
Rating Methodology

Corporate and Public Sector Debt

Global Criteria for Rating Power Utilities

October 2017

Related methodologies

Global Master Criteria for Rating Public Entities, updated February 2017

Global Master Criteria for Rating Corporate Entities, updated February 2017

Introduction

GCR's credit ratings for Power Utilities are a measure of a utility's relative ability to honour its financial obligations. The utility's ability to honour payments is assessed over both the short term and the long term, with separate short-term and long-term ratings accorded.

- Short-term credit ratings are an opinion of an Issuer's ability to meet all financial obligations over the upcoming 12 month period, including interest payments and debt redemptions.
- Long-term credit ratings reflect an Issuer's ability to meet its financial obligations over a period greater than 12 months, including interest payments and debt redemptions. This encompasses an evaluation of the organisation's current financial position, as well as how the position may change in the future with regard to meeting longer term financial obligations.

A strong linkage exists between short- and long-term credit ratings. However, as the rating process is dynamic, this linkage may be broken under certain circumstances, at the discretion of the GCR Rating Panel.

This Criteria report is an update to the version published in October 2016. There are no amendments to the Criteria and the update will not have an impact on any existing Power Utility ratings. Going forward, the Criteria will be applied to all Power Utility ratings.

The criteria outlined in this document are intended to illustrate the rating guidelines that GCR follows when according a rating to a Power Utility. Power Utilities (and utility companies in general) tend to exhibit characteristics of both private and public sector institutions. On the one hand, Power Utilities are often partially or wholly owned by the National Government of a particular country, or fall under some regional jurisdiction. Even where the entity may have been privatised, the provision of electricity and the pricing thereof tends to be highly regulated. On the other hand, Electricity Utilities tend to operate as corporatised legal entities, having a Board of Directors and management structure similar to that of private sector entities (and may sometimes be fully private and independent). Accordingly, the rating approach taken by GCR combines elements from both *GCR's Criteria for Rating Public Entities* and *GCR's Criteria for Rating Corporate Entities*. Readers are advised to read the two related methodologies in conjunction with this criteria for a more comprehensive discussion of GCR's rating philosophy. The methodologies are available on GCR's website, www.globalratings.net.

GCR's rating approach encompasses analytical techniques that assess quantitative and qualitative factors. The ratings reflect an evaluation of the organisation's current financial position, as well as how the financial position may change in the future. Ultimately, the goal of any credit rating analysis is to assess if, and to what extent, future cash flows cover interest and principal payments (as well as ongoing operating expenses and liabilities), and the relative certainty associated with this coverage. GCR examines the ability of the organisation to meet its obligations under reasonable and stressed scenarios.

GCR's analytical process for Power Utilities focuses on the following key areas:

1. Economic and operating environment, with particular emphasis on the factors that may impact the supply and demand (and the potential impact on tariffs), as well as the condition of the electricity generation and delivery infrastructure;
2. Legal and institutional framework, including management and administrative structures;
3. Operating performance of the entity;
4. Financial performance and ratio analysis;
5. Funding profile;
6. Future prospects/Strategic direction.

1. Economic and operating environment

The provision of electricity, while not considered crucial to sustaining life (unlike water services), is a critical component in enhancing the quality of life and supporting economic growth. In this respect, the government has an important role to play in ensuring sufficient electricity is generated and provided to users. Nevertheless, such services require a substantial fixed infrastructure, which needs to be funded from the tariffs charged to consumers. Where the required tariffs are unaffordable to the general public, income needs to be compensated by government subsidies or grants. Accordingly, the economic analysis focuses on the extent to which funding can be made available from different sources. An evaluation of the overall economic environment of a country or region is thus necessary to determine the ability of the National Government to financially support the utility. Indicators such as GDP growth, the national deficit and the national debt to income or GDP ratio are used to provide a measure of a government's financial health and its ability to support the entity.

Social and development indicators are important in measuring the ability of the population to afford the electricity being supplied. As many of the countries in which GCR accords credit ratings are underdeveloped, with relatively low standards of living, the ability to afford electricity services may be limited. To the extent that social indicators such as employment, income levels and household indebtedness are improving, this is considered positive for the utility as it implies a greater ability to recoup expenses through tariff charges, while limiting the burden of free service provision.

More important to electricity demand and pricing than the health of the consumer sector, may be the state of the industrial and commercial sector. Primary and secondary industries (such as mines, smelters, steel mills and manufacturing plants) tend to be very heavy users of electricity, substantially exceeding household demand. Accordingly, where an economy is expanding and the health of industry is strong, electricity demand will be high. This should lead to improved economies of scale and lower per unit costs for the utility, with the tariffs charged to large commercial users often subsidising the price of household electricity. Conversely, to the extent that economic activity is weak, consumption from large users will decrease, which will raise the unit price of production and the difference would need to be compensated by higher tariffs or government funding.

Expected capital expenditure is also largely determined by the economic environment in which the Power Utility operates. Where financial

resources are limited, the generation and distribution network may not have been maintained to the required standards, and in many cases the infrastructure and equipment may have exceeded its useful life. This could add significantly to the cost of providing services due to breakdowns and electricity losses. Such infrastructure characteristics imply that substantial new funding is necessary to improve the system, although the necessary funding may not be available.

In developing countries the level of electricity penetration may be very low, with electricity from the national grid only available in the more affluent neighborhoods of the urban areas, whereas the peri-urban areas (where most of the population lives) only have limited access to such services. Even where some infrastructure already exists, trends such as population growth and urbanisation could see the demand for services exceed the infrastructure design capacity, thus placing the system under severe strain and implying that further capex will be required.

For entities servicing populations with the above characteristics, the development backlogs will typically substantially exceed the five year rating horizon, and the quantum of funding necessary to address the infrastructure needs, will be well in excess of what can be generated internally. This persistent need for capital and outside assistance will pose a material constraint on the ratings.

2. Legal and institutional framework

Power Utilities, even if privatised, tend to be highly regulated entities and their financial and operating performance depends, to a large extent, on maintaining a strong working relationship with the governing authority. The rating analysis therefore encompasses a synopsis of the laws, regulations and practices that shape the public entity's operations. Most importantly, this is attained by reviewing the structure of the industry and the applicable electricity generation and distribution legislation. Such legislation will usually outline the requirements and responsibilities of each player in the industry and their pricing mechanisms, as well as delineate the relationship with the industry regulator. It is only within this framework that the operational flexibility afforded to the Power Utility can properly be assessed.

Historically, Power Utilities have encompassed all aspects of electricity provision within one corporate entity. In brief, core aspects of the process comprise *Generation* (the creation of electricity from one or multiple sources), *Transmission* (transporting electricity from the source of generation to centralised substations around a country/city) and *Distribution* (transfer of electricity from the

substation to the end user, generally including metering and billing). However, in more developed markets there has been a trend to separate the generation and distribution functions into distinct companies, with the distribution utility being able to buy electricity from a number of generation companies on commercial terms. This has allowed for the proliferation of independent generating companies, which fund the development costs from their own resources. Independent producers are often at the forefront of supplying electricity from renewable sources. Nevertheless, the appropriateness of such a framework needs to be carefully considered in light of the supply/demand dynamics in a particular jurisdiction, as well as the state of the electricity infrastructure. In this regard, it may be more appropriate for Power Utilities in underdeveloped markets, with limited infrastructure, to retain all functions within a single entity. Key to GCR's consideration is whether a single company would facilitate better long term planning, and whether this would exceed the potential benefits of private sector investment (which may not actually materialise in small markets, even if they are decentralised).

In most instances where the Power Utility has been fully or partially privatised, legislation has mandated the establishment of a regulatory authority to oversee the power industry and represent the interests of consumers. Responsibilities of the regulatory authority may include, *inter alia*: licencing industry participants; managing the interactions between the parties; determining the appropriate tariffs to be charged; and ensuring that the Power Utility complies with the service delivery benchmarks as stipulated in its operating licence. An analysis of the scope of the regulatory authority's powers is critical in determining the operational flexibility afforded to the Power Utility. Evidence of a productive working relationship between the authority and the utility is also important in assessing the stability and sustainability of operations.

Implied support from National Government, or lack thereof, plays an important role in the rating of public entities. As electricity is central to a government's overall development framework, the likelihood of support is generally assumed to be high. Such support may be operational, as demonstrated by seconding or deploying senior management to the entity, or by maintaining a particularly responsive policy towards the entity, whereby new policies and strategies can be easily discussed and quickly implemented. Financial support can be determined by analysing the historical funding track record. Where the National Government has provided equity capital, concessionary debt funding, or financial guarantees

to the Power Utility, support can be considered high. With regard to financial matters, however, the willingness to support must be considered in conjunction with the ability of the National Government to provide support, as determined through the economic analysis.

Tariffs

Given the importance of electricity in enhancing the quality of life and facilitating economic growth, tariffs are usually highly regulated. Typically, the Power Utility's role is to propose a tariff structure to the regulator, which must consider the proposal in terms of cost recovery and affordability before approval is granted. Most importantly, the regulatory body should determine the tariff pricing mechanism in a transparent manner. To reduce reliance on outside sources of funding, tariffs need to be set at a rate that adequately compensates the utility for all expenses incurred in its service provision, including the depreciation of assets and the funding costs of new equipment. Flexibility should also be built into the pricing mechanism that allows for the automatic readjustment of tariffs if key exogenous factors (such as commodity prices or the exchange rate) change substantially.

GCR recognises that setting tariffs requires a fine balance between cost recovery, return on investment, and affordability and demand. With the cost of renewable energy becoming cheaper and consumers increasingly utilising private sources of generation (such as solar panels), tariff increases could have a substantial adverse impact on demand, even where cost recovery considerations would justify such increases. Particularly when assessing the budgets for new generating capacity, attention needs to be given to the inverse relationship between tariffs and demand, and the impact this may have on cash flow forecasts. Another consideration is the step up rate of tariffs. While it is common for tariff rates to increase at higher levels of consumption, it is important that the higher rates do not inadvertently disincentivise electricity consumption.

In some jurisdictions, particularly in developing economies, electricity tariffs to households may not reflect the total cost of service provision. This may be compensated by higher (or more profitable) rates charged to heavy industrial users of electricity, leading to an average tariff price that does cover expenses. Nevertheless, in many instances this is not the case. Accordingly, GCR may consider the extent to which tariffs meet cash operating costs on an ongoing basis. Government grants or subsidies that mitigate the cost of electricity provision should also be considered in relation to the tariff structure.

Corporate governance

Corporatised Power Utilities are generally controlled by a Board of Directors ("Board") that delegates the day to day management of the utility to an executive team. Cognisance is taken of the Board Charter (or lack thereof), the utility's operating policies and procedures, as well as the management structure and reporting lines. An assessment of the number of engineers and other specialised technical staff employed in house may be undertaken to determine the capacity of the entity to carry out its functions.

The composition of the Board, and the Board committees, is also important as it attests to the operating independence of a utility. Where the Board is weighted towards political appointments, rather than independent professionals, this would imply greater political interference in the utility's operations. Similarly, Board actions that overstep into the general operations of the utility or seek to influence appointments, is indicative of political meddling and would be considered ratings negative. Conversely, the demonstrated ability of executive management to take actions for the benefit of the utility, even if they are politically unpopular, point to an entity with operational independence.

Given the often significant quantum involved, procurement is an aspect of a utility's operations that is predisposed to conflicts of interest and corruption. For an entity to be highly functional, it should have robust policies and procedures in place to prevent opportunities for such malfeasance, as well as mechanisms to investigate and remediate incidents when they occur.

3. Operating performance

Operating performance assesses the success of the Power Utility in performing its mandate. Key performance indicators ("KPIs") for Power Utilities include: kilowatt hours generated and growth in generation; redundant generating capacity; transmission/distribution losses; kilowatt hours sold; reliability of supply and percentage downtime of the grid. Within emerging economies, a Power Utility's operational performance can also be judged on its success in extending the electricity grid to new areas and broader sections of the population. KPIs are not assessed on an absolute basis, but relative to the utility's own targets, as outlined in its medium term development plan (or other internal or external strategy documents), as well as the performance of similar regional and international utilities. Positive trends in KPI's will generally indicate a strongly performing utility, while negative trends would be indicative of operational challenges.

In general, having the ability to generate electricity from several resources is positively considered. Diversification may arise from different types of

generation (such as coal and solar or hydro power), or by having plants at several different locations. What is important is that electricity generation is not overly reliant on a single plant, where a breakdown could have a significant adverse effect on generating capacity, or a single type of generation such as solar, where environmental factors could impact generation. GCR does not express any preference between different methods of generation (renewable versus fossil fuels). However, the potential impact on the availability of financing may be relevant, with several Development Finance Institutions (“DFIs”) no longer providing funding for fossil fuel generation.

The amount of electricity lost through the transmission and distribution process is an important indicator of the core performance of the Power Utility. Where losses are high, this is generally an indication of a substandard electricity grid, with older and lower voltage cables generally corresponding to higher losses. In addition, inadequate maintenance would also lead to higher losses. Electricity theft is also a problem that needs to be closely managed. Illegal connections to the grid not only deprive the utility of the income that should be earned from the stolen electricity, but may also make the grid more unstable for connected consumers, leading to a less reliable supply.

A higher proportion of prepaid meters is considered positive for a Power Utility. Not only does this alleviate the problem of debtors and improve cash flows, but prepaid metres tend to be more technologically advanced and can thus help detect problems such as disruptions and illegal connections faster. Furthermore, a modern IT backbone that allows the utility to monitor its network, identify problems faster and improve billing accuracy should also support improved efficiency metrics, and ultimately more sustainable cash flows for the utility.

Although the primary focus on operational performance is to determine the ability and the impediments to the utility performing its core service delivery function, such outcomes relate directly to financial performance. In this regard, the cost per kilowatt hour produced is a function of the above efficiency considerations and forms the critical input in financial forecasting for Power Utilities.

4. Financial performance and ratio analysis

GCR’s quantitative analysis for Power Utilities closely follows that of Corporate Issuers. The analysis involves scrutinising the utility’s earnings performance, cash generation and financial position, typically over a five year period. As the ratings

process explicitly excludes any type of audit, due consideration is given to the composition and accounting quality of financial statements, taking into account factors such as reserving policies, valuation of assets, treatment of off-balance sheet items, depreciation and asset impairment, as well as debtors write-offs and provisioning. In particular, accurate asset valuations are crucial in determining the necessary depreciation charge and thus the true level of expenses for a utility. If asset values are understated, the depreciation charge will not properly reflect the replacement cost, resulting in inadequate maintenance spend. This may give the impression that the utility is profitable, although profitability is being achieved at the expense of long term sustainability.

The core analysis centres on the extent to which income generated from the sale of electricity is sufficient to cover the expenses incurred, and the different factors that may impact this. While credit is given to more diverse sources of income, cognisance is taken of the limited ability of Power Utilities to diversify income relative to other corporate entities (as they generally have rigid mandates) and, in many cases, to independently set prices. Nevertheless, utilities may benefit from recurring subsidies or grants from the National Government or DFIs, which can provide a stable base level of income. It is also informative to look at the proportion of income generated from prepaid electricity supplied relative to post-paid, with prepaid electricity favoured as a more reliable source of income, as it does not incur the collection costs and delays often associated with post-paid.

The expenditure analysis seeks to identify and quantify each major cost component affecting the entity, and thereafter to assess how changes in these items contribute to, or inhibit, the utility’s financial stability. The absolute value of key expenditure items is of limited value, but rather such expenditure is evaluated relative to previous years, as well as relative to total expenditure and/or revenue.

Key cost ratios considered are as follows:

- **Delivery cost ratio** – which measures the cost of providing electricity against revenue earned (akin to the gross margin). This is considered on a total cost basis, as well as by calculating the ratio of each component of the delivery process to identify sources of cost pressure;
- **Staff costs relative to total expenditure and/or revenue** – staff costs tend to be higher in utilities than in municipal or other state entities, as the staff component should include a higher proportion of skilled personnel;
- **Administrative costs relative to total cost** – measures non-service delivery related costs;

- **Maintenance and repairs cost ratio** – a higher ratio may imply that a Power Utility is maintaining its infrastructure to an adequate standard and therefore the costs associated with service disruptions, as well as future capex costs, may be lower. At a minimum, maintenance expenditure should match or exceed the depreciation charge, but this may often be insufficient (depending on the estimation of depreciation).

To obtain a credit rating in the ‘BBB’ band or above, a Power Utility should be able to report positive operating profit on a consistent basis.

Interest obligations are assessed in absolute terms and relative to operating profit and free cash flow. GCR considers a net interest coverage metric (operating profit divided by net interest expense) of 2.5x to be prudent for entities rated in the ‘A’ band or higher. Free cash flow coverage of interest (cash flow from operations before the net interest payment divided by gross/net interest) takes into account the potential working capital drain and the metric should be above 2x for ‘A’ band rated Power Utilities.

Liquidity

Liquidity within a Power Utility is largely a function of the ability of the utility to collect from its customers the amounts they are billed. Debtors collection remains a major challenge in many of the jurisdictions in which GCR accords credit ratings and an analysis of the historical debtors trends, and the aging of the debtors book, must be performed in order to extrapolate the expected cash flows from current billed electricity. As explained, having a higher portion of prepaid electricity provision can significantly reduce the cost of collection and the incidence of bad debts and is therefore positively considered. However, prepayments may not be practical for large consumers such as industrial companies. A key tool Power Utilities can use to ensure payment is the threat of disconnection, albeit that such measures are generally not politically or socially acceptable. Accordingly, it is informative to investigate whether there is any specific legislation that precludes disconnecting errant consumers, or makes it exceedingly difficult to do so. To the extent that a Power Utility has carried out this recovery measure, the debtors book is likely to be better performing.

Variations in liquidity requirements need to be assessed within a given month and across seasons. Power Utilities tend to exhibit higher demand in the winter season (due to heating requirements from households), and in many cases tariffs are adjusted upwards during these months. In contrast, maintenance activity would be conducted during the

summer season, when demand is lower. Accordingly, a greater component of cash needs to be retained in winter months, to meet the capex and operating requirements in the summer months. To mitigate unforeseen liquidity requirements, a Power Utility should also maintain cash on hand. Cash on hand must be adjusted for existing capex and maintenance commitments (for which cash has been earmarked), as well as for cash that is restricted (by the National Government or a donor) for specific projects, to gain a clearer understanding of the actual amount of free cash available for a utility’s discretionary use. The key ratio considered is the level of days cash on hand, with a ratio of around 60 days considered prudent.

5. Funding profile

An appraisal of the funding profile commences with an overview of the various sources of funding available to the Power Utility. Highly functioning Power Utilities should have adequate access to private sources of capital. In such cases, GCR will assess the profile of the current debt financing by considering the quantum of the facilities availed and the utilisation thereof, as well as the number of financial institutions lending to the utility. Highly rated utilities should be able to demonstrate sufficient available funding facilities to meet committed capex, as well as short term debt redemptions. Having secured unutilised facilities in place to meet unforeseen circumstances is also positively viewed. Even where a utility does not have any debt on its balance sheet, an assessment of access to debt funding can be made based on historical debt utilisation trends.

While, in theory, a Power Utility should have access to the full scope of private sector funding, in practice such entities, particularly in underdeveloped markets, tend to rely on government and DFI funding. This could partly be explained by the political and environmental sensitivities related to electricity provision. This is particularly true of utilities in developing countries, where the government has made greater access to electricity part of its social mandate. In addition, private funders may be discouraged by the very high capex requirements of the utility. In such cases, it is critical for the utility to demonstrate ongoing support from the National Government or DFIs to enable it to diversify into new sources of funding.

National Government financial support can take several forms including equity, grant funding, direct loans, on-lent loans or guarantees. Equity and grant funding represent the lowest risk options for the utility as they provide needed funding without creating a corresponding liability. Moreover, the provision of such funds demonstrates a strong level

of commitment to the Power Utility. Although support is also implied by the provision of Government loans to the utility, such loans do require a commitment to service their financial obligations according to the loan agreements. Government loans, however, tend to be on concessionary terms and for longer durations than could be obtained through the private sector, making it a less risky funding source. Nevertheless, where the National Government has borrowed money and on-lent the funds to the utility, credit terms could be more akin to those of the private sector. Government guarantees require a Power Utility to source funding from the private sector and to service this debt. By providing the lender the assurance that in the event that the utility is unable to meet its obligations, the National Government will honour the debt, guarantees can play a critical role in opening up private and alternative sources of funding to the Power Utility, and enabling it to borrow on more favorable terms.

DFIs also play an important role in making funding available to Power Utilities. Such funding is generally in the form of longer term debt funding at concessionary rates, and DFIs, by virtue of their mandates, are often prepared to fund riskier projects. To the extent that repayment terms are flexible and/or debt is convertible into equity, credit risk is reduced, even if the quantum of debt is high. DFI support also tends to extend to technical support and capacity building by assisting utilities to improve operating and accounting standards, and to implement corporate governance best practices (often as a precondition for the loan). Over the long term, an improved level of professionalism and effectiveness should increase the willingness of private sector financial institutions to lend to such utilities.

As discussed previously, the extent of Government support that can be factored into the rating must be tempered by financial capacity of the Government, which in many countries may be limited or unreliable. In such circumstances, the rating enhancement provided by DFI support may be greater than that of Government support, as DFIs are generally highly rated on the international scale and have access to substantial funding.

No matter the source of funding, GCR will undertake an assessment of the Power Utility's debt burden in terms of the historical trend, future expectations and its ability to service obligations at present and over the medium term. Earnings based gearing metrics are of greater value in the analysis, as equity may be underpinned by a fixed infrastructure that cannot practically be sold (particularly in politicised environments). The currency distribution of debt also needs to be

analysed. As a utility's revenue is almost always generated in local currency, having large foreign currency exposures and embedded derivatives adds a significant element of risk.

Other key debt factors that are considered include:

- **Net debt to total income** – a sustainable ratio of around 400% is acceptable for 'BBB' rated entities, although to obtain an 'A' band credit rating, a ratio of around 200% is more appropriate;
- **Operating cash flow coverage of debt** – measures the level of debt relative to annual cash flows;
- **Maturity profile of the debt** – Power Utilities should strive to have longer dated maturities, corresponding to the lifespan of the assets the debt is financing. However, of greater importance is that debt maturities are relatively evenly spread;
- **Short term maturities (less than one year)** – GCR expects the utility to have initiated refinancing or redemption arrangements at least six months in advance;
- **Off balance sheet liabilities** – are not reflected in traditional gearing metrics but may result in unexpected cash outflows which could impact credit quality. These include contingent liabilities, outstanding legal claims or unfunded pension obligations.

6. Future prospects/Strategic direction

GCR's credit ratings provide a forward looking assessment of a Power Utility's financial commitments and its ability to meet these obligations. Much of the assessment of future prospects centres on capex plans, and the utility's ability to honour its past capex funding commitments and to budget for future expenditure. This in turn is a factor of the demand and income projections that justify such expenditure. As the overall demand of electricity is relatively inelastic, and will tend to rise with population and economic growth, there is a high level of predictability to income forecasts. Nevertheless, demand can reduce due to adverse changes in the general economic environment, as well as changes to the price of electricity. The ability of consumers to shift towards private sources of generation also needs to be considered. Accordingly, a utility's internal forecast models should be robust enough to withstand substantial deviations in key growth assumptions (GDP growth, demand), as well as to exogenous input costs such as commodity prices and exchange rates. As financing is almost always necessary for large projects, earnings must also be sufficient to meet the interest obligations at higher interest rate levels. To this end, GCR will stress capex budgets and income forecasts to assess if recurring earnings

and cash flows will be sufficient to ensure timely payment of interest and principal obligations under various economic conditions.

Having a significant capex pipeline does introduce project and construction risk, as well as the potential for significant costs overruns, but such risks can be mitigated by a more staggered development pipeline. Power Utilities tend to publish broad medium to long term plans, but typically only a small number of the projects will be undertaken in a given year.

Ultimately, the performance of an entity depends, to a large extent, on the strengths and capabilities of management. In this regard, forecast analysis and the comparison to actual performance, provides crucial insight into management's ability to understand its environment (and the current trends therein), project earnings performance accordingly, and to execute its strategy within the parameters set in the budget.

Conclusion

Power Utilities present investors with a unique convergence between the private and public sectors. Whether analysing the utility from the private or public perspective, this convergence presents both additional risks and safeguards which must be carefully understood by investors. To this end, the credit ratings report is a critical tool in describing the interplay, or potential conflict, between the various factors and in accurately assessing the credit risk of such an entity.

Credit ratings have an additional advantage for Power Utilities, as they are often the only independent research conducted on the entity. Even in developing markets where a ratings culture may not manifest, ratings can play a unique role in helping Power Utilities access alternative sources of funding, by providing potential investors with the comfort that a rigorous analysis has been conducted, and that the entity will be reviewed on an ongoing basis. Moreover, the credit rating symbol allows for these risks to be easily compared across various potential investments.

GLOSSARY OF TERMS/ACRONYMS USED IN THIS DOCUMENT AS PER GCR'S CORPORATE GLOSSARY

Bond	A long term debt instrument issued by either a company, institution or the government to raise funds.
Budget	Financial plan that serves as an estimate of future cost, revenues or both.
Capital	The sum of money that is invested to generate proceeds.
Capital Expenditure	Expenditure on long-term assets such as plant, equipment or land, which will form the productive assets of a company.
Cash Flow	The inflow and outflow of cash and cash equivalents. Such flows arise from operating, investing and financing activities.
Corporate Governance	Corporate governance broadly refers to the mechanisms, processes and relations by which corporations are controlled and directed, and is used to ensure the effectiveness, accountability and transparency of an entity to its stakeholders.
Credit Rating	An opinion regarding the creditworthiness of an entity, a security or financial instrument, or an issuer of securities or financial instruments, using an established and defined ranking system of rating categories.
Credit Risk	The possibility that a bond issuer or any other borrowers (including debtors/creditors) will default and fail to pay the principal and interest when due.
Debt	An obligation to repay a sum of money. More specifically, it is funds passed from a creditor to a debtor in exchange for interest and a commitment to repay the principal in full on a specified date or over a specified period.
Default	Failure to meet the payment obligation of either interest or principal on a debt or bond. Technically, a borrower does not default, the initiative comes from the lender who declares that the borrower is in default.
Exposure	Exposure is the amount of risk the holder of an asset or security is faced with as a consequence of holding the security or asset. For a company, its exposure may relate to a particular product class or customer grouping. Exposure may also arise from an overreliance on one source of funding.
Fixed Capital	Fixed capital is the part of a company's total capital that is invested in fixed assets such as land, buildings and equipment that remains on the balance sheet, usually for years, but for at least one accounting period.
Gearing	With regard to corporate analysis, gearing (or leverage) refers to the extent to which a company is funded by debt and can be calculated by dividing its debt by shareholders' funds or by EBITDA.
Impairment	Reduction in the value of an asset because the asset is no longer expected to generate the same benefits, as determined by the company through periodic assessments.
Interest	Scheduled payments made to a creditor in return for the use of borrowed money. The size of the payments will be determined by the interest rate, the amount borrowed or principal and the duration of the loan.
Interest Cover	Interest cover is a measure of a company's interest payments relative to its profits. It is calculated by dividing a company's operating profit by its interest payments for a given period.
Interest Rate	The charge or the return on an asset or debt expressed as a percentage of the price or size of the asset or debt. It is usually expressed on an annual basis.
International Scale Rating	International scale ratings relate to either foreign currency or local currency commitments, assessing the capacity of an issuer to meet these commitments using a globally applicable (and therefore internationally comparable) scale.
Investment Grade	Credit ratings equal to or higher than 'BBB-'.
Liquidity	The speed at which assets can be converted to cash. It can also refer to the ability of a company to service its debt obligations due to the presence of liquid assets such as cash and its equivalents. Market liquidity refers to the ease with which a security can be bought or sold quickly and in large volumes without substantially affecting the market price.
Long term rating	A long term rating reflects an issuer's ability to meet its financial obligations over the following three to five year period, including interest payments and debt redemptions. This encompasses an evaluation of the organisation's current financial position, as well as how the position may change in the future with regard to meeting longer term financial obligations.
Maturity	The length of time between the issue of a bond or other security and the date on which it becomes payable in full.
National Scale Rating	A national scale rating provides a relative measure of creditworthiness for rated entities only within the country concerned. Under this rating scale, a 'AAA' long term national scale rating will typically be assigned to the lowest relative risk within that country, which in most cases will be the sovereign state.
Operating Cash Flow	A company's net cash position over a given period, i.e. money received from customers minus payments to suppliers and staff, administration expenses, interest payments and taxes.
Operating Profit	Profits from a company's ordinary revenue-producing activities, calculated before taxes and interest costs.

Political Risk	The risk associated with investing and operating in a country where political changes may have a negative impact on earnings or returns.
Portfolio	A collection of investments held by an individual investor or financial institution. They may include stocks, bonds, futures contracts, options, real estate investments or any item that the holder believes will retain its value.
Principal	The total amount borrowed or lent, e.g. the face value of a bond, excluding interest.
Redemption	The repurchase of a bond at maturity by the issuer.
Refinancing	The issue of new debt to replace maturing debt. New debt may be provided by existing or new lenders, with a new set of terms in place.
Short term rating	A short term rating is an opinion of an issuer's ability to meet all financial obligations over the upcoming 12 month period, including interest payments and debt redemptions.
Tenor	The time from the value date until the expiry date of an instrument, typically a loan or option.
Under Review	Failure to carry out a full review of a rated entity within the designated timeframe, either through lack of information or delays in finalisation, i.e. review is ongoing.
Variable Costs	A cost that varies with the volume of production or sales, such as the cost of raw materials or packaging. In contrast with fixed costs, such as rent, which stay the same regardless of the volume of production or sales.

This page has intentionally been left blank

ALL GCR CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS, TERMS OF USE OF SUCH RATINGS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS, TERMS OF USE AND DISCLAIMERS BY FOLLOWING THIS LINK:[HTTP://GLOBALRATINGS.NET/UNDERSTANDING-RATINGS](http://GLOBALRATINGS.NET/UNDERSTANDING-RATINGS). IN ADDITION, RATING SCALES AND DEFINITIONS ARE AVAILABLE ON GCR'S PUBLIC WEB SITE AT WWW.GLOBALRATINGS.NET/RATINGS-INFO. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. GCR'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE UNDERSTANDING RATINGS SECTION OF THIS SITE.

CREDIT RATINGS ISSUED AND RESEARCH PUBLICATIONS PUBLISHED BY GCR, ARE GCR'S OPINIONS, AS AT THE DATE OF ISSUE OR PUBLICATION THEREOF, OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. GCR DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL AND/OR FINANCIAL OBLIGATIONS AS THEY BECOME DUE. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: FRAUD, MARKET LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND GCR'S OPINIONS INCLUDED IN GCR'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS AND GCR'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND GCR'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL OR HOLD PARTICULAR SECURITIES. NEITHER GCR'S [CREDIT RATINGS](#), NOR ITS PUBLICATIONS, COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. GCR ISSUES ITS CREDIT RATINGS AND PUBLISHES GCR'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING OR SALE.

Copyright © 2013 Global Credit Rating Co (Pty) Ltd. INFORMATION PUBLISHED BY GCR MAY NOT BE COPIED OR OTHERWISE REPRODUCED OR DISCLOSED, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT GCR'S PRIOR WRITTEN CONSENT. Credit ratings are solicited by, or on behalf of, the issuer of the instrument in respect of which the rating is issued, and GCR is compensated for the provision of these ratings. Information sources used to prepare the ratings are set out in each credit rating report and/or rating notification and include the following: parties involved in the ratings and public information. All information used to prepare the ratings is obtained by GCR from sources reasonably believed by it to be accurate and reliable. Although GCR will at all times use its best efforts and practices to ensure that the information it relies on is accurate at the time, GCR does not provide any warranty in respect of, nor is it otherwise responsible for, the accurateness of such information. GCR adopts all reasonable measures to ensure that the information it uses in assigning a credit rating is of sufficient quality and that such information is obtained from sources that GCR, acting reasonably, considers to be reliable, including, when appropriate, independent third-party sources. However, GCR cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall GCR have any liability to any person or entity for (a) any loss or damage suffered by such person or entity caused by, resulting from, or relating to, any error made by GCR, whether negligently (including gross negligence) or otherwise, or other circumstance or contingency outside the control of GCR or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits) suffered by such person or entity, as a result of the use of or inability to use any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained in each credit rating report and/or rating notification are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained in each credit rating report and/or rating notification must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY GCR IN ANY FORM OR MANNER WHATSOEVER.