EthiFinance Ratings

Rating Methodology for Real Estate Investment Companies & Real Estate Transactions

1. SCOPE OF RATED UNIVERSE

This document details the methodologies to rate Real Estate Investment Companies (REICs) as well as Real Estate Transactions (RETs). It is therefore split into two main parts, with section 2 for the REICs and section 3 for the RETs.

1.1. REICs

We define REICs as corporate entities that are primarily engaged in owning and managing a portfolio of Real Estate (RE) assets with a long-term investment horizon. A REIC can also engage into corporate actions such as M&A of another REIC or selling part of its activities.

Typically, these REICs will hold a minimum of 80% of their assets in real estate properties and will generate income that is primarily derived from the rental of these properties.

Real Estate developers are not included in this universe of firms but are covered by the General Corporate Methodology.

REICs can be standard Limited Companies but, in many cases, they are incorporated as Real Estate Investment Trusts (REITs) for tax purposes. For REITs to enjoy their special tax regime they typically must distribute most of their taxable income and therefore usually do not hold significant cash balances. In most jurisdictions, REITs are allowed to deduct paid dividends from their taxable income. This may confer certain tax benefits to their shareholders, depending on the applicable jurisdiction. Other REICs are not required to distribute dividends but usually choose to do so.

REICs that are covered by this analytical framework may hold residential property and derive their sales from renting these homes to individuals or they may hold different types of commercial real estate assets (offices, shopping centres, logistics, hotels, warehouses, etc) and derive their income from renting these to corporate tenants. They may also hold a mix of residential and commercial properties.

This framework only deals with the issuer ratings assigned to REICs. Instruments issued by a REIC are covered by our General Corporate Methodology, specifically section 5 that covers instrument ratings.

1.2. RETs

By opposition to REICs, we define RETs as self-financing special-purpose vehicles (SPVs) - or holding companies with activity limited to the ownership of one or several SPV - whose debt is serviced via the rental income generated by the underlying real estate asset or via the disposal of the asset, or a mix of both.

The ring-fenced perimeter of RETs is notably what differentiates them from REICs and what therefore justifies different approaches to their ratings. There is also typically a charter for the entity that is significantly more restrictive compared to REICs, and that is part of the legal structure of the real estate transaction.

RETs are generally used when there is a real estate sponsor that invests in one or several real estate assets or when a corporate owns some real estate assets and wants to finance it outside of its corporate debt structure.

2. RATING FRAMEWORK FOR REAL ESTATE INVESTMENT COMPANIES

EthiFinance Ratings uses a common framework to analyse the creditworthiness of corporates. Under the umbrella of this framework, EthiFinance Ratings is publishing a sector-specific methodology for REICs that is based on the corporate framework but at the same time addresses the specificities of this sector.

REICs having common characteristics with other corporates, some of the analytical factors are common to both methodologies and can be found in the General Corporate Methodology.

Credit ratings assigned by EthiFinance Ratings are based on the analysis of qualitative factors that qualify the Business Risk Profile (BRP) of the REIC, and quantitative factors that determine its Financial Risk Profile (FRP), which are then adjusted with modifiers (see Table 1). The combination of the scores from the BRP and the FRP, with the influence of ESG factors, lead to 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 Methodology for REICs

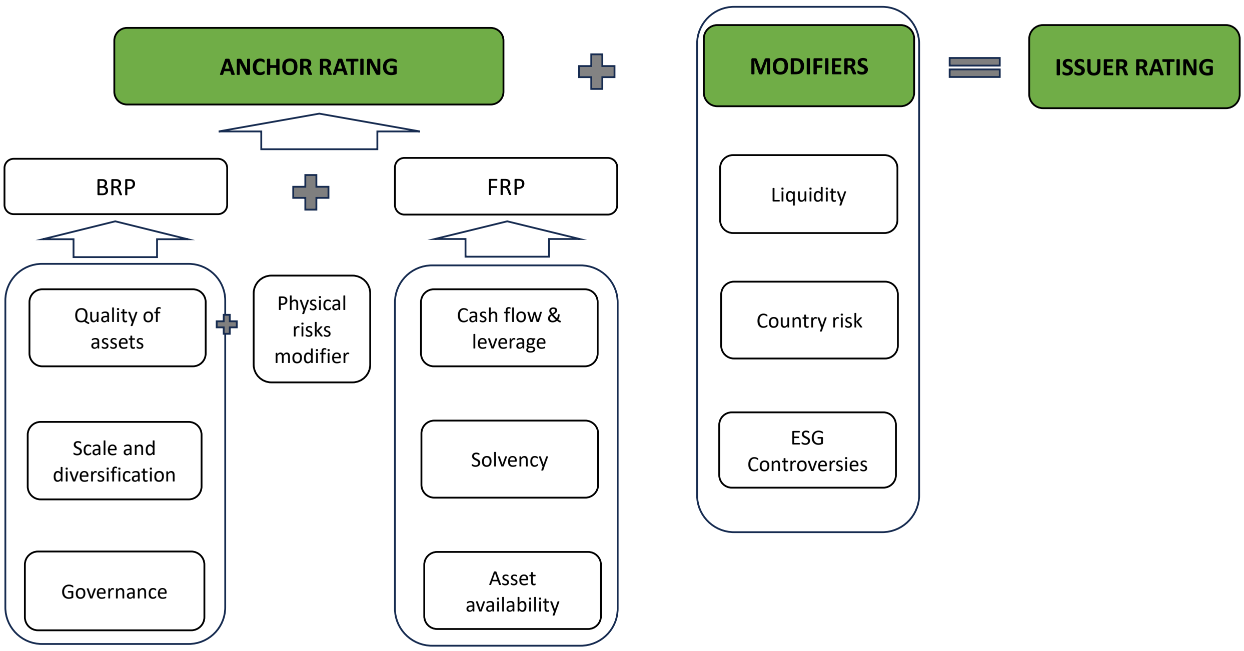

Table 1 shows how EthiFinance Rating arrives at the Anchor Rating. First, each of the Business and Financial risk profiles is assessed separately based on their respective risk subfactors. The Quality of Assets factor may be negatively impacted by Physical Risks considerations. The resulting Business and Financial profile scores are then weighed to arrive at the Anchor rating.

The **REIC's business risk profile** is assessed using the following analytical factors:

- Quality of the Real Estate Assets
- Scale and diversification
- Governance

The **REIC's financial risk profile** is assessed using the following analytical factors:

- Cash Flow and Leverage
- Solvency
- Asset availability

Table 2 – EthiFinance Ratings' REICs Anchor Rating

Business Risk Profile	50%
Quality of the Real Estate Assets	**30%**
Asset Location	10%
Weighted Avg. Unexpired Lease Term (WAULT)	5%
Tenants' creditworthiness	5%
Vacancy Levels	5%
Energy Efficiency	5%
Company's scale and diversification	**10%**
Diversification	5%
Scale	5%
Governance	**10%**
Financial Policy / Management	5%
Shareholding and Control Structure	5%
Financial Risk Profile	**50%**
Cash flow and Leverage	**25%**
NFD/EBITDA (x)	10%
EBITDA / interest (x)	15%
Capitalisation	**15%**
Debt/GAV (%)	15%
Asset availability	**10%**
Unencumbered Assets/GAV	10%

For both profiles, a score between [1 and 8[is assigned to each of the subfactors, where 1 is the best and 7.9 is the worst. They are then combined based on the weights presented in Table 2

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.

Table 3 – Alphanumeric mapping for the Anchor rating

AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC
1	2			3			4			5			6			7 - 8[

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 3.00 and 3.33 translates into an ‘A+’, whereas an Anchor score between 3.34 and 3.67 would translate into an ‘A’ rating. Finally, this methodology maps the numeric rating resulting from the rating process into the Long-Term Rating Scale used by EthiFinance Ratings. For more information, please refer to our Rating Scales & Definitions document.

2.1 BUSINESS RISK PROFILE

The following subfactors are taken into consideration when assessing the business profile score:

- Quality of the real estate assets
- Competitive Positioning
- Governance

2.1.1 Quality of the real estate assets

The quality of the real estate assets held by the REIC is one of the main drivers of the rating. A high quality RE portfolio will usually generate above-market rents, attracting the best tenants in terms of creditworthiness, will be more resilient to downturns in the RE market and will be easier to sell at higher prices in the event of liquidity needs. The following sub factors are applicable in order to evaluate the attractiveness of a REIC's real estate portfolio:

- Asset Location (Centre Business District, Tier1, Periphery, etc.)
- Weighted average of unexpired lease term (WAULT)
- Tenants' creditworthiness
- Vacancy Levels
- Energy Efficiency

Once the Quality of Assets factor has been scored, EthiFinance Ratings will assess the exposure of the portfolio to physical risks. To do this, we will use our proprietary Physical Risks Scores Framework (PRSF) to quantitively assess a wide range of physical risks of the portfolio of assets based on their geographical location. Section 2.1.1.6 explains how it works and its potential impact on the rating.

2.1.1.1 Asset attractiveness

A high-quality real estate portfolio will usually generate above-market rents, attracting the best tenants in terms of creditworthiness, will be more resilient to downturns in the real estate market and will be easier to sell at higher prices in the event of liquidity needs.

A third-party expert assessment report and market comparisons (where applicable) are used by EthiFinance Ratings to assess asset attractiveness.

As a rule of thumb, location is the main driver of the score as indicated in Table 4. The AAA class reflects a very strong asset appraisal corresponding to a prime asset, typically corresponding to a location in the centre of "global cities" such as Paris, London, New York. The BBB class corresponds to a location quite distant from the centre of cities with at least national attractions. In France and Spain for instance, national attractions can be defined, but not exclusively, as the capitals of the regions. If such an urban area was exposed to demographic erosion, EthiFinance Ratings may lower this score, to reflect a likely decline in attractiveness. Where applicable, EthiFinance Ratings may use statistical information provided by national institutes such as INSEE in France.

Even though location is the main driver of the asset attractiveness, its connection to transport infrastructure is key or even sometimes essential. In the event an asset is characterized by poor connections, EthiFinance Ratings may apply a discount to its score. In this respect, EthiFinance Ratings will consider for an “urban asset” its distance to a train/metro/bus station (> 1km or >15 minutes walking will be considered as quite distant, although transportation frequency will also be factored in). For a commercial centre, the distance to its catchment area and parking availability, as well as competition from other commercial centres, will be assessed. For a warehouse its distance to the highway will be considered. EthiFinance Ratings expects such information to be disclosed in a third-party assessment report or to be accessible via public sources, including - but not limited to - financial statements for listed REICs. In the event that third-party technical reports highlight material risks for a given asset, EthiFinance Ratings may lower its asset attractiveness score. Such risks can be related for instance to metal decommissioning.

Table 4 – Asset attractiveness

1-2	3	4	5	6	7
“Trophy” assets located in the centre business districts of global gateway cities. Clear track record of very strong demand resulting in well above-average rentals. Assets with a high degree of cash flow stability and that are highly liquid.	Prime assets located in the centre of regional gateway cities. Clear track record of strong demand resulting in above-average rentals. Fairly high degree of cash flow stability and liquidity.	Mostly prime assets located in the centre of the larger cities within a region of countries with some assets in the periphery. A track record of medium demand resulting in average rentals. Cash flow and liquidity stability mirror those of the RE market.	A mix of assets located in the centre and periphery of larger cities within a country. A track record of weaker demand than the market resulting in below-average rentals. Degree of cash flow stability and liquidity are below those of the RE market.	Assets mostly located in the periphery of larger cities within a country. Demand and rentals are well below the sector and cash flow generated by the assets are unstable and the properties are rather illiquid.	Assets located in the periphery of smaller cities within a country. Demand and rentals are far below the sector and cash flow generated by the assets are unstable and the assets are illiquid.

The section below provides some indications on how we generally view the following real estate assets classes regarding asset attractiveness.

Offices: Location is paramount to assess if an office is in a prime area where demand is expected to be strong, or at the other end of the spectrum, in the periphery of a city that can sometimes experience excess supply or significant swings in demand. Such a location is exposed to deteriorated rental rates and decreasing prices in the event of a sale. Consequently, asset attractiveness scores for this category can be assigned using the full range.

Commercial centres: this class of real estate assets is more and more exposed to the competition from online retail and to the challenges posed by the sustainability of consumer consumption. Commercial centres have started to widen their offer, evolving from a traditional consumption centre to a more multi-purpose eat-and-meet shopping place where location is a key factor. Consequently, asset attractiveness scores for this category can be assigned using the full range.

Industrial sites: Location is usually at the boundaries of city centres. Additionally, significant moving costs (fitting and installation costs) make it challenging for tenants to move elsewhere, and for landlords to find another tenant elsewhere. Consequently, asset attractiveness scores for this category usually lie in the bottom-half part of the range.

Data centres: this class of real estate assets presents very specific characteristics. Not exposed to public attendance, location mostly relies on the proximity to energy centres. Moreover, the increasing need for data storage has boosted demand over the past few years. Consequently, asset attractiveness scores for this category usually lie in the middle part of the range.

Residential: this class of real estate assets, which is not commercial, is mainly driven by demographic and economic trends. Additionally, the sector is particularly sensitive to any change in the regulation related to energy consumption. Consequently, asset attractiveness scores for this category usually lie in the top-half part of the range.

Operated collective housing: this class of real estate assets includes collective housing such as student housing, senior housing or hotels, which are rented to one or several operators by the real estate owner. These assets rely on the credit quality of the operator - which derives mainly from efficient management of the real estate asset – as well as the interchangeability of the real estate asset. Consequently, asset attractiveness scores for this category usually lie in the middle part of the range.

2.1.1.2 Weighted average of unexpired lease term (WAULT)

The rental income of a REIC is linked to its real estate portfolio and the related leases contracts with the tenants. The longer the average unexpired lease term, the higher the visibility on the rental income, and by extension on profitability and cashflow.

It is assessed by calculating the weighted average of unexpired lease term.

Table 5 – Weighted average of unexpired lease term (WAULT)

Categories	1	2	3	4	5	6	7
WAULT	10 years < WAULT	7 years ≤ WAULT < 10 years	5 years ≤ WAULT < 7 years	4 years ≤ WAULT < 5 years	3 years ≤ WAULT < 4 years	2 years ≤ WAULT < 3 years	1 year ≤ WAULT < 2 years

In the case of residential real estate assets, the WAULT criteria is not applicable and as such the criteria is removed from the quality of the real estate assessment, the other criteria having their weight increased by the same proportion in order to still reach a total of 30%.

2.1.1.3 Tenants' creditworthiness

The tenant quality criterion is a qualitative assessment. Under this assessment, EthiFinance Ratings pays attention to multiple characteristics, such as tenant concentration, the credit quality of tenants, the characteristics of lease terms, and rent levels vs market levels. A strong tenant quality mitigates the risk of cash flow losses, particularly during stressed periods. The table below shows the tenants' credit standing when the diversification of tenants and the lease terms or rent levels are satisfactory. If there is high tenant concentration (the main tenant represents more than 50% of the portfolio in value or rental income, or the 3 main tenants represent more than 66%), a denotching of up to one category can be made on table 6.

Table 6 – Tenants' credit standing

Categories	1	2	3	4	5	6	7
Tenants credit standing	Main tenants have an average credit score in the AA category or above	Main tenants have an average credit score in the A category	Main tenants have an average credit score between BBB and BBB+	Main tenants have an average credit score between BB+ and BBB-	Main tenants have an average credit score between BB and BB-	Main tenants have an average credit score of B+ and B	Main tenants have an average credit score of B- or lower

In the case of residential real estate assets, the tenant creditworthiness criterion is not applicable, and as such this criterion is removed from the quality of the real estate assessment, the other criteria having their weight increased by the same proportion in order to still reach a total of 30%.

2.1.1.4 Vacancy levels

Vacancy rates are a fundamental real estate indicator. Vacancy quantitively captures the attractiveness of an asset. A significant vacancy rate may indicate that the asset is not competitive (especially if it is located in attractive areas) and may result in lower profitability & cash generation, and by extension in a worse credit risk profile.

The vacancy rate considered by EthiFinance Ratings is commercial vacancy. As such, the vacancy does not consider technical vacancy typically linked to maintenance, refurbishment, scrapping etc. The vacancy is computed in terms of financial vacancy and not physical vacancy.

The vacancy ratio computed by EthiFinance Ratings is a mix between the prospective vacancy and the historical vacancy with an equal weight for each. EthiFinance Ratings will retain up to 5 periods (last 2 years + 3-year forecasts). For the historical vacancy, EthiFinance Ratings may decide to exclude some periods if they are considered outliers.

Table 7 – Vacancy levels

Categories	1	2	3	4	5	6	7
Vacancy levels	Vac < 2,5%	2,5% ≤ Vac < 4,0%	4,0% ≤ Vac < 7,0%	7,0% ≤ Vac < 10,0%	10,0% ≤ Vac < 15,0%	15,0% ≤ Vac < 20,0%	20% ≤ Vac

2.1.1.5 Energy efficiency

Energy efficiency is a key environmental indicator because energy efficiencies policies will require significant investments, reducing the attractiveness of a real estate asset and its future profitability and valuation. Energy efficiency is assessed through the energy consumption of the real estate asset.

EthiFinance Ratings only uses the report related to energy consumption and not the report related to carbon emissions. EthiFinance Ratings believes that energy consumption is more credit risk-relevant than the carbon efficiency report given that carbon emissions could be subject to the national energy mix. Furthermore, any government decision to change its energy mix - via for instance the subsidies of certain energy assets (such as renewables) or amendment to its nuclear policy - could have a significant impact on the carbon performance over time while a particular asset may not have changed materially.

The assessment will be made through the energy class which is the predominant source. In Europe, residential assets are classified into 7 categories, ranking from A to G, which translates into EthiFinance Ratings' grid from AAA down to CCC. If such an assessment is not available (for legal reasons), EthiFinance Ratings will request details of energy consumption and compute a relative value performance, using publicly available information and requirements. If this option too is not available, EthiFinance Ratings will base its assessment on discussions with the rated entity (or the third-party requesting the rating), using a conservative approach. For instance, if the energy consumption is not relevant following a refurbishment, EthiFinance Ratings may use management estimates, but will potentially not retain the full planned energy saving in its assessment.

Table 8 – Energy efficiency

Categories	1	2	3	4	5	6	7
Energy efficiency	A	B	C	D	E	F	G

2.1.1.6 Physical Risks

Physical risks are a specific case of the environment impacting a real estate asset through natural disasters, long term effects of climate change, or extreme weather conditions. These types of risks directly affect the operation of the tenant of a real estate asset and could also affect its attractiveness and valuation. Therefore, EthiFinance Ratings could potentially adjust the Quality of the Real Estate assets as a result of the physical risk assessment.

EthiFinance Ratings strongly believes that physical risks are a key credit factor when rating different types of corporates but especially in the case of REICs whose assets are situated in one or several locations and, by definition, cannot be relocated. EthiFinance Ratings uses a proprietary framework (Physical Risks Scores Framework – PRSF) to quantitively assess a wide range of physical risks for an asset or a portfolio of assets based on their geographical location. The entry data of the PRSF is the precise geographical position of the asset (i.e., latitude and longitude of a building, location), or the most precise administrative region to which the asset belongs. Then for each risk, one or several specific databases are used to determine the score based on an approach of damage functions, whenever they exist, which quantify the risks related to climate change, or based on limit values largely used by the scientific community. The damage functions or limit values convert the hazard intensities into a proportion of assets affected resulting in a specific physical risk exposure which is classified as 'very low', 'low', 'medium', 'high', 'very high'. High risk exposure does not automatically impact the quality of the real estate assets factor but rather is used as an alert tool to signal that the potential risk must be further investigated by the analyst as described in the Qualitative Analysis paragraph.

Quantitative analysis. Physical risks considered are i) chronic or, ii) acute. Chronic risks are related to a shift of the mean climate that can have ongoing effects on the asset or its use. For instance, a rise of the sea level for real estate assets located near riverbeds or coastal areas. Acute risks relate to extreme events that concern a wide range of hazards which can have potentially high adverse impacts from limiting its use (i.e., the effect of a flooding resulting in a commercial centre unable to operate) to very significant damage, temporary or permanent, with high remediation costs (i.e., a building, a commercial centre, or a plant affected by earthquakes, cyclones, storms, or tsunamis). The quantitative assessment of an asset or a portfolio of assets results in a table with a physical risk exposure. Table 9 illustrates a real case of an asset located in Italy.

Table 9 – PR exposure

Physical Risk	Assessment
Riverline floods	Very low
Coastal floods	Very low
Tsunami	Very low
Main seal level rise	Very low
Heatwave	High
Coldwave	Low
Water stress	High
Aridity	Very low
Drought	Low
Wildfire	High
Earthquake	High
Extreme rainfall	Very low
Extreme snowfall	Very low
Storms	High
Tropical cyclone	Very low

Qualitative analysis. Once the different physical risk factors have been assessed, the analyst will use the table as an alert tool and select the highest risks and will discuss them with the REICs (if it is a solicited rating). Apart from the information gathered from this interchange, the analyst will rely on the valuation reports. Additionally, the analyst will analyse the insurance policy that covers the real estate assets, keeping in mind that there is a high likelihood that the time horizon of the insurance coverage will usually be shorter than the remaining life of the asset and there are no guarantees that the current coverage will be renewed on the same terms.

For instance, the qualitative analysis can take into account the geographic surroundings of a real estate asset that has a high-risk exposure in terms of flooding or wildfire risks. Continuing with this example, an asset located in a region with a high wildfire hazard but within a precise location where there are no trees or other flammable materials will have its wildfire hazard assessed as negligible compared to an asset located in a forest. In this example, the rating analyst will interact with REICs (if it is a solicited rating), in order to analyse possible remedial actions, put in place to reduce the risk (i.e. anti-fire area, water storage and capabilities for quick fire extinction after an early detection by fire sensors).

Rating a portfolio of assets. In the typical case where a REIC holds a portfolio of several assets, the rating analyst will assess the diversification and the materiality of those assets that have a significant physical risk exposure.

Physical risk adjustment on quality of the real estate assets: As a result of combining physical risks with the level of protection afforded by the insurance policy and other possible mitigants, EthiFinance Ratings will adjust the score of this factor down by one notch, and in some cases may consider further downward adjustments provided that the risk can be determined to be material.

2.1.2 Scale and diversification

2.1.2.1 Asset Diversification

Diversification is important because it can mitigate the negative impact of RE downturns as certain asset classes may remain relatively unaffected by a crisis. In addition, specific regions or countries may stay immune to a targeted crisis. Finally, tenant diversification can also help mitigate the potential impacts stemming from macro-economic cycles. The following sub factors are applicable to assess diversification:

- Asset class diversification and asset concentration
- Geographic diversification
- Tenant concentration

Table 10 – Asset class diversification and asset concentration

1-2	3	4	5	6	7
Several asset classes with a broadly equal weight in terms of value or rental income. No individual asset represents more than 5% of the portfolio value.	Several asset classes. No individual asset represents more than 10% of the portfolio value.	One asset class and the largest asset represents less than 15% of the portfolio value.	Only one asset class, the largest asset represents more than 15% of the portfolio value.	Only one asset class, the largest asset represents more than 30% of the portfolio value.	Only one asset class, the largest asset represents more than 50% of the portfolio value.

The asset attractiveness assessment made in the section 2.1.1 is key and allows to better appreciate the asset diversification in terms of geography and tenant. The lower the asset attractiveness the more important the geographic diversification and tenant concentration. Tables 10 and 11 below indicate the notching to apply, for geographic diversification and tenant concentration, to the initial assessment deriving from table 10.

Table 11 – Geographic diversification & asset attractiveness

		Asset attractiveness category		
		1, 2, 3	4, 5	6, 7
Geographic diversification	Well diversified	+1	+1	=
	Mildly diversified	+1	=	-1
	Poorly diversified	=	-1	-1

The geographical diversification is defined as follows: i) well diversified: assets present in several countries, ii) poorly diversified: assets present in only one economic local region (i.e. Paris area), iii) mildly diversified is in between.

Table 12 – Tenant concentration & asset attractiveness

		Asset attractiveness category		
		1, 2, 3	4, 5	6, 7
Tenant concentration	Low concentration	+1	+1	=
	Medium concentration	+1	=	-1
	High concentration	=	-1	-1

The tenant concentration is defined as follows: i) low concentration: no tenant represents more than 5% of rental income, ii) high concentration: the main tenant represents more than 25% of rental income, and iii) medium concentration is in between.

In the specific case of a tenant representing more than 50% of rental income and an asset attractiveness category of 5, 6 or 7, then the anchor rating may be capped at the level of the main tenant's rating.

2.1.2.2 Scale

A REIC's size, in terms of the gross asset value of its portfolio, 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. The GAV (Gross Asset Value), which is defined in section 4.1, is the indicator to assess the scale. In Table 13 we define how we assess scale for REICs. A REIC that is large in scale in terms of the gross asset value of its property portfolio usually commands a dominant positioning with significant market shares (amongst the top 5) in prime locations. This positioning implies a capacity to defend its pricing conditions vis à vis its potential tenants based on the scarcity of prime locations. Large REICs are able to spread fixed costs over their numerous operating units. Additionally, scale usually leads to geographic and asset class diversification.

Table 13 Gross Asset Value (GAV) (€bn)

Categories	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Scale	GAV > 20	20≥GAV>10	10≥GAV>5	5≥GAV>1.5	1.5≥GAV>0.75	0.75≥GAV>0.5	GAV≤0.5

2.1.3 Governance

Governance is an important factor that is assessed through the financial policy/management quality and shareholding and control structure of the issuer. For guidance on how to assess Governance please refer to section 3.2.1.3 of our General Corporate Methodology.

2.2 FINANCIAL RISK PROFILE

The financial risk profile provides an assessment of a firm's debt servicing capacity and solvency based on four key credit metrics:

- Leverage: Net debt/ EBITDA
- Interest Coverage: EBITDA / interest expenses
- Solvency: Debt / Gross Asset Value (GAV)
- Asset availability: Unencumbered Assets (UA) / GAV

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. The main adjustments are defined in Section 3.2.2 of our General Corporate Rating Methodology.

2.2.1 Cash flow (leverage and coverage)

To assess a firm's cashflow and leverage, EthiFinance Ratings uses two credit ratios: EBITDA / Interest and NFD / EBITDA, which are given weights of 15% and 10% respectively. Both ratios provide an intuitive view of a company's distance to default: the higher the cash flow relative to debt and / or interest expenses, 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.

As mentioned before, REICs typically display stable cash flows generated from their rental income that are supported by pluriannual contracts with their tenants.

Table 14 - Leverage ratio

	1	2	3	4	5	6	7
NFD/EBITDA (X)	X ≤ 1.0	1.0< X ≤ 2.5	2.5< X ≤ 4	4 <X ≤ 6	6< X ≤ 8	8 < X ≤ 12	X > 12

Table 15 – Interest coverage ratio

	1	2	3	4	5	6	7

EBITDA/interest (Y)	Y ≥ 10	10 > Y ≥ 8	8> Y ≥ 6	6> Y ≥3	3> Y ≥ 1.8	1.8> Y ≥ 1.3	Y < 1.3

2.2.2 Capitalisation

To assess the capitalisation of a REIC, EthiFinance Ratings uses the Gross Debt / (GAV + cash) ratio. The higher the total of GAV plus cash, the better the cushion is for creditors against future losses.

Table 16 - Capitalisation

	1	2	3	4	5	6	7
Debt/GAV (Z)	Z ≤ 10%	10< Z ≤ 20%	20< Z ≤ 30%	30< Z ≤ 50%	50< Z ≤ 65%	65< Z ≤ 75%	Z > 75%

When a REIC has a significant amount of cash representing more than 10% of the gross debt reflecting an exceptional situation (i.e. a large asset was sold with the intend to repay debt), then the net debt figure can be retained for the calculation of the capitalisation ratio (i.e. cash is removed from gross debt and not added to the real estate value).

2.2.3 Asset availability

A company that enjoys asset availability can typically access new sources of financing with relative ease.

We assess asset availability for REICs using the following ratio: Unencumbered Assets / GAV. The higher the ratio, the easier it is for a company to access new sources of funds either by pledging their unencumbered assets against new loans or by directly selling them.

Table 17 – Asset availability

	1	2	3	4	5	6	7
Unencumbered assets/GAV (U)	U ≥ 95%	95> U ≥ 90%	90 > U ≥ 80%	80 > U ≥ 65%	65 > U ≥ 50%	50 > U ≥ 35%	U < 35%

2.3 RATING MODIFIERS

Once we have arrived at the Anchor Rating, we analyse three risk factors that are not captured in the scorecard, Liquidity risk, Country risk, and ESG-related controversies risk, in order to determine if it must be adjusted downwards. These modifiers are assessed following Section 3.3 of our General Corporate Rating Methodology with a slight modification for the liquidity risk as presented after.

2.3.1 Liquidity

As mentioned, EthiFinance Ratings follows Section 3.3 of our General Corporate Rating Methodology in order to analyse a REIC's liquidity. However, certain adjustments are made when calculating the sources of funds in order to better capture the specificities of a REIC.

Because REICs hold and operate long-lived assets that generate stable cash flows, their capital structure includes a sizable proportion of long-term mortgage loans or bonds. Typically, this debt is either bullet or with a sizable balloon which are usually refinanced at maturity. Therefore, when calculating the liquidity for the upcoming year, EthiFinance Ratings will in most circumstances assume that any bullet or balloon amortisations will be refinanced. To apply this criterion, all of the following conditions must be met:

- The REIC has an FRP of at least BB-
- The REIC must have an Unencumbered Assets / GAV ratio of 40% at least
- The REIC must have sufficient unencumbered assets in the centre of large cities to cover at least twice the amount of the maturing loan at the national level

If the RE market is undergoing a significant crisis, i.e. a 20% fall in market prices of the corresponding asset class, then the above criteria will only be applied to REICs with an anchor rating that is investment grade.

2.3.2 Country Risk

This modifier is assessed following Section 3.3 of our General Corporate Rating Methodology

2.3.3 ESG-related controversies

This modifier is assessed following Section 3.3 of our General Corporate Rating Methodology

3. RATING FRAMEWORK FOR REAL ESTATE TRANSACTIONS

This section provides an overview of the approach taken by EthiFinance Ratings when assigning long-term ratings to real estate transactions (RETs). It incorporates a scorecard with details on the analytical factors and the weights given to them.

This framework indeed applies to self-financing special-purpose vehicles (SPVs) or holding companies with activity limited to ownership of an SPV whose debt is serviced via the rental income generated by the underlying real estate asset or via the disposal of the asset, or a mix of both. These specialized real estate financings are typically secured by the real estate asset and the vehicle is insulated from third-party influence. This framework can apply to various real estate assets, from large residential projects to commercial centres, offices, warehouses, and tailor-made assets. In the event the asset is under construction, a specific scorecard, reflecting the construction risk, also applies and is disclosed within this methodology. In this specific case, EthiFinance Ratings will use the more conservative of the scorecard for the operating asset and the scorecard for the asset under construction. This framework does not apply to real estate developers, construction, or real estate investment companies (covered unders section 2 of this methodology).

To evaluate the credit quality of RETs, EthiFinance Ratings assesses the asset attractiveness and the degree of financial risk. The assessment of the asset attractiveness focuses on its capacity to attract tenants, its resilience to adverse market conditions, and its environmental profile. The evaluation of financial risk primarily focuses on the level of indebtedness through the loan-to-value (LTV) ratio and through the coverage ratio, either via an interest coverage ratio (ICR) or via a debt service coverage ratio (DSCR).

Additional modifiers such as political & country risk, adverse ESG performance, sponsor reputation, hedging risk, structuration risk, etc. These additional modifiers are mostly external factors which EthiFinance Ratings believes are not reflected into the rating grid and impact the final rating through an override adjustment. The main modifiers are explained in section 3.4. This framework also addresses the issuer rating of the SPV as the first step towards the rating of the instrument which can entail two situations:

- In the event of a single class of debt, the instrument rating matches the rating of the issuer.
- In the event of different layers of debt, section 5 of the General Corporate Methodology covers instrument ratings.

Table 18 – EthiFinance Ratings Methodology for RETs (operational phase)

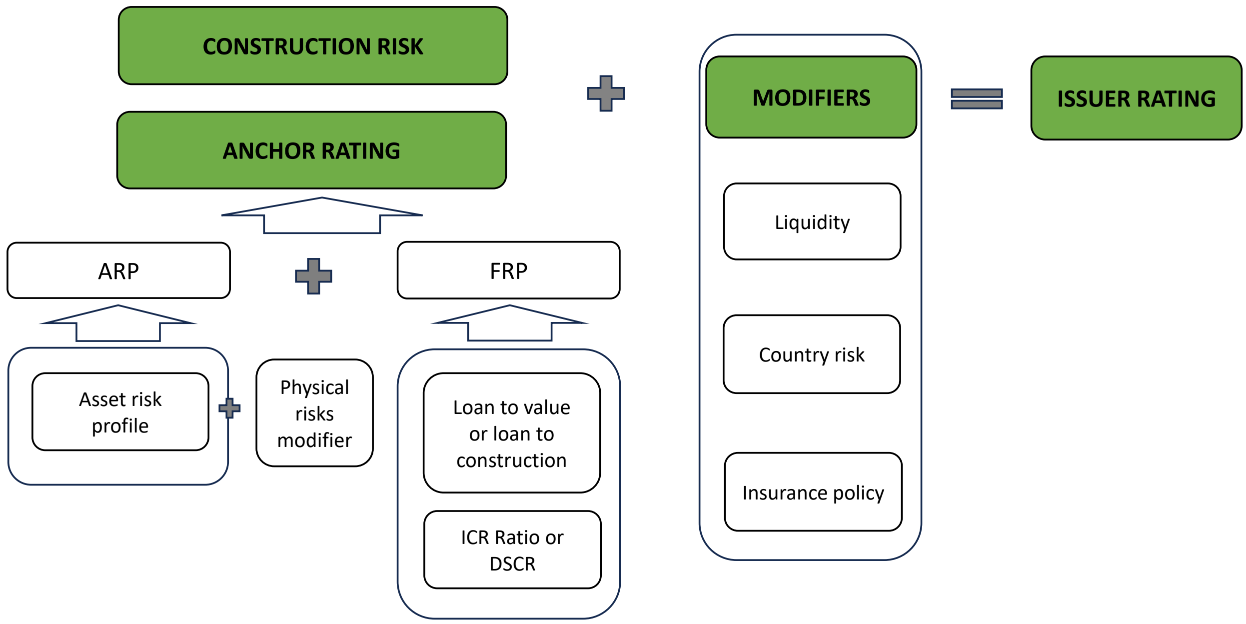

Table 18 shows how EthiFinance Rating arrives at the Anchor Rating. First, each of the Business and Financial risk profiles is assessed separately based on their respective risk subfactors. The Quality of Assets factor may be negatively impacted by Physical Risks considerations. The resulting Business and Financial profile scores are then weighed to arrive at the Anchor rating.

The **RET's asset risk profile** is assessed using the following analytical factors:

- Asset risk profile

The **RET's financial risk profile** is assessed using the following analytical factors:

- Loan-to-value or loan-to-construction
- ICR ratio or DSCR

The construction risk acts as a rating cap for assets under construction.

Table 19 – EthiFinance Ratings' RETs Anchor Rating

Asset Risk Profile	60%
Asset attractiveness	20%
Weighted Avg. Unexpired Lease Term (WAULT)	10%
Tenants' creditworthiness	10%
Vacancy Levels	10%
Energy Efficiency	10%
Financial Risk Profile	**40%**
Loan-to-value or loan-to-construction	33%
ICR Ratio or DSCR	7%

For both profiles, a score between [1 and 8[is assigned to each of the subfactors, where 1 is the best and 7.9 is the worst. They are then combined based on the weights presented in Table 19.

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 - Alphanumeric mapping for the Anchor rating, and the explanations below the table.

3.1 ASSET RISK PROFILE

3.1.1 Assessing the asset risk profile

The assessment of the asset quality is a core component of a RET and its related rating because it determines the quality of the cashflows, and by extension the asset value. Because of the legal structure, the asset is the unique source of revenues.

Due to that specific characteristic, the assessment of the asset risk profile is based on the same criteria as for the REICs, however with different weights as EthiFinance Ratings believes that the creditworthiness of the transaction depends even more on the quality of the portfolio compared to a REIC.

In addition, the need of maintenance of the real estate asset and its complexity is assessed in regard of the counterparty in charge of the maintenance. If there is a significant complexity in the maintenance and a risk of default of the counterparty in charge, then a notching down of up to one notch can apply on the asset risk profile.

3.1.1.1 Asset attractiveness

Please refer to the section 2.1.1.1 that covers this criterion.

3.1.1.2 Weighted average unexpired lease terms

Please refer to the section 2.1.1.2 that covers this criterion.

3.1.1.3 Tenants' creditworthiness.

Please refer to the section 2.1.1.3 that covers this criterion.

3.1.1.4 Vacancy

Please refer to the section 2.1.1.4 that covers this criterion.

3.1.1.5 Energy performance profile

Please refer to the section 2.1.1.5 that covers this criterion.

3.1.1.6 Physical Risks

Please refer to the section 2.1.1.6 that explains this criterion.

Physical risk adjustment on asset risk profile: As a result of combining physical risks with the level of protection afforded by the insurance policy and other possible mitigants, EthiFinance Ratings will adjust the score of this factor down by one notch and in some cases may consider further downward adjustments provided that the risk can be determined to be material.

3.2 FINANCIAL RISK PROFILE

3.2.1 Assessing the financial risk profile

3.2.1.1 Loan To value

The loan-to-value (LTV) ratio measures the total debt to the value of the asset. The LTV is an essential ratio for a real estate financing transaction & its documentation, through the setting of a maximum covenant level. All else being equal, the lower the ratio, the lower the credit risk. Indeed, a lower ratio will provide the lenders with a higher equity cushion which can better absorb operating losses and/or decrease in value, especially in the event of adverse market conditions. This equity cushion may protect lenders in the event of disposal of the assets or make refinancing easier.

Table 20 - LTV

	1	**2**	**3**	**4**	**5**	**6**	**7**

Loan-to-value or Loan-to-construction	LTV < 40%	40% ≤ LTV < 50%	50% ≤ LTV < 60%	60% ≤ LTV < 70%	70% ≤ LTV < 80%	80% ≤ LTV < 90%	LTV ≥ 90%

The value of the asset is derived from market valuation from external third parties to which the value of the cash is added. According to the reputation of the third parties, and their credibility to assess such assets, a discount may be applied.

3.2.1.2 Interest Coverage Ratio and Debt Service Coverage Ratio

This interest coverage (ICR) ratio assesses the capacity of the SPV to cover its interest charges with the cash-flow it generates. The ICR ratio (net operating income-to-gross interest expenses) measures the degree of financial strength or weakness and is an indicator of how close an entity is to missing an interest payment and so to default. The ICR ratio is computed as net operating income over interest charges.

Table 21 – ICR or DSCR

	1	2	3	4	5	6	7
ICR Ratio or DSCR	ICR > 10,0x or DSCR > 1,75x	10,0x ≥ ICR > 6,5x or 1,75x ≥ DSCR > 1,40x	6,5x ≥ ICR > 4,5x or 1,40x ≥ DSCR > 1,25x	4,5x ≥ ICR > 2,5x or 1,25x ≥ DSCR > 1,175x	2,5x ≥ ICR > 1,8x or 1,175x ≥ DSCR > 1,10x	1,8x ≥ ICR > 1,2x or 1,10x ≥ DSCR > 1,05x	ICR ≤ 1,2x or DSCR ≤ 1,05x

EthiFinance Ratings also calculates for amortizing facilities a debt service coverage ratio (DSCR) which is computed as cash-flow over interest charges and principal repayment. In such cases, the cash-flow is defined as net operating income minus working capital minus capex minus specific cash-flow. EthiFinance Ratings only computes maintenance capex as extraordinary capex would likely need to be financed with several years of cash-flow and/or additional debt or equity. The specific cash-flow relates to extraordinary cash outflow/inflow adjustments estimated by EthiFinance Ratings on a case-by-case basis and considered as necessary adjustments to reflect a normative cash-flow.

Both the ICR and DSCR ratios are computed using the remaining life of the debt. EthiFinance Ratings will retain the most conservative between ICR scoring and DSCR scoring, even though obviously their scaling is different, as highlighted within the EthiFinance Ratings' scorecard.

3.2.1.3 Financial risk profile assessment clarification

In the assessment of the financial risk profile, the ratio computed by EthiFinance Ratings will be based on its own forecasts and correspond to the next 3 years of forecast ratios. Regarding the value of the assets, for the LTV ratio, EthiFinance Ratings will not estimate prospective value and will use the current or most recent value (plus or minus investments or divestments). Indeed, in the event of development capex, and if such capex is not reflected in the initial LTV ratio, EthiFinance Ratings will reflect those in the forecasts for the ratio's calculation.

In the event there is a significant tenant concentration, EthiFinance Ratings may cap the financial assessment scoring to the tenants' assessed credit rating. This would particularly be the case for specific real estate assets for which the transaction could be considered as an off-balance sheet optimization for the tenant. For instance, a project for which the asset will be used for industrial purposes, EthiFinance Ratings will most likely cap its financial assessment to the tenant credit rating. Under such a scenario, it is most likely that an industrial site will have a low realizable value for a third party as it would probably require some significant capex and/or the site will attract only a very narrow prospect base.

3.3 ETHIFINANCE RATINGS' SCORECARD WITH CONSTRUCTION RISK

The construction risk acts as a rating cap for assets under construction. In such a situation, EthiFinance Ratings computes the scorecard based on its initial grid risk assessment and a further assessment based on the below construction grid risk. During the construction phase, EthiFinance Ratings retains the more conservative rating between its initial grid assessment and the construction grid risk assessment. Until the asset has been delivered, the rating will be capped at a maximum level of BBB.

Table 22 – Scorecard with construction risk

Weight	Rating class	BBB	BB	B	CCC
15%	**Constructors, sponsors & partners**	Very strong & long track record with international reputation	Sponsors and partners with adequate track record and brand reputation	Sponsors or partners with good but limited track record	Sponsors or partners with no track record or weak track record
20%	**Project complexity**	Long past record regarding the technology and/or knowledge involved to execute the project	Adequate risk regarding the technology and/or knowledge involved to execute the project	The project is built on a cost-plus structure with a fixed delivery date	The project is built on a cost-plus structure with unclear risk-sharing and/or uncertain delivery date
15%	**Execution risk**	Execution risk of the project is very low with typically turnkey/EPC contract	The project is either a cost plus with rather low execution risk or a turnkey/EPC contract with adequate execution risk	The project presents some complexity in terms of execution although the partners have a good execution track record	The project presents high complexity in terms of execution and the partners track-record is limited in this field
10%	**Financing**	Financing of the project is fully committed from first-rank sponsors or financial institutions or with available cash	Financing of the project is partially committed from first-rank sponsors or financial institutions	Financing of the project is partially committed from second-rank sponsors or financial institutions	Financing of the project with weak commitments from second-rank sponsors or financial institutions
10%	**Loan administration**	First-rank loan administrator with strong loan administration process (drawdown tied to invoices with independent inspection before drawdown, frequent on-site visit from a lenders' representative)	First-rank loan administrator with adequate loan administration process	Second-rank loan administrator with strong loan administration process	Weak loan administrator or second-rank loan administrator with adequate loan administration process
10%	**Insurance / Bonds / Surety**	Construction risk & insurance are covered with standard or robust bond/insurance scheme from first-rank financial institutions		Construction risk & insurance are covered with a bond/insurance scheme from second rank financial institutions or from first-rank institutions with below-standard bond/insurance scheme	Construction risk & insurance are covered with below-standard bond/insurance scheme from relatively weak financial institutions
10%	**Project completion stage - PC**	100% ≥ PC > 85%	85 ≥ PC > 66%	66 ≥ PC > 33%	PC ≤ 33%
10%	**Pre-rent risk - PR**	100% ≥ PR > 75%	75% > PR > 50%	50% ≥ PR > 25%	PR ≤ 25%

The construction phase is typically characterized by higher risk as it is exposed to cost overruns. There might be some uncertainty regarding the ability of the constructor to deliver the project on time with all its specificities, the construction might be exposed to technical construction challenges, or there can even be unexpected problems with the land. Usually, the more standardized the asset, the more commoditized its construction can be, and by extension, the lesser the risk. Obviously, the experience of the constructors and contractors are strong factors. The scorecard used by EthiFinance Ratings aims at assessing these risks, although EthiFinance Ratings might decide to constrain the final rating in the event that:

(i) some criteria are assessed as very weak, for instance very high project complexity and very high execution risk can potentially not be fully compensated for by very low commercialization risk and very high experience of sponsors, constructors & partners.

(ii) other external factors are expected to weigh significantly on the final rating assessment, in which case the rationale of the override will be clearly detailed by EthiFinance Ratings.

When assessing the performing scorecard, EthiFinance Ratings will:

(i) Assess the pre-rent rate instead of the vacancy rate which is by definition not applicable. The pre-rent criterion is used up to 6 months after delivery. In between 6 and 12 months after delivery, the analyst will take the average of both scores (commercialization rate and vacancy). If the rating assessment falls 12 months after delivery, the analyst will only use the vacancy criteria.

(ii) Use the more conservative ratio between the loan-to-construction (LTC) ratio and the expected loan-to-value ratio. LTC is computed using construction costs.

3.4 RATING MODIFIERS

Once we have arrived at the Anchor Rating, we analyse three risk factors that are not captured in the scorecard: Liquidity risk, Country risk, and Insurance policy in order to determine if it must be adjusted downwards. The first two modifiers are assessed following Section 3.3 of our General Corporate Rating Methodology.

3.4.1 Liquidity

This modifier is assessed following Section 3.3 of our General Corporate Rating Methodology.

In addition, EthiFinance Ratings will expect a RET to operate with various bank accounts and a cashflow waterfall. Such a structure allows better monitoring of the cashflow transaction and preserves a minimum liquidity. In the event of significant deviation, the rating committee can consider additional rating adjustments, especially in the event of weak financial performance.

3.4.2 Country risk

This modifier is assessed following Section 3.3 of our General Corporate Rating Methodology.

3.4.3 Insurance policy

Specific attention is paid to the insurance policy. EthiFinance Ratings expects a borrower to contract an insurance policy in line with market conditions and to cover the risks and specific risks which are economically feasible to do. EthiFinance Ratings also pays attention to the assignment of insurance rights as well as to the rating quality of the insurance company.

4 APPENDIX

4.1 RATIO DEFINITIONS

- EBITDA: Operating income – depreciation and amortization – provisions – impairments and profit/losses on disposal of non-current assets
- Net Financial Debt: (short-term financial debt + long-term financial debt – cash & equivalents – short-term financial investments)
- Debt/GAV: Total Financial Debt / Gross Asset Value
- GAV: By definition, it is the fair value of a REIC's assets. If the fair value is not available, then EthiFinance Ratings would use the asset's Book Value, adding back the corresponding accumulated depreciation
- Unencumbered Assets: Real Estate assets that are not mortgaged