



LAUNCH

Sustainable energy assets as tradable securities

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Risk Assessment Protocol Final Version

Version 1.0



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D3.3 Risk Assessment Protocol Final

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Executive Summary

Risk is inherent to all financial transactions, and its assessment occupies whole departments at large financial institutions. Energy efficiency finance is no exception, but along with an overall lack of standardised terms and contractual agreements, there is also no generally accepted way of discussing, analysing and potentially mitigating specific risk types in this sector. To be clear, the issue at hand here is not risk perception or risk appetite, as these will always be subjective, and rightfully so. What is lacking is an agreed methodological structure of risk assessment that is well understood and applied across the industry, thus lowering agency costs and accelerating due diligence processes for all players involved.

This LAUNCH Risk Assessment Protocol looks to address exactly this gap – by presenting a template that is both detailed enough to capture the full complexity of the underlying assets, while at the same time being accessible and usable by all concerned parties, first and foremost however by the party that is expected to fill it in – the Contractor/ESCO.

The RAP includes a total of 17 risk types, split into three main categories, each of which is introduced and discussed with its relevance, responsibilities and potential mitigation measures. This current document represents the final of three versions that developed in the course of the LAUNCH project, with constant adjustments and improvements expected made based on feedback by both contractors and investors. The LAUNCH project included the RAP as a module in its LAUNCH Education Programme (LEP) in the second quarter of 2020, where the RAP was introduced and piloted with a number of stakeholders. A final version, including a supporting document containing guidelines for its use, has since then been completed.



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1. Introduction

The process of trying to standardize the assessment of risk inevitably begs for a common understanding of the subject matter itself – risk – in the first place. In the context of energy efficiency investments, there is a surprisingly consistent - albeit frustrating - experience shared among industry professionals, that risk is being discussed, perceived and understood in such different ways that this lack of clarity is causing many projects to fail. On the one hand, this can lead to very time-consuming discussions and increase due diligence costs and process time unnecessarily. On the other hand, getting a common understanding right from the start on all of the key risk areas would help to avoid even to discuss project opportunities further, should the risk profile not match the investors' expectations. The lack of clarity calls for standardised tools and benchmarks to support the risk assessment, as currently each investor uses their own in-house methodologies, applies different benchmarks and puts emphasis on an individual set of risk types. Contractors require these tools most of all, as it would help them to “get it right the first time” and avoid lengthy procedures and discussions with each investor individually. The current situation also represents a strong information asymmetry, which is in the detriment to an industry in need for larger capital deployment. Increasing transparency for all parties involved will not only help to cut overhead costs in the due diligence process, but also de-risk SEA project investments entirely, as Contractors who propose projects that follow well-established standards and benchmarks will increase trust in the financial community. The ultimate goal of the present standardized risk assessment protocol (RAP) is to establish this standard in the industry and test it with both practitioners and investors. Only with a lowered information asymmetry and increased trust in procedures will the SEA project finance see a significant growth of capital influx and increased liquidity from the creation of securitizable assets. A better understanding and quantification of risks will allow for investments to be priced more accurately and for innovative finance products to be developed.

Risk mitigation

Risk mitigation for energy efficiency investments can include purchasing insurance, hedges, and warranties. The energy efficiency insurance market is developing as specialised insurance companies tailor their offerings to insure performance risks of energy efficiency projects. Hartford Steam Boiler (HSB) is an example of one such insurance company that covers performance risks, alongside equipment failure and liability insurances. This type of insurance product offers greater certainty that forecasted capital returns will be achieved, by covering e.g. 80% of performance shortfall (thus, significantly reducing performance risk and related costs).

Another method of risk mitigation is the purchase of hedges. For instance, weather poses uncertainty to energy efficiency projects since it can influence the success of energy savings measures. An example is the performance of a retrofit implemented to reduce fuel for heating followed by a mild winter season. The project may result in less savings than anticipated due to change in weather. In specific cases, hedges against weather can be purchased in insurance

markets.¹ Other hedging options could include energy price hedges (upwards or downwards) depending on the structure of the forecasted revenue.

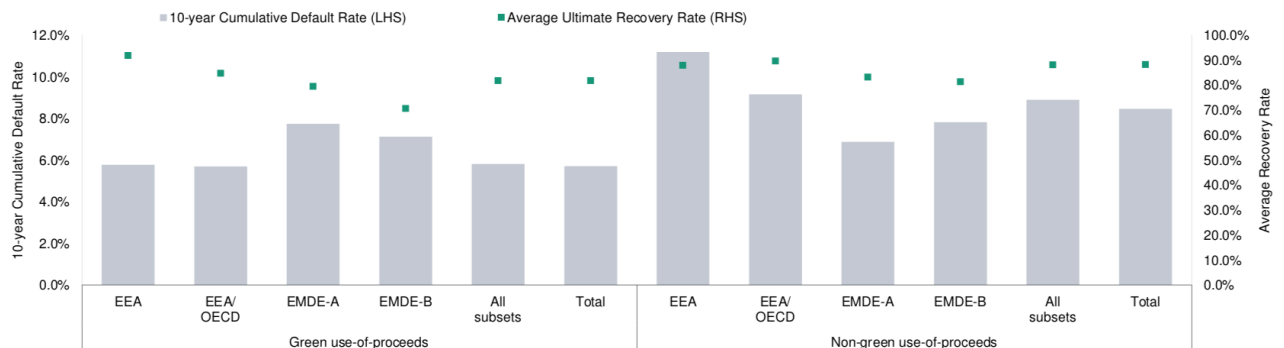
Along the same lines, warranties can be used to combat equipment risks. It is considered good practice for contractors or borrowers to negotiate warranties for as long a term as possible. Similarly, equipment suppliers should ensure projects are being supplied with high quality equipment from reputable manufacturers. Performance warranties may also be incorporated into operations and maintenance contracts as another mitigation measure. These warranties may be based on measures of up-time or energy performance, but should always cover at least the contractual term (ideally a longer period).

Risk appetite

Finally, it is important not to neglect the various levels of risk that investors will be willing to take. In this context, risk appetite stands for the level of risk that an investor is willing to pursue, retain or take. This risk level can vary greatly and is precisely matched by its counterpart – the return – on the risk-return trade-off profile. This profile simply plots acceptable risks against required returns, and is usually represented by an upwards sloping curve (the more risk, the higher the return). As the saying goes “everything can be priced” – in the financial world there are indeed investments made with extreme risks involved, which do however need to yield a satisfactory return in case they succeed. The objective of the RAP is not to prescribe any specific level of risk or make recommendations in this direction. This decision is ultimately made by each investor itself and will be based on investment policies and portfolio management considerations. The RAP however should help investors assess risks quicker and more accurately, to identify which investments would suit their appetite.

Eventually, the goal is to create asset-backed securities that can be listed on fixed income markets. These markets see growing demand for “green” or “sustainable” products and can be identified by their own specific performance qualities. Historical evidence shows that green use-of-proceeds bonds tend to have lower default rates and comparable recovery rates compared to non-green bonds (see Figure 1 below).

Cumulative default rates and recovery rates: Green and non-green use-of-proceeds subsets



¹ Weather hedging is being used by power companies to smooth earnings by e.g. derivatives based on heating degree days or cooling degree days.

Figure 1: Cumulative Default Rates and Recovery Rates²

In a 2020 report published by the EeDaPP H2020 project a significant (negative) correlation was shown to exist between the energy efficiency of a building and the probability of a mortgage default on this same building.³ This is one more piece of evidence – this time in the residential sector in Italy – that energy efficiency investments indeed lead to collateral financial benefits that can and should be priced into these investments more accurately. This present RAP tries to support this process by gathering and presenting appropriate information in a standardized way.

² Moody's (2018): Default and recovery rates for project finance bank loans, 1983-2016: Green projects demonstrate lower default risk, available here:

https://www.moody's.com/researchdocumentcontentpage.aspx?docid=PBC_1138618

³ EeDaPP H2020 Project (2020): D5.7 – Final report on correlation analysis between energy efficiency and risk, available here: https://eedapp.energyefficientmortgages.eu/wp-content/uploads/2020/08/EeDaPP_D57_27Aug20-1.pdf

2. The LAUNCH Securitization Model

The LAUNCH Securitization Model outlines the structure and process steps involved in the financial engineering of SEA project opportunities to securities. The main challenges to successfully creating SEA-backed securities are the lack of standardization and lack of generally accepted benchmarks and criteria in the various steps involved in the Securitization. This chapter will briefly outline the Securitization Model as proposed by the LAUNCH consortium and highlight the various parties and steps involved in the process.

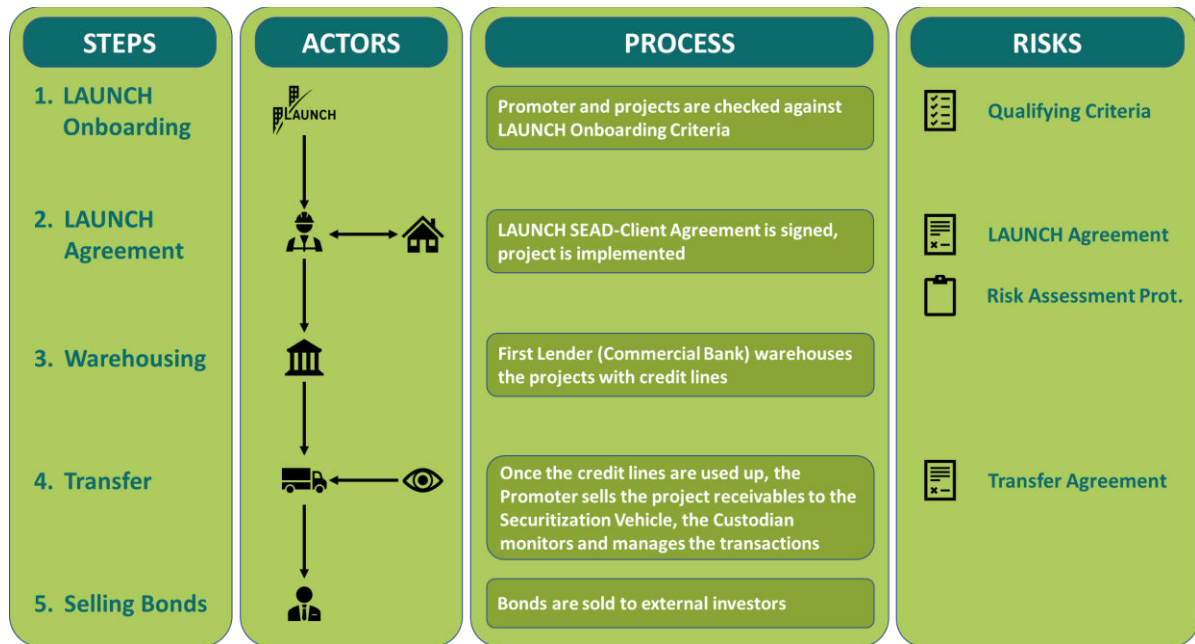


Figure 2: The LAUNCH Securitization Process

One of the main challenges addressed in the LAUNCH securitization model is the small scale of investment characteristic of energy efficiency measures compared to the relatively large investment threshold required by investors. While the average energy efficiency measure costs in the range of € 5 - 100K, investors typically look to fund measures with at least € 50 Mio. Co-mingling assets from various implementers can increase the value of groups of measures to make them more attractive for investment, and helps to reduce credit risk by diversifying it over a larger group of counterparties. However, the implications of increased due diligence and unique legal obligations tied to each measure can prove too costly to allow groups of assets to be feasible. The standardization of quality and an overarching legal contractual framework is therefore needed to expedite due diligence and legal obligations.

For the various steps in the Securitization Process the LAUNCH consortium develops and promotes various standardized tools, including the present Risk Assessment Protocol (RAP). The RAP will be compiled at the initial underwriting phase, and used jointly with the LAUNCH Standardized Agreement (developed in WP2 of the LAUNCH project). It is the responsibility of the Contractor to fill in the RAP and provide all necessary information and supporting documentation along with the RAP. The first recipients will be the warehousing banks, and later on the Securitization Vehicle and ultimately the RAP will increase trust in the solidity of the overall process from the side of the buyers of the issued securities.

3. LAUNCH Risk Assessment Protocol

The two main objectives of the LAUNCH RAP are a) to enhance transparency about risk levels, risk allocation, and risk treatment on every key risk type involved in SEA project investments, and b) to prescribe from the perspective of a Securitisation Model – wherever possible – specific benchmarks and criteria on what levels of risks are accepted, and how residual risk is treated. Risk treatment in this context includes risk mitigation (through insurance, warranties, etc.), risk transfer through contractual arrangements regarding risk allocation, and – if possible – risk elimination. Having briefly discussed the different risk appetites and the inherent challenges in standardising risk assessment, the LAUNCH RAP will approach this second objective without unreasonable restriction and rigour, but nevertheless propose a thorough set of methods, measures and documentation that is generally accepted by industry professionals.



Figure 3: The three layers of risks in the covered by the LAUNCH RAP

In a first round of literature review, the LAUNCH consortium had identified and compiled a list of 15 different risk types involved in EE project financing. These risk types were clustered into 3 distinct categories, that formed the main structure of the protocol itself. As discussed in chapter 2, the LAUNCH Securitization Model defines clear roles and procedures about the actors and steps involved in the securitization process. This present risk assessment protocol forms an integral part of this Securitization Model. The LAUNCH consortium thus defined a first set of risk benchmarks for any potential EE

project to be included in the Securitization Model, a category of risk that is referred to here as “LAUNCH Qualifying Criteria”. The four risk types contained in this category are all exogenous to the project itself and refer to conditions that generally apply to the entire pipeline of an individual SEAD. The second risk category contains project-endogenous risks, and risk treatment for most of these risks is defined and handled directly by the LAUNCH Standardized Contract (see LAUNCH Deliverable D2.2). Finally, a third, separate category was identified for SEAD and end client credit risk. These are considered both the most important risk types, as well as the most difficult to prescribe clear benchmarks and mitigation measures for. Throughout the industry, credit risk indeed is repeatedly stated as the key risk factor, with many of the other risk types potentially having an indirect impact on it as well – e.g. in case a SEAD is contractually obliged to cover performance shortfalls, its credit risk could be affected, too. Figure 3 above presents the three-layered approach to risk assessment



followed by this protocol. Since the first version of the RAP – published in January 2020 – 3 additional risk types have been identified: Change in Control Risk, Supply Chain Risk and ESG Risk. The remainder of this chapter is organized to discuss these newly added risk types and all the changes to the other risks separately. The full RAP template is attached as Annex 1 to this Deliverable.

3.1 Exogenous risks

In this first category, four risk types were included for the particular way they can be assessed and treated. These four risks are all somewhat detached from the actual SEA projects, and thus are rather to be considered “meta”-risks, referring to conditions that are exogenous to the projects themselves. At the same time, quantification of risk benchmarks for these risks is straightforward, as they can be clearly delineated and specified. As a result, the definition of benchmarks for these risks allows to quickly frame the scope of the SEA projects which could be part of the LAUNCH Securitization exercise and those that couldn’t. It is for this reason that the LAUNCH consortium considers these risks as “Qualifying Criteria”. However, they should not be considered immutable; they will be subject to investors’ and SEADs’ feedback throughout the LAUNCH project, in order to ensure that the scope is tight enough to accommodate investors’ interest and wide enough not to block out too large a portion of the SEA market from the LAUNCH Securitization exercise. Each of these risks was discussed in more detail in the previous version of this Deliverable – published in January 2020 – and the important changes that were incorporated thereafter were based on feedback from practitioners and investors in the period February-October 2020, included in the previous October 2020 version of the RAP. Since then, there have been no significant changes made. The descriptions below have thus been included only to confirm this under each risk category.

3.1.1 Regulatory risk

In the Regulatory risk section, no significant changes were made compared to the October 2020 version.



3.1.2 Market risk

In the Market risk section, no significant changes were made compared to the October 2020 version.



3.1.3 Energy price risk

In the Energy price risk section, no significant changes were made compared to the October 2020 version.



3.1.4 Currency risk

In the Currency risk section, no significant changes were made compared to the October 2020 version.



3.2 Endogenous risks

A second category of risks is more strictly related to the individual projects, and includes to a large extent rather qualitative than purely quantitative assessments. Many of these risk types are addressed directly or indirectly in the LAUNCH Standardized Agreement or eventually the Transfer Agreement between the Contractor and the Securitization Vehicle. Aside from ESG risk, all other categories were discussed in more detail in the previous version of this Deliverable – published in October 2020. The descriptions below are thus limited to only three risk categories that underwent changes based on feedback from practitioners and investors in the period of October 2020-October 2021: O&M risk, Supply chain risk and ESG risk.

3.2.1 Technical risk



In the Technical risk section, no significant changes were made compared to the October 2020 version.

3.2.2 Performance risk



In the Performance risk section, no significant changes were made compared to the October 2020 version.

3.2.3 O&M risk



The O&M risk section was revised slightly and now includes a reference to the step-in clause which was inserted in the LAUNCH Standardized Contract to allow for the replacement of the Service provider/Contractor in certain defined cases.

3.2.4 Interface risk



In the Interface risk section, no significant changes were made compared to the October 2020 version.

3.2.5 Pipeline risk



In the Pipeline risk section, no significant changes were made compared to the October 2020 version.

3.2.6 Prepayment risk



In the Prepayment risk section, no significant changes were made compared to the October 2020 version.

3.2.7 Occupancy risk



In the Occupancy risk section, no significant changes were made compared to the October 2020 version.

3.2.8 Management risk

In the Management risk section, no significant changes were made compared to the October 2020 version.



3.2.9 Change in Control risk

In the Change in Control risk section, no significant changes were made compared to the October 2020 version.



3.2.10 Construction risk

In the Construction risk section, no significant changes were made compared to the October 2020 version.



3.2.11 Supply chain risk

The Supply chain risk was included for the first time in this version of the RAP, further to a decision by the Consortium to include it during an internal review of the RAP in June 2021.



It focuses on identifying the extent to which an entity's supply chain structure, policies, and practices may pose a risk to its business (e.g.: level of offshoring, insurance against bottlenecks, among others). The section was completed using the standard RAP format and methodology defined for the other risks that are included in this Deliverable.

3.2.12 ESG risk

The ESG risk section has been defined for the first time in this version of the RAP and is included as a stand-alone section in this final version of the RAP. The LAUNCH Investor Board has seen the creation of a subgroup of members interested in the ESG topic and further sessions with the ESG subgroup have taken place from November 2020 to March/April 2021.



The ESG approach for the RAP follows the GRESB methodology⁴, as proposed by a number of investor and contractor stakeholders, and seeks to ensure compliance of investments with the EU Taxonomy on Sustainable Activities.⁵

The way in which this section is presented is slightly different in that it is included under a separate format from the rest of the RAP. The reason for this differentiation is due to the nature of the approach chosen for the ESG risk assessment, i.e.: by following the GRESB methodology and compliance with the EU Taxonomy, the ESG risk section is structured along a set of questions to establish the relevance of the risk under specific areas.

The list of ESG criteria provided by GRESB on Real Assets was internally reviewed and additional feedback was gathered from a number of LAUNCH Investor Board members as to the relevance of

⁴ <https://gresb.com/>

⁵ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en



individual criteria contain therein. Additional criteria specifically in the “Environment” section were added from a set of related economic activities as defined in the EU Taxonomy.

3.3 Credit risk



In the Credit risk section, no significant changes were made compared to the October 2020 version.



4. Conclusion

This third and final draft of the LAUNCH Risk Assessment Protocol presents a set of 17 risk types commonly involved in energy efficiency project investments, with a few of them added since the initial draft that was published in January 2020. Separated into 3 main categories, this Deliverable discusses each type by defining the risk (from the point of view of SEA investments), introducing guiding questions for its assessment and listing supporting documentation to be provided. Wherever possible, the risk assessment was aligned with the LAUNCH Standardized Agreement (D2.3), by making direct references to the agreement text. The RAP itself is designed as a template to be filled in by SEADs.

The current version of the RAP has already undergone several rounds of feedback by the LAUNCH Investor Board members and by contractor stakeholders in the LAUNCH Education Programme (LEP) and the LAUNCH pilot. In the last 12 months of the LAUNCH project was piloted in real life projects by SEADs and Investors alike. Specific attention was given to both the usability of the RAP by SEADs (ease of use, well understood, not too overwhelming) and the acceptance of the assessment methodology by financial players. The overall feedback was very positive and the RAP has been incorporated into internal risk assessment procedures at various companies. It further informed standardized project finance training material provided by RENAC.⁶ Further information on the impact and the application of the RAP in the LAUNCH pilots can be found in D5.4.

Looking ahead, the successor project of LAUNCH, called PROPEL H2020 will incorporate the RAP together with other standardized LAUNCH material into the PROPEL IT platform and further disseminate and exploit these solutions through the Sustainable Energy Finance Association (SEFA).⁷

⁶ <https://www.renac.de/trainings-services/trainings>

⁷ <https://www.sefaeu.org/>



5. References

- LAUNCH H2020 (2020a): Deliverable D2.2 – Standardised SEAD-End Client Contract Draft 2
- LAUNCH H2020 (2020b): Deliverable D4.2 – Standardised financial representation spreadsheets Draft 2
- Moody's (2018): Default and recovery rates for project finance bank loans, 1983-2016: Green projects demonstrate lower default risk, available here:
https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1138618



1. Annex 1 – Risk Assessment Protocol Template

LAUNCH RISK ASSESSMENT PROTOCOL
V1.5 – 05/10/2021

Guidance note:

- This Risk Assessment Protocol (RAP) V1.5 presents the set of risk types commonly seen in energy efficiency project investments and outlines a range of guiding questions for quantifying risk levels, and discussing risk bearing parties and mitigation measures.
- The overall purpose of the RAP is to collect all relevant risk-related information and enhance transparency for all financial counterparties in the securitization process (warehousing bank, securitization vehicle, ultimate investor/buyer of securities).
- The RAP will be filled in by the Service provider/Contractor for each project opportunity separately – it was designed to be used alongside the LAUNCH Standardized Agreement and specific risk treatments refer to this agreement.
- As the Service provider/Contractor fills in the RAP, all claims made herein will have to be supported by a required set of documentation, which will be handed in jointly with the RAP.
- For the purpose of filling in the credit risk assessment, the Service provider/Contractor will receive an excel template to produce the required financial ratios and parameters – both for their own company, but also for the financial performance of the Implementor/Client.
- As the installed equipment will reside as assets on the balance sheet of the Service provider/Contractor, but the Implementor/Client ultimately is responsible for paying the services (and thus paying off the investment), the credit risk assessment for these 2 parties will differ in nature (looking at financial stability, liquidity, etc.).

Version history:

V1.1 of the RAP contains a new risk type “Management Risk”, a revised Credit Risk Methodology and additional information regarding supporting documentation.

V1.2 of the RAP contains a number of clarifications in terminology in the credit risks sections, and on the Client credit risk, Repayment Capacity Ratio was replaced with Debt Service Coverage Ratio. Several URLs for direct access to relevant external sources of information (energy price, inflation, country ratings, Ecodesign regulation). Several risk types are now structured in a cascading questioning format. Change of Control risk was added (still to be refined).

V1.3 of the RAP contains Construction risk that is now discussed in more detail, and further refinements to Currency risk, Occupancy risk and Change-in-Control risk.

V1.4 of the RAP contains Supply Chain risk as a new risk type.

V1.5 added an ESG Questionnaire, following the GRESB methodology and EU Taxonomy criteria.




CREDIT RISK SERVICE PROVIDER/CONTRACTOR



RELEVANCE

| Formula | Formula explained | Result | KPI evaluation | Pts. | RISK ASSESSMENT | |
|---------------------------------|---|--------|---|------|--|--|
| Liquidity | | | | | | |
| Current Ratio | $\frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$ | | if KPI > 1 → 1 if KPI < 1 → 4 | | RISK ASSESSMENT TOTAL SCORE | |
| Quick Ratio | $\frac{\left(\begin{array}{l} \text{Cash} \\ + \text{Cash Equivalents} \\ + \text{Marketable Securities} \\ + \text{Current Account Receivables} \end{array} \right)}{\text{Total Current Liabilities}}$ | | if KPI > 1 → 2 if KPI < 1 → 4 | | | |
| Comparison | Current Ratio [minus] Quick Ratio | | if KPI < 0.3 → 2 if KPI > 0.3 → 4 | | | |
| Solvency | | | | | | |
| Solvency Ratio | $\frac{\text{After-tax net operating income}}{\text{Total Liabilities}}$ | | if KPI > 60% → 1 if KPI 50-60% → 2 if KPI 40-50% → 3 if KPI 30-40% → 4 if KPI < 30% → 5 | | | |
| Profitability | | | | | | |
| Net Profit Margin | $\frac{\text{After-tax net income}}{\text{Total Revenue}}$ | | if KPI > 0 → 2 if KPI < 0 → 5 | | | |
| Commercial Profitability | $\frac{\text{EBITDA}}{\text{Total Revenue}}$ | | if KPI > 0 → 2 if KPI < 0 → 5 | | | |

| | | | | | |
|--|--|--|--|---|--------------------------------|
| | Repayment Capacity Ratio | <p>The Repayment Capacity Ratio (RPR) analyses how long it takes (in years) to pay off a firm's long-term debt and interest (in the Numerator) with its current Self-Financing Capacity (in the Denominator).</p> $\frac{\text{Long term debt} + \text{interest}}{\left(\begin{array}{l} \text{Net Operating Income} \\ + \text{Amortizations} \\ + \text{Provisions} \\ - \text{Dividends} \end{array} \right)}$ | | <p>if RPR (years) > duration of the EPC → 2 if not → 4</p> | |
| | Supply chain ratios | | | | |
| | Working Capital | <i>Current Assets [minus] Current Liabilities</i> | | <p>if KPI > 0 → 2 if KPI < 0 → 4</p> | |
| | Days of Receivables | $\frac{\text{Commercial Receivables}}{\text{Total Revenue}} \times 365$ | | <p>KPI decreasing → 2 KPI increasing → 4</p> | |
| | Days of Payables | $\frac{\text{Average trade payables}}{\text{COGS}} \times 365$ | | <p>KPI increasing → 2 KPI decreasing → 4</p> | |
|  DOCUMENTATION | <p>List all available documentation to support any of the claims made above:</p> | | | | DOCUMENTATION PROVIDED? |
| | 1) Balance Sheet (the last 3 years) | | | | Y / N |
| | 2) Income Statement (the last 3 years) | | | | Y / N |
| | 3) External credit rating report (if available) | | | | Y / N |



CREDIT RISK IMPLEMENTOR/END CLIENT




RELEVANCE





| Formula | Formula explained | Result | KPI evaluation | Pts. |
|---|---|--------|---|------|
| Liquidity | | | | |
| Current Ratio | $\frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$ | | if KPI > 1 → 1 if KPI < 1 → 4 | |
| Quick Ratio | $\frac{\left(\begin{array}{l} \text{Cash} \\ + \text{Cash Equivalents} \\ + \text{Marketable Securities} \\ + \text{Current Account Receivables} \end{array} \right)}{\text{Total Current Liabilities}}$ | | if KPI > 1 → 2 if KPI < 1 → 4 | |
| Comparison | Current Ratio [minus] Quick Ratio | | if KPI < 0.3 → 2 if KPI > 0.3 → 4 | |
| Solvency | | | | |
| Solvency Ratio | $\frac{\text{After-tax net operating income}}{\text{Total Liabilities}}$ | | if KPI > 60% → 1 if KPI 50-60% → 2 if KPI 40-50% → 3 if KPI 30-40% → 4 if KPI < 30% → 5 | |
| Profitability | | | | |
| Net Profit Margin | $\frac{\text{After-tax net income}}{\text{Total Revenue}}$ | | if KPI > 0 → 2 if KPI < 0 → 5 | |
| Commercial Profitability | $\frac{\text{EBITDA}}{\text{Total Revenue}}$ | | if KPI > 0 → 2 if KPI < 0 → 5 | |
| Debt Service Coverage Ratio (DSCR) | $\frac{\text{Net Operating Income}}{\text{Total Debt Service}}$ | | if KPI > 4 → 2 if KPI 2 < X < 4 → 3 if KPI 1 < X < 2 → 4 | |

RISK ASSESSMENT

TOTAL SCORE



| | | | | | | |
|--|---|---|--|--|--|-------------------------|
| | | | | if KPI < 1 → 5 | | |
| | Supply chain ratios | | | | | |
| | Working Capital | <i>Current Assets [minus] Current Liabilities</i> | | if KPI > 0 → 2 if KPI < 0 → 4 | | |
| | Days of Receivables | $\frac{\text{Commercial Receivables}}{\text{Total Revenue}} \times 365$ | | KPI decreasing → 2 KPI increasing → 4 | | |
| Days of Payables | $\frac{\text{Average trade payables}}{\text{COGS}} \times 365$ | | KPI increasing → 2 KPI decreasing → 4 | | | |
|  DOCUMENTATION | List all available documentation to support any of the claims made above: | | | | | DOCUMENTATION PROVIDED? |
| | 1) Balance Sheet (the last 3 years) | | | | | Y / N |
| | 2) Income Statement (the last 3 years) | | | | | Y / N |
| | 3) External credit rating report (if available) | | | | | Y / N |

|  | REGULATORY RISK | |
|---|---|--|
|  RELEVANCE | Incentives <ul style="list-style-type: none"> - Are government incentives included in the revenue model? - What is the nature of the incentive – upfront grant, tax incentive for a number of years, feed-in tariffs, white certificates...? - What is the share of incentive revenue as % of total revenue? Compliance <ul style="list-style-type: none"> - Is the project governed by any relevant environmental and/or health&safety compliance regulation? | RISK PRESENT? [Y / N] |
|  RESPONSIBILITY | Incentives <ul style="list-style-type: none"> - Which party is the beneficiary of the incentive? - Can the incentive be reassigned? - Are there restrictions that apply in reassigning the incentive? - In case the incentive revenue is split, provide % shares for all parties concerned. Compliance <ul style="list-style-type: none"> - Describe how client and/or contractor comply with all relevant environmental and/or health&safety regulation(s). | RISK BEARER? CLIENT / CONTRACTOR |
|  DOCUMENTATION | <i>List all available documentation to support any of the claims made above:</i> <ol style="list-style-type: none"> 1) Relevant law or regulation that govern the incentives, and its potential reassignment 2) Historic data on volume of incentives granted and types of projects that benefitted from the incentive (official source) 3) Relevant law or regulation regarding environmental and/or health&safety compliance | DOCUMENTATION PROVIDED? Y / N Y / N Y / N |



MARKET RISK








RELEVANCE





- Which country/countries are the contractor and the client operating in? [country]
- What is the current market rating and respective outlook?
 - o [Fitch](#)
 - o [Moody's](#) (requires login)
 - o [S&P](#)
- State the relevant date of the rating





AVERAGE RATING:

[]

| [Country] | FITCH | | MOODY'S | | S&P | |
|-------------------|--------------------|---------|--------------------|---------|--------------------|---------|
| | Date: [dd/mm/yyyy] | | Date: [dd/mm/yyyy] | | Date: [dd/mm/yyyy] | |
| | Current rating | Outlook | Current rating | Outlook | Current rating | Outlook |
| Contractor | | | | | | |
| Client | | | | | | |

|  ENERGY PRICE RISK | | | | | | | | | | | | | | | | | | | | |
|--|---|--|-------|--|-------|--|-------|-------------------------|--|--|--|--|--|----------------|--|--|--|--|--|-------------------------------------|
|  RELEVANCE | <p>Does the financial model of the project factor in energy price development? Y / N</p> <p>If Yes, please provide the following information:</p> <ul style="list-style-type: none"> - How is the energy price assumed to develop over the course of the investment term? [in % per annum] - What was the annual movement of (relevant) energy price in % over the last 5 years? Eurostat - What was the inflation rate movement in the relevant market in % over the last 5 years? ECB <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Y -5</th> <th>Y -4</th> <th>Y -3</th> <th>Y -2</th> <th>Y -1</th> </tr> </thead> <tbody> <tr> <td>Energy price movement</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Inflation rate</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | Y -5 | Y -4 | Y -3 | Y -2 | Y -1 | Energy price movement | | | | | | Inflation rate | | | | | | RISK PRESENT? [Y / N] |
| | Y -5 | Y -4 | Y -3 | Y -2 | Y -1 | | | | | | | | | | | | | | | |
| Energy price movement | | | | | | | | | | | | | | | | | | | | |
| Inflation rate | | | | | | | | | | | | | | | | | | | | |
|  RESPONSIBILITY | <ul style="list-style-type: none"> - Who bears the risk of deviation from the assumed energy price curve (shortfall, excess revenue?) | RISK BEARER? CLIENT / CONTRACTOR | | | | | | | | | | | | | | | | | | |
|  MITIGATION | <ul style="list-style-type: none"> - Has the Service provider/Contractor hedged the energy price risk (e.g. through buying/selling energy futures)? - For which duration and which % of the Baseline Monthly Energy Used is covered by this hedge? | FULLY MITIGATED? Y / N | | | | | | | | | | | | | | | | | | |
|  DOCUMENTATION | <p><i>List all available documentation to support any of the claims made above:</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>1) Provide information on historic energy price movements from relevant sources (Eurostat)</td> <td style="text-align: center;">Y / N</td> </tr> <tr> <td>2) Provide information on historic inflation rates from relevant sources (ECB)</td> <td style="text-align: center;">Y / N</td> </tr> <tr> <td>3) Provide supporting information on a potential energy price hedging instrument</td> <td style="text-align: center;">Y / N</td> </tr> </tbody> </table> | 1) Provide information on historic energy price movements from relevant sources (Eurostat) | Y / N | 2) Provide information on historic inflation rates from relevant sources (ECB) | Y / N | 3) Provide supporting information on a potential energy price hedging instrument | Y / N | DOCUMENTATION PROVIDED? | | | | | | | | | | | | |
| 1) Provide information on historic energy price movements from relevant sources (Eurostat) | Y / N | | | | | | | | | | | | | | | | | | | |
| 2) Provide information on historic inflation rates from relevant sources (ECB) | Y / N | | | | | | | | | | | | | | | | | | | |
| 3) Provide supporting information on a potential energy price hedging instrument | Y / N | | | | | | | | | | | | | | | | | | | |

|  | CURRENCY RISK | |
|--|---|---|
|  RELEVANCE | <p>Is there a single currency applied to this project? Y / N</p> <p>If Yes, state the currency: [currency]</p> <p>If No, please answer the following:</p> <ul style="list-style-type: none"> - Which currency will the project cash flows be generated in? [currency] - Which currency will be used to purchase the equipment? [currency] - Is there a different currency foreseen for any significant foreseeable operational expense throughout the project term? If Yes, state the currency: [currency] and state the operational expense: [expense] | RISK PRESENT? [Y / N] |
|  MITIGATION | <ul style="list-style-type: none"> - Has the Service provider/Contractor hedged the currency risk (e.g. through buying/selling currency futures)? - For which duration and which % of revenue and/or operational expenses are covered by this hedge? | FULLY MITIGATED? Y / N |
|  DOCUMENTATION | <p><i>List all available documentation to support any of the claims made above:</i></p> <p>1) Provide supporting information on a potential currency price hedging instrument</p> | DOCUMENTATION PROVIDED? Y / N |

|  TECHNICAL RISK | |
|---|--|
|  RELEVANCE | <ul style="list-style-type: none"> - Total value of the installed equipment: [monetary term] - Useful life of the installed equipment: [years] - Term of the agreement with the Implementor/Client: [years] - Useful life > Term of the agreement? Y / N - Depreciation of the installed equipment: [straight-line/accelerated], over [] years - Best available technologies should be applied – please provide information: <ul style="list-style-type: none"> o Whether the product(s) is/are defined in the Ecodesign regulation Y / N o A reference list of min. 3 implemented projects where the product(s) were used Y / N |
|  RESPONSIBILITY | <p>According to the LAUNCH Standardized Service Agreement, article 2.11, the Service provider/Contractor is obliged to obtain and maintain insurances, essentially removing technical risks (see below).</p> |
|  MITIGATION | <p>The following insurances shall be obtained and maintained:</p> <ul style="list-style-type: none"> - warranties on all the installed Equipment for a duration that is equal to or greater than the service agreement and the investment agreement period; - insurance of the Equipment to a value not less than its full replacement value comprehensively against all usual risks of loss, damage or destruction by fire, theft or accident; - insurance for such amounts as a prudent owner or operator of the Equipment would insure for, or such amount as the Service provider/Contractor may from time to time reasonably require, to cover any third party or public liability risks of whatever nature and however arising in connection with the Equipment; and - insurance against such other or further risks relating to the Equipment as may be required by law, together with such other insurance as the Service provider/Contractor may from time to time consider reasonably necessary. <p>The Service provider/Contractor shall be responsible for paying any deductibles due on any claims under such insurance policies.</p> |

RISK PRESENT?


[Y / N]




RISK BEARER?



CLIENT /
CONTRACTOR





FULLY MITIGATED?


[Y / N]





|  DOCUMENTATION | <i>List all available documentation to support any of the claims made above:</i> | DOCUMENTATION PROVIDED? |
|--|---|-------------------------|
| | 1) Technical data sheet of installed equipment, indicating useful life | Y / N |
| | 2) Warranties on the installed equipment | Y / N |
| | 3) Insurance of the equipment (loss/damage/theft): include policy | Y / N |
| | 4) Liability insurance for the installed equipment: include policy | Y / N |
| | 5) Any other insurance as may be required by law: include policy | Y / N |
| | 6) Reference list of implemented projects where the equipment was used (in case it's not defined in the Ecodesign regulation) | Y / N |




|  | <h1>PERFORMANCE RISK</h1> | |
|--|--|--|
|  <p>RELEVANCE</p> | <p>Relevant factors included in this risk type:</p> <ol style="list-style-type: none"> 1. Flawed Energy Audit 2. Poor or faulty project design 3. Flaws in the implementation of EE measures 4. Equipment malfunctioning 5. Mistakes in the operation of the measures <ol style="list-style-type: none"> 1. Maintained/operated by the Service Provider/Contractor 2. Maintained/operated by the Subscriber/Client 6. Fluctuation of usage patterns, including change of user behaviour <p>Energy price risk is treated as a separate risk type in this Risk Assessment Protocol</p> <p>Minimum Energy Savings as stated in the LAUNCH Standardized Service Agreement:</p> <p>[in kWh/MWh terms] [in monetary terms]</p> | <p>RISK PRESENT?</p> <p>[Y / N]</p> |
|  <p>RESPONSIBILITY</p> | <p>According to the LAUNCH Standardized Service Agreement, the Service provider/Contractor guarantees that specific service levels will be achieved for the full term, subject to the satisfactory performance by the Implementor/Client of all its obligations. Therefore, underperformance of the EE measures based on factors 1-4 as well as 5a) above will be covered by the Service provider/Contractor. This guaranteed savings scheme (as opposed to the shared savings scheme) leads to a higher incentive for the Service provider/Contractor to achieve envisaged savings.</p> <p>The Service provider/Contractor is furthermore required to provide a detailed Measurement and Verification (M&V) Plan, containing:</p> <ul style="list-style-type: none"> - Clear specification of the standards used for M&V (IPMVP, ISO 50015) - Schedule of M&V activities - Schedule of algorithms used in the calculations - List of any responsible stakeholders that are party to the M&V protocols | <p>RISK BEARER?</p> <p>CLIENT / CONTRACTOR</p> |






| | | |
|--|---|--|
| | <p>Additionally, the project submission shall contain a sensitivity analysis modelling the proposed performance levels with +/- 10% and +/- 20%, and indicating subsequent impacts on project cash flows.</p> | |
|  MITIGATION | <ul style="list-style-type: none"> - Has the Service provider/Contractor purchased performance insurance? - If yes, what % of performance (with reference to the guaranteed service level) is insured? | FULLY MITIGATED? [Y / N] |
|  DOCUMENTATION | <p><i>List all available documentation to support any of the claims made above:</i></p> <ol style="list-style-type: none"> 1) Detailed M&V Plan 2) Worst, real and best-case scenarios for performance levels 3) If available, performance insurance documentation | DOCUMENTATION PROVIDED? Y / N Y / N Y / N |






|  O&M RISK | | |
|---|---|--|
|  RELEVANCE | <p>As the Service provider/Contractor (according to the LAUNCH Standardized Agreement) retains legal and financial ownership of the equipment, he/she is incentivised to ensure careful operations and timely maintenance of the equipment throughout the service period.</p> <p>Nevertheless, the Service provider/Contractor shall provide a detailed O&M schedule, and disclose all relevant O&M documentation from previously undertaken and/or ongoing projects of similar nature in support of that.</p> | RISK PRESENT? Y / N |
|  RESPONSIBILITY | <p>According to the LAUNCH Standardized Service Agreement, the Service provider/Contractor is responsible for undertaking all necessary O&M work during the full-service period. The following information shall be provided in the O&M schedule:</p> <ul style="list-style-type: none"> - Who is the O&M provider? - Credit quality of O&M provider (in case it differs from the Service provider/Contractor) - Historical O&M performance by O&M provider - Monitoring and communication systems used for outage detection and system performance - Documented and mutually agreed upon response protocol (as a Schedule to the LAUNCH Standardized Agreement) - Presence and nature of any back-up O&M arrangements - The LAUNCH Standardized Service Agreement furthermore includes a step-in clause to allow for the replacement of the Service provider/Contractor in certain defined cases. | RISK BEARER? CLIENT / CONTRACTOR |
|  MITIGATION | <p><i>[TBD: Contractual stipulations ensuring O&M service levels post-securitization should be included in the transfer agreement]</i></p> | FULLY MITIGATED? Y / N |





| | | |
|--|--|-------------------------|
|  DOCUMENTATION | <i>List all available documentation to support any of the claims made above:</i> | DOCUMENTATION PROVIDED? |
| | <ol style="list-style-type: none"> 1) Detailed O&M schedule 2) Full credentials and previous experience by assigned O&M provider 3) Back-up O&M arrangements (if present) | Y / N |






|  | INTERFACE RISK | |
|---|---|--|
|  RELEVANCE | The LAUNCH Standardized Agreement delineates clear roles and responsibilities between the Service provider/Contractor and the Implementor/Client, in order to limit any interference to a minimum and ensure correct operation of the equipment. | RISK PRESENT? Y / N |
|  RESPONSIBILITY | According to the LAUNCH Standardized Service Agreement, the Subscriber/Client is obliged (among other things) to: <ul style="list-style-type: none"> - Keep the installed equipment and its environment clean and safe - Make no alteration to the equipment - Keep the equipment at its installed location - Allow access for inspection and maintenance at all reasonable times | RISK BEARER? CLIENT / CONTRACTOR |
|  MITIGATION | <i>[TBD: the LAUNCH Standardized Service Agreement includes a removal cost clause in case of breach or pre-emptive unilateral termination of the agreement]</i> | FULLY MITIGATED? Y / N |






|  PIPELINE RISK | | | | |
|--|---|--|----------------------------|---|
|  RELEVANCE | Size of the commercial project pipeline by the Service provider/Contractor with the same specifications, in particular: <ul style="list-style-type: none"> - Similar technology - The same client type (sector, maturity) - The same contractual agreement - The same project terms | | RISK PRESENT? Y / N | |
| | Contract signed with Implementor/Client – ready for installation | With agreements to proceed (to be closed in less than 6 months): | | With agreements to proceed (to be closed in less than 12 months): |
| | [in monetary terms] | [in monetary terms] | | [in monetary terms] |
|  DOCUMENTATION | <i>List all available documentation to support any of the claims made above:</i> | | DOCUMENTATION PROVIDED? | |
| | 1) Detailed project pipeline document, listing all relevant opportunities according to the 3 stages outlined above | | Y / N | |





|  | <h1>PREPAYMENT RISK</h1> | |
|--|--|--|
|  RELEVANCE | <p>The LAUNCH Standardised Agreement outlines in Article 13 a number of reasons for which the agreement can be terminated pre-emptively.</p> <p>In case of pre-emptive service termination, the following conditions have to be assessed:</p> <ul style="list-style-type: none"> - Technical consideration: equipment can be technically removed - Economic consideration: equipment can be sold for a reasonable price (either in a new location or by a new user in the same location) - Legal consideration: ownership of equipment can be transferred | RISK PRESENT? <p style="text-align: center;">Y / N</p> |
|  RESPONSIBILITY | <p><i>[TBD: Ultimately, pre-payment risk will be something to be dealt with in the transfer agreement between the Service provider/Contractor and the Securitization Vehicle.]</i></p> | RISK BEARER? <p style="text-align: center;">CLIENT / CONTRACTOR</p> |
|  MITIGATION | <p><i>[TBD: A "removal cost" provision in the LAUNCH Standardized Agreement mitigates this specific risk type in case of unilateral pre-emptive termination without just cause or breach of the agreement]</i></p> | FULLY MITIGATED? <p style="text-align: center;">Y / N</p> |
|  DOCUMENTATION | <p>List all available documentation to support any of the claims made above:</p> | DOCUMENTATION PROVIDED? |
| | <p>1)</p> | <p style="text-align: center;">Y / N</p> |
| | <p>2)</p> | <p style="text-align: center;">Y / N</p> |
| | <p>3)</p> | <p style="text-align: center;">Y / N</p> |


|  OCCUPANCY RISK | | |
|---|---|--|
|  RELEVANCE | <ul style="list-style-type: none"> - How are energy consumption baselines adjusted for change in occupancy levels? - Is there a minimum payment level stipulated, and in case there isn't: which % of drop in occupancy level is (still) financially sustainable? - Is there a contractual stipulation in case of decommissioning of the facility where measures were installed? | RISK PRESENT? Y / N |
|  RESPONSIBILITY | <p>The Service provider/Contractor is responsible for regular adjustments to the energy consumption baselines. The Subscriber/Client is responsible for timely and transparent communication about any change of occupancy level.</p> <p><i>[TBD: At which state is the Service provider/Contractor no longer obliged to provide services?]</i></p> | RISK BEARER? CLIENT / CONTRACTOR |
|  MITIGATION | <p><i>[TBD: A minimum payment level, as a % of the subscription value, is now specified in the LAUNCH Standardized Agreement which mitigates this specific risk type]</i></p> | FULLY MITIGATED? Y / N |
|  DOCUMENTATION | <p>List all available documentation to support any of the claims made above:</p> | DOCUMENTATION PROVIDED? |
| | 1) | Y / N |
| | 2) | Y / N |
| | 3) | Y / N |

|  | MANAGEMENT RISK | |
|---|--|--|
|  RELEVANCE | <p>In order to ensure sound governance of investments and installed equipment, the following “Know-Your-Customer” (KYC) data is required:</p> <ul style="list-style-type: none"> - Type of entity - Sector of activity, including sector code - Number of employees - Ownership structure - Background and track record of key management personnel | RISK PRESENT? Y / N |
|  RESPONSIBILITY | <p>The Service provider/Contractor is obliged to gather the KYC information from the Subscriber/Client and submit it together with the same data on the Service provider/Contractor company.</p> | RISK BEARER? CLIENT / CONTRACTOR |
|  DOCUMENTATION | <p><i>List all available documentation to support any of the claims made above:</i></p> <ol style="list-style-type: none"> 1) Chamber of Commerce registration document 2) Documentation of shareholder structure 3) CVs of key management personnel | DOCUMENTATION PROVIDED? Y / N Y / N Y / N |

|  CHANGE IN CONTROL RISK | | |
|---|--|--|
|  RELEVANCE | Is the Subscriber/Client the legal owner of the building where equipment will be installed? Y / N In case the building is rented, please provide information on the site lease and term. | RISK PRESENT? Y / N |
|  RESPONSIBILITY | The LAUNCH Standardized Agreement will include a clause obliging either: <ul style="list-style-type: none"> - The new Subscriber/Client to enter into the existing Service Agreement with the same terms or - The existing/old Subscriber/Client to pay the removal cost to the legally assigned recipient/counterparty. | RISK BEARER? CLIENT / CONTRACTOR |
|  MITIGATION | According to the LAUNCH Standardized Agreement, this risk type would be fully mitigated. | FULLY MITIGATED? Y / N |
|  DOCUMENTATION | <i>List all available documentation to support any of the claims made above:</i> | DOCUMENTATION PROVIDED? |
| | 1) Information on the site lease and term | Y / N |
| | | |

|  CONSTRUCTION RISK | | |
|--|---|--|
|  RELEVANCE | <ul style="list-style-type: none"> - Are all necessary construction permits obtained to allow for a timely execution? - What are the lead times for the equipment, and will all equipment be available in due time? - Is there a significant interference with current occupants or operations in the prospective building that requires construction works to be limited in time or restricts it to a specific time window? - If yes, what are the consequences of not meeting these limitations or restrictions? - Are change orders allowed and if yes, to what extend and until what stage of execution? | RISK PRESENT? Y / N |
|  RESPONSIBILITY | <p>As the responsible party, the Service provider/Contractor should provide two important sets of documentation:</p> <ul style="list-style-type: none"> - A detailed handoff procedure listing all steps, interferences and handoffs between the (sub-) contracted parties involved in carrying out the work. - A detailed commissioning report template stating all necessary checks for completion, quality control, compliance and inspections that had to be respected in the construction phase. | RISK BEARER? CLIENT / CONTRACTOR |
|  MITIGATION | <p>More complex or more invasive measures, especially in building environments that are used for production, essential services, etc. additional mitigation measures against delays could be required, such as a clause on liquidated damages (e.g. for not having been able to use a building or a part of it for a longer period) or a construction risk insurance policy.</p> | FULLY MITIGATED? Y / N |
|  DOCUMENTATION | <p><i>List all available documentation to support any of the claims made above:</i></p> | DOCUMENTATION PROVIDED? |
| | 1) Handoff procedure | Y / N |
| | 2) Commissioning report template | Y / N |

|  SUPPLY CHAIN RISK | | |
|--|--|--|
|  RELEVANCE | <p>Does at least one of the contracting parties (Service Provider/Contractor, O&M, and/or technology provider) have a supply chain that is located in one or more location(s) other than its own and reliant on at least one other third party?</p> | RISK PRESENT? Y / N |
|  RESPONSIBILITY | <p>The Service provider/Contractor is responsible for the management and traceability of its supply chain, including that of each of its suppliers and (if relevant) their respective suppliers.</p> <ul style="list-style-type: none"> - Can the company report that it sources a minimum % / level of supplies via reshoring or, for example, through so-called ‘hybrid’ supply chains* ? - Does the company track supply chain risk in its operations (for example, through resilience indicators or other tools)? Does the company conduct/possess a mapping or have complete visibility of its supply chain? <p>*re-shoring – relocating the production or manufacturing of goods back to the company’s country of origin, with supply chain based mainly within country of supply (eg, Rossignol ski’s); a.k.a.: ‘inshoring’, ‘nearshoring’, ‘backshoring’</p> <p>‘hybrid’ supply chains: supply chains that combine offshoring and reshoring (eg, Chinese electronics produced partly in South-east Asia)</p> | RISK BEARER? CLIENT / CONTRACTOR |
|  MITIGATION | <p><i>[TBD: contract conditions with the Service provider/Contractor could insure all parties in the case of delays/missing equipment/recalls by including, for example, minimum and maximum payment levels in such cases, and/or insurance, liability insurance, and liability claims conditions in the case of loss or damage]</i></p> | FULLY MITIGATED? Y / N |

| | | |
|--|--|-------------------------|
| | <p>Potential mitigation measures could be verified in the form of questions to the responsible party(-ies), such as:</p> <ul style="list-style-type: none"> - What guarantees/insurance against supply bottlenecks does the company have? E.g.: does the company have an insurance policy that covers supply chain risk, for instance, in the event of bottlenecks, via coverage of associated costs? - What % of the company's supply chain is located 'offshore' vs 'inshore' / 're-shore' / 'backshore' / 'nearshore'? - Does the company hedge supply chain risk via any financing mechanisms or instruments (eg, insurance policy or other)? - Can the company report on measures to mitigate the risk of extra costs from unexpected supply chain halts / delays / redundancies? - Can the company report on maximum no. / % / level of non-EU taxonomy compliant products/activities in its supply chain and/or measures to reduce this? | |
|  DOCUMENTATION | <p><i>List all available documentation to support any of the claims made above:</i></p> | DOCUMENTATION PROVIDED? |
| | <p>[TBD: 1) Insurance policy]</p> | Y / N |
| | <p>2) Annual report, incl. audit report]</p> | Y / N |
| | | |

Annex 2 – ESG RAP Template

When developing the ESG section for the Risk assessment protocol (RAP), it became apparent that a number of questions should be asked of contractors in order to enable investors to establish whether these risks are relevant, first and foremost, and also to what extent contractors are exposed to such risks.

Analysing the extent of risk exposure is, moreover, enabled by classifying ESG risks into three categories, which have been colour-coded and included in the tables below: 'Must have', 'Nice to have', and 'Not strictly necessary'.

A distinction is also made between 'project-related', 'client-related', and 'contractor-related' questions, which is designed to also enable the identification of the extent of the risk exposure of the investment, based on which factor it is most correlated with (project, client, contractor).

It is worth noting that environmental risks in particular ('E') are assessed along both a set of more high-level questions (pertaining to an entity's policies, strategy, performance monitoring and reporting on overall energy use and emissions) as well as a set of questions designed to verify compliance with EU taxonomy requirements across each of the taxonomy's main areas of environmental protection (air and water quality, waste, and biodiversity).

The following pages illustrate the questions developed to enable an assessment of risk under each of the ESG risk categories. The template used for this section of the RAP has been kept in Excel format in order to allow for a more effective cross-checking of the relevance of each risk against the type of entity being assessed (project, contractor, or client).

ESG RAP Template – Environmental risk assessment ('E')

| | |
|--|------------------------|
| | Nice to have |
| | Must have |
| | Not strictly necessary |

| Management / Performance | E / S / G | Code | Question | Project-related | Client-related | Contractor-related |
|--------------------------|-----------|--|--|-----------------|----------------|--------------------|
| Management | E | PO1 | Does the entity have a policy or policies on environmental issues? | | x | x |
| Management | E | RM2.1 | Has the entity performed an environmental risk assessment(s) within the last three years? | | x | x |
| Management | E | RM3 | Does the entity's strategy incorporate resilience to climate-related risks? | | x | x |
| Management | E | RM5.1 | Does the entity monitor environmental performance? | | x | x |
| Performance | E | IM1 | Can the entity list the key actions implemented to mitigate environmental risks or improve environmental performance? | | x | x |
| Performance | E | EN1 | Can the entity report on energy? | x | x | x |
| Performance | E | GH1 | Can the entity report on greenhouse gas emissions? | x | x | x |
| Performance | E | AP1 | Can the entity report on air pollution? | x | x | x |
| Performance | E | Bioenergy | Can the entity report that its emissions to air are prevented / minimised by employing the techniques and respecting the emissions limits required by the EU Taxonomy? | | | |
| Performance | E | Building renovation | Can the entity report that building surveys are carried out before renovation works by competent, trained specialists in accordance with national legislation and EU Taxonomy requirements? | | | |
| Performance | E | Individual renovation measures, installation of renewables on-site and professional, scientific and technical activities | Can the entity report that building components and materials do not contain asbestos nor substances of very high concern and as per requirements of the EU Taxonomy for building renovation? | | | |
| Performance | E | | Can the entity report that building surveys are carried out before renovation works by competent, trained specialists in accordance with national legislation and EU Taxonomy requirements? | | | |
| Performance | E | | Can the entity report that building components and materials do not contain asbestos nor substances of very high concern and as per requirements of the EU Taxonomy for building renovation? | | | |
| Performance | E | WT1 | Can the entity report on water inflows / withdrawals? | x | x | x |

| | | | | | | |
|-------------|---|---------------------|--|---|---|---|
| Performance | E | Building renovation | Can the entity report that all relevant new water appliances meet EU Taxonomy requirements for water consumption? | | | |
| Performance | E | WT2 | Can the entity report on water outflows / discharges? | x | x | x |
| Performance | E | Bioenergy | Can the entity report that it fulfills the requirements of EU water legislation and that it manages risks and water use as required by EU Taxonomy criteria for water use/quality and consumption? | | | |
| Performance | E | Building renovation | Can the entity report that all relevant new water appliances meet EU Taxonomy requirements for water consumption? | | | |
| Performance | E | WS1 | Can the entity report on waste generated and disposed? | x | x | x |
| Performance | E | PV | Can the entity ensure that PV panels, installations and associated components are designed and manufactured according to EU Taxonomy waste criteria? | | | |
| Performance | E | Bioenergy | Can the entity report that it implements measures according to EU Taxonomy criteria for installations with a total rated thermal input of 50 MW or more? | | | |
| Performance | E | Electricity storage | Can the entity report its intention to maximise recycling at end of life based on BAT as required by EU Taxonomy (e.g. through contractual agreements with recycling partners, reflection in financial projections or official project documentation)? | | | |
| Performance | E | Building renovation | Can the entity report that at least 80% of non-hazardous construction and demolition waste is sent to recycling, re-use, or recovery, as per EU Taxonomy criteria? | | | |
| Performance | E | BI1 | Can the entity report on biodiversity and habitat? | x | x | x |
| Performance | E | PV | Can the entity report that the production and installation of PV panels and associated components comply with EU Taxonomy criteria on biodiversity? | | | |
| Performance | E | Bioenergy | Can the entity report that production of electricity from bioenergy (biomass/biofuels/biogas) occurs while respecting EU Taxonomy criteria for biodiversity? | | | |
| Performance | E | Electricity storage | Can the entity report that storage of electricity also meets/respects/complies with EU Taxonomy criteria for biodiversity? | | | |
| Performance | E | Building renovation | Can the entity report that timber products used in renovation meet the EU Taxonomy's sustainable sourcing requirements? | | | |

ESG RAP Template – Social risk assessment ('S')

| Management / Performance | E / S / G | Code | Question | Project-related | Client-related | Contractor-related |
|--------------------------|-----------|-------|---|-----------------|----------------|--------------------|
| Management | S | LE6 | Does the entity include ESG factors in the annual performance targets of personnel? | | | |
| Management | S | PO2 | Does the entity have a policy or policies on social issues? | | x | x |
| Management | S | RM2.2 | Has the entity performed a social risk assessment(s) within the last three years? | | x | x |
| Management | S | RM5.2 | Does the entity monitor social performance? | | x | x |
| Performance | S | IM2 | Can the entity list the key actions implemented to mitigate social risks or improve social performance? | | x | x |
| Performance | S | HS1 | Can the entity report on health and safety performance of its employees? | | x | x |
| Performance | S | HS2 | Can the entity report on health and safety performance of its contractors? | | x | x |
| Performance | S | HS3 | Can the entity report on health and safety performance of its users? | | x | x |
| Performance | S | HS4 | Can the entity report on health and safety performance of its local community? | | x | |
| Performance | S | EM1 | Does the entity engage with its employees through training or satisfaction monitoring? | | x | x |
| Performance | S | EM2 | Does the entity report on inclusion and diversity? | | x | x |
| Performance | S | CU1 | Has the entity undertaken customer satisfaction surveys within the last three years? | | x | x |

ESG RAP Template – Governance risk assessment ('G')

| Management / Performance | E / S / G | Code | Question | Project-related | Client-related | Contractor-related |
|--------------------------|-----------|-------|---|-----------------|----------------|--------------------|
| Management | G | LE1 | Has the entity undertaken an ESG materiality assessment in the last 3 years? | | x | x |
| Management | G | LE2 | Has the entity made public commitment to ESG leadership standards or principles? | | | |
| Management | G | LE4 | Does the entity have one or more persons responsible for implementing ESG? | | x | x |
| Management | G | LE5 | Does the entity have a senior decision-maker accountable for ESG issues? | | | |
| Management | G | PO3 | Does the entity have a policy or policies on governance issues? | | x | x |
| Management | G | RP1 | Does the entity disclose its ESG actions and/or performance? | | x | x |
| Management | G | RP2.1 | Does the entity have a process to monitor and communicate about ESG-related controversies, misconduct, penalties, incidents, accidents or breaches against the codes of conduct/ethics? | | x | x |
| Management | G | RM1 | Is the entity's management system accredited to, or aligned with, ESG-related management standards? | | x | x |
| Management | G | RM2.3 | Has the entity performed a governance risk assessment(s) within the last three years? | | x | x |
| Management | G | RM4.1 | Does the entity have a systematic process for identifying transition risks that could have a material financial impact on the entity? | | x | |
| Management | G | RM4.2 | Does the entity have a systematic process to assess the material financial impact of transition risks on the business and/or financial plannings of the entity? | | x | |
| Management | G | RM4.3 | Does the entity have a systematic process for identifying physical risks that could have a financial impact on the entity? | | x | |
| Management | G | RM4.4 | Does the entity have a systematic process for the assessment of material financial impact from physical climate risks on the business and/or financial plannings of the entity? | | x | |
| Management | G | RM5.3 | Does the entity monitor governance performance? | | x | x |
| Performance | G | IM3 | Can the entity list the key actions implemented to mitigate governance risks or improve governance performance? | | x | x |
| Performance | G | CA1 | Did the entity maintain or achieve asset-level certifications for ESG-related performance? | | x | x |
| Performance | G | CA2 | Did the entity receive awards for ESG-related actions, performance, or achievements? | | | |