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1. EXECUTIVE SUMMARY

The General Corporate Methodology describes the general analytical framework by which EthiFinance Ratings assigns long-term, short-term and instrument credit ratings to non-financial corporates. The methodology captures both financial and extra-financial risks that qualify a company's credit quality defined as the issuer´s ability and willingness to honour its financial commitments fully and in a timely fashion.

Long-term general non-financial corporate credit ratings

Section 3 of this methodology describes how EthiFinance Ratings assigns long-term general non-financial corporate ratings. This entails the assessments of the Business Risk Profile (BRP) and the Financial Risk Profile (FRP) and is supplemented by certain adjustments. The BRP and FRP are evaluated through an expert-based scorecard that considers qualitative and quantitative risk factors.

- The BRP reflects financial and extra-financial risk factors related to the industry in which a company operates, to its competitive positioning relative to its peers and to its governance and strategy.
- The FRP evaluates the amount of debt leverage and capitalisation both historically and prospectively.

When including extra-financial factors, EthiFinance Ratings uses a double materiality approach at the sector level and a financial materiality approach at the company level, in line with the EU definition. This means that we consider how sustainability issues affect companies, and how companies impact their environment and their stakeholders, both influencing the credit standing of the company.

The evaluation of the BRP and FRP constitute the Anchor rating. The Anchor rating may be adjusted by an assessment of ESG controversies, liquidity risk and country risk considerations.

Short-term credit ratings

This methodology also details the process by which EthiFinance Ratings determines the short-term rating for corporates (Section 4) as well as related short-term instruments. The short-term rating is derived from the following:

- The long-term rating (covered in Section 3).
- The liquidity risk.
- The credit metrics expected evolution (CMEE).

Instrument credit ratings

Lastly, this methodology details how to derive the long-term instrument issued by corporates (Section 5) depending on whether the long-term issuer rating is:

- Investment-grade, or
- Non-investment grade.

While this methodology provides a largely prescriptive approach to evaluate a company's credit quality,

EthiFinance Ratings' analytical process also includes the use of analytical judgement. Economic reality rarely conforms to prescriptive frameworks or models, and analysts must consider the specifics of each company, recent trends and comparisons with peers. Therefore, this methodology should be understood as a general guidance that EthiFinance Ratings' analysts use in tandem with their expert views to arrive at a rating.

2. SCOPE

Section 3 of this methodology describes how EthiFinance Ratings assigns a long-term rating to general non-financial corporates[1]. Due to their unique characteristics, some non-financial corporates or transactions may require the use of alternative corporate rating methodologies, including but not limited to, social housing companies, investment holdings, project finance transactions.

Sections 4 and 5 of this methodology describe how EthiFinance Ratings assigns short-term and instrument ratings. Although these types of ratings are part of the General Corporate Rating Methodology, potentially they may also be used for other asset classes, including Banks, Insurance, and other financial issuers.

[1] EthiFinance Ratings details the perimeter for the analysis in appendix A "Rating subsidiaries and affiliates within a group"

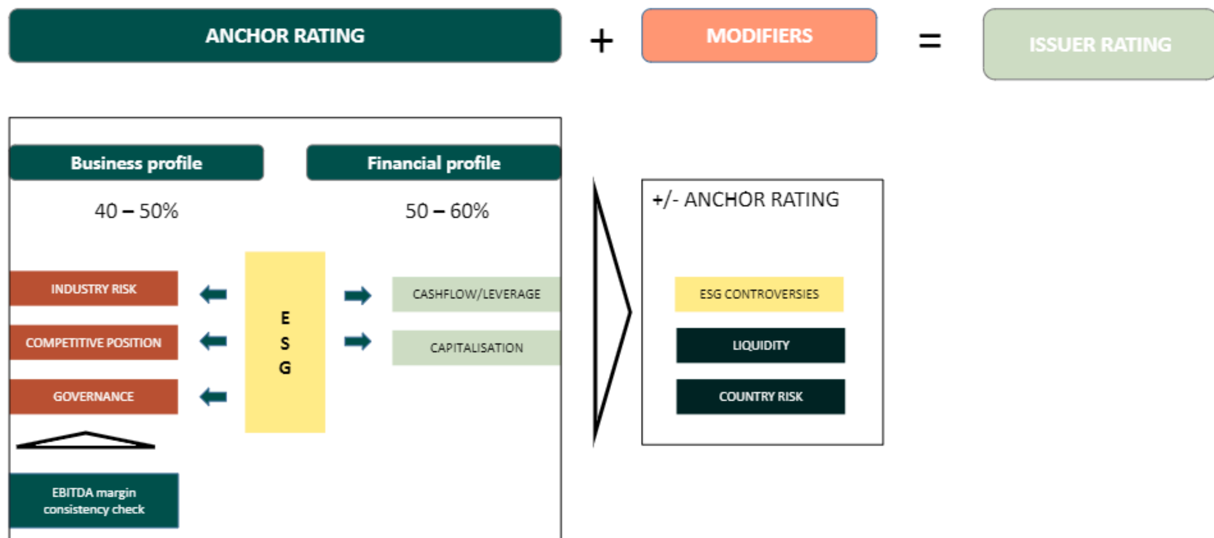
3. LONG-TERM NON-FINANCIAL CORPORATE RATINGS

3.1. Analytical approach

3.1.1. Overall approach

Ratings assigned by EthiFinance Ratings are based on the analysis of qualitative factors and quantitative factors, which are then adjusted with modifiers (see Table 1). The combination of the scores from the Financial and Business Profiles, with the influence of ESG factors, give the Anchor Rating. To arrive at the Issuer Credit Rating, EthiFinance Ratings adjusts the Anchor Rating based on the scoring of three additional risk factors: ESG related controversies, the company's liquidity position and country risks.

Table 1 – EthiFinance Ratings Corporate Ratings Methodology



3.1.2. Deriving the anchor rating

Table 2 shows how EthiFinance Ratings arrives at the Anchor Rating. First, each of the Business and Financial risk profiles is assessed separately based on their respective risk subfactors. Some of the Business sub-factors and the Financial profile score may be positively or negatively affected by ESG factors. The resulting Business and Financial profile scores are then weighed to arrive at the Anchor rating.

The Business risk profile is a largely qualitative assessment and is composed of three sets of risk factors:

- The Industry risk profile;
- The Company's Competitive positioning;
- Governance.

The Financial risk profile is a mostly quantitatively driven assessment and is composed of two sets of risk factors:

- Cash flow and leverage;
- Capitalisation.

Table 2 – EthiFinance Ratings' Anchor Rating (50%-50%)

BUSINESS PROFILE	**50%**
Industry risk assessment	**20%**
Levels of profitability	5%
Volatility of profitability	5%
Effectiveness of barriers to entry	5%
Growth perspectives	5%
Company's competitive positioning	**20%**
Scale	7%
Competitive advantages	6%
Diversification (geographic, client & products)	7%
Governance	**10%**
Financial policy / Management quality	5%
Shareholding & control structure	5%
FINANCIAL PROFILE	**50%**
Cashflow and leverage	**40%**
Net financial debt / EBITDA	15%
FFO/Net financial debt	5%
EBITDA/Interest	20%
Capitalisation	**10%**
Equity / Debt	10%
TOTAL	**100%**

Table 2.1 – EthiFinance Ratings' Anchor Rating (40%-60%)

BUSINESS PROFILE	40%
Industry risk assessment	16%
Levels of profitability	4%
Volatility of profitability	4%
Effectiveness of barriers to entry	4%
Growth perspectives	4%
Company's competitive positioning	16%
Scale	6%
Competitive advantages	5%
Diversification (geographic, client & products)	5%
Governance	8%
Financial policy / Management quality	4%
Shareholding & control structure	4%
FINANCIAL PROFILE	60%
Cashflow and leverage	48%
Net financial debt / EBITDA	18%
FFO/Net financial debt	6%
EBITDA/Interest	24%
Capitalisation	12%
Equity / Debt	12%
TOTAL	100%

Each of the risk factors and subfactors is scored on a scale of 1 to 7, 1 being the least risky and 7 the most. They are then combined based on the weighting presented in Table 2. The Industry risk score may be positively or negatively affected depending on "ESG Sector scores". The Financial Profile score may be positively or negatively affected by the "ESG Company score".

If the score of the Financial risk profile is less than 6 (i.e. [1 to 6[), the scores of each of the Business and Financial risk profiles are combined given an even weight of 50% to arrive at the Anchor Rating. However, if the score of the Financial risk profile is 6 or above, EthiFinance Ratings assigns a 40% weight to the Business risk profile and a 60% weight to the Financial risk profile (Table 2.1).

Table 3 - Alphanumeric mapping for the Anchor rating

AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-
1	2			3			4		

BB+	BB	BB-	B+	B	B-	CCC
5			6			7 – 8[

To arrive at the Anchor rating, EthiFinance Ratings translates the combined score of the Business and Financial risk profiles into a rating based on the mapping presented in Table 3. The highest grade of each rating category (AAA, AA+, A+, BBB+, BB+, B+, CCC+) corresponds to the whole number of the 1 – 7 numeric scale. The boundaries of all ratings are established through a linear interpolation to the nearest third of a whole number. For example, an Anchor rating score between 3.0 and 3.33 translates into an ‘A+’, whereas an Anchor score between 3.34 and 3.67 would translate into an ‘A’ rating.

Note: If the assessment of the Business or Financial risk profile is B or worse, the rating would be capped at BB-. If the assessment of the Business or Financial risk profile is equivalent to B+ or BB-, the rating would also generally be capped at BB+. The previous cap can be overridden in cases where the lower profile is at BB- and the higher profile is at least in the A category. Finally, if the assessment of the Business or Financial risk profile is equivalent to BB or BB+, the rating would generally be capped at BBB. The previous cap can be overridden in cases where the lower profile is at BB+ and the higher profile is at least in the AA category. When both the Business and Financial risk profiles are investment grade, there is no capping.

The use of the score card can only yield a minimum rating of CCC- corresponding to a numeric score in the range of [7.67 to 8[. However, EthiFinance Ratings’ scale also includes CC, C and D rating categories. A company will be assigned a CC or a C if EthiFinance Ratings believes that there is a high probability of it missing a payment. Scenarios that point to this prospect includes: i) A company has announced that it will seek court protection in order to negotiate a restructuring of its debt although it is still current on its financial obligations ii) Any other announcement stating the company’s intention to miss a payment or to capitalise part of its debt. The difference between a CC and a C rating depends on the distance to default which is shorter in the case of a C rating. The D category is for companies that have defaulted.

The complete long term rating scale and the definition of each of the rating categories can be found in the “Credit Rating Scale & Definitions” document that appears on the EthiFinance Ratings website.

3.1.3. Deriving the issuer credit rating

To arrive at the Issuer credit rating, EthiFinance Ratings may adjust the Anchor Rating up or down, or even cap the Issuer Credit Rating with the assessment of the following three risk factors which are not reflected in a scorecard:

- ESG controversies;
- Liquidity risk;
- Country risks.

In particular, liquidity and country risks represent risks that can very quickly escalate with severe consequences for credit quality. This is the reason why EthiFinance Ratings may either cap or downgrade the Issuer credit rating under certain circumstances as a result of the assessment of these factors.

ESG issues, of which primarily Climate risk, are starting to impact some sectors significantly, affecting the credit standing of all companies because of higher operating costs (e.g., carbon price cost), revised asset values (stranded assets) or significant additional investment needs to comply with new regulatory demands (new technologies). As a result, and for the companies operating fully in sectors where ESG risks and impacts are high and face significant "transformation" needs as defined in Appendix "E", the Issuer Ratings will be impacted through a downgrade or an upgrade of the sector assessment.

3.2. The analytical scorecard

3.2.1. Rating factors: the Business Risk Profile (BRP)

We assess the business risk profile of an issuer based on the following three factors:

- Industry risk.
- Competitive positioning.
- Governance.

We believe that each one of those factors influences a company's creditworthiness and therefore its rating. In each section below, we highlight how each factor is measured and how ESG sector related risks may benefit or impact them.

We corroborate our assessment of the business profile using a company's EBITDA margin and its volatility relative to sector peers.

3.2.1.1. Industry risk

The cash flow generation of all companies engaged in a particular industry is influenced by that industry's characteristics and trends. Industry risk is therefore the starting point to understanding an individual firm's credit quality. While the Industry assessment provides a reference point for the total overall rating of a company, it does not act as a ceiling or a floor for all the companies within that sector. Industry risk however may be modified by ESG considerations.

We take five factors into consideration when evaluating the industry score:

1. Levels of Profitability.
2. Volatility of the profitability (caused by swings in volumes/prices/costs, etc.).
3. Effectiveness of Barriers to Entry.
4. Growth Perspectives.
5. ESG sector risks and opportunities.

For companies that operate in various sectors with significantly different characteristics, EthiFinance Ratings may assess the two main industries separately and then calculate a blended score using the weighted average of the two sector scores. The weights assigned consider the importance, in terms of EBITDA, of each of the sectors involved. This approach will be used when the weight of both sectors is at least 20%. Additionally, if the analysed Company does not have a good fit among the sectors in Appendix B or C, the analyst will be able to override the factor scores of the sector as long as he/she can provide data on subsector EBIT Margin levels and volatility of EBIT which will then be scored using Tables 4 and 5.

a) Levels of profitability

The level of profitability within a sector is a good indicator of whether an industry is attractive and therefore should receive a high score. To compare the levels of profitability between sectors, EthiFinance Ratings uses the EBIT margins. This profitability analysis has been conducted on the basis of the review of the EBIT margins of 1,722 non-financial corporates for the years from 2005 to 2021. The companies have been grouped by sectors and the EBIT margin median has been calculated for each sector (See Appendix B). The setting of the boundaries (see Table 4) has been established taking the group of EBIT medians corresponding to each industry and classifying them into 7 groups (septile) where a score of 1 is given to the group of industries with the highest EBIT margins and a score of 7 corresponds to the sectors with the lowest EBIT margin.

Table 4 – Industry profitability level assessment (EBIT Margin)

1	2	3	4	5	6	7
Ebit >22%	22% ≥ Ebit >18%	18% ≥ Ebit >13%	13% ≥ Ebit >9%	9% ≥ Ebit >6%	6% ≥ Ebit >2%	Ebit ≤ 2%

b) Peak to trough/Volatility of profitability

The profitability of an industry, although a good indicator of a sector's attractiveness, is by itself incomplete and must be accompanied by an analysis of the volatility of each sector's profitability, as volatility is at the core of any risk assessment. Again, EthiFinance Ratings has established boundaries (see Table 5) using statistical information on 1,722 non-financial corporates and measuring for each company the EBIT margin decline between the years 2007 and 2009 during the great financial crisis.

The companies have been grouped by sectors and the median of the EBIT margin declines has been calculated for each sector (See Appendix C for a reference of sector EBIT margin volatilities). The setting of the boundaries (see Table 5) has been established taking the group of EBIT medians corresponding to each industry and classifying them into septiles where a score of 1 is given to the group of industries with the lowest volatility and a score of 7 corresponds to the sectors with the highest volatility.

Table 5 – Peak to Trough (PT) Profitability assessment

1	2	3	4	5	6	7
PT > -1%	-1% ≥ PT>-6%	-6% ≥ PT > -9%	-9% ≥ PT > -11%	-11% ≥ PT > -28%	-28%≥ PT > -39%	PT ≤-39%

c) Effectiveness of the barriers to entry

Barriers to entry is another important factor in analysing industry risk where strong barriers to entry make the presence in a sector more attractive (see Table 6). This factor encompasses many sub-factors that reduce the risk of operating in an industry such as:

- Regulatory requirements that include licensing, mandatory administrative approvals and the granting of monopolies or oligopolies (i.e., drug licensing processes, utilities providers, etc.);
- Patents, research capabilities and technological know-how (i.e., in industries such as pharmaceuticals, aerospace, etc.);
- Material environmental or social regulation that impose high costs to players in order to comply with stringent environmental or health risks (i.e., paper industries, vehicle manufacturers, etc.);
- Industries that are capital intensive and require strong capital structures (i.e., telecom companies, infrastructure operators, steel producers, etc.);
- Well-established and dominant brands that command a price premium over peers (i.e., luxury items).

Table 6 – Barriers to entry

1 – 2	3	4	5	6	7
High level of regulation with approval to operate needed and necessity for very large investments (high capex, patents)	Very capital-intensive industry, strong brand image requirement, which provides ability to dictate prices. Some degree	Capital-intensive industry, significant know-how, high R&D expenditures and or brand image requirement.	Significant amount of assets needed but no regulatory approval and little brand image requirements	Required capital or know-how is limited. Follower in highly competitive sector.	Very low barriers to entry

	of regulation approval	No or little degree of regulation approval			

d) Growth perspectives

Demand influences financial performance as it drives volumes and product/service prices. Our assessment of the growth perspectives of an Industry (see Table 7) factors in the existence of long-term growth drivers in demand, correlation to GDP, and the risk of product substitution.

Industries that are growing well above GDP, are more likely to obtain favourable scores for this factor whereas sectors with declining demand, or a high risk of product substitution will receive a poor score for this factor.

Table 7 – Growth perspectives

1 – 2	3	4	5	6	7
Very strong growth well above GDP trend, sustained by long-term drivers and with no foreseeable product substitution risk	Strong growth above GDP trend, sustained by long-term drivers and a very low product substitution risk	Moderate growth slightly above GDP trend, sustained by moderate long-term growth drivers and a limited risk of product substitution	Weak growth at best similar to GDP trend, neutral long-term growth drivers and a visible risk of product substitution	Demand is stagnating or already in decline with no long-term growth drivers and a significant risk of product substitution	Strong decline in demand expected in the years ahead, with no long-term growth drivers and the risk of product substitution has become a reality

e) ESG impact on the sector

EthiFinance Ratings evaluates with its sector heatmap (see Appendix D) the financial impact that ESG factors may have on a sector's participants (financial materiality), and the impact that these participants may have on the environment and society (non-financial materiality). Extra financial materiality represents real risks to companies as it creates needs to transform the way companies operate to maintain profitability in a changing society / environment. Some sectors (e.g., oil and gas energy sector) may be affected or conversely some sectors (e.g., renewable energy sector) may already benefit from ESG trends.

In the ESG sector heatmap, factors linked to i) environmental and ii) stakeholder issues are considered. Environmental risk factors considered include climate change, intensity of resource uses, pollution and biodiversity, and Stakeholder risk factors include suppliers, consumers and states, regions and communities. The way a company behaves in terms of ESG is considered at the ESG Company Profile level.

EthiFinance Ratings scores each sector ESG exposure on a scale of 1 to 5 as shown in the following table (Table 8):

Table 8 – Sector ESG exposure

[1 to 2[	[2 to 3[	[3 to 4[	[4 to 5]
Sectors that already stand to benefit from ESG related opportunities and have very limited ESG risk	Sectors with ESG related opportunities and limited impacts but with required "adaptation" from companies to benefit from them	Medium to high ESG related risks and a definite need for the sector to "transition" structurally over the medium term	Significant level of ESG industry issues leading participants to a need to completely "transform" their operations over the short to medium term in order to limit financial risks (full definitions in appendix E)

Industry Risk Score Adjustment:

- Companies in sectors (Need to transform) would see their Industry risk score penalised by one figure as a result (+1 on the industry risk score): Companies operating in sectors most exposed to ESG risk factors may face, among others, declining demand for their products or services, higher cost structures, difficult access to financing and/or increased regulatory oversight over the next five years.
- Conversely, firms in sectors that fall in the 1st category (already aligned) i.e., with significant ESG related opportunities would see their industry risk score benefited with a one figure adjustment (-1 on the industry score).
- Companies in sectors with a score of [3 to 4[have a medium to high ESG risk and therefore, the upper half of the range [3.5 to 4[includes sectors that begin to incorporate higher levels of ESG risks. Companies in sectors in this part of the range would see their industry risk score penalised by one notch (+0.33 on the industry risk score).

3.2.1.2. Company's competitive positioning

Within the constraints of a particular Industry, there are companies whose command of the market helps them stand out in terms of pricing power, economies of scale and ultimately in its ability to generate cash. They use their competitive advantage to better perform in times of growth and are more resilient to sector-related shocks. Such resilience reinforces the business profile and is linked to the stability of cash flows. As a result, it is a key input into the rating. Competitive Positioning covers the following three factors:

- Scale.
- Competitive advantages and the ability to maintain them over time (brand, technological advance, positioning vs. ESG trends…).

- Diversification (geographic, client & products).

a) Scale

A company's size reflects its position relative to sector peers, and while being large is not a guarantee of future success, it is generally evidence of past achievements. Sector leaders are assigned the highest grades, as they benefit from scale economies and tend to drive trends in their sectors. Additionally, their position gives them the ability to adjust to disruption and show more resilience in case of shock. Conversely, industry followers are more exposed to market developments and therefore are assigned lower grades.

Table 9 – Revenues (R) (€ bn)

	1 – 2	3	4	5	6	7
General case	R > 30	30 ≥ R >15	15 ≥ R > 5	5 ≥ R >1	1 ≥ R > 0.2	R ≤ 0.2
Local / Niche firms	R > 10	10 ≥ R > 5	5 ≥ R > 1	1 ≥ R > 0.3	0.3 ≥ R > 0.1	R ≤ 0.1

Our Scale assessment however (see Table 9) differentiates between companies operating in:

- Global sectors, such as commodities, automotive, pharmaceuticals or technology, to name a few. Companies in these sectors compete globally, are exposed to global trends, and sectors are often dominated by very powerful industry leaders.
- Local or niche sectors; for companies operating in these sectors, absolute scale is not as important a rating factor. This category covers four distinct groups:
    1. Sectors benefiting from regulatory licences to operate essential services, such as utilities, telecoms or healthcare.
    2. Sectors producing products whose transportation price is very high (e.g., cement) or which cater to local consumer preferences.
    3. Highly fragmented and competitive sectors that are local in nature, such as construction or leisure.
    4. Sectors providing unique products or services, e.g., the luxury sector, law firms or firms benefiting from highly specialised intellectual property, technology, or proprietary processes.

b) Competitive advantages

A company's competitive advantages is what differentiates it relative to its peers and are company specific. They can adopt numerous forms, but all combine to support a company's financial performance. Here are the key aspects that EthiFinance Ratings reviews to assess a company's competitive advantages (see Table 10):

- Products or services offered are of high quality and so recognized by the market.
- Differentiation and uniqueness of products/services offered provide market advantages.
- Brand image improves the competitiveness and brings pricing power.

- Technological specificities in products, processes, or ecosystem bring advantages.
- Early / late product positioning vis a vis ESG related opportunities.
- Favourable access to resources leading to lower production costs.

Table 10 – Competitive advantages

1 – 2	3	4	5	6	7
Products have unique attractive features that make them hard to substitute. This could be linked to high brand power, specific ecosystems, unique technological characteristics aligned with ESG trends, etc. Products provide high value to clients and pricing power is very strong	Products are recognized for their high quality or are complicated to substitute due to technical specificities and / or unique know-how (patents), high technological content that positions them in line with ESG trends etc. Those products tend to have a highly recognized brand, allowing premium pricing	Product quality is generally recognized in sector. Technological content or innovation, availability, brand image or other factors allow the company to broadly stand out from competition and defend pricing points	Products have limited specific characteristics in terms of brand, quality, technology, or other factors. Substitution is generally possible but some factors such as availability, pricing point or else may support competitiveness. Pricing power tends to be limited.	Commoditized products with little differentiating characteristics relative to peers. No pricing power.	Highly commoditized products with no differentiation or pricing power.

c) Diversification

Diversification measures the breadth of a company's product or service offering, client concentration risk and exposure to country risk. More diversified companies are assigned the highest grades, as they are less exposed to a risk in one of its products / service offerings, geographies or clients, and are therefore likely to have more stable cash flows than less diversified peers. Conversely, companies with worrisome client concentrations, and / or very high exposure to risky countries are assigned the lowest grades.

Our analysis of this risk factor looks at the combination of all three factors (product / service offering, client concentration and geographic diversity) to determine the overall grade for diversification (see Table 11). The lowest grade would be assigned to the extent client concentration or exposure to country risk is particularly high unless there is strong evidence of mitigating factors.

Table 11 – Diversification

1 – 2	3	4	5	6	7
Broadest product/service mix in several industries. No client concentration. Global footprint with greatest exposure to the most favourable markets. No meaningful country risk exposure.	Broad product/ service mix in several industries. No meaningful client concentration. Global footprint, or greatest exposure to the most favourable markets. No meaningful country risk exposure.	Broad product/ service mix in different segments within a given industry. Potential manageable client concentration. Greatest exposure to favourable markets. Potential manageable country risk exposure.	Large product / service mix in one segment or narrow product offering in several segments. Manageable client concentration. Manageable country risk exposure.	Narrow offering in undifferentiated product / service segment. Some client concentration risk. Some meaningful country risk exposure.	Very narrow offering in undifferentiated product / service. High client concentration risk. Very high country risk exposure.

The following provides guidance for each of product / service mix, client concentration and country risk exposure.

Product / service mix

We assign the highest grade to companies with a broad portfolio of product and / or services in several industries relative to peers, as they are less vulnerable to substitution and supply-chain issues. Conversely, companies with a narrow, undifferentiated product /service mix receive the lowest grades.

Client concentration

When clients are concentrated, the main risk is losing them since that would have a very significant impact on the rated company's turnover and profitability. This risk is compounded by the fact that their negotiation power tends to be significantly higher than that of the "seller", which precisely gives them the ability to switch suppliers / providers. We would expect from companies in the investment grade category that their main client would represent no more than 5% of sales and the top 10 clients no more than 15% of sales. There may be exceptions, if the product or service is unique (patents, branding, etc.), but it remains a rare occurrence. In cases where client concentration is particularly high (the main client represents over 20% of sales and the top 10 clients represent over 40% of sales), we will analyse the credit quality of individual clients, and may stress revenues and cash flows to evaluate additional weak link exposures.

Geographic diversity

We assign the highest grade to companies that have a global footprint, with the highest exposure to the

most favourable markets in North America, Western Europe, Asia and the Middle East. Conversely, we would not expect to assign investment grade ratings to companies with sales and / or EBITDA exceeding 25% in the least desirable jurisdictions as defined by Coface and CESCE (seesection 3.3.3).

d) ESG impact on the company

When including extra-financial factors, EthiFinance Ratings uses a double materiality approach in line with the EU definition. This means that we consider how sustainability issues affect companies, and how companies impact their environment and their stakeholders, both having an effect on the credit standing of the company. The general approach followed to score a company in terms of ESG can be found in appendix H, where we describe how we build an ESG company scorecard through the selection of 18 indicators that are listed there.

EthiFinance Ratings scores and categorises each company ESG exposure on a scale of 0 to 5, with 0 representing companies with no dependencies and no impact on ESG factors or companies already fully aligned or positioned to take advantage of ESG trends, while 5 is representing companies with a high level of ESG dependencies and significant external impacts from their activities and that would need to transform their strategy and operations in order to reduce risks. The aggregate evaluation of the individual ESG indicators provides a final ESG score for the issuer. The final ESG exposure is defined in Table 12.

Table 12 – Company ESG Exposure assessment

Scale	Score definition
[0 to 1[	ESG risks are well understood and managed. The company management has already transformed the strategy and business practices to benefit from ESG related sector trends. There are no significant negative ESG impacts from the company's activities or behaviour.
[1 to 2[	ESG issues are already considered and managed, leading to a low probability of occurrence of an ESG related impact on revenues, results, cash flows, asset value or reputation. The business strategy is being adapted to benefit from ESG related sector trends and strong governance and management are contributing to limiting risks and using ESG as an opportunity.
[2 to 3[	ESG related risks could increase and are not yet fully considered, increasing the probability of occurrence of a problem that could moderately affect revenues, results, cash flows, asset value or reputation. Yet impact would remain manageable or issues are unlikely to happen in the short to medium term (up to 5 years)
[3 to 4[	ESG risks are increasing and there is limited or no adaptation of the business positioning to ESG trends. Combined with potentially insufficient governance risks on revenues, results, cash flows, asset value or reputation are increasing and could materialize in the foreseeable future (up to 5 years).
[4 to 5]	The company is highly exposed to ESG risks which are hard to control or limit and has not yet taken any decision to adapt the strategy. ESG related risks could impact revenues, results, cash flows, asset value or reputation over the short term (<3 years). The company is not adapting to ESG trends.

Company's Financial Risk Profile Adjustment:

The ESG score of a company will derive in an adjustment of its financial risk profile as follows:

- A Company with an ESG score of [4 to 5] corresponding to the worst ESG grading will undergo a one notch downgrade of its Financial Risk Profile i.e., +0,33 on its Financial Profile score. Additionally, a company with an ESG score of [3,5 to 4[will undergo a half a notch downgrade of its FRP i.e., +0,17.
- A Company with an ESG score of [0 to 1[corresponding to the best ESG grading will benefit from a one notch upgrade of its Financial Risk Profile i.e., -0.33 on its Financial Profile score. Additionally, a company with an ESG score of [1 to 1,5[will undergo a half a notch upgrade of its FRP i.e., -0,17.

This notching reflects our belief that companies with good ESG scores stand to profit from having transformed their strategy and business practices to benefit from ESG related sector trends.

Conversely, companies with poor ESG, scores that have not adapted their strategy to face ESG risks, stand to suffer negative impacts on their financial metrics, asset values or corporate reputation.

3.2.1.3. Governance

EthiFinance Ratings believes that a disciplined strategy supported by a long-term view from the company's owners will translate into better financial performance over time relative to peers, and hence better credit quality.

EthiFinance Ratings assigns scores of 1 to 7 to Governance risk factors (see Table 13).

The Governance assessment accounts for 10% of the overall scorecard (or 8% of the overall scorecard under the 40-60% distribution). EthiFinance Ratings evaluates management quality and the company's financial policy (5% of the overall scorecard), and shareholder structure, support, and control structure (5% of the overall scorecard).

A firm's financial policy is an indicator of management and shareholders' tolerance to financial risk in the short term. A company providing evidence of a disciplined strategy by publicly communicating its financial policy and demonstrating evidence of adherence with the stated targets is more likely to have a stable business profile, to be able to adapt to new environments and is more likely to limit risks on its activity, and thus better protect creditors' interests than peers over time.

Also, a strong control structure that ensures a sound balance of powers is another key factor that can limit undue risk taking and bring comfort or conversely affect a credit rating, when looking at a company's credit quality through an economic cycle.

Finally, despite sound financial policies and as a company goes through the usual ups and downs of the economic cycle, it may also need shareholder support from time to time to reinforce its capital structure. Ability and willingness to support the company are important factors for the stability or support to the financial structure and may have a definite influence in maintaining a company alive at times of stress or change.

Table 13 – Management and Financial Policies / Shareholder Support and Control

1 – 2	3	4	5	6	7
Management is world class with an impressive track record in implementing successful strategies and reacting rapidly to crises. They display a strong ability to manage risk through their financial risk management policies.	Management consists of highly regarded professionals with a good track record in implementing effective strategies, reacting adequately to crises. Financial policies are fairly conservative.	Management has an adequate track record in designing and implementing good strategies, usually reacting adequately to crises. Financial policies display a certain degree of willingness to take on risks.	Management may sometimes display a mediocre track record in designing or implementing successful strategies. Alternatively, strong management may be balanced by a high tolerance to high financial risk.	Management displays a poor track record in decision making, having chosen non-optimal strategies. Financial policies display a high tolerance to risk.	Management has a very poor track record in decision making, having chosen misguided strategies. Financial policies show a disregard to risk.
Shareholders have exceptionally deep financial resources and have a track record of supporting the company by any means necessary. Governance of control functions is fully functioning and transparent.	Shareholders have deep financial resources and have shown a commitment to support the company. Governance of control functions is functioning, and transparency is reasonable.	Shareholders have some means to support the company under certain circumstances. Governance could benefit from improvements in certain areas to ensure proper balance of powers.	Shareholders have limited resources and may not be willing to lend support to the company. Governance is at best average vs. international standards and control functions should be strengthened.	Shareholders have very limited resources and / or have little incentive to support the company. Governance tends to be below par with lack of efficient control functions.	Shareholders are neither willing nor able to support the company. Governance is not protecting shareholders nor stakeholders.

More specifically, in order to assess the shareholder of a company, EthiFinance Ratings usually distinguishes between the following shareholder profiles:

- Family profile. In the case of family-owned SMEs, the maximum score will usually be of BB-. For larger family-owned companies the score will be calculated case by case with final calibration depending on the shareholder's financial capacities and the degree of independence of the company with respect to other family businesses.

- Investment funds or similar. In the case of companies owned by Investment funds, the score will usually revolve around the BB range, but could be lower if the fund's financial policy is aggressive and/or its investment horizon is less than 5 years.

- Listed company. The score will usually be BBB- or better since these companies have a wider shareholder base, a greater capacity for launching capital injections and therefore obtaining support in stress situations.

3.2.1.4. Validating the business risk assessment

We consider that a company's capacity to generate recurrent operating profits is a good indication of the sector's attractiveness and of the firm's competitive position. After completing the assessment of the Business Risk profile, which is mostly qualitative, EthiFinance Ratings validates it by comparing the company's EBITDA margin level with that to its peers (see sector EBITDA margins in Appendix F).

We would expect a broad alignment between the Business Risk assessment and the position of the company relative to the industry median. If not, EthiFinance Ratings will explain the reasons for the discrepancy. For the avoidance of doubt, this step is not part of the scorecard, and is used as a "consistency check".

3.2.2. Rating factors: the Financial Risk Profile (FRP)

The financial risk profile provides an assessment of a firm's debt servicing capacity and capitalisation based on four key credit metrics (net debt/ EBITDA, Funds from Operations / net debt, EBITDA / interest, and Equity / Debt).

Typically, we use the last two years of financial data (audited financial accounts) and three years (including the current year) of financial projections (provided by the issuer or alternatively estimated by EthiFinance Ratings) to derive these credit metrics. If EthiFinance Ratings believes this approach is not representative (M&A, restructuring, demerger, etc.), we would consider a time horizon which provides the clearest picture of the company's future economic reality. Where required, EthiFinance Ratings adjusts debt and EBITDA to best reflect a company's recurring cash flows and enhance comparability across sectors and jurisdictions. Some of the more common adjustments performed by EthiFinance Ratings include:

- Total debt will usually be adjusted for operating leases (when not already factored in as per the reporting framework), employee benefits (pensions), factoring/securitization, and any other debt-like items (vendor finance, earn-outs, etc).
- Unrestricted Cash (adjusted for cash already committed, e.g. taxes, investments, dividends, contingencies, or transfer and convertibility issues) which includes cash and cash equivalents but may also factor in liquid financial assets and up to 50% of readily-marketable inventories (RMI) provided that they quote in an organized market.
- EBITDA will usually be adjusted for operating lease expenses (when not already factored in as per the reporting framework), capitalised R&D, and significant non-recurring items when the analysts believe it is relevant to do so.
- FFO is adjusted for dividends to minority interests and may also be adjusted for interest paid when companies report them in the financing part of their cashflow as EthiFinance Ratings

believes that these belong to the operating cashflow. For companies that do not report under IFRS 16, FFO is also adjusted for the D&A part of operating leases.

3.2.2.1. Cashflow and leverage

To assess a firm's cash flows and leverage EthiFinance Ratings uses three leverage and coverage credit ratios: EBITDA / Interest, NFD / EBITDA and FFO/NFD, which are given weights of 20%, 15% and 5% respectively. All three provide an intuitive view of a company's distance to default: the higher the cash flow relative to debt and / or interest expense, the higher the distance to a potential default.

All things equal, we believe that companies with a more stable and predictable cash flow profile can afford a higher debt leverage than companies with uncertain and / or highly cyclical cash flows. EthiFinance Ratings thus uses three sets of ratio benchmarks to differentiate the following types of companies:

I. firms engaged in activities that have below average cyclicality (table 15).

II. companies engaged in activities that have a standard cyclicality (table 16).

III. companies engaged in activities that have a high cyclicality (table 14).

The low volatility table will be used for sub-sectors that have a proven track record of stability over long term economic cycles such as Pharmaceuticals, Incumbent Telecommunication operators, Integrated Utilities, Food & Staples Retailers, amongst others. The high volatility table will be applied to companies that engage in an activity that is extremely cyclical and that face large swings in both demand and prices such as commodity traders.

For companies operating in strongly regulated environments in which the long-term stability of the business environment allows for higher leverage (such as regulated utilities but also companies operating infrastructures with availability payments), a specific reference table will be used as defined in Appendix G.

Table 14 – High Cyclicality – Cash flow and leverage ratios

Scoring level	1	2	3	4	5	6	7
EBITDA / Interest (X)	X >50	$40 < X \leq 50$	$25 < X \leq 40$	$15 < X \leq 25$	$7 < X \leq 15$	$5 < X \leq 7$	$X \leq 5$
NFD / EBITDA (Y)	Net cash position	Net Cash position	$0 \leq Y < 1$	$1 \leq Y < 2$	$2 \leq Y < 3$	$3 \leq Y < 5$	$Y \geq 5$
FFO / NFD (%)	Net cash position	Net Cash position	% > 80	80 ≥ % > 40	40 ≥ % > 30	30 ≥ % > 20	% ≤ 20

Table 15 – Low Cyclicality – Cash flow and leverage ratios

Scoring level	1	2	3	4	5	6	7
EBITDA / Interest (X)	$X > 25$	$25 \geq X > 15$	$15 \geq X > 7$	$7 \geq X > 5$	$5 \geq X > 4$	$4 \geq X > 2$	$X \leq 2$

NFD / EBITDA (Y)	Y <1	1 ≤ Y< 2	2 ≤ Y< 3	3 ≤ Y< 4	4 ≤ Y< 5	5 ≤ Y< 7	Y ≥ 7
FFO / NFD (%)	% >80	80 ≥ % > 40	40 ≥ % > 30	30 ≥ % > 20	20 ≥ % > 15	15 ≥ % > 10	% ≤ 10

Table 16 – Standard Cyclicality – Cash flow and leverage ratios

Scoring level	1	2	3	4	5	6	7
EBITDA / Interest (X)	> 40	40 ≥ X > 25	25 ≥ X > 15	15 ≥ X > 7	7 ≥ X > 5	5 ≥ X > 3	X ≤ 3
NFD / EBITDA (Y)	Net cash position	Y < 1	1 ≤ Y < 2	2 ≤ Y< 3	3 ≤ Y< 4	4 ≤ Y< 6	Y≥ 6
FFO / NFD (%)	Net cash position	% > 80	80 ≥ % > 40	40 ≥ % > 30	30 ≥ % > 20	20 ≥ % > 15	% ≤ 15

For companies that operate in various sectors that require the use of different volatility tables, EthiFinance Ratings will calculate the financial profile (FP) of each of their business lines using the appropriate volatility table. The company's final FP will be the result of the weighted average of each of the individual FP scores. The weights used consider the importance, in terms of EBITDA, of each of the sectors involved. This approach will be limited to the use of a maximum of two volatility tables and when the weight of the sectors is at least 20%.

3.2.2.2. Capitalisation

To assess Capitalisation, EthiFinance Ratings uses the Equity / Debt ratio (Table 17). The higher the equity relative to debt, the better the cushion is for creditors against future losses.

Table 17 – Capitalisation ratios

Scoring level	1	2	3	4	5	6	7
Equity / Total Debt (%)	% > 300	300 ≥ % > 250	250 ≥ % >120	120 ≥ % >80	80 ≥ % > 50	50 ≥ % > 30	% ≤ 30

Strong capitalisation indicates that the value of a Company's assets is comfortably greater than its liabilities. Moreover, well capitalised companies will usually hold valuable assets that can be monetized in times of stress.

3.3. Rating modifiers

Once we have arrived at the Anchor Rating, we analyse three risk factors that are not captured in the scorecard: controversies risk, Liquidity risk and Country risk in order to determine if it must be adjusted up or down.

3.3.1. Controversies assessment

As the information used in the ESG exposure analysis above is typically reported by companies with limited audit / verification and ability to check the accuracy or truthfulness of the data, controversies are used as a way to compare a company's communication against its actions. Controversies represent information that reflects a company's actual behaviour, which may result in financial, reputational or legal impact on the company analysed.

To assess controversies, EthiFinance Ratings uses the following grid (Table 18), which aims at identifying the potential (i.e., forward looking) financial impact on the company. While controversies tend to be based on past news, their impact can be linked to lawsuits or to reputation damages that have forward impact that are also considered in the evaluation of the score.

Companies with a controversy score of 5 would see its rating affected by 2 notches (or to avoid a double counting effect by one notch in the event the company ESG score is between 4 and 5). Companies with a controversy score of 4 would see their ratings affected by 1 notch (none in the case that their ESG company score is between 4 and 5).

Table 18 – Controversies Assessment

Score	Controversies / Definition
1	News or event that do not necessarily constitute a real issue but that point to a weakness in the company's operations or organisation and that needs monitoring for further potential development
2	News or events that do not necessarily constitute a real issue but that point to a weakness in the company's operations or organisation and that could affect its reputation temporarily yet does not lead to material financial consequences. Needs monitoring.
3	An unexpected news or event that does not necessarily lead to a reassessment of the company's business model but that could affect its reputation, organisation and financial metrics in a manageable way. Recurrence could lead to a more significant issue.
4	A string or combination of unexpected news / event that leads to a reassessment of the company's business model or organisation and that could affect its growth potential or debt metrics in a significant way
5	A string or combination of unexpected news / event that leads to a significant reassessment of the company's business model or organisation and that is expected to permanently affect its growth potential or debt metrics in a significant way

3.3.2. Liquidity assessment

As debt service is paid in cash, liquidity is key for an issuer to operate both in good times and even more importantly in times of stress. Liquidity analysis complements the solvency assessment of a company. While solvency indicates the medium-term viability of a company, liquidity measures its ability to

honour its near-term financial obligations. Often a solvent company can survive a liquidity shock because it has ample access to financing sources, but a company's liquidity will rapidly deteriorate if it has a low solvency.

3.3.2.1. Assessing the liquidity risk

EthiFinance Ratings combines the assessments of a firm's level of liquidity risk with that of its refinancing profile to arrive at a liquidity risk assessment of very weak, weak, or good (See Table 21).

- A "Very weak" assessment reflects a heightened default risk within 12 months, may cap the rating to the CCC category or below.
- A "Weak" assessment reflects a liquidity issue that could become problematic during the period spanning from 13 to 24 months, typically resulting in a one to two notch rating downgrade.
- A "Good" assessment reflects the expectation of sufficient liquidity, over the next two years or more, to meet the firm's current obligations, and has no impact on the scorecard assessment.

3.3.2.2. Assessing the level of liquidity

To assess a company's level of liquidity, we determine how many years of liquidity a company has. A 'Poor' assessment would be assigned to a company if there is a risk of insufficient liquidity in the coming year; a 'Reasonable' assessment would be given if EthiFinance Ratings believes a company has sufficient liquidity between the coming year and the next, and a 'High' assessment would be assigned to a company if it is expected to have sufficient liquidity beyond 2 years (see Table 19).

Table 19 – Level of liquidity (years)

Poor	Reasonable	High
<1 year	<1 – 2>	> 2

The level of liquidity is determined by reviewing sources and uses of funds. Sources of funds include unrestricted cash, projected operating cash flow for the coming year and undrawn committed lines of credit over one year of maturity; and uses of funds include upcoming debt maturities, capital spending, dividends, and any commitments that EthiFinance Ratings believes have reasonable likelihood of materialising in the period under review.

3.3.2.3. Assessing the refinancing profile

The assessment of a firm's refinancing profile (Table 20) is closely tied to the assessment of its financial profile and reflects its capacity to access funds from financial markets in a timely manner and at market conditions under moderate stress conditions (i.e. an economic environment where spreads have increased due to some risk aversion). We assess the strength of a company's refinancing profile using the following three categories:

Table 20 – Refinancing profile

Weak	Satisfactory	Strong
Firms with a weak financial profile (typically firms with a financial profile score equivalent to the B or CCC categories) further undermined by capital structure risks such as concentrated debt maturities, currency or interest rate mismatches, restrictive covenants or adverse terms and conditions. We expect that access to refinancing for these firms may be challenging, or at very expensive conditions under even moderate stress conditions	Firms with a satisfactory refinancing profile would have a medium financial profile (typically with a financial profile score equivalent to the BB category), and no overarching capital structure weaknesses, but their capacity to refinance may depend on market conditions at the time of refinancing.	Firms with a strong financial profile (typically with a financial profile score equivalent to the BBB category or better) complemented by well spread-out debt maturities, little currency or interest rate risks, and few restrictive debt covenants. We expect these firms to have uninterrupted access to financial markets at market conditions under most circumstances.

We choose to assess refinancing profiles against moderate stress conditions. This is because we observe that all firms, irrespective of their credit quality, may find access to financial markets to be challenging under extreme financial market conditions, such as those seen during the Great Financial crisis.

Table 21 – Long-term liquidity risk assessment

	Level of liquidity		
Refinancing profile	**Poor**	**Reasonable**	**High**
Weak	Very weak	Weak	Good
Satisfactory	Weak	Good	Good
Strong	Weak	Good	Good

Although EthiFinance Ratings has chosen to use a single common LT Corporate methodology, regardless of the issuer size, the fact remains that medium-sized corporates present certain specificities that require to be considered when applying the liquidity assessment. We believe that this tailored approach will result in a credit rating that is closer to the economic reality of this segment ultimately deriving a more accurate rating. For further clarity, we have equated a medium-sized corporate as a company whose scale derives in a score just below investment grade (i.e., 5 or more) which, according to our scale assessment for local firms on table 9 ranges from €1Bn to 0.3Bn in terms of revenues. We have chosen to define a medium-sized corporate as a company that generates a maximum of 0.65Bn in revenues which constitutes the mid-point of the range.

It is our understanding that in the banking community, a standard credit line by default is a 12- month facility and companies seeking longer-term financing will usually be offered term loans. Medium-sized corporates are unaware of how CRAs measure liquidity and will solicit their banking pool for standard 1-year credit lines and other working capital facilities. Additionally, these types of companies will usually

finance their needs through bilateral lines as the amount of credit they need does not warrant the use of syndicated loans that do include multi-year revolving credit facilities.

In light of this reality, which reflects how medium-sized corporates conduct their financing activities, we have chosen to adapt how liquidity is assessed for this segment. Consequently, for medium-sized corporates the level of liquidity is determined by reviewing sources and uses of funds following the general rule only that short-term credit facilities and other working capital lines are presumed to be rolled over annually. Following this premise, sources of funds include unrestricted cash, projected operating cash flow for the upcoming year and undrawn working capital facilities; uses of funds include upcoming loan maturities - but excluding maturing working capital lines (lines of credit, confirming, discount lines, factoring, etc.) which are assumed to be rolled over, capital spending, dividends, and any commitments that EthiFinance Ratings believes have a reasonable likelihood of materialising in the period under review. If the analysed medium-sized corporate has a poor financial profile (i.e., B+ or worse) then all revolving lines both committed and uncommitted maturing in one year will be computed as a maturity because EthiFinance Ratings will no longer presume that those lines will necessarily be renewed.

3.3.3. Country risk

Country risk represents the risk of doing business in a country. All things equal, a company exposed to significant country risk would have a lower rating than one operating exclusively in stable and favourable jurisdictions. However, the absence of country risk does not contribute to a better rating than the rating indicated by the scorecard.

EthiFinance Ratings looks at many sources of information to assess country risk, including the country risk assessments provided by credit insurers Coface[2] and CESCE[3]. The assessment of country risk considers the macroeconomic and political environment, fiscal and regulatory risks, transfer risk, the application of the rule of law in business (e.g., property rights, contracts, financial distress, insolvency) as well as safety issues.

If a company operates in one country, and all sales are generated there, its rating will be strongly conditioned by EthiFinance Ratings' view of the country risk on the basis of assessments provided by credit insurers or multilateral organisations that regularly publish country reports (OECD, IMF, etc). If a company operates in several countries, EthiFinance Ratings will evaluate the overall country risk proportionately to its business activities in these countries, provided they exceed 10% of sales and / or EBITDA. Generally, operating in risky jurisdictions will severely limit the rating as discussed in the diversification section. There may be rare situations where some flexibility could be granted, particularly if a company is highly diversified geographically.

[2] https://www.coface.com/news-economy-and-insights/business-risk-dashboard

[3] https://www.cesce.es/es/riesgo-pais

4. SHORT-TERM CORPORATE RATINGS

This section of the methodology provides an overview of the approach taken by EthiFinance Ratings when assigning short-term ratings.

While this section forms part of the General Corporate Methodology, section 4 can also apply to other corporate methodologies such as Investment Holdings, Social Housing, Project Finance, and may potentially be used for other asset classes such as Banks, Insurance issuers, and other financial services companies.

4.1. Framework & rating

4.1.1. Short-term rating

EthiFinance Ratings' short-term ratings are a measure of an issuer's ability to fulfill its debt-related payments over the next 18 months.

More specifically, EthiFinance Ratings' short-term ratings are usually used to assess the risk of short-term instruments that are mostly unsecured and have a maturity less than 18 months. Such instruments include, but are not limited to, commercial paper and short-term notes.

EthiFinance Ratings has identified three important parameters impacting short-term ratings:

- The long-term rating which is covered in Section 3 of this methodology.
- The liquidity risk (see definition below).
- The credit metrics expected evolution (CMEE).

EthiFinance Ratings' short-term ratings are assigned to an issuer and therefore assuming a single consolidated entity and a single class of debt.

4.1.2. Short-term instrument rating

Unless subject to specific conditions, all short-term instruments of the same issuer have the same short-term rating, which in turn coincides with the entity's short-term rating. As such, when EthiFinance Ratings assigns a short-term rating to an instrument, such as a NEU CP program, it usually does not specify the short-term entity rating.

4.2. Use of the long-term rating

Long-term ratings provide an assessment of the overall credit quality of the issuer and are the starting point for assigning a short-term credit rating although the latter is not determined by the former since, in the assignment of a short-term rating, the other two parameters - liquidity risk and CMEE - must also be considered. Once the long-term rating is established it will be used in the transition matrix (see section 5) along with the other two parameters to determine the short-term rating.

4.3. Liquidity analysis

While the assessment of the liquidity analysis for short-term ratings combines the assessments of a firm's level of liquidity with that of its refinancing profile, similarly to what is described in the modifier section of long-term ratings (3.3.2), the outcome slightly differs. The 'good' outcome of the long-term ratings liquidity assessment has been replaced with 'adequate' to introduce a 'superior' category for the highest liquidity profiles (see Table 22), which influences the correspondence between long-term ratings and short-term ratings (see 4.5).

Table 22 – Short-term liquidity risk assessment

	Level of liquidity		
Refinancing profile	Poor	Reasonable	High
Weak	Very weak	Weak	Adequate
Satisfactory	Weak	Adequate	Superior
Strong	Weak	Adequate	Superior

4.4. The Credit Metrics Expected Evolution (CMEE)

The credit metrics expected evolution (CMEE) is EthiFinance Ratings' indication of where the credit metrics of an issuer are heading within a 12-month timeframe. The CMEE can be Positive, Stable or Negative. The CMEE directly derives from EthiFinance Ratings' forecasts used during the financial analysis when assigning ratings. The assessment of the CMEE is made with the idea to remove the short-term impact of particular but exceptional events resulting in credit ratios decreasing, then increasing back to the starting point.

4.5. Short-term/Long-term rating correspondence

The following chart provides an indication of the mapping between different ratings and criteria, although the credit committee remains free not to follow these guidelines under specific circumstances, linked to a lack of information, for instance.
When the liquidity is very weak, the best short-term rating that can be assigned is EF5, based on a long-term rating capped at CCC+.

EFR LT rating	CMEE	Liquidity risk assessment			
		Very weak	Weak	Adequate	Superior
AAA	Positive				
AAA	Stable				
AAA	Negative				
AA+	Positive				
AA+	Stable				
AA+	Negative				
AA	Positive				
AA	Stable			EF1+	
AA	Negative				
AA-	Positive				
AA-	Stable				
AA-	Negative				
A+	Positive				
A+	Stable				
A+	Negative				
A	Positive				
A	Stable				
A	Negative				
A-	Positive				
A-	Stable				
A-	Negative			EF1	
BBB+	Positive				
BBB+	Stable				
BBB+	Negative				
BBB	Positive				
BBB	Stable				
BBB	Negative				
BBB-	Positive			EF2	
BBB-	Stable				
BBB-	Negative				
BB+	Positive				
BB+	Stable				
BB+	Negative				
BB	Positive			EF3	
BB	Stable				
BB	Negative				
BB-	Positive				
BB-	Stable				
BB-	Negative				
B+	Positive				
B+	Stable				
B+	Negative				
B	Positive				
B	Stable				
B	Negative			EF4	
B-	Positive				
B-	Stable				
B-	Negative				
CCC+	N/S/P				
CCC	N/S/P				
CCC-	N/S/P		EF5		
CC	N/S/P				
C	N/S/P				
D	N/S/P			EFD	

4.6. Specific considerations

In some specific cases, EthiFinance Ratings may override the transition matrix if it seems more accurate to do so. For instance, if an issuer has a level of cash representing more than 2.0x its short-term debt and 1.5x its overall debt, the scorecard of its long-term rating combined with the transition matrix may still place it in the EF1 category. However, the rating committee may decide that the excess cash position is commensurate with an EF1+ rating as there is very low short-term risk.

5. LONG-TERM INSTRUMENT RATINGS

This section provides an overview of the approach taken by EthiFinance Ratings when assigning long-term instrument ratings. EthiFinance Ratings' long-term instrument ratings are derived from the entity rating with a differentiation between investment grade issuers and sub-investment grade issuers.

While this section forms part of this general corporate methodology, section 5 can also apply to other corporate methodologies such as Investment Holdings, Social Housing, and may potentially be used for other asset classes such as Banks, Insurance issuers and other financial services companies.

5.1. Investment grade issuers

The instrument rating is derived from issuer rating. Rated entities with an entity rating of BBB- (investment grade issuers) and above usually have senior unsecured instrument rating in line with their entity rating. This reflects the fact that recovery rates for unsecured debt for investment grades issuers is usually in the 40% area (see recovery Table 23 below). In general, instrument ratings for investment grade issuers depend on their debt structure and jurisdiction but typically follow the same pattern which is:

- One notch higher than the entity rating for senior secured debt.
- By default, equivalent to the issuer rating for senior unsecured debt, with possibilities for adjustments (+/- one notch) in case of structural subordination or seniority (i.e. significant amount of senior secured debt or subordinated debt in the debt structure).
- One or two notches lower than the entity rating for subordinated instrument.

5.2. Sub-investment grade issuers

For entities rated BB+ and below (sub investment grade issuers), EthiFinance Ratings adopts a more tailored analysis with the instrument rating being a combination between the recovery rate and the entity rating.

For sub investment grade issuers EthiFinance Ratings performs an analysis which is based on 3 steps:

- Determining a post-restructuring enterprise value.
- Estimating creditors' claims.
- Distributing the value available for claims based on priority of claims.

5.2.1. Determining a post-restructuring enterprise value

It is market practice to assess the post restructuring value of an issuer based on two different methods which are the going concern approach and liquidation approach. The post-restructuring enterprise value retained for calculating the recovery rate is the greater of the two approaches.

In most cases there is a restructuring on a going concern basis since this generally results in greater value for all stakeholders. Liquidations are only assumed if we believe the business model cannot be sustained.

5.2.2. Going concern approach

For this approach we use an EBITDA multiple approach which is based on the combination of the following two steps:

- Determining a distressed EBITDA.
- Selecting a multiple reflecting the company's relative positioning within a sector. This multiple is generally based on historical multiples used for peer bankruptcy reorganizations.

Determining a distressed EBITDA

This distressed EBITDA represents the level of EBITDA at which the company will be forced to seek bankruptcy protection or push the company creditors to enforce their rights. This distressed EBITDA is therefore the EBITDA level at which the company will not be able to face its fixed obligations as it has already depleted its liquidity sources.

A scenario of default is forecast based on reasonable assumptions of adverse economic and/or business conditions for the company. This is by nature tailor-made to each individual company's situation, but it includes projected interest expenses, principal amortizations and capex, as required on a going concern basis.

The default occurs when the liquidity sources have been depleted and the distressed EBITDA is therefore not enough to cover the addition of the interest, principal amortization and capex.

Selection of multiples

Multiples are taken from recent market transactions and/or historical distressed sales where available. We note however, that these data are more easily available in the US than in Europe. As such, EthiFinance Ratings will make appropriate adjustments when needed in their analysis. As an indication, the all-sector mean is 6.0x.

5.2.3. Liquidation value approach

The liquidation approach usually involves discounting the book value of balance sheet assets and summing the results. EthiFinance Ratings generally applies the following discount to the following key assets:

- Account receivables: 20%.
- Inventories: 50%.
- PPE: 50%.

These discount rates are not fixed for all companies and the analyst may deviate from these rates if he believes there is sufficient reason to do so.

5.2.4. Estimating creditors' claims

EthiFinance Ratings assumes that unused portions of committed lines of revolving credit facilities are fully drawn (this excludes capex lines and acquisition lines or other committed lines which need a specific event in order to be drawn).

- Administrative claims: These claims are typically assumed to be up to 10% of the distressed enterprise value (EV). These claims include costs and expenses involved in operating and preserving the estate (wages, salaries, taxes, professional fees for lawyers…).
- Concession assumption: The value distributed to senior creditor may be reduced by a certain amount (up to 5%) distributed to junior claims in order to secure their consent for the restructuring plan.
- Pension: The Agency will typically take into account in its creditor claims pension obligations.
- Other non-debt and contingent claims: Material lawsuit, environmental remediation obligations or employee claims will also be factored in our analysis depending on the level of information available.

5.2.5. Distribution value

After the valuation processes are completed, the resulting post-restructuring EV is allocated to creditors according to their seniority in the waterfall.

In a number of jurisdictions, the waterfall approach is subject to country cap reflecting the creditor-friendliness of certain jurisdictions and enforceability of security in the event of a default. Instrument ratings for a given jurisdiction are subject to these caps, according to the country groupings listed in the criteria report and reflect the assumption that average recoveries are likely to be lower in regime that are debtor-friendly and / or have weak enforceability, and higher in jurisdiction that are creditor-friendly and / or have strong enforceability.

5.2.6. Recovery rating scale

EthiFinance Ratings divides the spectrum of recovery percentages from 0% to 100% into 6 categories as shown in the table below in order to define recovery rating and then to derive the notching of individual instrument ratings from the entity rating of the issuer. The percentage range should be considered as an estimate and not as a precise potential recovery.

Table 23 – Recovery table

Recovery %	Description of recovery	Impact on instrument ratings from entity issuer ratings
91%-100%	Outstanding	+ 2 / + 3 notches
71%-90%	Superior	+ 1 / + 2 notches
61%-70%	Good	+ 0 / + 1 notch
31%-60%	Average	+ 0 notch
11%-30%	Below average	-1 notch
0%-10%	Poor	- 2 / - 3 notches

Unsecured debt recovery rates are generally capped at the 71%-90% range. Contractually, subordinated debt that ranks after senior secured debt and senior unsecured debt in priority of payment would typically be capped at the 31%-50% range.

As described above, recovery rates are also capped by the country in which the issuer mainly operates in order to take into account the creditor-friendly (or otherwise) environment in this country. We have used data from the World Bank (doing business dataset as well as the worldwide governance indicators). EthiFinance Ratings distinguishes two different groups with one having its recovery rate capped at 31% - 50%.

- Group 1: No cap.
- Group 2: Recovery rates are capped at 31% - 50%.

Below is an example of key countries included in the different groups:

- Group 1: Western Europe, US, Canada, UK, Australia, Japan, Hong Kong, Estonia, Poland, Slovakia, Cyprus, Luxembourg, Hungary.
- Group 2: Brazil, China, Greece, Russia, South Africa, and similar jurisdictions.

This recovery rate cap approach does not mean that higher recovery is impossible for issuers located in group 2, it means the outcome is less predictable. We would like to mention that recovery ratings are not intended to provide precise numerical estimates. There are several factors that we cannot capture in our recovery analysis, one being the composition of the lender pool, which we believe is outside of our scope. Concentration of the claims at a certain level of the capital structure, common ownership of claims at different levels in the capital structure, or even differing entry price of investors within the same creditor class will have profound impact which are not captured by this analysis.

APPENDICES

Appendix A – Rating subsidiaries and affiliates within a group

For the purpose of this methodology, a group is a Corporate entity operating through various fully- or partly-owned subsidiaries and/or affiliates, not necessarily engaged in the same business activities, and generally represented by a Parent company. The Parent company may or may not be a holding company. A group span of control is reflected in its consolidated financial statements. Groups including bankruptcy-remote Special Purpose Vehicles (SPVs) are not covered by this methodology.

This methodology outlines our approach to determine two situations:

- Where a parent would support its subsidiary if the subsidiary faced financial distress; and conversely,
- Where a parent could weaken a subsidiary if the parent faced financial distress.

Our analytical approach follows five steps:

- First, we determine a Group Family Rating using EthiFinance Ratings' Corporate Rating methodology, as if the group was a single entity.
- Second, we assign a standalone rating on group members assuming no extraordinary support outside of the ongoing arm's length relationships amongst group members and their parent.
- Third, we determine the degree of control that the parent exerts on its subsidiary. Key determinants of control include shared management, company name, degree of economic integration (cash pooling, shared central resources, shared name, etc.), and percentage ownership among others.
- Fourth, if the Group family rating is stronger than the standalone rating of the subsidiary:
    - I. We rate the subsidiary at or close to its standalone level if it is a small part of the business, the credit quality gap with the parent is large, it is experiencing significant difficulties, it is in a distant jurisdiction, or simply the strategic commitment from the parent is questionable.
    - II. We rate the Subsidiary at or close to the Group Family rating if it is core to the parent strategy, it represents a very significant part of the Group's business, its finances are sound and the credit quality gap between Group Family and subsidiary is small, and it is in the same or neighbouring jurisdiction.
    - III. Where the degree of control between parent and subsidiary is moderate, we rate the subsidiary starting from its standalone rating. Based on our assessment of parental support in the case of subsidiary distress, we will "notch" up the standalone rating correspondingly. The size of the credit quality gap between Group Family Rating and the Standalone rating of the Subsidiary is always a good indicator of the likelihood of parental support in case of subsidiary distress: the greater the gap, the more evidence of parental support is necessary.

- Fifth, If the Group Family rating is weaker than the rating of the subsidiary, the rating of the subsidiary is that of the Group family rating at best. The risk is that the parent may tap the subsidiary to enhance its own weaker credit quality. There may be very unusual situations where a very strong subsidiary could be rated one or two notches above the rating of the Group Family rating. This may be the case if that subsidiary represents a very sizable part of the parent business, is very profitable and/or is located in a jurisdiction with lower country risk.

Appendix B – EBIT margins by sector

Sector	Median (%)
Construction & engineering	5.3%
Food & Staples retailing	5.9%
Automobiles	7.1%
Auto Components	7.8%
Retailing	9.1%
Capital Goods	9.6%
Consumer Durables & Apparel	10.3%
Energy	10.4%
Materials	11.1%
Health Care Equipment & Services	11.2%
Transportation (cyclical)	11.7%
Commercial & Professional Services	12.4%
Utilities	12.5%
Branded Food Product	12.5%
Hotels, Restaurants & Leisure	13.0%
Technology Hardware & Equipment	14.4%
Real Estate	14.5%
Media & Entertainment	15.5%
Software & Services	16.1%
Semiconductors & Semiconductor Equipment	16.9%
Beverage	17.1%
Telecommunication Services	17.7%
Household & Personal Products	18.0%
Pharmaceuticals, Biotechnology	20.9%
Transportation (infrastructures)	22.4%

Note: The sector median has been calculated for the period 2005 to 2021

(*) For the Hotel and Resorts sector, EthiFinance Ratings has specific criteria (See Appendix I) which will serve as a complement to the present Methodology.

Appendix C – EBIT MARGIN peak to trough (%) by sector (2007-2009 crisis)

Peak to trough have been calculated for the 2007-2009 financial crisis.

Sector	Median (%)
Health Care Equipment & Services	Positive
Utilities	Positive
Food & Staples retailing	-1,5%
Pharmaceuticals, Biotechnology	-1,8%
Telecommunication Services	-3,6%
Household & Personal Products	-4,5%
Beverage	-5,4%
Branded Food Product	-5,4%
Transportation (infrastructures)	-6,1%
Retailing	-8,5%
Software & Services	-9,4%
Commercial & Professional Services	-9,5%
Consumer Durables & Apparel	-9,9%
Media & Entertainment	-10,3%
Transportation (cyclical)	-10,6%
Construction & engineering	-10,9%
Capital Goods	-11,1%
Hotels, Restaurants & Leisure	-14,9%
Technology Hardware & Equipment	-16,3%
Materials	-17,0%
Auto Components	-18,0%
Semiconductors & Semiconductor Equipment	-25,0%
Real Estate	-26,0%
Automobiles	-35,0%
Energy	-38,0%

Appendix D – ESG Sector Heat Map

The Heat Map shows the aggregated result of scores allocated to different environmental and stakeholder related themes that are systematically evaluated by EthiFinance teams. Those factors are evaluated with a 1 to 5 scale, with 1 attributed to topics having the lowest ESG related impacts and with the 5 to topics having the highest ESG related impact, and so for each sector.

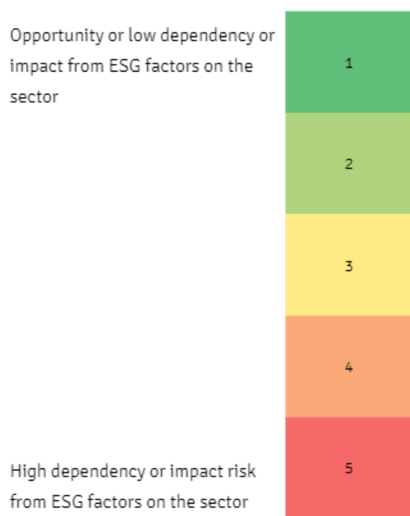
Each factor is considered through both a financial materiality angle and an extra-financial materiality angle before being combined into a general view. Finally, factors are aggregated in a general sector score that is colour coded and can be found in the last column on the right.

ESG sector scores are then used as an input in the final view as to whether the sector is in need of “transformation”, “adaptation”, further “transitioning” or is already “aligned” with ESG key trends and requirements - as per appendix E.

The Heat map hinges on industry groupings that broadly share common ESG features. However, it may occur that certain subsectors, within a given set of industries, do not conform to the assigned ESG score for that grouping. In these cases, the Rating Committee is empowered to adjust the global ESG sector score by a maximum of +/- 0.5 points. For this adjustment to be applied, the analyst will have to provide the Rating Committee with a specific heat map for the subsector with an overall score which will be the result of a thorough assessment of each ESG indicator with a line-by-line justification. Final decision will be documented in the corresponding Rating Committee’s Minutes.

Sources: the sector heatmap is an expert-based assessment using a mix of different internal databases and sector research developed by the EthiFinance ESG division. Scores may evolve as the sector's ESG issues evolve and depending on further research, findings etc. on the topic.

	Environmental factors				Stakeholders			
Sector	Climate	Resources	Pollution	Biodiversity	Suppliers	Consumers	State, regions, communities	Global risk
Consumer goods (both branded and private): processed food, household & personal products, consumer durables & apparel	2,4	2,4	3,9	3,0	3,0	3,4	3,1	3,4
Oil, gas, coal, energy equipments, electricity & gas utilities	4,8	4,0	4,8	4,5	2,8	3,5	4,4	4,4
Renewables, water utilities, multi utilities	1,0	2,1	1,0	1,0	1,8	1,0	1,0	1,7
Agribusiness	3,5	3,8	3,8	4,0	3,5	3,8	3,4	3,8
Beverages	1,0	2,0	3,0	2,0	2,0	4,1	4,4	3,5
Healthcare equipment & services	1,0	1,0	2,5	1,5	2,8	2,4	3,8	2,9
Hotels and leisure	2,9	2,5	2,8	3,0	2,0	3,2	2,8	2,9
Capital goods: aerospace, defence, conglomerates, building products and machinery	3,5	4,0	3,8	3,0	3,8	3,0	1,0	3,6
Auto constructors	4,0	4,0	4,8	4,0	3,8	3,8	3,1	4,3
Auto component manufacturers	3,5	3,8	3,0	3,0	3,8	3,4	3,1	3,6
Environmental services	1,0	2,0	1,0	1,0	2,0	1,8	2,0	1,8
Information technology: hardware equipment, electronic instruments, semi-conductors and semi-conductors equipment	3,0	3,4	2,8	3,0	3,4	3,4	1,8	3,2
Infrastructures and construction & engineering	3,0	3,8	3,5	3,0	2,0	2,8	2,5	3,3
Materials and chemicals	3,8	4,8	4,8	4,0	3,5	2,8	2,0	4,2
Media and telecommunications	2,0	1,0	1,8	1,0	1,0	2,8	2,8	2,3
Real estate developers	3,0	3,8	2,8	3,0	2,8	1,8	2,9	3,3
Services and retailing: food & staples retailing, general retailing, commercial & professional services, software services	2,0	3,0	2,8	2,0	4,0	3,9	1,0	3,3
Transportation cyclical (airlines, road and marine transport)	4,8	4,8	4,8	2,0	4,0	4,0	3,0	4,3
Railways	1,8	2,8	2,0	1,0	3,0	3,0	1,8	2,6



Appendix E – ESG Sector Scores Definitions

The ESG sector scores shown in Appendix D provide an indication of where the sectors are in terms of their respective consideration for fundamental ESG trends, and how this may in return impact the companies operating within.

The worst rated sectors are in clear need of transformation while the best rated sectors reflect an alignment with the key ESG trends that provide significant opportunities in return.

The four main ESG sector buckets are shown in the table below. Those are used as an input into the Anchor rating via potential influence on the Industry Risk Assessment score:

ESG sector ranking

1 to 1.9 Already aligned	The sector is already or structurally positioned to benefit from ESG trends and to limit its negative impacts. The ESG trends are providing significant business opportunities and long-term visibility for the whole sector.
2 to 2.9 Adaptation in process	ESG trends are structural and business opportunities exist but further adaptation is still needed to reach positive financial or societal benefits. Conversely, there are low expected dependencies or negative impacts from ESG factors on stakeholders.
3 to 3.9 Need to transition	The potential high risk OR high impact from companies in the sector from ESG factors over the medium term implies that a transition to new practices is required for the sector. No action could generate a material impact on the overall stability or profitability levels of the sector over the short to medium term.
4 to 5 Need to transform	ESG related risks on companies in the sector and impacts on Environmental Social factors and stakeholder are already material and affect the sector stability of fundamentals (write-offs…). Companies in the sector need to transform their operations or otherwise face significant risks in the short to medium term

Appendix F – EBITDA Margin – Median by sector

Sector	Median (%)
Transportation (infrastructures)	35,5%
Telecommunication Services	31,0%
Pharmaceuticals, Biotechnology	29,0%
Media & Entertainment	26,0%
Semiconductors & Semiconductor Equipment	25,0%
Household & Personal Products	24,0%
Software & Services	23,0%
Beverage	21,6%
Utilities	21,0%
Real Estate	20,5%
Hotels, Restaurants & Leisure	20,0%
Energy	20,0%
Technology Hardware & Equipment	19,5%
Transportation (cyclical)	19,0%
Commercial & Professional Services	18,0%
Materials	18,0%
Branded Food Product	17,6%
Health Care Equipment & Services	16,0%
Retailing	14,0%
Consumer Durables & Apparel	14,0%
Capital Goods	14,0%
Auto Components	13,0%
Automobiles	12,5%
Construction & engineering	9,6%
Food & Staples retailing	8,0%

Note: The sector median has been calculated for the period 2005 to 2021

(*) For the Hotel and Resorts sector, EthiFinance Ratings has specific criteria (See Appendix I) which will serve as a complement to the present Methodology.

Appendix G – Ratio guidance for Regulated utilities and Infrastructure companies

Certain businesses benefit from regulated tariffs and / or contractual provisions, protecting them against competitors and limiting cash flow volatility. Unlike project finance transactions, they are going concern corporations, with administrative and operational resources, and management teams. Amongst others, these companies include privately managed ports, airports, toll roads, regulated energy networks and utilities.

Against these advantages, they are generally subject to operational and financial constraints, such as limitations of activities, financial covenants and re-investment obligations, to name of few. To the extent EthiFinance Ratings believes regulations and / or contractual provisions are sufficiently strong to support cash flow predictability over the medium to long term, it will apply the following cash flow and leverage ratios.

Table 24 - Infrastructure and concession businesses – Cash flow and leverage ratios

Scoring level	1	2	3	4	5	6	7
EBITDA / Interest (X)	> 10	10 ≥ X > 8	8 ≥ X > 6	6 ≥ X > 3	3 ≥ X > 1.8	1.8 ≥ X >1.3	≤ 1.3
NFD / EBITDA (Y)	<1.8	1.8 ≤ Y <2.5	2.5 ≤ Y < 4	4 ≤ Y < 6	6 ≤ Y < 8	8 ≤ Y < 12	≥ 12.0
FFO / NFD (%)	> 45	45 ≥ % > 30	30 ≥ % > 18	18 ≥ % > 12	12 ≥ % > 8	8 ≥ % > 4	≤ 4

Appendix H – Arriving to ESG Company scores

ESG data & indicators

When looking at extra financial information for issuers, we have selected KPIs which are used to calculate 18 scorable ratios / indicators. The ESG indicators have been selected with both financial and extra-financial materiality in mind, and are applicable to all industries with the exception of the waste rate that does not apply to services companies, and water consumption that does not apply to services companies and distribution companies. These indicators reflect transversal issues that affect all issuers or are significant to society globally (e.g., climate related information such as Carbon emissions, or Governance information).

They are categorised under three themes (Environment, Social, and Governance) and have been selected to evaluate the issuer around these themes.

From data to ESG score

An ESG scorecard composed of those indicators is used to compute an overall Issuer ESG score. When no information is available from the company for an indicator, EthiFinance Ratings will consider either deactivating the indicator or using its industry average.

Companies are ultimately scored on a scale of 0 to 5. Score definitions are provided in Table 13. Selected KPIs are the following:

Indicator	Family
Existence of an environmental management system (EMS) and share of activities covered by an external certification (e.g., ISO 14001, EMAS)	E
Total Energy consumption (MWh/m€)	E
Greenhouse gas emissions, Scope 1 (direct emissions) and Scope 2 (indirect emissions from purchased energy) (tCO2e/m€)	E
Water consumption (m3/m€)	E
Waste rate (t/m€)	E
Average number of training hours per employee (total training hours / total workforce)	S
Permanent employee turnover rate (number of permanent employee departures (FTE) / total workforce (FTE))	S
Existence of an HSS management system (health, safety, security) and share of activities covered by an external certification (ISO 45001)	S
Absenteeism rate for illness and work accidents	S
Accident frequency rate	S

(number of accidents with lost days x 1,000,000 / number of hours worked)	
Share of women in management positions	S
Responsible purchasing policy including social criteria	S
Responsible purchasing policy including environmental criteria	S
Existence of a quality management system (QMS) and share of activities covered by an external certification (e.g ISO 9001)	S
Number of independent board members	G
Public disclosure of a formalised Business Code of Conduct and Corruption Policy	G
Assessment and prioritisation of the group's ESG issues	G
Separation of the roles of CEO and Chair of the Board	G

Appendix I – Criteria for rating Hotels

When rating Hotel Groups, EthiFinance Ratings applies the present methodology in conjunction with specific criteria that are laid out in this Appendix. The rating process follows the framework illustrated in Table 1. Similarly, the anchor rating for companies in this sector is determined using the scorecards that appear in Table 2.

1. The Business Risk Profile (BRP)

The analytical factors used to assess the BRP of hotels are the same as for the rest of corporates (See section 3.2.1), except for the company's competitive positioning. Indeed, to assess a hotel group's competitive positioning, we analyse the following factors with their corresponding weights:

Table 25 – Hotel's competitive positioning

Hotel's competitive positioning	20%
Scale	5%
Quality of a hotel portfolio	5%
Brand strength	5%
Diversification (geographic, feeder markets)	5%

1.1 Scale

Scale is assessed following Table 9 and using the 'Local Scale' metrics.

1.2 Quality of a hotel portfolio

The quality of a hotel portfolio is an important factor when assessing the competitive positioning of a hotel group. All things being equal, a quality hotel portfolio will help keep occupancy levels and room tariffs at a higher level than that of peers.

The following Table includes guidance on how to assess the company's hotel portfolio

Table 26 – Quality of a hotel portfolio

Scale	Score definition
1 and 2	Very high-quality pool of hotels in terms of location, services offered, and levels of comfort and luxury in relation to their room tariff. A portfolio that is extremely well balanced between urban and leisure hotels. Receives excellent reviews in the different social media sites.
3	High-quality pool of hotels in terms of location, services offered, and levels of comfort and luxury in relation to their room tariff. A portfolio that is well balanced between urban and leisure hotels. Receives good reviews in the different social media sites.

4	The quality of the pool of hotels is above average in terms of location, services offered, and levels of comfort and luxury in relation to their room tariff. A portfolio that is fairly balanced between urban and leisure hotels although it is skewed towards one of the segments. Receives more good reviews than bad in the different social media sites.
5	The quality of the pool of hotels is slightly below average in terms of location, services offered, and levels of comfort in relation to their room tariff. A portfolio that is fairly unbalanced between urban and leisure hotels, skewed towards one of the segments. Receives mixed reviews in the different social media sites that may in some cases cause an unfavorable impression.
6	The quality of the pool of hotels is poor in terms of location, services offered, and levels of comfort. Most of the portfolio is either in the urban or leisure segments. Receives poor reviews in the different social media sites, causing a bad impression.
7	The quality of the pool of hotels is very poor in terms of location, services offered, and levels of comfort. The portfolio is either in the urban or leisure segments. Receives very poor reviews in the different social media sites, causing a sense of rejection.

1.3 Brand strength

The brand strength of a hotel group is crucial in the hospitality industry as guests are expecting to enjoy a holiday away from home or are on a business trip and are expecting a comfortable and agreeable place to stay in. In both cases, guests will turn to trusted brands that will assure that their expectations are met. Brand strength offers several competitive advantages to the hotel group:

- Closely associated with the perceived quality of the hotel services, a strong brand will help keep occupancy levels and room tariffs at a higher level than that of peers.
- A strong brand increases the number of reservations made through the hotel's website which is the sales channel with the highest margins.
- A strong brand allows the hotel chain to increase its franchise by attracting more hotel owners willing to sign management contracts under more favourable terms. Growing the hotel franchise is a competitive advantage because growth is asset-light and therefore does not require higher debt levels, and because this type of growth partially de-risks demand risk as part of the franchise fees are fixed regardless of sales.

The following table includes guidance on how to assess the strength of a hotel's brand.

Table 27 – Brand strength

Scale	Score definition
1 and 2	• The company has five or more brands with recognized prestige in the international markets. • Very strong track record. The hotel company has been operating under these brands for more than twenty years. • All or most of its operating profits is derived from franchise/management fees.
3	• The company has four brands with recognized prestige in the international markets. • Strong track record. The hotel company has been operating under these brands for more than fifteen years.

	• The majority of its operating profits is derived from franchise/management fees.
4	• The company has three brands with recognized prestige in the international markets. • Fairly strong track record. The hotel company has been operating under these brands for more than ten years. • 20% or more of its operating profits is derived from franchise/management fees.
5	• The company has three or more brands with a certain brand image at the national level. • Adequate track record. The hotel company has been operating under these brands for between five to ten years. • Less than 20% operating profits are derived from franchise/management fees.
6	• The company operates with two brands that have no brand image. • Weak track record. The hotel company has been operating under these brands for less than five years. • No operating profits are derived from franchise/management fees.
7	• The company operates with one brand that has no brand image. • Very weak track record. The hotel company has been operating under this brand for less than two years. • No operating profits are derived from franchise/management fees.

1.4 Diversification

Diversification in the hotel industry is assessed in a similar way to the rest of the corporates but with some specificities. Our analysis of this risk factor looks at the combination of all four types of diversification in the sector: service offering, client, geographic and feeder market diversification to determine the overall grade of this factor. For the first three types of diversification please refer to what is discussed in Section 3.2.1.2 of this document. It is worth mentioning that for the hotel industry, the diversification of services offered is less important while geographic diversification plays a more important role than in the rest of corporates. Diversification of services in the hotel industry has a limited application as diversification can only go so far in this sector. Nevertheless, EthiFinance Ratings recognises that hotel chains that provide a wide variety of complementary hotel services such as spa, golf, high profile restaurant services, etc stand to gain versus their peers. On the other hand, the risk of geographic concentration plays a much larger role in the hotel sector than in the rest of the industries. This is because a hotel group has its assets tied to specific locations and if regional problems arise in those locations (i.e., terrorism, natural disasters, political uncertainty, etc.) the company cannot close shop and transfer its business elsewhere.

The fourth type of diversification that is specific to the hotel sector is feeder market diversification. This analyses what is the origin of countries of the guests that a hotel receives. For instance, a hotel chain may be only located in one country. If that hotel receives tourists from a wide variety of countries it may be assessed as well diversified compared with a group of hotels located in several Caribbean countries but that receive guests from American clients.

1.5 Validating the business risk assessment

We consider that an assessment of the company's hotel KPIs (ADR, Occupancy rate and RevPar) and their comparison with its peers is a good indication of the hotel's competitive position, being closely related to the quality of the hotel portfolio and the brand strength. Therefore, after completing the assessment of the BRP, which is mostly qualitative, EthiFinance Ratings validates it by comparing the company's KPIs with those of its peers.

We would expect a broad alignment between the business risk assessment and the position of the company relative to the industry median. If not, EthiFinance Ratings will explain the reasons for the discrepancy. For the avoidance of doubt, this step is not part of the scorecard, and is used as a "consistency check".

2. The financial risk profile

To assess the FRP of a hotel company, EthiFinance Ratings will follow what is discussed in Section 3.2.2 of this document and will apply Table 16 of this document to assess its cash flow and leverage metrics, and Table 17 to assess its capitalisation.

However, for hotel groups that follow an asset-heavy business model and own or rent most of their hotel portfolio, the following table will be used to assess their capitalisation.

Table 28 – Loan to Value

Scoring level	1	2	3	4	5	6	7
Loan to Value (%)	% < 10	20 > %≥ 10	30 > % ≥20	50 > % ≥30	65 > % ≥ 50	75 ≥ % ≥ 65	% > 75

This document updates the previous "Corporate Rating Methodology - Long Term", "Corporate Rating Methodology - Short Term" and the "Corporate rating methodology – Instruments" by grouping them into a single "General Corporate Rating Methodology". This document includes minor wording changes to bring more clarity to the reader and to avoid any repetition of paragraphs due to the merger of the previously separate documents. Apart from a non-material change regarding the calculation of distressed EBITDA in section 5.2.2, with no impact on the existing ratings as per our impact test, there have been no modifications made to the criteria used in the previous methodologies. Consequently, there are no changes for EthiFinance Ratings' existing credit ratings as a result of this update. EthiFinance Ratings has therefore not made a request for comments.