorithm. According to VSME framework, the ESG KPIs are only related to impact materiality.

Table 1 - Number of ESG Variables

PILLAR	ESRS	VSME FIELD DESCRIPTION	#KPIs
E	E1	B3 – Energy and greenhouse gas emissions	2
E	E1	C4 – Climate risks	1
E	E1	C8 – Revenues from certain sectors and exclusion from EU reference benchmarks	1
E	E1	Disclosure B1 – Basis for preparation	2
E	E2	B4 – Pollution of air, water and soil	3
E	E3	B6 – Water	3
E	E4	B5 – Biodiversity	3
E	E5	B7 – Resource use, circular economy and waste management	4
S	S1	B10 – Workforce – Remuneration, collective bargaining and training	3

S	S1	B9 – Workforce – Health and safety	2
S	S1	C6 – Additional own workforce information - Human rights policies and processes	1
S	S2	B8 – Workforce – General characteristics	1
G	G1	B11 – Convictions and fines for corruption and bribery	2
G	G1	C5 – Additional (general) workforce characteristics	1
G	G1	C9 – Gender diversity ratio in the governance body	1
G	G1	Disclosure B1 – Basis for preparation	1
G	G1	Disclosure B2 – Practices, policies and future initiatives for transitioning towards a more sustainable economy	2

The selected variables were calculated across the entire benchmark sample.

Within our framework, the objectives of the Paris Agreement are indirectly considered, through the consideration of whether the company is included in, or excluded from, EU Paris-aligned benchmarks.

For each KPI included in the framework, a dedicated data quality process was performed to ensure consistency, completeness and accuracy of the inputs used by the algorithm. This process included checks on data availability, validation of input formats, identification of missing or inconsistent values, and outlier detection procedures aimed at identifying anomalous observations that could affect the robustness of the rating results.

Subsequently, each variable was normalized by rescaling its values to a range between 0 and 1 based on its distribution within the benchmark sample. This approach allows the variables to be expressed on a common scale, ensuring comparability across indicators with different units of measurement and distributions, while positioning each company's performance (on x axis in the figure below) relative to the benchmark population (on y axis in the figure below).

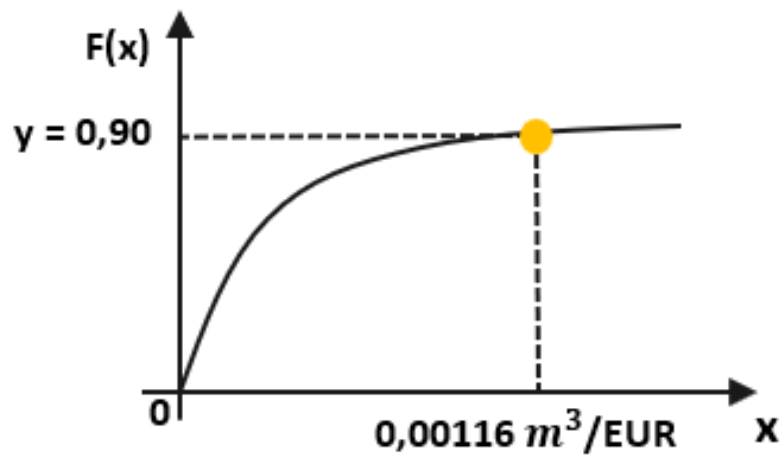


Figure 1: Example of normalization process

4.3. ESRS Algorithm

For each pillar of the ESG Rating Open (Environmental, Social and Governance), the data points defined by the VSME standard have been mapped to the corresponding ESRS topics. The figure below provides an overview of the adopted framework and the relationship between the ESG pillars and the relevant ESRS standards.

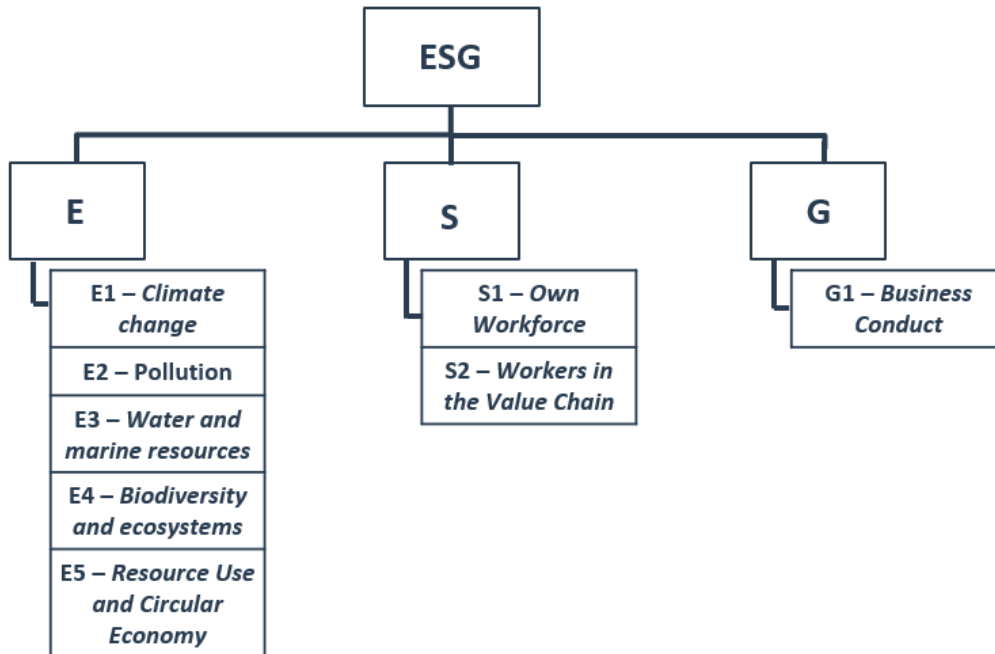


Figure 2: ESG Model Framework

The Environmental (E) dimension is composed of the following ESRS standards:

- E1 – Climate Change
- E2 – Pollution
- E3 – Water and Marine Resources
- E4 – Biodiversity and Ecosystems
- E5 – Resource Use and Circular Economy

The Environmental pillar is derived from 19 underlying KPIs.

The Social (S) dimension is composed of the following ESRS standards:

- S1 – Own Workforce
- S2 – Workers in the Value Chain

In line with the proportionate approach of the VSME framework, the ESRS S3 – Affected Communities and ESRS S4 – Consumers and End-users topics are not included in the quantitative component of the pillar, as they are not currently supported by structured and dedicated metrics comparable to those available for the other ESRS standards. The Social pillar is derived from 7 underlying KPIs.

The Governance (G) dimension is represented by:

- G1 – Business Conduct

The Governance pillar is derived from 7 underlying KPIs.

Once the variables have been normalized, as described in the previous section, an ESRS factor is computed for each topic through a weighted average of the corresponding indicators.

A weight equal to 1 is assigned to single-name indicators, while a weight equal to 0.5 is assigned to sector-level indicators. This process generates a continuous ESRS value ranging from 0 to 1.

Subsequently, the Jenks Natural Breaks algorithm is applied to transform the continuous values into discrete classes. The algorithm identifies optimal breakpoints by minimizing the variance within classes and maximizing the variance between classes. Each ESRS is then classified on a three-point scale, where 1 indicates a topic with lower materiality, while 3 indicates a topic with higher materiality.

The resulting ESRS classes represent the relative materiality of each sustainability topic and are subsequently used in the calculation of the Environmental, Social and Governance pillars.

4.4. Sectorial weights

The estimation of sector-specific ESRS weights was based on a combination of quantitative evidence and expert validation. In particular, the following elements were considered:

1. **ESRS materiality assessments disclosed by companies** in Corporate Sustainability Reports (CSRs) available within CRIF Group databases and published from 2024 onwards. The analysis assessed the prevalence of each ESRS within a sector, measured by the frequency with which sustainability topics were identified as material by reporting entities. To reflect the economic significance of companies within each sector, observations were aggregated using a revenue-weighted approach
2. **Sector-specific sustainability characteristics**, captured through the clustering of economic activities into sectoral groups and reflecting the different ESG impacts, risks and opportunities associated with each sector
3. **External reference frameworks and sector benchmarks**, used to assess the consistency, robustness and reasonableness of the quantitative results
4. **Publications and guidance issued by regulatory, standard-setting and supervisory bodies**, including EFRAG and other relevant institutions, used to support the assessment of sector-specific sustainability materiality and validate the resulting weighting scheme
5. **Expert judgement**, applied to combine quantitative evidence with external benchmark references

Specifically, the sectors considered were defined by grouping six-digit industry classifications into 15 macro-sectors: in this classification, a higher level of granularity was adopted for the manufacturing sector, to better capture the significant heterogeneity of production processes.

Table 2 - Sectoral clusters details

SECTORAL CLUSTERS	DESCRIPTION
Agriculture	Agricultural production, livestock farming, forestry, and related natural resource activities.
Mining, Oil and Gas	Extraction of minerals, coal, oil, natural gas, and supporting mining services.

Food, beverage and tobacco	Production and processing of food products, beverages, and tobacco.
Manufacturing: Textile and apparel	Manufacturing of textiles, clothing, footwear, leather goods, and fashion-related products.
Manufacturing: non-metals activities	Production of wood, paper, rubber, plastics, glass, ceramics, and other non-metallic materials.
Manufacturing: Metals	Metallurgy, metal processing, and manufacturing of metal products.
Manufacturing: Electronics	Manufacturing of electronic, computer, optical, and high-technology equipment.
Manufacturing: Mechanics and means of transport	Production of machinery, industrial equipment, vehicles, components, and transport equipment.
Manufacturing: Instrumental machinery	Industrial machinery, equipment and automation systems manufacturing.
Chemicals and pharmaceutical	Chemical production, pharmaceuticals and life sciences activities.
Construction, infrastructure and services	Construction, civil engineering and infrastructure development.
Commerce and Large-scale retail distribution	Wholesale trade and distribution of goods to businesses and retailers.
ICT & Media & TLC	Information technology, software, telecommunications, media, publishing, and digital services.
Utilities and power	Energy generation and distribution, water supply, waste management, and utility services.
Transport and logistics	Transportation, warehousing, logistics, courier, and postal services.
Services	Business and personal support services, rental, security, administrative support, and miscellaneous services.

For every sector, the analysis of the selected CSRs produced a set of quantitative weights, derived from the processing of the disclosure data. These results were subsequently benchmarked against external references and relevant academic literature to assess their consistency and robustness.

In a limited number of cases, the quantitative results showed discrepancies with the benchmark evidence or were affected by a limited number of available CSRs within a given sector. Under these circumstances, a more qualitative assessment approach was adopted to derive the sector-specific ESRS weights.

Below is an example of the ESRS weights applied to the agriculture sector:

Table 3 - Example of ESRS weights

SECTOR	E1	E2	E3	E4	E5	S1	S2	G1
Agriculture	16%	12%	16%	16%	8%	16%	8%	8%

4.5. ESG Algorithm

Once the inputs required for the rating calculation have been defined—namely the ESRS values and their corresponding sector-specific weights—the Environmental (E), Social (S) and Governance (G) component pillars are computed as weighted sums of the continuous ESRS values belonging to each respective dimension. Specifically, each ESRS contributes to the pillar according to its continuous value and the weight assigned to the relevant sector.

The output of this step is a continuous value for each pillar (E, S and G). Subsequently, the Jenks Natural Breaks algorithm is applied to these values to identify optimal classification thresholds and convert the continuous values into discrete classes.

Once the classified components have been obtained, the overall ESG Rating is calculated as a weighted average of the Environmental, Social and Governance pillars. The weights used in this aggregation are determined by the sum of the weights assigned to the ESRS topics belonging to each dimension, thereby ensuring that the contribution of each dimension reflects its sector-specific relevance.

Both the overall ESG Rating, and the pillars (E, S and G) are expressed on a discrete scale ranging from A to E, where:

- A represents the strongest ESG performance;
- E represents the weakest ESG performance.

This approach ensures consistency between the assessment of individual sustainability dimensions and the calculation of the overall ESG Rating while preserving the sector-specific materiality embedded in the weighting framework.

The following example provides an illustration of the ESG Rating calculation process using the agriculture sector weights shown in Section 4.4 :

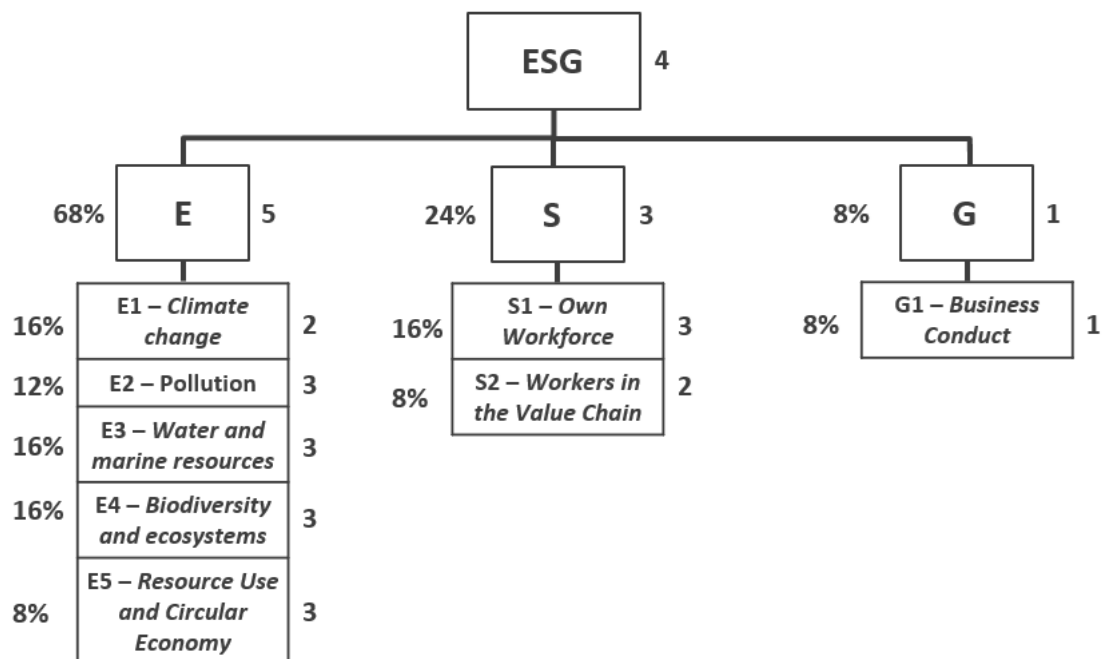


Figure 3 - Example of ESG Rating calculation process

5. Rating Scale

The ESG Rating Open output is expressed on an A-to-E scale, with higher values indicating better ESG performances. In details:

RATING OPEN CLASS	RATING OPEN CLASS DESCRIPTION
A	The company demonstrates a very strong capability to identify, manage and mitigate ESG factors, supported by an advanced governance framework and extensive integration into strategy and decision-making processes.
B	The company demonstrates a robust capability to identify, manage and mitigate ESG factors, supported by a very structured governance framework and robust integration into strategy and decision-making processes.

C	The company demonstrates a basic capability to identify, manage and mitigate ESG factors, supported by a basic governance framework and substantial integration into strategy and decision-making processes.
D	The company demonstrates a weak capability to identify, manage and mitigate ESG factors, supported by a partial governance framework and initial integration into strategy and decision-making processes.
E	The company demonstrates a minimal capability to identify, manage and mitigate ESG factors, supported by a minimal governance framework and minimal integration into strategy and decision-making processes.

6. Restrictions

The set of information required to assess the ESG Rating Open of is based on financial statements, available public information (Chambers of Commerce, public real estate registries and courts) and on other public ESG raw data, elaborated from CRIF Group.

Besides the circumstances mentioned in chapter 3, CRIF Synesgy Ratings can abstain from issuing a this rating when the set of minimum information is not available or when the quality of available information is deemed inadequate or unreliable to assess the entity's ESG impact materiality.

The assessment is generated through a fully automated process based solely on the KPIs and underlying the model inputs. By definition, no additional qualitative or other information is considered in the calculation.

The model is fully automated and does not allow any form of manual override of its outputs. This ensures, by design, an ex-ante control mechanism aimed at preventing any potential manipulation, undue influence or conflict of interest.

The ESG Rating Open is valid for up to 12 months from the date of issuance, unless any withdrawal triggers occur.

Appendix

Table 4 - Legal Structure in Scope

IN-SCOPE CODE	DESCRIPTION	EXAMPLES
COMP	<p>Limited liability partnerships is a company in which all partners have limited liability.</p> <p>A joint-stock company is a business entity in which shares of the company's stock can be bought and sold by shareholders.</p> <p>A general partnership, the basic form of partnership under common law, is in most countries an association of people or an unincorporated company where the owners are jointly and severally liable for any legal actions and debts the company may face, unless otherwise provided by law or in the agreement.</p>	<p>Corporation</p> <p>Limited Liability</p> <p>Private Company</p> <p>Limited by Guarantee</p> <p>Private Limited</p> <p>Company</p> <p>Public Company</p>
COOP	<p>A cooperative (also known as cooperative, co-op, or coop) is "an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise". Cooperatives are democratically controlled by their members, with each member having one vote in electing the board of directors.</p>	Cooperative
JV	<p>A joint venture (JV) is a business entity created by two or more parties, generally characterized by shared ownership, shared returns and risks, and shared governance.</p> <p>Companies typically pursue joint ventures for one of four reasons: to access a new market, particularly Emerging market; to gain scale efficiencies by combining assets and operations; to share risk for major investments or projects; or to access skills and capabilities</p>	<p>Joint Stock Company</p> <p>Joint Venture</p>
PART	<p>A partnership is an arrangement where parties, known as business partners, agree to cooperate to advance their mutual interests. The partners in a partnership may be individuals, businesses, interest-based organizations, schools, governments or combinations. Organizations may partner to increase the likelihood of each achieving their mission and to amplify their reach. A partnership may result in issuing and holding equity or may be only governed by a contract.</p>	<p>Partnership</p> <p>General Partnership</p> <p>Limited Partnership</p>
PROP	<p>A sole proprietorship, also known as a sole tradership, individual entrepreneurship or proprietorship, is a type of enterprise owned and run by one person and in which there is no legal distinction between the owner and the business entity. A sole trader does not necessarily work alone and may employ other people. The sole trader receives all</p>	<p>Proprietorship</p> <p>Sole Proprietorship</p>

	profits (subject to taxation specific to the business) and has unlimited responsibility for all losses and debts.	
OTHER		All other legal forms (this legal form WILL BE EXCLUDED by the bundle ESG evaluation)

