EIB Project Bond Credit Enhancement Proposal

Potential to Boost Projects' Credit Metrics to 'A' Rating

Special Report

'A' Potential: The European Investment Bank's (EIB; 'AAA'/Negative/'F1+') project bond credit enhancement (PBCE) instrument – whether in the form of funded subordination or unfunded letter of credit (LC) – could improve a project's credit metrics to ratings in the 'A' category. The rating benefit depends on factors including the amount of PBCE used relative to senior debt.

Not Just Credit Metrics: In addition to superior credit metrics, 'A' category rated debt instruments would display, in most cases, a combination of stronger and midrange attributes in respect of the project's Key Risk Factors (KRFs) outlined in Fitch's rating criteria. Ratings may be constrained by qualitative aspects, for example revenue counterparty risks. The PBCE is also unlikely to transform an otherwise sub investment grade rating to one in the 'A' category.

Unfunded LC Focus: Fitch Ratings considers the unfunded LC instrument to be the most likely form in which the EIB PBCE may be deployed. Debt enhanced by the funded subordinated facility would simply follow the guidelines of the rating criteria relevant for the asset class. The funded subordinated debt option does not improve a project's risk profile during construction and it provides marginally less liquidity support during operation.

Liquidity Valuable During Construction: The unfunded PBCE instrument can improve the construction phase risk profile of a project by providing additional subordinated liquidity to fund cost overruns or to replace a defaulted contractor. This would provide benefits similar to an enhanced performance bonding package. Assuming that the works are not particularly complex relative to the sector and that at least a standard contractual structure is in place, the PBCE may allow a project with a 'BB' category contractor to achieve an 'A' category senior debt rating.

Rebalancing Beneficial During Operations: The unfunded PBCE provides a rating benefit for regulated or contracted projects exposed to long-run asset performance and cost levels. This is because it can be used once during the operating phase to partially prepay senior debt to restore cash flow coverage levels (rebalancing). The precise definition of the re-balancing conditions (whether this is automatic or subject to bondholders' vote and the DSCR trigger level) will determine the extent of the PBCE's liquidity benefit.

Following such drawing, the PBCE can be assimilated to subordinate debt, as it is repaid through cash sweep after senior debt service. Amounts repaid can be redrawn, hence potentially providing future liquidity support.

Full Drawing Assumed: Fitch's analysis of the senior debt's financial metrics will follow the agency's standard analytical approach for the relevant sector under the assumption that the PBCE is used on day one of the operational period to partially pre-pay the senior debt.

Twin Benefits Possible: The PBCE may alleviate risk during both construction and operation if there is a strong probability that the PBCE is quickly replenished after a drawing during construction. This should be the case in situations where strong construction contracts are in place, as construction-related indemnification proceeds will be applied first to the replenishment of the PBCE, and when the project is not expected to be exposed to some kind of ramp-up risk.

Ratings Exclude Recovery: Fitch's ratings in the infrastructure and project finance area address the probability of default of the specific debt instrument and exclude amounts that may be recovered post-default. As a result, the recovery benefit of the PBCE instrument is not factored into the rating.

Related Research

European Project Bonds: The Jury Is Still Out (May 2012)

Fitch Comments on EU Project Bonds Initiative (April 2011)

How Sovereign Ratings Relate to Other Asset Class Ratings in the Eurozone (October 2012)

Analysts

Federico Gronda
+39 02 8790 87287
federico.gronda@fitchratings.com

Olivier Delfour
+33 1 44 29 91 21
olivier.delfour@fitchratings.com

Dan Robertson
+44 20 3530 1312
dan.robertson@fitchratings.com

Nicolas Painvin
+33 1 44 29 91 28
nicolas.painvin@fitchratings.com

Background

The PBCE is the instrument through which the EIB, in conjunction with the European Commission, proposes to enhance the credit quality of European infrastructure projects to facilitate the capital market funding of their investment requirements. In its pilot phase, running up to 2016, the PBCE instrument is expected to be directed at supporting trans-European networks in the fields of transport and energy, as well as broadband and information and communication technology projects.

The enhancement in the projects' credit quality is to be achieved through the reduction of senior debt leverage and the consequent improvement in financial coverage. The PBCE instrument may allow the project to withstand more severe stresses while continuing to meet its senior debt obligations in full and on time. Such stresses include those that are traditionally assessed through the quantitative analysis of a transaction and whose average magnitude and likelihood is reflected in the senior debt's buffer above 1.0x coverage. These are, for example, an increase in operations and maintenance (O&M) costs following the replacement of a contractor or a decline in revenue due to underperformance.

In addition, the EIB PBCE, particularly if at an amount equal to 15% or 20% of the senior debt, also appears capable of providing mitigation against risks that is not possible to anticipate and whose magnitude cannot be predicted. These may take the form of material changes in an industry's dynamics, event risks (natural hazards, mayor technical outages etc.) or changes in the regulation governing a sector. While similar risks cannot be fully accounted for and will continue to be borne by lenders, a sizeable PBCE injected at the point of the stress to partially pre-pay the senior debt may provide the project with much needed deleveraging.

Different Credit Enhancement Structures

The EIB is contemplating two PBCE structures: (i) funded subordinated debt (subordinated debt) and (ii) unfunded letter of credit (letter of credit, LC). The latter instrument is intended to (a) cover cost overruns, including debt service, prior to construction completion, (b) support scheduled debt service after construction and (c) supplement the termination payments upon concession termination. The facility will represent the second source of project liquidity, after the debt service reserve.

Either credit enhancement instrument will have a maximum amount equal to the lower of EUR200m and 20% of senior project debt at any point in time (eg, the commitment will reduce over time in line with senior debt amortisation). Fitch assumes that the terms and conditions of either form of credit enhancing facility will provide for full subordination to senior debt in terms of interests, rights and actions, except in the event of acceleration, when the EIB, as PBCE provider, will participate in the vote for the amount of the PBCE. The unfunded liquidity facility instrument is expected to remain available even in case of a breach of representations, information undertakings or covenants under any of the contracts. Also, for the facility to fully exploit its credit enhancement potential, drawings should be fully unconditional.

The unfunded letter of credit may be fully drawn to pay down the senior debt should the project come under material financial stress (re-balancing). This may occur only once during the life of the debt. Fitch understands that the re-balancing will be triggered when the DSCR falls under a certain level; this may occur automatically or at the option of the bondholders.

The repayment of any drawn amount is through cash sweep after senior debt service, meaning that, once drawn, the unfunded facility effectively turns into subordinated debt. Amounts repaid will be available to be redrawn to mitigate potential future debt service shortfalls.

Figure 1 below outlines the risk factors which may be mitigated in a transaction enhanced by the two forms of PBCE instrument and summarises Fitch's assessment of the benefit for each option.

Related Criteria

Rating Criteria for Infrastructure and Project Finance (July 2012)

Rating Criteria for Availability-Based Projects (June 2012)

Rating Criteria for Toll Roads, Bridges, and Tunnels (August 2012)

Figure 1
PBCE: Where it Helps and Where it Does not

	Funded PBCE (subordinated debt)	Unfunded PBCE (letter of credit)
Summary description	Reduces the required senior debt amount thereby increasing the relating financial coverage	Contingent subordinated debt turning into funded subordination by way of partial senior debt prepayment when financial performance deteriorates beyond a certain DSCR trigger level or in case of liquidity/additional debt needs during construction – it may also be used as a standard liquidity facility when replenished after the first drawing or when the re-balancing is at the option of bondholders.
Completion risk	**Rating neutral:** Does not increase the amount of available contingency	**Rating positive**: Support against cost overruns, liquidity stress from delay
Operation and revenue risk	**Rating positive:** Increases the senior debt's ability to withstand reduction in CAFDS from cost increases or revenue stress	**Rating positive:** Typically not different from the subordinated debt instrument
Infrastructure/renewal risk	**Rating positive:** Increases flexibility to meet lifecycle costs/ongoing capital program and maintenance	**Rating positive:** Typically not different from the subordinated debt instrument
Structural features	**Rating neutral:** Does not improve debt's liquidity position beyond higher debt service coverage	**Rating neutral/positive:** When selectively drawn, it provides liquidity support – however, in case of automatic re-balancing, this may only happen after the facility has been at least partially topped-up after having been drawn in full previously – greater liquidity support is possible in structures where the re-balancing is not triggered automatically as bondholders may vote to selectively draw on the PBCE rather than re-balance in one go.
Best suited for	Operating projects with low expected cash flow volatility (eg, availability-based PPPs)	Greenfield projects and/or projects potentially exposed to shock events on revenues or costs (eg, volume risk, technical outage)

Source: Fitch

The degree of mitigation of a single risk factor ought to be considered in connection with the likelihood and the severity of the other risks. Although the facility may be replenished and redrawn after an initial re-balancing event, its enhancement potential is not considered to possibly mitigate concurrently a number of project weaknesses. For this reason, as further discussed below, Fitch considers that single-A rated debt instruments should typically display mostly stronger and midrange attributes in respect of the applicable KRFs.

Qualitative Factors Considerations

As discussed in the report *Fitch Comments on EU Project Bonds Initiative* dated 27 April 2011, rating levels are not only dictated by quantitative measures of credit risk, be it leverage or coverage metrics, but also by other aspects that may be purely qualitative. Fitch believes that projects aiming at an 'A' category rating ought to benefit from a sound standalone risk profile as the underlying project features will remain the overriding drivers of the bonds' credit quality.

Each of Fitch's infrastructure and project finance rating criteria (please see list in the box on the side of the page) discusses the various risks analysed by Fitch and highlights those that, for each sector, typically play a major role in determining the rating outcome (KRFs). Single-A rated debt instruments would be typically expected to display mostly stronger and midrange attributes in respect of the applicable KRFs.

Furthermore, regardless of third party partial structural enhancement, ratings may be constrained by the following factors, among others.

Offtaker or Grantor Risk

Entities that are the primary source of revenues for a project can significantly impact, or even constrain a project's debt rating, especially when it is unlikely that they could be replaced at economically viable rates. For instance, if a grantor in an availability-based PPP is rated 'BBB', it is very unlikely that the debt rating will be higher unless there is strong potential for grantor substitution or back-up in case of its default.

Sovereign Risk

In Fitch's opinion it is not possible to fully disconnect the credit profile of a domestic project from that of the country in which it is located. Therefore, as discussed in the report *How Sovereign Ratings Relate to Other Asset Class Ratings in the Eurozone* dated 3 October 2012, the debt of a project could be rated higher than the host sovereign, but only up to a maximum of three notches and subject to a cap at the applicable Country Ceiling (currently 'AAA' for countries in the eurozone).

Regulatory Risk

The PBCE instrument, especially when sized at 15% or 20% of the senior debt amount, provides a degree of mitigation against the risk of changes to an industry's regulation. For example, a 20% PBCE would have adequately offset the sharp reduction in the financial coverage of the senior debt financing Spanish photovoltaic (PV) projects caused by the introduction in 2011 of a temporary cap to the number of operating hours eligible to receive the feed-in tariff.

Regulatory risk in excess of what may be considered appropriate for an 'A' category rating may exist, however, for projects operating under regulatory frameworks which appear unbalanced and not in line with tested international peers, or where there are precedents of material regulatory instability which negatively affected the interests of incumbent operators.

Operational Risk

Some projects have a high level of operational risk, either in terms of cost or their ability to generate expected revenues. In such cases, a replacement operator may be difficult to secure due to a lack of alternatives. This may create a link between the operator's rating and that of the project. However, this is not typically the case in most projects rated by Fitch to date.

Technology Risk

Independently from the amount of available committed support, the debt financing projects (typically in the energy sector) employing technology with unproven operating track records is unlikely to be in 'A' category due to excessive performance uncertainty in respect of both operating costs and revenue generation.

Support During Construction

In the presence of strong construction contractual features and parties, the unfunded LC facility is considered capable of materially mitigating residual completion risk, potentially to a level in line with a single 'A' category rating for the senior debt. In order for the unfunded instrument to fully exploit its enhancement potential, it is important that the PBCE is treated as additional source of liquidity on top of an already solid construction package rather than a mitigating factor within a weak contractual structure.

Contractors rated in the 'BB' range may support an 'A' category transaction rating as long as a strong contractual package is in place, the project's construction is simple, many replacement contractors are available and the construction schedule is generous, or if the debt is rated when the project is in an advanced stage of completion.

This reflects the understanding that the unfunded LC facility will be available, before construction completion, to cover shortfalls in funds available for construction capital expenditures (including senior debt interest, fees, etc.) even if this support has not been disbursed. This is subject to the project having first called upon the available construction and liquidity support (including guarantees, letters of credits, performance bonds, etc.) and the technical adviser confirming that construction completion can be achieved before the longstop date. Should this not be the case, the liquidity facility will not be available for remedying construction cash shortfalls but only to meet debt service payments (including upon acceleration).

Fitch will assess the additional degree of protection afforded by the unfunded LC on the assumption of a delay in completion and, if appropriate, construction cost overruns. Fitch will look at the resulting additional expenses that the project will incur (including operation and maintenance, property taxes, overheads, debt service payments and cost overruns) and compare these against available liquidity (the EIB liquidity facility in addition to contingency, liquidated damages, debt service reserve, revenues, and so on). If adequate liquidity is available, construction delays and cost overruns will be considered to represent only a temporary stress to the transaction and may not constrain Fitch's assessment of the debt's credit quality.

However, if the completion analysis identifies the possibility that a liquidity facility drawing may be necessary during construction, the instrument may carry less value in Fitch's analysis of the operational phase unless sufficient comfort can be gained from the project's ability to quickly pay back the drawn amounts.

A reasonably fast replenishment should be facilitated by the facility's repayment through a full cash sweep of excess cash after senior debt service, once the project enters operation. Further risk mitigation is offered by the structural conditions which, Fitch understands, will provide that receipts from the payment of construction-related indemnification proceeds will be applied first to the replenishment of the PBCE.

The subordinated facility credit enhancement instrument is not capable of reducing the senior debt's default probability before construction is completed as it does not increase the amount of funds available to cover cost overruns during construction. Therefore, such an option would be rating neutral in respect of completion risk.

Structural Considerations

Fitch understands that the rebalancing will be subject to the debt service coverage ratio (DSCR) having fallen under a certain level, to be determined on a case by case basis (for example 1.1x or 1.0x). The facility's term-sheet may provide for the resulting partial debt pre-payment to occur automatically or at the option of the bondholders.

Structures where the rebalancing is left as an option for bondholders (rather than automatic) are more effective in enhancing the credit profile of projects exposed to the risk of volatile revenues or cost, for example, as a result of major technical outages in an availability-based energy project. This is because in such projects the rating is likely to be constrained by the ability to withstand specific shocks rather than by the average coverage level. Also, the use of the PBCE as a standard liquidity facility increases the duration of the stress that the project is able withstand while meeting debt service commitments in full and on a timely basis.

Once triggered, the rebalancing mechanism under the unfunded LC will put bondholders in the same position, in terms of senior debt metrics, as if the senior debt had been enhanced through the provision of subordinated debt at financial close. This equivalence is independent of the time when the rebalancing takes place as long as the maximum facility amount at the specific point in time is used to partially prepay the senior debt. This would not be the case, for example, in situations where the PBCE has been used to cover a debt service shortfall before being utilised to partially pre-pay senior debt.

The amount available to be drawn under the unfunded LC will be equal to a maximum of 20% of outstanding senior debt, subject to a cap of EUR200m and net of amounts previously drawn and not yet repaid.

The facility's amortisation reduces the instrument's ability to mitigate tail risks such as, for example, lifecycle or handover cost overruns. Also, the amortisation diminishes the facility's incremental benefit of proving extra liquidity support. This is because, although the facility's amount does not vary when looked at as a percentage of outstanding debt, it reduces over time in absolute terms and when considered as a percentage of the debt service due on any payment date. Also, the amortisation extends the length of time before the facility will be available to be drawn again[1].

The unfunded LC may be drawn, during the operational phase, to partially pre-pay senior debt or to support scheduled debt service, but not, at least directly, to meet operation and maintenance costs.

Analytical Approach

When analysing bonds enhanced through the subordinated debt instrument, Fitch's quantitative analysis will assess the cover ratio profile at the senior debt level.

In Fitch's opinion, the quantitative analytical considerations do not materially differ between the funded and unfunded instrument, except for the fact that the funded facility clearly does not enhance the projects' liquidity endowment. This is because the rebalancing mechanism implies that, when the project comes under stress, senior debt is partially pre-paid. As long as the PBCE has not been drawn before, the resulting financial metrics for successive periods will not deviate materially from those that would be observed if the senior debt had been enhanced through provision of subordinated debt at financial close.

Therefore, Fitch expects in most cases to approach the rating analysis of bonds enhanced by the unfunded PBCE instrument by assuming that this is used on day one of the operational period to partially pre-pay the senior debt. Fitch will then apply its standard financial analysis assumptions (as applicable under the relevant rating criteria) to the project's cash flow and compute financial metrics accordingly.

A particular case is that of structures where the rebalancing is left as an option for bondholders in respect of projects exposed to the risk of discrete stresses, for example a major technical outage in an energy project, In such cases Fitch's analysis will focus on the unfunded facility's enhancement of the project's ability to meet its debt service commitments while undergoing a stresses (assumed to occur at various points during the project's life) which materially depress cash available for debt service.

The time it takes for drawn amounts to be repaid will be a relevant analytical consideration for assessing the additional credit which may be given to the benefit of potentially using the facility as a standard liquidity facility after this has been previously fully drawn and then, at least partially, topped up. Fitch will perform such analysis reviewing scenarios reflecting stress events of varying severity and occurring at different points in time during the debt's life.

Below are two simplified examples of how the PBCE instrument may impact Fitch's ratings of the debt financing two hypothetical projects.

[1] For example, consider a situation where the outstanding senior debt amount is EUR1bn and the EUR200m PBCE is used to re-balance the project. Ignoring scheduled amortization for sake of simplicity, the outstanding senior debt balance on the following payment date will be EUR800m and, therefore, the maximum PBCE amount will have reduced to EUR160m. This implies that new PBCE drawings will be allowed only after the project will have paid back at least EUR40m

Example 1: Availability-Based Greenfield Road

Transaction Summary Description

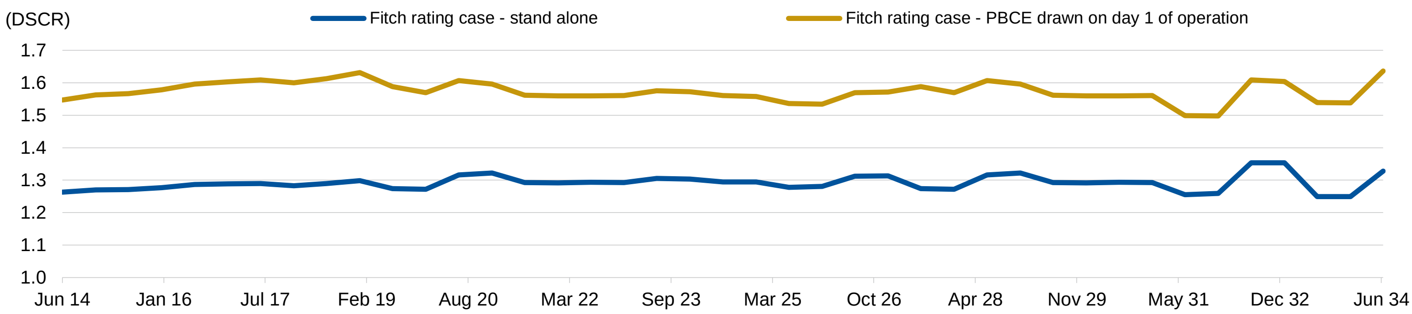
- 24 months construction by a consortium of 'BB' rated contractors, fixed price and date certain, 10% performance bonding.
- Inflation-indexed availability unitary charge from 'AAA' rated sovereign, performance deductions expected to be minimal.
- Road operated and maintained by a 'BB' rated, large and experienced operator, with full pass through of operating costs (but not lifecycle costs).
- Operating and lifecycle costs assessed as reasonable by the technical advisor and Fitch.
- DSRA sized at six months of debt service, three years forward looking maintenance reserve.
- Senior debt: fully amortising fixed rate bond, 20 years maturity.
- PBCE: unfunded letter of credit facility sized at 20% of senior debt, automatic re-balancing DSCR trigger at 1.10x (ignoring DSRA).

Figure 2
Key Risk Factor Assessments

Key risk factor	Stand alone	With PBCE
Completion risk	**Midrange** (low performance bonding)	**Stronger** (PBCE tops up performance bonding) – low likelihood of PBCE drawing expected during construction
Operation risk	**Midrange** ('BB' operator, lifecycle costs not passed through)	**Stronger** (PBCE should be reinstated when lifecycle kicks in)
Revenue risk	**Stronger** (availability, strong grantor)	**Stronger** – no enhancement
Structural features	**Midrange** (6 months DSRA)	**Midrange** (6 months DSRA)
Debt structure	**Stronger** (fixed rate fully amortizing senior debt)	**Stronger** (fixed rate fully amortizing senior debt)

Source: Fitch

Figure 3
DSCR Profile - Availability-Based Road



Source: Fitch

Figure 4
Rating Output

	Stand alone	With PBCE
KRFs assessment	Midrange to Stronger assessments	Mostly Stronger assessments
DSCR Profile	Midrange - 1.3x	Stronger - 1.60x
Possible Rating	'BBB'	'A'
Examples of what could lead to a lower PBCE-enhanced rating		Smaller PBCE;

Source: Fitch

Example 2: Availability-Based Energy Project

Transaction Summary Description

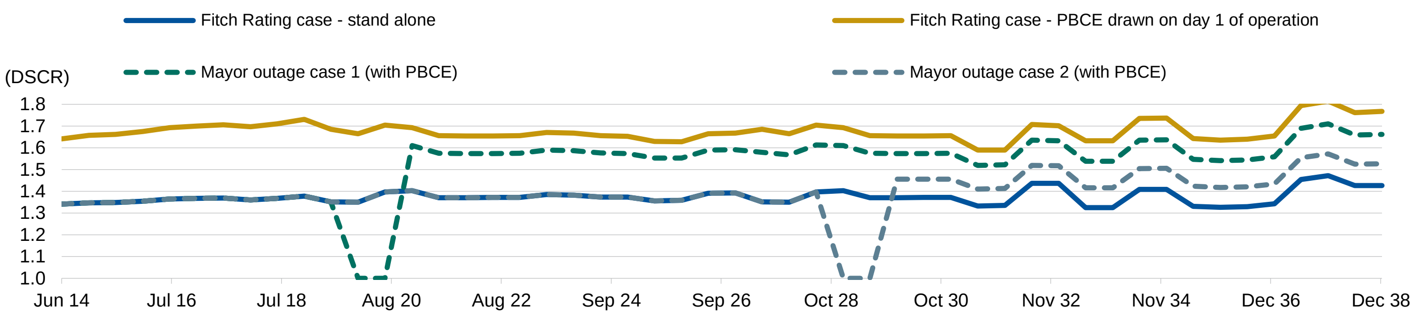
- 36 months construction; single fixed-price date certain turn-key Engineering, procurement and construction (EPC) contract with 'BBB' rated experienced contractor; proven technology; material liquidated damages.
- 'AAA' rated sovereign, untested regulatory framework, yet conservative and in line with international peers, providing for recovery of capital costs, operating costs and depreciation in addition to return component; material deductions for underperformance; revenues received from multiple counterparties with 'A' category average rating.
- Project company directly operating the asset; maintenance contracts with equipment manufacturers; operating cost budget assessed as generous; technical advisor's major technical outage scenario results in repair costs equal to average semi-annual debt service and 12 months of full unavailability before return to normal operation.
- DSRA sized at six months of debt service, one year forward looking MRA.
- Senior debt: fully amortising fixed rate bond, 25 years maturity.
- PBCE: unfunded letter of credit facility sized at 20% of senior debt, rebalancing at the option of bondholders when DSCR falls below 1.0x, on average four years to fully replenish; example assumes that PBCE is used to supplement debt service and then to partially pre-pay debt.

Figure 5
Key Risk Factor Assessments

KRF	Stand alone	With PBCE
Completion risk	**Stronger** (proven technology; strong contractor and contractual features)	**Stronger** – no PBCE drawing expected during construction
Operation risk	**Midrange** (exposure to mayor technical outages)	**Stronger** (PBCE allows to withstand 12 months stress in case of major outage)
Revenue risk	**Midrange** (regulatory regime considered reliable, yet untested)	**Midrange** – no enhancement
Structural features	**Midrange** (6 months DSRA)	**Stronger** – optional re-balancing increases liquidity endowment to a level sufficient to withstand mayor outages; also, PBCE considered capable of being replenished and of providing extra liquidity support
Debt structure	**Stronger** (fixed rate fully amortizing senior debt)	**Stronger** (fixed rate fully amortizing senior debt)

Source: Fitch

Figure 6
DSCR Profile - Availability-Based Energy Project



Source: Fitch

Figure 7
Rating Output

	Stand alone	With PBCE
KRFs assessment	Stronger to midrange assessments	Mostly stronger assessments
DSCR profile	Midrange: 1.35x	Stronger - 1.7x rating case; 1.45x-1.6x major outage cases[a]
Possible rating	'BBB'	'A-'
Examples of what could lead to a lower PBCE-enhanced rating		Smaller PBCE; higher technical and/or operational risk; regulatory instability; aggressive construction schedule, lower revenue counterparties' rating.

[a] Re-balancing does not lead to sub-debt-like ratios because PBCE is used to supplement debt service before being applied to partially pre-pay debt
Source: Fitch