Creditreform Rating AG Rating Methodology

Project Companies

Neuss, January 08, 2026
Version 1.0

Content

GLOSSARY **4**

1 INTRODUCTION **5**

1.1 Background of the Methodology 5

1.2 General Structure of a Project Finance Transaction 5

1.3 Methodological Approach 6

1.4 Definitionen 8

1.4.1 Project Company *8*

1.4.2 Project Finance *8*

1.4.3 Private vs. PPP Projects *9*

2 SCOPE OF APPLICATION **9**

3 RATING STATEMENT AND PROCESS **10**

3.1 Rating Statement 10

3.2 Rating Process 12

3.2.1 Data Collection *12*

3.2.2 Rating Interview *12*

3.2.3 Rating Committee *12*

4 RATING METHODOLOGY **12**

4.1 Construction Phase 12

4.1.1 Qualitative Analysis *12*

4.1.1.1 Construction Risk 13

4.1.1.2 Counterparty Risk 16

4.1.1.3 Refinancing Risk 19

4.1.1.4 Other Project Risks 24

4.1.1.5 Environmental, Social and Governance (ESG) 26

4.1.2 Quantitative Analysis *26*

4.1.2.1 Project Leverage Ratio 27

4.1.2.2 Project Time Lag 27

4.1.2.3 Cost Performance Index 27

4.2 Operational Phase 30

4.2.1 Quantitative Analysis *30*

4.2.1.1 Derivation of the CRA Base Case Scenario 30

4.2.1.2 Financial Ratios 37

4.2.2 Qualitative Analysis *39*

4.2.2.1 Sponsor 39

4.2.2.2 Market Risks 40

4.2.2.3 Regulation 40

4.2.2.4 Interest Rate Risks 41

4.2.2.5 Environmental, Social and Governance (ESG) 41

4.2.2.6 Liquidity 42

4.2.2.7 Servicer Replaceability ... 42
4.2.2.8 Foreign Exchange Risks ... 43
4.2.2.9 Other Project Risks ... 43
4.3 Government Linkage ... 43
5 ADDITIONAL NOTES ... 44
APPENDIX I: ILLUSTRATION OF THE METHODOLOGICAL APPROACH IN THE PROJECT PHASE ... 45
APPENDIX II: ILLUSTRATION OF THE METHODOLOGICAL APPROACH IN THE PROJECT PHASE ... 46
APPENDIX III: WEIGHTING OF FINANCIAL RATIOS ACCORDING TO PROJECT RISK ... 47
APPENDIX IV: THRESHOLD VALUES OF THE INDIVIDUAL FINANCIAL RATIOS ... 49
APPENDIX V: DEFINITIONS FOR THE CALCULATION OF FINANCIAL RATIOS ... 50
APPENDIX VI: LIST OF DOCUMENTS ... 52

Glossary

ADSCR	Annual Debt Service Coverage Ratio
CAFDS	Cash Available for Debt Service
Capex	Capital Expenditures
ConRS	Construction Risk Score
CountRS	Counterparty Risk Score
CPI	Cost Performance Index
CRA	Creditreform Rating AG
EPC Contract	Engineering, Procurement and Construction Contract
O&M Contract	Operations and Maintenance Contract
PLR	Project Leverage Ratio
PPA	Power Purchase Agreement
PTL	Project Time Lag
RefRS	Refinancing Risk Score
WACD	Weighted Average Cost of Debt

1 Introduction

Creditreform Rating AG (hereinafter “CRA”) has been conducting credit ratings since its foundation in 2000 and is a recognized European credit rating agency.

A credit rating constitutes an assessment of a company, financial instrument or security with respect to its creditworthiness, based on predefined criteria from a creditor’s perspective. This assessment may also encompass subordinated (mezzanine) financing. CRA employs internationally standardized alphanumeric rating codes (e.g. AAA, AA, etc.) to ensure transparency and comparability of results. The CRA rating methodology centers on the fundamental question of whether the rated entity will be able to meet its due and payable financial obligations to creditors in full and on time — or, in the case of instrument ratings, whether scheduled debt service can be maintained. CRA conducts its assessments based on a holistic analysis, incorporating all available and deemed relevant information, in order to evaluate default probability as a measure of credit risk. The methodology combines quantitative and qualitative analytical approaches.

Ratings represent informed opinions on the creditworthiness of an entity or instrument. They do not constitute recommendations to buy, sell, or hold a financial instrument. CRA’s opinions on the long-term viability of the rated entities are formed with systematic rigor and due professional care.

CRA’s reliable and independent ratings aim to reduce information asymmetries between capital providers and recipients. Moreover, published ratings enhance capital market transparency for the benefit of market participants and the interested public.

1.1 Background of the Methodology

To enable involved parties, investors, and the broader public to understand CRA’s rating assessments, the present methodology for the evaluation of project finance transactions is published. This document is subject to regular updates to reflect methodological adjustments and refinements. Both the rating methodology and CRA’s Code of Conduct are publicly available on the website www.creditreform-rating.de

1.2 General Structure of a Project Finance Transaction

Project finance transactions are characterized by a clearly delineated timeline, typically commencing with the construction phase and extending over a prolonged period into the operational phase. In some cases, financing may be limited to either phase individually. As such, a project phase and its corresponding financing may relate exclusively to construction or operation, or span both phases cumulatively. The project lifecycle and associated cash flows determine the financial and risk profile of the project company.

The construction phase usually marks the starting point of project financing. During this stage, the primary risk lies in the timely, complete, and cost-compliant completion of the project. Common risks include construction delays, cost overruns, technical challenges, quality issues, or permitting uncertainties. These risks are typically mitigated through fixed-price contracts with general contractors (EPC contracts), insurance coverage during construction, and the involvement of experienced technical advisors and independent experts. Disbursements during this phase are generally made in tranches, contingent upon construction progress, and subject to close monitoring by lenders and technical consultants.

Upon successful completion, the operational phase begins, during which the project company generates the bulk of its revenues — e.g. through availability or usage-based payments, electricity sales, or service fees. At this stage, the risk profile shifts, with market, operational, and revenue risks taking precedence. These may include price volatility in unhedged offtake arrangements, demand fluctuations, operational disruptions, or maintenance failures. Long-term contractual arrangements — such as Power Purchase Agreements (PPAs) or availability-based payments — play a key role in cash flow predictability and, by extension, the overall risk profile of the transaction.

The ability to consistently service debt obligations (interest and principal) is central to a project's financial viability. The structure and maturity profile of the financing are typically aligned with the project’s economic life and revenue generation model.

1.3 Methodological Approach

To adequately reflect the evolving risk profile across a project’s lifecycle, CRA has structured its rating approach for project companies into two distinct analytical phases: the construction phase and the operational phase. Separate rating outcomes are determined for each of these phases. This bifurcation acknowledges the significant shift in key risk drivers over time — from primarily technical, regulatory, and completion-related risks during construction to operational, market-based, and structural risks during the operating period.

In principle, both phases are assessed separately, provided the construction phase has not yet been completed at the time of the rating and the financing arrangement spans both phases. In such cases, separate assessment results are derived for the construction and operational phases. The lower of the two scores determines the final rating, as it reflects the highest default risk. For example, if the construction phase yields a rating of BBB+ and the operational phase a rating of A, the BBB+ rating prevails. This outcome remains in effect until the core risks of the construction phase are deemed resolved and operational risk drivers become dominant. CRA typically considers this transition to have occurred once construction progress exceeds 90% and the project company has begun generating substantial operational cash flows. If the project is already in the operational phase, a rating for the construction phase is no longer applicable.

Assessment of the Construction Phase

The analysis of the construction phase begins with the determination of a *Qualitative Risk Score*, based on the assessment of construction, counterparty, and potential refinancing risks. This is followed by a quantitative evaluation using project-specific financial metrics, resulting in a *Quantitative Risk Score*. Both components — qualitative and quantitative — are then aggregated into a *Stand-Alone Score*.

In the next step, this Stand-Alone Score is adjusted for any other identified project-specific risks. The outcome is the *Stand-Alone Rating* for the construction phase of the project company. CRA subsequently examines the degree of government linkage of the project company to assess potential implications for the issuer rating. Finally, the structure of the specific financial instrument is analyzed (in accordance with CRA's methodology for corporate bond ratings), leading to the final instrument rating. Given the relatively high level of risk during the construction phase, CRA generally applies a cap of A+ on the issuer rating during this period. A visual overview of the construction phase rating process can be found in Appendix I.

Assessment of the Operational Phase

The analysis of the operational phase is based on the financial model provided by the project sponsor. The starting point is the base case scenario as defined by the project developer. CRA adjusts key model assumptions as part of a qualitative risk assessment — particularly with respect to revenue, operating, and maintenance costs — and derives a risk-adjusted *CRA Base Case Scenario*, which serves as the foundation for further analysis.

The resulting financial ratios are consolidated into a *Stand-Alone Score*, which is then adjusted for additional qualitative transaction features. This process leads to a *Stand-Alone Rating* for the operational phase of the project company, which is further refined by considering the project's degree of government linkage to derive the issuer rating. In a final step, CRA evaluates the structural features of the financial instrument (in line with CRA's corporate bond rating framework) to determine the final instrument rating. A graphical representation of the methodological approach for the operational phase is provided in Appendix II.

1.4 Definitionen

1.4.1 Project Company

A project company (also referred to as a special purpose vehicle, SPV) is a legally independent entity established exclusively for the purpose of developing, constructing, financing, and operating a specific project. The shareholder(s) of the project company are referred to as the sponsor(s).

Typical characteristics of a project company include:

Project-specific corporate purpose: The company is solely dedicated to implementing and/or operating the underlying project. There are no or only negligible other operating activities beyond the defined project scope. Within this methodology, the terms “project company” and “special purpose vehicle” are used interchangeably.

Ring-fencing structure: The project company is financially, legally, and structurally isolated from the sponsor or other affiliated entities. Consequently, creditors of the sponsor — as well as the sponsor itself — have no direct claim on the assets of the project company.

Counterparty to all project agreements: The project company is the contractual party to all key project agreements (e.g. construction contracts, operations and maintenance agreements, offtake contracts, loan agreements, etc.).

Independent credit profile: The creditworthiness of the project company is based primarily — or exclusively — on the project's future cash flows and contractually mitigated risks, rather than on the sponsor’s credit quality.

Limited liability for investors/sponsors: Sponsors’ liability is generally limited to their equity contributions or specific contractual commitments.

1.4.2 Project Finance

Project finance refers to a structured form of financing in which debt service is expected to be covered primarily or exclusively from the future cash flows of a single, clearly defined project. The financing is typically structured through a project company set up solely for the execution of the given project. If the financing covers only the construction phase, full and timely debt repayment usually depends on the successful refinancing.

1.4.3 Private vs. PPP Projects

Private projects in the context of project finance are initiatives fully initiated, developed, financed, and operated by private entities or consortia — without direct involvement of public authorities as contracting parties, clients, or funding providers.

Public-Private Partnership (PPP) projects, by contrast, involve long-term contractual cooperation between public sector entities and private companies for the financing, construction, operation and/or maintenance of infrastructure or services. These arrangements typically include risk-sharing provisions and may also encompass financing and revenue components.

2 Scope of Application

This methodology applies to project companies, in both the construction and operational phases, that operate as special purpose vehicles (SPVs). The SPV acts as the sole borrower and is established exclusively for the development, construction, financing, and operation of a clearly defined project.

Project companies that are still in the development phase (i.e. pre-construction development) may be assessed under this methodology to a limited extent. Generally, there are no other operating activities outside the scope of the project.

Future investments in unknown assets are typically not intended or are contractually excluded. This methodology is applicable to both privately financed projects and Public-Private Partnership (PPP) structures.

In contrast to the credit assessment of traditional operating companies, the creditworthiness of a project company is not based on the economic standing of an existing enterprise, but solely on the project-specific future cash flows of the SPV. Debt repayment is primarily derived either from refinancing after the construction phase or from revenues generated during the project's operational phase (e.g. through availability or usage payments, electricity sales, toll revenues).

There is usually no direct recourse to the sponsor (e.g. parent company), or such recourse is limited due to contractual arrangements (non-recourse or limited-recourse structures). Project risks — such as construction delays, operational failures, or market price volatility — are ring-fenced within the SPV and typically transferred to third parties via contractual structures (e.g. EPC contracts, O&M agreements, offtake contracts).

This methodology does not apply if:

- the financing is structured through an existing operating company whose overall credit quality is decisive for repayment; or
- a more specific methodology exists for the respective case.

CRA analysts assess the applicability of this methodology on a case-by-case basis, both prior to and during the rating process. Where appropriate, CRA may refrain from issuing a rating or may limit the rating scope. Reference is also made to CRA's foundational document "Principles and Framework for the Issuance of Ratings."

For information on the availability of more specific methodologies, please consult the CRA website.

3 Rating Statement and Process

3.1 Rating Statement

The objective of the rating process is to arrive at a sound and reliable assessment of the credit quality of the rated entity in an efficient and consistent manner. The process is designed to uphold the integrity and quality of the rating outcome, avoid conflicts of interest, and ensure comparability in decision-making. For ratings issued under the project finance methodology, CRA applies the following rating scale:

Rating Classes	Rating	Assessment
AAA	AAA	Highest level of creditworthiness, lowest default risk
AA	AA+ AA AA-	Very high level of creditworthiness, very low default risk
A	A+ A A-	High level of creditworthiness, low default risk
BBB	BBB+ BBB BBB-	Highly satisfactory level of creditworthiness, low to medium default risk
BB	BB+ BB BB-	Satisfactory level of creditworthiness, medium default risk
B	B+ B B-	Moderate level of creditworthiness, increased default risk
C	CCC CC C	Low level of creditworthiness, high or very high default risk
SD	SD	Insufficient level of creditworthiness, selective default of a considerable proportion of the company's payment obligations
D	D	Insufficient level of creditworthiness, default, insolvency
NR	NR	Rating suspended, expired, temporarily suspended due to insufficient information, company has ceased to exist (merged, liquidated).

The assigned rating reflects the probability of default of the rated entity over the term of the instrument. Where applicable, a rating outlook is also assigned — "positive," "stable," or "negative" — indicating the potential trend of the rating over a 12-month horizon.

A rating may be supplemented with a "Watch" status if it is under heightened observation. This designation replaces the rating outlook and signals a potential change in the rating — positive ("Watch POS"), negative ("Watch NEW"), or uncertain ("Watch UNW") — typically within six months.

In some cases, the rating may be flagged as "preliminary" if final documents or information are still pending at the time of issuance but are expected shortly. In such cases, the "preliminary" status overrides all other outlooks or designations. The rating is issued with reservation, and any material deviations in the final documentation will prompt a review and possible revision of the rating outcome.

3.2 Rating Process

3.2.1 Data Collection

Project finance assessments require a complete, consistent, and verifiable data foundation. The analysis is based on project-specific information provided by the SPV, sponsor, or other involved parties. CRA generally assumes a high degree of reliability and quality in the submitted documentation. All data should be current. Incomplete, inconsistent, or unsubstantiated information may lead to risk adjustments or render the application of the methodology inapplicable.

3.2.2 Rating Interview

The rating interview is optional and serves to clarify or expand on the information provided. It is conducted with the sponsor's management or relevant representatives, and if applicable, with other involved parties. Both qualitative and quantitative aspects are addressed, and any open questions are discussed.

3.2.3 Rating Committee

The findings from the qualitative and quantitative analyses are synthesized by the analysts into a rating proposal using CRA's proprietary assessment tools. The documentation, including the proposed rating, is submitted to the Rating Committee. This committee acts as the final decision-making body, assigning or revising ratings as appropriate. Its purpose is to ensure objectivity and consistency in the content and format of all CRA ratings.

4 Rating Methodology

4.1 Construction Phase

4.1.1 Qualitative Analysis

The qualitative analysis serves as the basis for deriving the *Qualitative Risk Score* as described in section 1.3. The objective is to systematically assess the key non-quantitative risk dimensions of a project and quantify them in a structured format.

To this end, CRA identifies specific analytical dimensions for each relevant risk category — namely construction risk, counterparty risk, and refinancing risk — and assigns weightings and scores accordingly. Intermediate scores are derived for each of these categories. These are then adjusted for project-specific risk factors (e.g. interest rate risk, servicer substitutability, social or political opposition). The outcome consists of three sub-scores:

- Construction Risk Score (ConRS)

- Counterparty Risk Score (CountRS)
- Refinancing Risk Score (RefRS)

These three scores are ultimately consolidated into a single *Qualitative Risk Score*. Weighting is applied based on the relevance of each risk category in the context of the specific project under review.

4.1.1.1 Construction Risk

CRA assesses construction risk by analyzing the planning, implementation, and feasibility of the project, focusing on potential uncertainties and success factors. The objective is to identify key challenges that may endanger the timely, complete, and on-budget delivery of the project.

CRA pays particular attention to the technical, scheduling, and cost-related risk dimensions that are critical during the construction phase.

4.1.1.1.1 Technical Risk

As part of the qualitative analysis, CRA assesses the project's technical risk in terms of the maturity and reliability of the technologies and materials employed. This assessment follows a standardized framework, considering operational track records, technological maturity, and documented performance.

The core question is whether the technologies and components have been successfully deployed in comparable projects and whether there is sufficient long-term evidence of their reliability. Proven technologies are viewed as lower risk, while novel, untested, or experimental solutions increase uncertainty — especially when empirical data is limited, mixed, or absent.

CRA typically relies on reports by independent technical advisors and publicly available sources. Where essential information is lacking, CRA may either downgrade the weighting of the technical assessment or apply a more conservative judgment under heightened uncertainty.

4.1.1.1.2 Cost Risk

CRA assesses a project's cost risk on the basis of the submitted cost estimate, the contractual allocation of cost responsibilities among the project parties, and the structure and adequacy of designated contingency reserves. The objective of this analysis is to evaluate the robustness of the project's financial framework with respect to potential cost deviations during implementation.

The three analytical components — cost estimation, risk allocation, and contingency design — are consolidated into an overall assessment of cost risk, taking into account their respective relevance and weighting within the overall risk profile.

The evaluation is based on contractual documentation, in particular EPC agreements, change-order provisions, risk allocation arrangements, and relevant supplementary agreements, as well as on project plans and financial calculations. In addition, insights from comparable projects and input from independent technical advisers are incorporated into the assessment.

Cost Estimation

An integral part of the cost risk assessment is the plausibility and traceability of the cost estimate. In this context, CRA analyzes whether the estimate is based on a sound and verifiable foundation and whether all relevant cost components have been appropriately considered.

Particular emphasis is placed on the level of detail in the cost estimate, the quality and origin of the underlying data, and the extent of technical, planning, or expert substantiation. Cost estimates supported by recognized technical reports, reliable market data, or empirical evidence from comparable projects are considered more robust and meaningful than those based on simplified assumptions or non-transparent calculations. In addition, CRA compares the stated construction costs with reference values from other projects to identify potential anomalies or systematic underestimations.

Where sufficient information is not available or has not been provided, CRA applies a case-specific conservative assessment, taking into account potential valuation uncertainties.

Allocation of Cost Overruns

Another component of the cost risk assessment concerns the extent to which the project company is contractually liable for potential cost overruns. In this context, CRA analyzes the structure of the contractual provisions and determines to what degree the financial risks arising from change orders, price escalations, or unforeseen construction costs remain with the special purpose vehicle (SPV) or are absorbed by other project participants.

The assessment considers whether change orders are contractually excluded, or — if permitted — to what extent cost increases are borne by the project company. In many cases, lump-sum or fixed-price contracts are in place, which effectively transfer the risk to contractors, general contractors, or in some instances to the offtaker. In other arrangements, the project company retains a defined portion of the cost escalation risk, for example through specified tolerance thresholds (e.g. up to 10% of the contract value), resulting in partial risk exposure.

The higher the proportion of potential cost overruns borne by the project company, the greater the potential strain on the project's financial foundation — particularly for projects with limited contingency reserves. Accordingly, CRA takes into account not only the magnitude of the agreed cost-sharing arrangement but also the practical enforceability of the contractual provisions governing change orders and risk allocation.

Contingency Buffers

A central component of the cost risk assessment is the structure and adequacy of the contractually defined contingency reserves. CRA examines whether the project budget includes sufficient financial buffers to cover unforeseen additional expenditures and whether these reserves are transparently disclosed, purpose-bound, and realistically dimensioned.

For evaluation purposes, the size of the contingency reserves is assessed in relation to the project's total planned investment costs. In principle, the higher the proportion of funds allocated as reserves, the better the project is protected against cost uncertainty, price escalation, or subsequent change requests. Conversely, limited or non-transparent contingency provisions indicate an elevated risk that unforeseen expenses may adversely affect the project's financing structure, debt service capacity, or the financial stability and creditworthiness of the involved parties.

4.1.1.1.3 Schedule Risk

An important aspect in assessing schedule risk is the degree of prefabrication of construction components. CRA considers how many of the technical units or system components are manufactured off-site prior to installation and can therefore be delivered independently of site-specific conditions.

A high level of prefabrication generally contributes to a reduction in construction time, coordination effort, and weather-related delays. At the same time, technical interfaces can be planned more effectively, supply chains managed more efficiently, and construction processes accelerated. Consequently, a high degree of prefabrication also reduces the likelihood of technical complications occurring on-site.

Conversely, a low level of prefabrication increases the project's dependency on time- and weather-sensitive activities performed directly at the construction site, which may result in a higher risk of schedule delays and logistical bottlenecks. Coordination among different trades also becomes more complex under such conditions.

The assessment is based on the proportion of prefabricated components relative to the overall system. Depending on the project type and size, this information can be verified through technical specifications, execution plans, or EPC contract documentation. CRA also takes into account experience from comparable projects and insights from independent technical experts.

4.1.1.1.4 Other Construction Risks

In addition to the standardized risk categories of technical, cost and schedule, CRA also considers other project-specific uncertainties that fall outside the traditional risk dimensions but may nevertheless have a material impact on the successful completion of the project.

Where relevant, the following aspects are taken into account:

- Regulatory and environmental conditions, such as permitting requirements, environmental regulations, or obligations arising from spatial planning and sectoral development plans.
- Social or political resistance, for instance through (local) protest movements, citizen initiatives, media disputes, or political interventions.
- Project-specific influences that cannot be systematically captured within the main categories, such as site conflicts or coordination risks with adjacent infrastructure.
- Interest rate risks, insofar as these have not already been adequately addressed within the quantitative analysis or as part of the refinancing risk assessment.

The objective of this analysis is to obtain the most comprehensive picture possible of all individual risk factors that, in combination, may influence overall construction risk. Identification is based on project documentation, publicly available sources, and CRA's experience with comparable transactions.

4.1.1.2 Counterparty Risk

CRA defines counterparty risk as encompassing all risks arising from the role and performance capacity of the project's key participants — in particular, the contractor (e.g. general contractor or EPC provider) and the sponsor (i.e. the owner or ultimate economic backer of the project company). These two counterparties exert a significant influence on the overall project risk and are therefore critical to both the successful execution of the project and the structural stability of the financing arrangement.

The assessment of counterparty risk is based on publicly available information, project documentation, credit analyses, reference projects, and, where applicable, other relevant supporting materials.

4.1.1.2.1 Contractor

The contractor is primarily responsible for ensuring that the project is completed on time and in accordance with the required quality standards. Accordingly, CRA's assessment focuses on the contractor's financial stability, commitment to successful project delivery, and technical capability.

<u>Credit Quality</u>

The contractor's financial stability and credit quality are key indicators of its ability to deliver the contracted scope of work in full. CRA assesses the contractor's creditworthiness based on available financial statements, external ratings, Creditreform data, and other relevant sources of information — such as public registers or company disclosures.

The objective of this assessment is to identify the risk of financial distress or insolvency that could adversely affect project execution.

<u>Strategic Relevance of the Project</u>

The strategic relevance of a project for the contractor is assessed based on its contribution to the company's annual revenue. The higher this share, the greater — in CRA's view — the contractor's economic interest in ensuring the project's successful, timely, and quality-compliant completion. A high revenue contribution generally indicates stronger commitment and prioritization within the contractor's internal project portfolio.

The assessment is conducted along defined revenue brackets and is based on project volume as well as publicly available or contractually provided company data. In individual cases, qualitative aspects may also be taken into account — for example, when a project, despite representing a relatively small share of revenue, holds special strategic importance in terms of market entry, reputation, or follow-up business opportunities.

Delay Liability

For the assessment of delay liability, CRA analyzes the extent to which contractual provisions obligate the contractor to complete the project on schedule and what consequences are stipulated in the event of construction delays. The focus lies particularly on the existence and enforceability of liquidated damages clauses (penalties) and on the allocation of delay-related risks between the contractual parties.

Key aspects include the clarity and precision of the contractual wording, any applicable liability caps or exemptions, and the degree to which the economic and legal consequences of delays remain with the contractor. Where the risk of delay lies predominantly with the project company or where contractual provisions are weak or unenforceable, CRA considers the overall risk exposure of the SPV to be correspondingly higher.

Defect Liability

The assessment of defect liability is based on the agreed warranty periods and the scope of the contractor's liability for defects occurring during and after the construction phase. The key evaluation factors are the duration of the warranty obligation and the contractual structure of the liability provisions.

CRA examines whether a comprehensive defect liability has been contractually secured for an adequately long period — particularly with regard to the technical performance, durability, and operational safety of the constructed facilities or structures. Limited or absent defect liability increases the risk for the project company in terms of potential additional costs and technical disruptions during the operational phase.

The assessment is based on the relevant contractual documentation (e.g. EPC or general contractor agreements), any performance or warranty bonds, and other provisions related to remedial works and claims for damages.

4.1.1.2.2 *Sponsor*

The sponsor is responsible for the strategic management and capitalization of the project company. CRA's assessment includes, among other factors, the sponsor's credit quality, the degree of financial commitment (e.g. equity contribution, willingness to provide additional funding in case of project delays), and the relative size of the project in proportion to the sponsor's overall financial capacity.

<u>Credit Quality</u>

The sponsor's credit quality is a key factor in the assessment of counterparty risk. CRA examines the extent to which the sponsor — as the economic owner and financial backer of the project company — possesses sufficient financial strength to reliably fulfill its role within the project.

The evaluation focuses on the sponsor's balance sheet position, profitability, and capital structure, as well as on any available external credit ratings, Creditreform data, and information regarding group affiliation and financial support provided to other project companies. Of particular relevance is the sponsor's ability to fully and punctually meet additional funding obligations during the construction phase — such as equity injections, top-ups, or bridge financing.

<u>Strategic Interest</u>

The assessment of the project's strategic relevance to the sponsor serves to determine the extent to which the sponsor has an intrinsic interest in the project's successful realization and long-term stability. A high strategic importance increases the likelihood that the sponsor will provide support in times of stress — for example, through additional financial resources, management involvement, or political influence.

CRA evaluates whether the project constitutes a core element of the sponsor's corporate strategy or whether it plays only a peripheral role. Particular consideration is given to the project's relevance for future business development, regulatory compliance, market positioning, and potential synergies with the sponsor's existing activities.

<u>Project Size Relative to Sponsor Scale</u>

To assess the sponsor's financial resilience in the context of the project, CRA evaluates the ratio of total construction costs to the sponsor's overall annual revenue. This metric serves as an indicator of the project's relative significance and potential financial burden for the sponsor — particularly in the event of disruptions or additional capital requirements.

In general, the higher the share of project costs relative to total revenue, the greater the potential risk of financial strain or overextension on the part of the sponsor. Conversely, a lower project-to-revenue ratio indicates a stronger financial buffer and reduced vulnerability to project-specific risks.

4.1.1.2.3 *Other Counterparty Risks*

In addition to the standardized evaluation criteria — particularly those relating to the credit quality, strategic relevance, and contractual obligations of the contractor and the sponsor — CRA also considers potential other risks associated with the key project parties as part of its qualitative analysis.

These may include, for example:

- Organizational weaknesses or governance risks at the level of the contractor or sponsor (e.g. inadequate internal controls, unclear responsibilities, or conflicts of interest),
- Lack of project-specific or sector experience among key parties, which may impair implementation capability,
- Dependence on key individuals, particularly in owner-managed or highly centralized structures,
- Legal or regulatory constraints that may limit the ability of the parties to act within the project context (e.g. investment restrictions, compliance risks, or exposure to sanction-related business relationships),
- Currency or country risks**,** where key project parties are domiciled outside the project's jurisdiction or are financed in foreign currencies.

Such risks are identified based on project documentation, ownership structures, reference projects, and, where applicable, additional credit analyses. They are incorporated into the overall assessment of counterparty risk within CRA's qualitative evaluation framework.

4.1.1.3 Refinancing Risk

Refinancing risk represents the third key component of the qualitative analysis. It refers to the risk that the project company's future operational cash flows will be insufficient to fully repay the debt incurred during the construction phase. Since, as a rule, no significant revenues are generated during construction that would allow for full debt service, repayment at the end of the construction period typically depends on the successful arrangement of follow-on (refinancing) facilities. This, in turn, requires attracting potential lenders for the operational phase who are convinced that the project will generate sufficient revenues to ensure continued debt service.

If long-term financing has already been secured covering both the construction and operational phases, the issue of refinancing risk is no longer relevant.

To assess refinancing risk, CRA analyzes in particular the future debt service capacity, revenue risk, offtaker, and market-related risks. The underlying analytical premise is that refinancing becomes more likely — and less risky — the more stable and predictable the project company's future cash flows are.

The assessment is based on publicly available as well as project-specific documentation. Consideration is given in particular to offtake agreements, external credit ratings, financial statements of relevant counterparties, and macroeconomic or sector-specific analyses.

4.1.1.3.1 Debt Service Capacity of the Project Company

For the assessment of refinancing risk during the construction phase, CRA analyzes the expected debt service capacity of the project company in the subsequent operational phase. The analysis is based on the financial model provided by the sponsor, which reflects the projected cash flows generated during operations.

The focus lies on the Average Annual Debt Service Coverage Ratio (ADSCR) (see section 4.2.1.2.2) over the planned operating period. A high and stable ADSCR indicates strong debt service capability and therefore has a risk-mitigating effect on the project's future refinancing potential. Conversely, a low ADSCR increases the likelihood that refinancing may only be achievable under adverse conditions — or, in some cases, may not be achievable at all.

If no reliable information is available regarding the project company's debt service capacity during the operational phase — for example due to missing projections, incomplete model assumptions, or insufficient data quality — CRA generally limits the issuer rating to the range between C and BB+ on its rating scale.

4.1.1.3.2 Revenue Risk

To assess refinancing risk during the construction phase, CRA analyzes the revenue risk of the project company in the subsequent operational phase, as stable and predictable revenues are a key prerequisite for successful refinancing. Investors and lenders primarily focus on the reliability of future cash flows, which in turn largely depends on the risk profile of the project's revenue structure.

The assessment is based on the submitted contractual documentation, revenue forecasts, and information regarding the offtaker structure and overall market environment. The findings are incorporated into the qualitative overall assessment of refinancing risk.

<u>Term of Regulatory or Contractual Framework</u>

The term of the regulatory or contractual framework serves as an indicator of planning certainty and the refinancing potential of the project's cash flows. CRA assesses the period during which the project company can expect to generate revenues based on existing contractual arrangements or regulatory provisions.

A long remaining term of an offtake agreement or regulatory period provides stable conditions for debt service and reduces the risk that the project company's revenue situation will materially change during the loan term. Remaining terms of more than ten years — ideally extending until the end of the project's life or financing period (including an additional buffer) — are viewed particularly positively. As the remaining term shortens, uncertainty regarding the future revenue base increases, thereby heightening revenue risk.

Volume Commitments

The minimum purchase commitments stipulated by regulation or contract constitute another key component in assessing revenue security as part of the revenue risk analysis. CRA examines what proportion of the planned production volume or service output the offtaker is contractually obliged to purchase, regardless of actual utilization.

A high regulatory or contractually guaranteed purchase share — for example, through so-called take-or-pay clauses — mitigates volume risk and enhances the predictability of future cash flows. Conversely, the lower the regulatory or contractual minimum purchase requirement, the greater the risk of partial underutilization and the resulting loss of revenue.

Price Mechanisms

The applicable regulatory framework or the contractual pricing structure within an offtake agreement (e.g. Power Purchase Agreement, PPA) also plays an important role in ensuring the predictability and stability of project-generated cash flows. In this context, CRA evaluates both the type of price mechanism (fixed or variable) and the extent of indexation to inflation-relevant indices.

A fixed price structure with full indexation to inflation provides a high degree of revenue stability and protects the project company against rising costs over the term of the agreement. Partially indexed or hybrid pricing models may introduce planning uncertainty depending on their specific composition.

By contrast, predominantly variable pricing components — particularly those without inflation protection — increase the risk of revenue volatility and complicate the projection of long-term cash flows. This, in turn, may negatively affect the project's refinancing potential and overall risk profile.

4.1.1.3.3 Offtaker

The offtaker in a project finance structure is the contractually bound purchaser of the goods or services generated by the project company— for example, electricity, heat, water, or toll services. Offtakers play a central role in determining a project's economic viability, as they generate the project company's future revenues, typically under long-term offtake agreements.

As part of its qualitative analysis, CRA assesses both the credit quality of the offtakers and the structure of their respective revenue shares. In principle, the higher the creditworthiness of the offtakers, the lower the need for broad diversification. Conversely, as credit quality declines, the distribution of revenues across multiple, independent offtakers becomes increasingly important to mitigate concentration risk and to strengthen the project company's resilience against individual counterparty defaults.

Infobox 1: Identifying the Relevant Offtaker

Illustrative Example: Identifying the Relevant Offtaker

The relevant offtaker is a central factor in determining the structure, quality, and stability of project-related revenues and is therefore crucial to the assessment of offtaker risk. The following example illustrates two typical constellations in the context of a motorway operation:

Case 1: Availability-Based Model with Public Offtaker

In this model, the project company receives a regular, contractually guaranteed availability payment from a public contracting authority — for example, the state or a national infrastructure agency. The payment is not linked to traffic volumes but is tied to the operational readiness and defined quality parameters of the motorway. In this case, the public authority acts as the sole offtaker.

Case 2: Concession-Model with User-Financing

Under a toll road concession, the project company is granted the right to operate a motorway and to independently (and possibly under regulatory supervision) collect user fees. In this structure, revenues are generated directly from toll payments made by road users — meaning that all users of the motorway effectively constitute the offtakers.

Credit Quality

The credit quality of the offtakers is a key factor in assessing refinancing risk, as the project's cash flows depend directly on the offtakers' ability and willingness to meet their payment obligations. CRA analyzes whether the offtakers possess sufficient financial stability to honor the contractual payment commitments over the entire term of the offtake agreement.

The stronger the financial position of the offtakers, the more stable the foundation for a potential refinancing of the project.

Diversification and Granularity

In assessing refinancing risk, the concentration of revenues among individual offtakers also plays an important role. The key question is what proportion of the project company's total revenues is generated by the largest offtaker and how diversified or granular the overall offtaker structure is.

A high revenue share attributable to a single offtaker can create dependency on that party's financial strength and contractual performance. In such cases, the risk increases that a default or breach of contract could have significant adverse effects on the project company's ability to meet its payment obligations. Conversely, a broadly diversified offtaker base with balanced revenue distribution enhances resilience to individual counterparty disruptions.

As the credit quality of the offtaker(s) improves, the relevance of diversification and granularity correspondingly diminishes.

4.1.1.3.4 Market Risks

Under the heading Market Risks, CRA analyzes the exogenous factors that may affect the project's achievable revenues — particularly in the context of potential refinancing. Two key influencing factors in this regard are the cyclical sensitivity of the project and the expected economic growth dynamics within the relevant market segment.

In principle, the less a project is exposed to cyclical fluctuations, the lower the relevance of general economic growth forecasts for risk assessment. Conversely, for cyclical projects, a stronger dependence on overall economic development and demand dynamics must be taken into account.

Cyclical Exposure

Cyclical exposure describes the extent to which demand for the produced output or provided service is susceptible to fluctuations caused by general or sector-specific economic cycles. Projects with stable, largely cycle-independent demand — for example, those in basic utilities or regulated infrastructure — are considered more resilient in this respect.

A project is deemed cycle-independent if demand is secured through regulatory structures, long-term contractual arrangements, or the provision of essential services. However, the more a project operates within volatile, cyclical, or highly competitive markets, the greater its exposure to cyclical risk is assessed to be.

Macroeconomic Growth Outlook

For projects with relevant cyclical exposure, the assessment of expected economic growth is incorporated into the evaluation of market risk. The development of gross domestic product (GDP) serves as a macroeconomic indicator for overall demand and investment dynamics within the project's relevant market environment.

A positive GDP outlook generally signals a favorable environment for sales markets, price development, and investment activity — particularly for projects exposed to market-based pricing or lacking secured offtake agreements. Conversely, negative growth expectations may indicate potential declines in demand, reduced investment appetite, or deteriorating financing conditions, all of which could adversely affect the project's refinancing capacity.

4.1.1.3.5 Other Refinancing Risks

In addition to the standard contractual and market-related factors — such as debt service capacity, revenue risk, offtakers, and market risks — CRA also considers other project-specific risks that could complicate or hinder future refinancing.

These may include, for example:

- Complexity of the existing financing structure, which may restrict or impede refinancing either operationally or contractually (e.g. limited covenant flexibility or cross-default clauses).
- Unclear exit strategies of current lenders.
- Dependence on individual refinancing sources, such as government programs or temporary market windows.
- Lack of transparency or inconsistencies in financial assumptions, which may cast doubt on the project's ability to secure future funding.

These risks are identified through a structured case-by-case assessment involving legal, financial, and market-related documentation. They may constitute an independent risk dimension with a material influence on the qualitative assessment of the project company's refinancing capacity.

CRA does not conduct legal or tax due diligence as part of its rating process. Any related assessments are based on available expert opinions, external reports, or other advisory input, where such information has been provided voluntarily.

4.1.1.4 Other Project Risks

In addition to the main analytical areas of the qualitative assessment, CRA also takes into account other project-related risks that may be relevant for the evaluation of the construction phase. These risks cannot always be clearly assigned to one of the primary categories but may nonetheless influence the overall assessment of the project company's economic stability.

The focus is on selected aspects such as potential foreign exchange risks, structural or operational liquidity uncertainties, and other project-specific characteristics. Such risks may arise from the individual circumstances of the project and are often only assessable on a case-by-case basis.

4.1.1.4.1 Foreign Exchange Risks

Foreign exchange risks during the construction phase typically arise when components of the financing structure, project costs, or other payment obligations are denominated in different currencies. This situation often occurs in cross-border projects, where part of the debt financing is raised in a foreign currency — for instance, to attract international investors — while the project budget and/or future cash inflows are denominated in another currency.

Such constellations create the risk of a currency mismatch between sources and uses of funds. This is particularly critical when exposures involve volatile or structurally depreciating currencies, as exchange rate fluctuations during the construction period may lead to budget deviations and impair the project company's future debt service capacity as early as in the initial operational phase.

In this context, CRA evaluates both the extent of foreign currency exposure and the existence and adequacy of hedging arrangements. These may include contractual currency clauses, natural hedges through currency matching cash flows, or the use of derivatives such as forwards or swaps. In the absence of appropriate hedging, CRA conducts an analysis of the open currency position and its potential impact on construction costs as well as on the project company's future debt service capacity.

4.1.1.4.2 Liquidity

As part of the qualitative analysis, CRA assesses potential liquidity risks at the level of the project company, particularly those that may arise during the construction or early operational phase. These relate to the short- to medium-term ability of the project company to meet its payment obligations on time.

Relevant aspects include:

- the availability and adequacy of liquidity reserves (e.g. working capital facilities, equity buffers, etc.),
- delays in drawdowns or fund disbursements, for instance due to contractual milestones, approval procedures, or uncertainties regarding third-party funding,
- underestimation of interim financing needs, especially in projects with extended construction periods, and
- dependence on external financiers during critical stages of project execution.

Liquidity risks may also be triggered by unforeseen events (e.g. change orders, damage incidents, or delayed payments by offtakers) and therefore represent a central element of ongoing risk management. The assessment is based on the project budget, available liquidity reserves, liquidity forecasts, financing agreements, and any provisions concerning security arrangements or reserve accounts.

If material liquidity risks are identified, these have a direct and negative impact on the derived Stand-Alone Score.

4.1.1.4.3 Project-Specific Factors

In addition to the standardized risk dimensions, CRA also considers other project-specific factors within the qualitative analysis that may not be systematically captured by the existing evaluation categories. Such particularities may arise, for example, from the individual project structure, its regulatory or political context, or interdependencies with third parties.

These may include project-specific contractual arrangements with elevated interpretation or enforcement risk, unusual financing structures, special permitting requirements, or dependencies on individual project participants that are not typically present in comparable projects. External factors such as potential social or political opposition, legal ambiguities, or infrastructural dependencies may also fall under this category.

CRA examines whether such specific features, by their design or potential impact, may materially influence the project company's overall risk profile. Where appropriate, a corresponding adjustment is made in the qualitative assessment.

4.1.1.5 Environmental, Social and Governance (ESG)

CRA assesses potential ESG risks (Environmental, Social, Governance) where these are deemed relevant to the project's credit quality. Only those ESG factors are considered that have the potential to exert a lasting impact on the project company's economic viability, debt service capacity, or operational environment.

Environmental risks may include, for example, environmentally sensitive project locations, elevated emission levels, or contamination issues. Social risks are taken into account where there is evidence of limited public acceptance, disruption of local communities, or potential violations of labor or human rights. The analysis is complemented by potential governance risks, such as non-transparent ownership structures, weak compliance frameworks, or insufficient internal controls.

ESG risks are incorporated into the analysis only if they are tangibly capable of impairing the project's economic or structural credit profile. In such cases, the identified ESG factors are reflected as adjustments in the determination of the Stand-Alone Score and explicitly referenced in the rating report.

4.1.2 Quantitative Analysis

The quantitative analysis represents the second key component in determining the stand-alone score of the project company. Within this section, CRA evaluates the current project status using three quantitative indicators that serve as numerical measures to support the qualitative risk assessment.

The indicators considered are:

- Project Leverage Ratio (PLR)
- Project Time Lag (PTL)

- Cost Performance Index (CPI)

These three metrics reflect the project's financial, temporal, and operational discipline and provide objective indications of potential deviations, risks, or areas requiring corrective action. They complement the qualitative assessment by adding a reliable, data-based perspective on project performance.

4.1.2.1 Project Leverage Ratio

The Project Leverage Ratio (PLR) is used to quantitatively assess the project's level of debt financing. CRA calculates the leverage ratio as the proportion of debt to total planned investment costs.

A low level of leverage is generally viewed positively, as it indicates a solid equity base, greater financial resilience and flexibility, and a lower risk for lenders. An increase in leverage during the course of the project, for example due to additional debt financing resulting from cost overruns, is therefore assessed negatively. Conversely, a reduction in leverage, such as through subsequent equity injections by the sponsor, is typically viewed as neutral from a risk perspective. A positive assessment of additional equity contributions is generally only made if the funds are explicitly used to replace existing debt rather than to finance potential cost increases.

4.1.2.2 Project Time Lag

The Project Time Lag (PTL) measures the project's deviation from the original construction schedule and serves as a standardized metric for assessing delays during project execution. The objective is to enable a consistent evaluation of schedule risk.

To calculate the PTL, CRA compares the actual completion percentage at the assessment date with the planned completion percentage according to the original schedule established at financial close. The resulting time delay, expressed in months, is then set in relation to the originally planned total construction period, also in months.

A project that remains on schedule is considered to have a low level of risk. As deviations increase, so does the risk, particularly with regard to potential cost overruns, contractual penalties, and downstream effects during operations.

4.1.2.3 Cost Performance Index

The Cost Performance Index (CPI) is used to quantitatively assess cost discipline throughout the course of the project. The indicator measures the extent to which actual project costs (ACT) deviate from the originally planned investment costs (PLAN), taking into account the degree of completion at the assessment date.

The calculation is carried out in two steps, beginning with the harmonization of actual costs relative to the planned project progress:

Step 1:

Harmonized Actual Costs = Actual Costs / Actual Completion × Planned Completion

Step 2:

CPI = Harmonized Actual Costs / Planned Costs

A CPI of ≤ 1.01 indicates high cost efficiency and is viewed positively, as spending remains within the projected budget. A CPI > 1.01 suggests cost overruns, which may signal deficiencies in cost control, structural project risks, or unrealistic initial estimates — and is therefore assessed negatively.

Infobox 2: Calculation of the Cost Performance Index (CPI)

Illustrative Example: Calculation of the Cost Performance Index (CPI)

The following simplified example illustrates how the CPI is determined in practice:

PLAN			ACTUAL		
Period	Cumulative Costs	Completion	Period	Cumulative Costs	Completion
1	100	30,6%	1	120	28,9%
2	120	35,1%	2	140	33,4%
3	150	37,7%	3	180	36,0%
4	180	40,0%	4	220	40,5%
5	200	41,9%	5	255	43,2%
6	230	43,6%	6	280	44,4%

At period 5, the project shows cumulative actual costs of EUR 255 million and an actual completion level of 43.2%. According to the financial model, the planned completion level at this point is 41.9%, with total planned costs of EUR 200 million.

Since CRA always calculates the CPI based on comparable levels of progress, the actual costs are first harmonized as follows:

Harmonized Actual Costs (based on planned completion of 41.9%) = 255 / 43.2% × 41.9% = 247.3

The Cost Performance Index is then calculated as:

CPI = 247.3 / 200 = 1.24

A CPI greater than 1 in this example indicates a negative deviation from the budget, which in the context of project evaluation may be interpreted as a sign of insufficient cost control.

4.2 Operational Phase

4.2.1 Quantitative Analysis

The analysis of the operational phase begins with the quantitative assessment. This quantitative analysis is based on the calculation of selected financial ratios that provide insight into the project's economic viability and stability during ongoing operations. The analysis is based on the financial model provided by the sponsor, from which CRA derives its own risk-adjusted base case scenario.

4.2.1.1 Derivation of the CRA Base Case Scenario

To develop the CRA base case scenario, CRA first analyzes the key operational risk dimensions of the project company, focusing in particular on revenue risk, operating cost risk, and maintenance cost risk.

Based on the findings of this analysis, the corresponding parameters in the sponsor's financial model are cumulatively adjusted to reflect a risk-adjusted scenario. This adjusted scenario then serves as the basis for calculating the financial ratios used in the quantitative assessment of the operational phase.

4.2.1.1.1 Revenue Risk

For the assessment of revenue risk as part of the derivation of the CRA base case scenario, CRA analyzes the stability and reliability of the projected revenues generated from operations. The analysis focuses on three key risk dimensions: price risk, volume risk, and the risk profile of the offtaker(s).

Depending on the evaluation of these risk factors, a deduction is applied to the expected revenues in the financial model. This revenue stress reflects a conservative income profile within the CRA base case scenario. The size of the deduction varies and typically ranges between -1% and -20% relative to the original model assumptions.

4.2.1.1.1.1 Price Risk

To assess price risk as a component of revenue risk, CRA evaluates the extent to which the project company's sales prices are subject to potential fluctuations and the degree to which they are protected by contractual or regulatory mechanisms.

CRA distinguishes between different risk profiles depending on how prices are determined — for example, whether they are set by statutory remuneration schemes, long-term contracts, or market-based mechanisms. Fixed feed-in tariffs or availability payments typically entail very low price risk. In contrast, market-based revenues or economically sensitive services may be exposed to significant volatility, thereby representing a higher level of risk.

4.2.1.1.1.2 *Volume Risk*

In assessing the project company's volume risk, CRA focuses on the extent to which the actually achievable sales volumes may deviate from the assumptions in the financial model, for example due to technical, market-related, or usage-dependent factors.

The evaluation is carried out along a spectrum ranging from stable to highly volatile demand structures. Projects with guaranteed offtake volumes — such as those under availability-based models — typically exhibit low volume risk. In contrast, usage-dependent or market-driven business models, such as services subject to cyclical demand fluctuations, are generally associated with significantly higher volatility.

4.2.1.1.1.3 *Offtaker Risk*

Offtaker risk refers to the uncertainty surrounding the actual realization of projected revenues due to potential payment defaults or delays by the offtakers of the goods or services provided by the project company. CRA analyzes the extent to which the payment claims arising from existing supply or service contracts can be considered reliable, stable, and supported by the credit quality of the counterparties.

Two key aspects are taken into account when assessing offtaker risk: the credit quality of the offtakers and the diversification of the offtaker structure. These two dimensions are evaluated separately, as their relevance can vary and influence each other depending on the specific circumstances.

<u>Credit Quality</u>

The credit quality of the offtaker(s) provides insight into the ability and willingness of purchasers to meet their contractual payment obligations in full and on an ongoing basis. For this purpose, CRA analyzes financial statements, external ratings, market positions, and other indicators of economic stability.

Where credit quality is high — for example, in the case of public-sector entities or companies with an investment-grade rating — the risk of payment default is considered low. In such cases, a concentrated offtaker structure may still be acceptable.

Conversely, where reliable information is lacking or there are doubts regarding the offtaker's financial capacity, the risk of payment disruption increases. As a result, the diversification of the offtaker structure becomes more relevant in the assessment of offtaker risk.

<u>Diversification and Granularity</u>

The analysis of the diversification and granularity of the offtaker structure serves to assess potential concentration risks within the project company's revenue base. A high revenue share generated by one or a few offtakers entails the risk of excessive dependence, particularly where credit quality is weak.

CRA applies a risk-adjusted assessment approach:

- The stronger the credit quality of the offtakers, the less critical a concentrated offtaker structure is considered to be.
- The weaker the credit quality, the greater the need for a broadly diversified and granular offtaker base to mitigate risks and limit potential revenue losses.

If neither adequate credit quality nor sufficient diversification or granularity is present, the project company is exposed to a correspondingly high level of offtaker risk.

4.2.1.1.2 Operating Cost Risk

Operating cost risk refers to the uncertainty regarding the level, development, and controllability of operating expenses during a project's operational phase. It represents a central component of the quantitative analysis, as unforeseen or structurally underestimated operating costs can have a lasting negative impact on the project company's debt service capacity.

CRA assesses operating cost risk across several complementary dimensions. First, the stability of the historical operating margin is analyzed. Second, the plausibility of the projected future operating costs is reviewed, particularly with respect to market levels, indexation mechanisms, and contractual commitments. In addition, the quality of the operator is incorporated into the assessment.

The results of these individual analyses are reflected in the CRA base case scenario through a risk-adjusted cost stress. Depending on the project's risk profile, this leads to an upward adjustment of the assumed operating costs and directly affects the project's financial resilience. The magnitude of this stress typically ranges between +1% and +20% relative to the original model assumptions.

4.2.1.1.2.1 Historical Operating Margin

In the first step of the operating cost risk analysis, CRA evaluates the historical development of operating costs, with particular attention to the stability of the historical EBIT margin. This metric serves as a key indicator of how efficiently the project company has been managed in the past and provides a basis for deriving assumptions about future performance.

The analysis focuses on determining the extent to which margin fluctuations can be attributed to external factors (e.g. price developments, capacity utilization) or to structural inefficiencies. A stable EBIT margin over several years indicates a controlled revenue and cost environment as well as reliable operational processes. In contrast, high volatility or significant deviations over time may point to operational weaknesses, insufficient management control, or low forecasting accuracy.

The assessment is based on the available historical actual data, such as financial statements, management reports, or regularly updated financial models, and serves as a plausibility check for future cost projections.

4.2.1.1.2.2 *Plausibility of Cost Estimations*

Another key factor in assessing operating cost risk is the quality and traceability of the operating cost assumptions applied in the financial model. CRA examines the extent to which the cost estimates are based on reliable foundations and how realistic the projected expenditures appear when compared to market levels, empirical benchmarks, and project-specific conditions.

Both the degree of detail and the derivation of the assumptions are taken into account. A well-founded cost estimate is typically supported by technical studies, benchmarks from comparable projects, and conservative calculation parameters. Conversely, if the estimate shows gaps, relies on insufficient data (for example, due to missing expert assessments), or appears unusually low compared to market standards, this indicates an increased risk of potential misjudgment.

To validate the assumptions, CRA also uses quantitative references, such as percentile comparisons of the operating cost budget against similar transactions.

4.2.1.1.2.3 *Quality of the Operations Service Provider*

The quality of the operator is also an integral part of the assessment of operating cost risk. It significantly determines whether the project company is capable of ensuring efficient, reliable, and uninterrupted operations in line with planning expectations. CRA considers in particular two key dimensions: the operator's operational experience and its financial strength (credit quality).

An experienced and financially stable operator can draw on established processes, well-functioning structures, and reliable risk management practices, all of which contribute to greater cost stability and predictability in operations. Weaknesses in these areas — such as limited market presence or experience, operational deficiencies, or financial uncertainty — by contrast, increase the risk of unforeseen cost developments and operational disruptions.

<u>Experience</u>

To assess operational experience, CRA analyzes the extent to which the operator has successfully managed comparable projects in the past and the level of technical, personnel, and organizational expertise it possesses. Evaluation criteria include, among others, the number and size of facilities operated, the duration of operational activity within the relevant sector, and documented performance indicators from previous projects (e.g. availability rates, failure rates, cost deviations).

A long-standing and demonstrably stable operating history with high technical reliability has a risk-mitigating effect. Conversely, a limited experience profile or evidence of poor past performance indicates an elevated level of operating cost risk.

Credit Quality

The financial stability of the operator is crucial to maintaining operations even under stress conditions. For this purpose, CRA analyzes available financial indicators or external credit assessments (e.g. ratings). A solid capital base and sufficient financial flexibility enable the operator to absorb unexpected cost increases and effectively manage operational challenges.

Conversely, a lack of financial substance or the presence of significant uncertainties regarding future solvency increases the risk of performance deficiencies, delays, or unstable operational management. In such cases, CRA derives an elevated risk assessment.

4.2.1.1.3 Maintenance Cost Risk

Maintenance risk encompasses the uncertainty regarding the scope, timing, and cost of all activities required to maintain the project's technical operability. Inadequate or delayed maintenance can lead to long-term performance losses, outages, or increased operating costs; therefore, the planning, execution, and financing of maintenance measures are of critical importance for the stability of cash flows.

4.2.1.1.3.1 Maintenance Program

CRA assesses the extent to which the maintenance measures (Capex) provided for in the financial model are classified as either necessary or optional. This distinction is essential, as it directly affects the project company's flexibility in the use of funds—particularly during periods of financial stress or in the event of unexpected cash flow pressures.

Necessary maintenance measures are indispensable for ensuring the proper operation of the project company. They must be carried out regardless of the economic situation, as postponement could lead to contractual breaches, safety risks, or operational interruptions in the short to medium term. Consequently, such measures represent binding obligations that burden operational cash flow and reduce liquidity buffers in stress scenarios.

Optional measures, by contrast, are typically aimed at improving efficiency, modernization, or other operational optimizations that are not immediately required to maintain functionality. These measures are more investment in nature and can generally be deferred or reduced if needed, thereby providing the project company with greater flexibility in financially challenging periods. A high proportion of optional Capex items in the maintenance plan therefore increases short- to medium-term cash flow flexibility and has a risk-mitigating effect.

For this assessment, CRA relies, among other sources, on management information regarding the classification of planned measures. In projects where more than two-thirds of the maintenance activities are classified as optional, CRA assumes a significant degree of adjustment flexibility. Conversely, a high proportion of necessary measures indicates limited cash flow flexibility.

4.2.1.1.3.2 *Plausibility of Cost Estimations*

The adequacy and transparency of future maintenance cost planning constitute another component of maintenance cost risk. The focus lies on the foundations on which the cost estimates in the financial model are based and the extent to which these can be considered reliable.

Risk is deemed low particularly when the Capex estimates are supported by detailed technical assessments, proven benchmarks from comparable projects, and conservative assumptions. CRA also uses quantitative indicators for plausibility checks, such as percentile comparisons of the maintenance budget in the context of similar transactions.

If the level of detail decreases or the calculation relies on less reliable sources—for example, general market approaches or data from only partially comparable projects—uncertainty regarding actual expenditure developments increases. Unclear or weak assumptions heighten the risk of misjudgment, especially when the assumed maintenance budget lies in the lower percentile range.

4.2.1.1.3.3 *Quality of the Maintenance Service Provider*

The quality of the maintenance service provider has a decisive impact on whether the planned measures can be implemented efficiently and reliably, particularly over longer operating periods.

CRA assesses the quality of the service provider from two complementary perspectives: operational experience and financial strength (credit quality). While operational experience indicates whether the provider possesses the necessary expertise and organizational capacity to perform comparable tasks, credit quality reflects the extent to which the provider is capable of maintaining consistent performance even under unexpected stress conditions.

Both aspects influence the reliability of maintenance services and, consequently, the predictability of related cash flows. Weaknesses in either or both dimensions may lead to budget deviations, operational delays, or additional costs, thereby increasing the overall cost risk.

<u>Experience</u>

The practical experience of the maintenance service provider with comparable projects is a key criterion for assessing its operational competence and its ability to deliver in line with expectations. CRA evaluates in particular how long the provider has been responsible for projects of similar type and scale and to what extent it has developed relevant expertise in specific sectors.

Extensive experience — for example, over 15 or even 20 years — is regarded as a strong indicator of well-established procedures, robust operational processes, and proven responsiveness in the event of disruptions. These factors have a stabilizing effect and help minimize the risk of unforeseen additional costs or performance delays.

By contrast, limited or less sector-specific experience increases the likelihood that the teams or structures in place may not be fully prepared for the project's specific requirements. This can manifest in inefficient workflows, a higher susceptibility to errors, or inaccurate cost estimates, all of which can negatively affect the predictability of cash flows.

Credit Quality

The financial strength of the maintenance service provider is critical to ensuring the reliable execution of planned measures throughout the entire operational period. In this context, CRA assesses whether the provider possesses sufficient credit quality or a strong corporate backing to remain operationally capable even under temporary stress conditions, such as cost increases or supply chain disruptions.

Good credit quality is assumed where meaningful (audited) financial statements or external credit assessments (e.g. ratings) indicate solid financial capacity. This reduces the risk that agreed maintenance services may need to be curtailed, delayed, or suspended in times of financial strain.

Conversely, limited or unclear credit quality may jeopardize the provider's operational reliability. This is particularly relevant for smaller or highly specialized providers without significant reserves, where the risk increases that performance shortfalls, uncovered warranty claims, or even insolvency events could delay or increase the cost of maintenance activities.

4.2.1.1.4 Data Quality

The quality of the data provided constitutes another key foundation for validating the project assumptions within the financial model. CRA assesses the completeness, consistency, and traceability of the information supplied regarding revenue, operating, and maintenance parameters, as well as the extent to which this information allows for reliable conclusions about the project company's future economic performance.

High data quality is considered to exist when the assumptions are based on meaningful historical data series, robust expert reports, or transparent benchmarks. In contrast, missing documentation, inconsistent model logic, or unclear valuation approaches reduce the reliability of the projected results.

In cases where a limited data basis is evident, CRA explicitly takes this uncertainty into account within the quantitative analysis. Depending on the type and extent of the data limitations, additional conservative adjustments are applied to projected revenues, expected operating costs, and/or the maintenance budget. These adjustments are incorporated into the CRA base case scenario as deduction-based risk offsets to adequately reflect the increased informational and valuation uncertainties.

The assessment of data quality therefore acts as a cross-sectional amplification factor and can materially influence the risk evaluation of individual indicator areas—particularly when assumptions are heavily model-driven and independent validation sources are lacking.

4.2.1.2 *Financial Ratios*

CRA assesses the project company's debt service capacity during the operational phase using several financial ratios derived from the CRA base case scenario. This scenario incorporates the previously analyzed adjustments related to revenue, operating, and maintenance risks.

To evaluate the project company's capacity to serve its liabilities, CRA analyzes three key ratios:

1. <u>Average Annual Debt Service Coverage Ratio (Avg. ADSCR)</u>: measures the average annual coverage of debt service by operating cash flow.
2. <u>Minimum Annual Debt Service Coverage Ratio (Min. ADSCR)</u>: identifies the weakest year within the observation period in terms of debt service coverage.
3. <u>Project Lifetime Coverage Ratio (PLCR)</u>: reflects the ratio of available project cash flows to the project company's outstanding total debt.

These three indicators are then consolidated into a Stand-Alone Score. The weighting of the individual ratios depends on the previously determined project risk profile: in higher-risk projects, more conservative indicators such as the Min. ADSCR are assigned greater weight relative to the Avg. ADSCR, whereas in more stable project structures, the Avg. ADSCR carries greater importance. The typical weighting of each ratio as a function of project risk is presented in Appendix III.

An alternative weighting may be applied in cases of non-amortizing financing structures to account for specific risk factors such as refinancing risks or project extension risks (e.g. the expiration of a concession).

The resulting Stand-Alone Score is subsequently used in the derivation of the Stand-Alone Rating for the operational phase and thus represents one of the central components in CRA's overall rating outcome.

4.2.1.2.1 *Project Risk*

CRA differentiates project risk into four categories, which are determined by the structure and security of the project's revenue streams. The first distinction is made between contracted and non-contracted revenues. Within these two categories, a further differentiation is applied based on the credit quality of the offtakers and the presence or absence of price and volume risks.

Depending on the resulting project risk level, different ratio requirements and evaluation thresholds apply, as defined in Appendix IV. This risk-adjusted classification ensures that the interpretation of the financial ratios is conducted in the context of the underlying revenue structure.

4.2.1.2.2 *Average Annual Debt Service Coverage Ratio*

The Average Annual Debt Service Coverage Ratio (Avg. ADSCR) is a key indicator for assessing a project's average debt service capacity over the entire financing period. It represents the ratio between the annual cash flow available for debt service (Cash Available for Debt Service – CAFDS) and the corresponding annual debt service obligations (interest and principal), calculated on an arithmetic average basis. The calculation of CAFDS and debt service is defined in Appendix V.

This ratio not only provides a quantitative measure of the project's earning power but also serves as an initial indicator of the structural buffer available to meet debt obligations over time. A high average ADSCR indicates a solid earnings base from which debt commitments can reliably be serviced under normal operating conditions. Conversely, a low value signals that the project has limited reserves to absorb unforeseen developments or financial stress.

Since the Avg. ADSCR does not capture extreme values but rather reflects an average-oriented perspective, it is always interpreted in conjunction with the Min. ADSCR and the PLCR within CRA's rating approach. Depending on the project's previously determined risk level, the relative importance of this indicator may vary: for stable, low-risk projects, it carries greater weight in the cash flow assessment, while for projects with higher risk profiles, the more conservative Min. ADSCR is given increased consideration.

The mapping of the Avg. ADSCR to specific rating categories, depending on the project's risk classification, is presented in Appendix IV.

4.2.1.2.3 Minimum Annual Debt Service Coverage Ratio

The Minimum Annual Debt Service Coverage Ratio (Min. ADSCR) is a financial metric used to assess the lowest level of debt service coverage within the analyzed period. It identifies the year in which the weakest relationship between available cash flows (CAFDS) and debt service obligations (interest and principal) occurs, thereby providing key insight into the project's potentially most vulnerable year during the financing term.

In contrast to the Avg. ADSCR, which represents an average measure, the Min. ADSCR specifically focuses on the point in time when the project faces the highest risk in terms of debt service capacity. It thus functions as an early indicator of liquidity planning risks and is particularly relevant in phases characterized by volatile cash flows, ramp-up periods, or elevated operating costs.

The Min. ADSCR is calculated based on the stressed CRA base case scenario and follows the methodological definition outlined in Appendix V. For the evaluation and interpretation of the resulting values, CRA applies the threshold levels specified in Appendix IV, which allow for a risk-differentiated consideration within the Stand-Alone Score.

Within the derivation of the Stand-Alone Score, the Min. ADSCR carries particular weight whenever a pronounced asymmetry or temporary weakness in debt service capacity is evident over the course of the project. This is especially the case for projects with elevated risk profiles. This approach ensures that periods of high risk in individual years are not offset by strong performance in other years when determining the rating outcome.

4.2.1.2.4 Project Lifetime Coverage Ratio

The Project Lifetime Coverage Ratio (PLCR) is a structure-oriented metric used to assess a project's long-term debt sustainability. It represents the ratio of the present value of all remaining available operating cash flows over the project's remaining lifetime to the outstanding financial liabilities. The PLCR therefore provides an indication of the extent to which future project-generated funds—regardless of their timing—are, in principle, sufficient to repay the project's debt.

In contrast to the ADSCR metrics, which are calculated on an annualized basis, the PLCR considers the total available cash flows (CAFDS) until the end of the project cycle. Future cash flows are discounted to the assessment date using the project company's weighted average cost of debt (WACD) as the discount rate. This approach ensures that the metric remains consistent with the project's financing structure.

4.2.2 Qualitative Analysis

The qualitative analysis during the operational phase complements the previously conducted quantitative assessment and builds directly on its results. Its purpose is to identify those risk factors that, in CRA's view, cannot be fully or adequately captured through financial ratios alone. The focus is generally on identifying additional risks that may warrant a downward adjustment of the quantitative outcome.

Depending on the extent and materiality of the identified qualitative risks, CRA may adjust the result of the quantitative analysis downward by up to 19 notches—covering the entire rating scale. The standardized assessment examines specific areas in detail to obtain a comprehensive understanding of all risk-relevant factors during the operational phase.

4.2.2.1 Sponsor

An element of the qualitative analysis during the operational phase is the assessment of the sponsor. Building on the quantitative evaluation, CRA analyzes potential risks arising from the sponsor's role and characteristics. The primary focus is on the extent to which the sponsor is both capable and willing to support the project in the event of financial or operational difficulties.

The assessment is carried out along several dimensions. First, CRA evaluates the sponsor's financial stability, based on audited financial statements or external credit ratings. Second, the strategic importance of the project within the sponsor's overall corporate structure is analyzed. Projects with high strategic relevance are generally considered better protected, as sponsor support in times of stress appears more likely.

CRA also considers the project's relative economic significance to the sponsor. If the project represents only a small portion of the sponsor's total revenue, project-related risks can typically be absorbed more easily at the corporate level. Conversely, a high revenue share from the project may indicate stronger dependency and a potential risk of financial strain for the sponsor should the project encounter difficulties.

The conclusions derived from this assessment are incorporated as an independent factor into the qualitative risk evaluation and may—particularly in combination with other risk drivers—have a significant impact on the stand-alone rating.

4.2.2.2 Market Risks

In assessing the macroeconomic environment, CRA considers both the cyclical sensitivity of the project and the overall economic growth outlook.

The key question is the extent to which the project's economic performance may be affected by cyclical fluctuations. Projects with stable, regulated, or contractually secured revenue streams are generally considered non-cyclical and less vulnerable to macroeconomic developments. Conversely, projects driven by market-based demand may exhibit higher sensitivity to economic cycles.

The relevance of the macroeconomic environment increases with the project's degree of cyclical dependence. Where demand is largely independent of economic conditions, macroeconomic indicators such as GDP growth play only a minor role. However, if there is a strong linkage to economic cycles, a weak or negative growth environment may act as an additional risk driver. Assessments in this area may therefore lead to qualitative adjustments within the rating process, particularly where heightened economic volatility could adversely affect the project's future performance.

4.2.2.3 Regulation

Regulatory frameworks can have a significant impact on the stability and predictability of project revenues and operating costs. CRA therefore considers, as part of its qualitative analysis, whether the project operates within a clearly defined and reliable regulatory environment or whether material uncertainties, intervention risks, or forthcoming changes are to be expected.

Regulation is particularly relevant for projects involving public participation, public-law contracts, or tariff-based revenue structures. In such cases, a stable legal foundation can substantially reduce risk — for example, in the context of regulated network tariffs, feed-in remuneration schemes, or concession models. Conversely, political interventions, ongoing legislative processes, or unclear institutional responsibilities may destabilize the project environment.

In this context, CRA examines, among other aspects, the legal structure of existing contracts, the historical record of regulatory changes, and the institutional reliability of the responsible authorities.

Pending court proceedings or unresolved permitting processes are also considered where they could potentially affect the project company's economic interests.

Regulatory risks are deemed relevant particularly when they have direct implications for revenues, operating costs, permits, or contract enforceability. In such cases, CRA may apply a corresponding qualitative adjustment to the stand-alone rating.

4.2.2.4 Interest Rate Risks

Interest rate risks arise when a significant portion of the project company's financing is based on variable interest rates, causing its earnings performance to be affected by changes in overall interest rate levels. In such cases, an increase in interest rates can raise ongoing financing costs and adversely affect the project company's debt service capacity.

Where a high proportion of fixed-rate loans exists, or effective hedging measures—such as interest rate derivatives or long-term fixed-rate agreements—have been implemented, interest rate risks are considered low or immaterial. In such instances, the projected debt service obligations remain largely stable and can be forecasted with a high degree of reliability.

The situation differs for variable-rate financing structures without adequate hedging instruments. In these cases, future cash flows are more dependent on external market developments or central bank rate movements, which can impair the predictability and stability of the project's financing. Material interest rate risks may therefore lead to a negative qualitative adjustment of the stand-alone rating.

4.2.2.5 Environmental, Social and Governance (ESG)

ESG factors (Environmental, Social, Governance) can influence a project's economic viability in various ways and are taken into account by CRA when they are deemed potentially credit-relevant. The focus is not on normative assessments but rather on determining whether, and to what extent, ESG risks may have financial, legal, or operational implications for the project company.

Environmental risks may arise, for example, from tightening regulatory requirements, physical or climatic changes, or costly environmental compliance obligations. Social risks relate to factors such as public acceptance of the project, labor disputes, or impacts on local communities. In the area of corporate governance, the key aspects include transparency, compliance, anti-corruption measures, and conflict of interest management.

Material ESG risks are explicitly identified in the analysis and are incorporated into the derivation of the stand-alone rating if they have the potential to impair the project's economic stability. For this purpose, CRA draws on project-specific documentation, ESG ratings, external expert reports, and public disclosures.

The consideration of ESG factors is not carried out in isolation but always in the context of the existing assessment framework. ESG aspects serve to amplify or mitigate risks, particularly in areas where economic or operational uncertainties are already evident. Accordingly, CRA views ESG risks as an integral component of the qualitative analysis.

4.2.2.6 Liquidity

The general approach to assessing liquidity risks is described in the chapter on the construction phase and applies correspondingly to the operational phase (see section 4.1.1.4.2).

In the operational phase, however, the focus shifts: particular attention is given to the stability of operating cash flows, the availability of ongoing liquidity reserves (e.g. working capital facilities, Debt Service Reserve Accounts – DSRA), and the project company's ability to respond promptly to unexpected fluctuations in revenues or expenditures.

4.2.2.7 Servicer Replaceability

Servicers should be replaceable if they play a central role in the project's operational management. The objective of the analysis is to assess the risk associated with a potential default or replacement of the servicer—for example, regarding the continuity of smooth project operations, the fulfillment of contractual obligations, and the potential costs involved.

A key aspect is whether, and to what extent, suitable alternative servicers are available in the market. For standardized activities with a broad provider base, the risk associated with a servicer replacement is generally considered low. The risk is significantly higher in situations where the existing servicer possesses project-specific know-how or proprietary infrastructure that cannot be replaced in the short term, or only with considerable effort.

CRA also considers the potential cost risk arising from a change of servicer. A shortage of suitable alternatives or a monopolistic market position of the current servicer can lead to noticeably higher operating costs in the event of replacement. This risk is particularly pronounced when existing contracts secure favorable terms and new providers are only available at higher price levels, increasing the likelihood of a deterioration in the project's cost structure—which could negatively affect liquidity and debt service capacity.

Servicer replaceability is therefore incorporated as an independent factor in the qualitative assessment. It has a risk-mitigating effect when there is broad market availability of alternative providers and when appropriate contractual provisions for an orderly transfer are in place. Conversely, low replaceability can introduce both operational uncertainties and additional financial burdens, which may negatively influence the overall risk assessment.

4.2.2.8 *Foreign Exchange Risks*

The methodological approach to assessing foreign exchange risks during the operational phase generally follows the same principles outlined for the construction phase. CRA examines whether a currency mismatch exists between the revenue currency and the debt service currency, and whether appropriate hedging mechanisms are in place.

In addition to the considerations applied during the construction phase, the focus here is on the stability of operating cash flows. Further details on the identification and assessment of foreign exchange risks can be found in section 4.1.1.4.1.

4.2.2.9 *Other Project Risks*

The category "Other Project Risks" encompasses all additional uncertainties that cannot be clearly or systematically assigned to the previously defined assessment dimensions. These may include risks that are currently unknown or unforeseeable, or that arise from project-specific circumstances but could nonetheless have a material impact on the project company's overall risk profile.

Such factors may include, for example, the complexity of operational processes, site-specific characteristics, or risks resulting from extraordinary external events—such as natural disasters, legal disputes, or reputational issues. All of these may be taken into account under other project risks, provided they are deemed relevant within the project context.

The identification and evaluation of such risks are based on the available documentation, discussions with project stakeholders, and, where necessary, CRA's own analyses. The objective is to obtain as comprehensive an understanding as possible of residual risk drivers that could affect ongoing project operations and that are not adequately captured in the quantitative analysis or in the other qualitative categories.

Depending on the assessed probability of occurrence and potential impact, the consideration of these factors may result in a downward adjustment of the stand-alone rating.

4.3 Government Linkage

After deriving the stand-alone rating for the project company—both for the operational phase and, where applicable, for the construction phase — CRA subsequently assesses whether there is a relevant government linkage that would justify an adjustment (uplift) or limitation of the rating.

For this purpose, the sub-methodology for *Government-Related Companies* is applied. The objective of this assessment is to determine whether, and to what extent, the project company could receive financial or operational support from the public sector due to state ownership structures, contractual relationships, or systemic importance — particularly in times of financial distress. Conversely, the project company’s rating may be constrained by a weak sovereign credit profile if a high degree of government linkage exists.

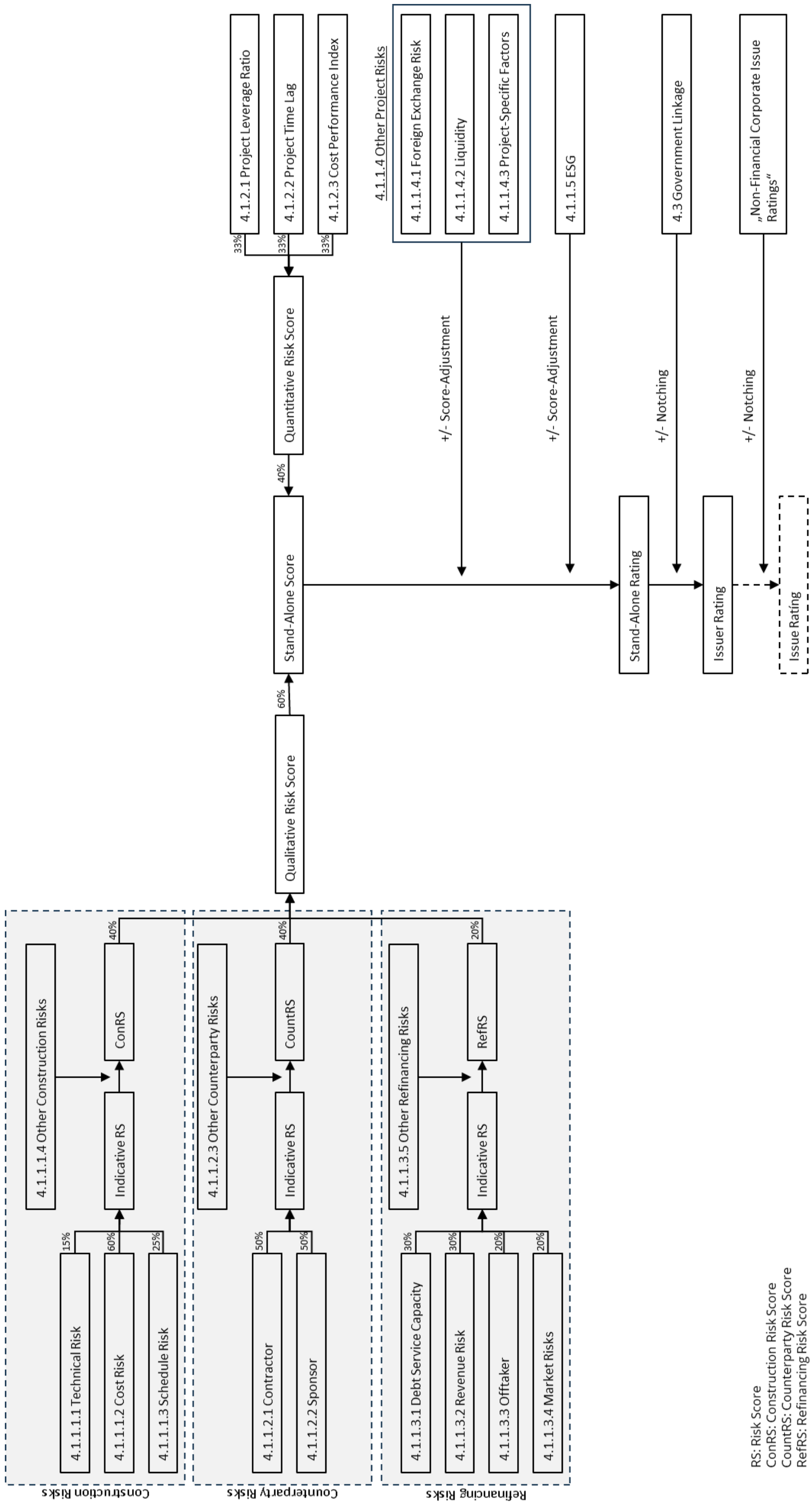
The outcome of this analysis may result either in an upward adjustment of the stand-alone rating or in the imposition of a rating cap. The resulting adjusted rating represents the final issuer rating of the project company and serves as the basis for the subsequent evaluation of the specific financial instrument.

5 Additional Notes

The discussion and potential consideration of legal and tax aspects within the rating process do not constitute a legal opinion by CRA; likewise, CRA does not issue its own legal or tax assessments as a “second opinion.” While CRA forms an analytical view on such documentation, no legal examination in the strict sense is carried out.

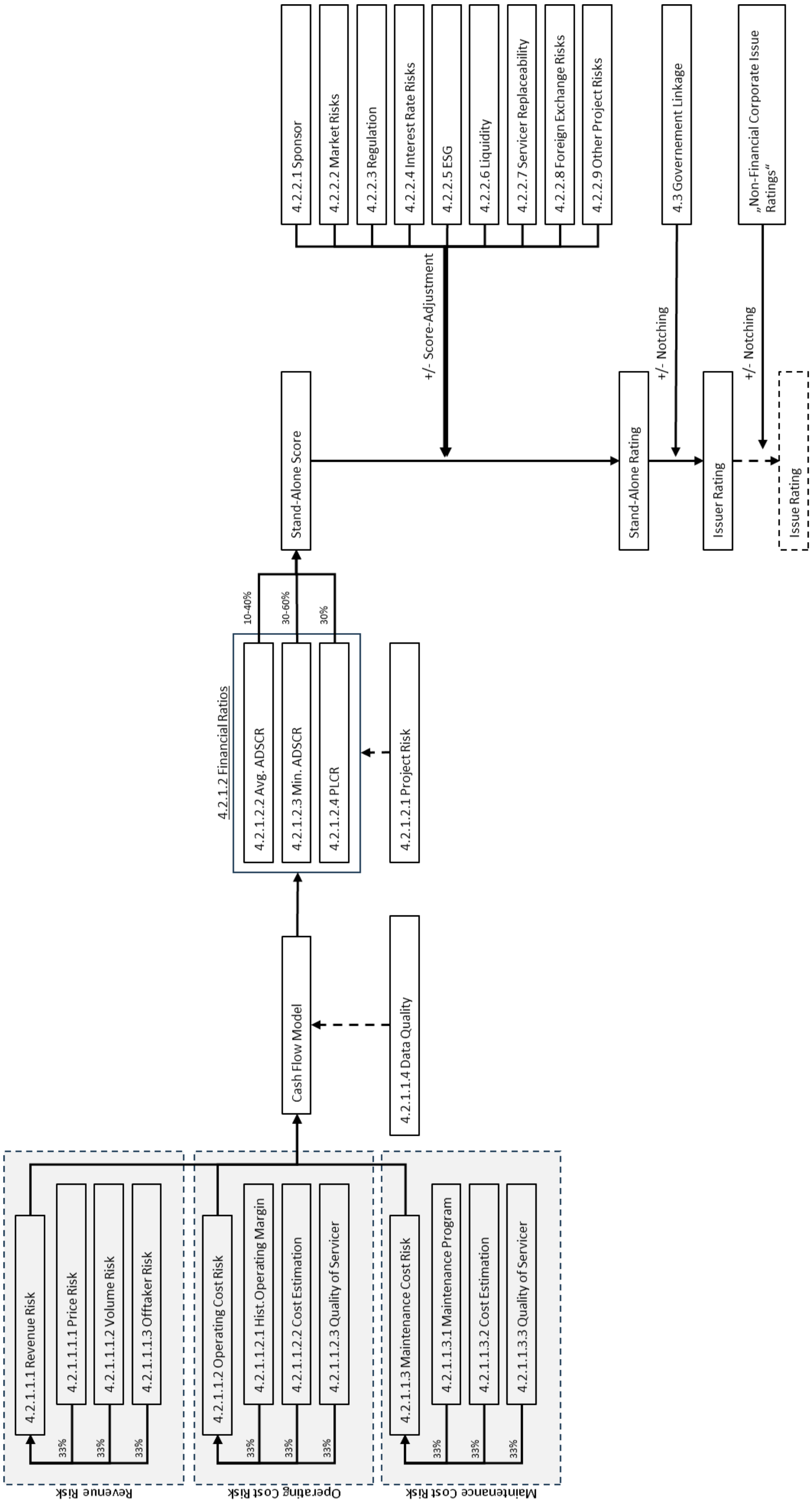
CRA may deviate from the criteria and calculation methods described above or apply other or additional criteria for the assessment of project companies if it believes that such deviations result in a more plausible rating outcome. Any deviations from the methodology are disclosed and explained by CRA in the respective rating report.

Appendix I: Illustration of the Methodological Approach in the Project Phase



Creditreform Rating

Appendix II: Illustration of the Methodological Approach in the Project Phase



Appendix III: Weighting of Financial Ratios according to Project Risk

CRA classifies project risk into four levels (1 to 4). Table 1 below outlines the substantive distinction between the individual levels.

Table 1: Description of the different levels of Project Risk

Project Risk	Description
Level 1	The project company has entered into a contract with one or more offtakers. The revenues are subject to neither price nor volume risk (e.g. availability model, Regulated Asset Base (RAB) model).
Level 2	The project company has entered into a contract with one or more offtakers. However, the project company's revenues are subject to either price or volume risk (e.g. feed-in tariff for renewable energy projects).
Level 3	The project company has not concluded firm offtake agreements, or such agreements cover only a portion of its revenues. The offtakers, on average, exhibit credit quality within the investment-grade range.
Level 4	The project company has not concluded firm offtake agreements, or such agreements cover only a portion of its revenues. The offtakers, on average, exhibit credit quality within the non-investment-grade range.

Table 2 illustrates how the weighting of the financial ratios used (Average ADSCR, Minimum ADSCR, PLCR) varies depending on the respective project risk. The risk-adjusted weighting ensures that more conservative ratios receive greater emphasis at higher risk levels. In justified individual cases, the analyst team may deviate from the standardized weighting.

Table 2: Weighting of individual Financial Ratios based on the determined Project Risk

Project Risk	Financial Ratio		
	Avg. ADSCR	Min. ADSCR	PLCR
Level 1	40%	30%	30%
Level 2	30%	40%	30%

Level 3	20%	50%	30%
Level 4	10%	60%	30%

Appendix IV: Threshold values of the individual Financial Ratios

Table 3 below shows the assignment of rating categories to the respective threshold values, depending on the project risk.

Table 3: Assignment of threshold values to rating categories according to Project Risk

Project Risk	AAA	AA	A	BBB	BB	B	CCC
Level 1							
Avg. ADSCR	>=3,00x	>=2,25x	>=1,75x	>=1,25x	>=1,15x	>=1,10x	>=1,05
Min. ADSCR	>2,25x	>1,75x	>1,25x	>1,15x	>1,10x	>1,05x	>1,0x
PLCR	>=1,40x	>=1,25x	>=1,15x	>=1,10x	>=1,06x	>=1,03x	>=1,01x
Level 2							
Avg. ADSCR	>=5,00x	>=3,00x	>=2,25	>=1,75x	>=1,25x	>=1,15x	>=1,05x
Min. ADSCR	>3,00x	>2,25x	>1,75x	>1,25x	>1,15x	>1,10x	>1,00x
PLCR	>=1,60x	>=1,32x	>=1,22x	>=1,13x	>=1,08x	>=1,04x	>=1,02x
Level 3							
Avg. ADSCR	>=6,00x	>=4,50x	>=3,00x	>=2,00x	>=1,50x	>=1,25x	>=1,10x
Min. ADSCR	>3,50x	>2,75x	>2,00x	>1,50X	>1,25x	>1,15x	>1,00x
PLCR	>=1,70x	>=1,45x	>=1,28x	>=1,16x	>=1,10x	>=1,06x	>=1,03x
Level 4							
Avg. ADSCR	>=10,00x	>=6,00x	>=4,50x	>=3,00x	>=2,00x	>=1,50x	>=1,15x
Min. ADSCR	>6,00x	>4,50x	>3,00x	>2,00x	>1,50x	>1,25x	>1,00x
PLCR	>= 1,90x	>=1,60x	>=1,35x	>=1,20x	>=1,12x	>=1,07x	>=1,05x

Appendix V: Definitions for the calculation of Financial Ratios

The following section presents the calculation formulas and corresponding steps used to derive the individual financial ratios.

Financial Ratio 1: Average ADSCR:

Formula 1: Calculation of the Average Annual Debt Service Coverage Ratio

$$Average\ ADSCR = \frac{1}{n}\sum_{t=1}^{n}\frac{CAFDS_t}{Debt\ Service_t}$$

CAFDS: Cash Flow Available For Debt Service in year t

Debt Service: Total of interest and principal payments in year t

n: Number of rolling one-year periods until the maturity of the financial instrument

Financial Ratio 2: Minimum ADSCR:

Formula 2: Calculation of the Minimum Annual Debt Service Coverage Ratio

$$Minimum\ ADSCR = \min_{t\in[1,n]}\left(\frac{CFADS_t}{Debt\ Service_t}\right)$$

CAFDS: Cash Flow Available For Debt Service in year t

Debt Service: Total of interest and principal payments in year t

n: Number of rolling one-year periods until the maturity of the financial instrument

min: Lowest value within the observation period

Project Lifetime Coverage Ratio (PLCR):

Formula 3: Calculation of the Project Lifetime Coverage Ratio

$$PLCR = \frac{\sum_{t=1}^{T}\frac{CAFDS_t}{(1+WACD)^t}}{Outstanding\ Debt}$$

CAFDS: Cash Flow Available For Debt Service in year t

WACD: Weighted average cost of debt of the project company (discount rate)

T: Number of remaining years until the end of the project

Outstanding Debt: Remaining outstanding debt of the project company at the valuation date

The following outlines CRA's general approach to deriving CAFDS and Debt Service.

Formula 4: Derivation of CAFDS

CFADS:

	Operating cash flow
-	(Maintenance-)Capex
-	Deposits into reserve accounts
+	Withdrawals from reserve accounts
-	Necessary other project-related outflows
+	Necessary other project-related inflows
=	Cash Flow Available for Debt Service (CAFDS)

Formula 5: Derivation of Debt Service

Debt Service:

	Interest payments on senior debt
+	Principal repayments on senior debt
+	Relevant fees on senior debt
+	Interest payments on pari passu debt
+	Principal repayments on pari passu debt
+	Relevant fees on pari passu debt
+	Interest payments on subordinated debt
+	Principal repayments on subordinated debt
+	Relevant fees on subordinated debt
=	Debt service of the project company (Debt Service)

Appendix VI: List of Documents

The following list serves as a guideline for the documentation required to prepare a rating. It is not intended to be exhaustive. CRA requires the following documents:

- Summary of the transaction (e.g. in the form of an investment committee memorandum)
- Structure diagram including all relevant contractual parties (service providers, lenders, guarantors, etc.)
- Audited financial statements for the past three years
- Shareholders' agreement of the project company
- Project agreement (if available)
- Service provider agreements
- Financial model (should include actual figures for the past 12 quarters [or longer] as well as projected figures)
- Technical due diligence report
- Legal due diligence report
- Insurance report
- Monitoring reports from the technical advisor for the past 12 months
- Loan agreement including all amendments and supplements
- Intercreditor agreement
- Security agreements
- Current compliance certificates