



Methodology

*Rating Engineering and Construction  
Companies*

MARCH 2008



*Insight beyond the rating.*

---

## CONTACT INFORMATION

**Kam Hon**

Managing Director  
Industrials  
Tel. +1 416 597 7543  
khon@dbrs.com

---

DBRS is a full-service credit rating agency established in 1976. Privately owned and operated without affiliation to any financial institution, DBRS is respected for its independent, third-party evaluations of corporate and government issues, spanning North America, Europe and Asia. DBRS's extensive coverage of securitizations and structured finance transactions solidifies our standing as a leading provider of comprehensive, in-depth credit analysis.

All DBRS ratings and research are available in hard-copy format and electronically on Bloomberg and at DBRS.com, our lead delivery tool for organized, Web-based, up-to-the-minute information. We remain committed to continuously refining our expertise in the analysis of credit quality and are dedicated to maintaining objective and credible opinions within the global financial marketplace.

---

# Rating Engineering and Construction Companies

---

## TABLE OF CONTENTS

I. Overview	4
II. General Business Risk Profile	5
Key Considerations in Evaluating a Company's Business Risk Profile	5
Economic Environment	5
Legislative and Regulatory Environment	5
Competitive Environment	5
Country Risk	5
Industry Cyclicity	6
Management	6
Corporate Governance	6
III. General Financial Risk Profile	6
Key Considerations in Evaluating a Company's Financial Risk Profile	6
(1) Earnings	6
(2) Cash Flow/Coverage	7
(3) Balance Sheet and Financial Flexibility Considerations	7
IV. Industry-Specific Factors	8
Key Considerations in Evaluating Engineering and Construction Companies	8
Primary Factors	8
Risk Management	8
Project Complexity and Company Expertise	8
Financial Volatility	9
Size and Liquidity	9
Secondary Factors	10
Nature of Contracts	10
Diversification	10
Geographic Diversification	10
Customer Diversification	10
Sector or Business Diversification	10
Project Ownership	11
Market Position	11
Barriers to Entry	11
Legal and Environmental	11
Regional Characteristics	11

---

Note: DBRS provides third-party, independent evaluations in four major areas: the corporate sector, financial institutions, public finance and structured finance. The corporate sector consists of a wide variety of industries.



---

## I. Overview

---

DBRS ratings are opinions that reflect the creditworthiness of an issuer, a security or an obligation. They are opinions based on forward-looking measurements that assess a company's ability and willingness to make timely payments on outstanding obligations (whether principal, interest or dividend) with respect to the terms of an obligation. Ratings are not buy, hold or sell recommendations and they do not address the market price of a security.

DBRS rating methodologies include consideration of general business and financial risk factors applicable to most industries in the corporate sector as well as industry-specific issues and more subjective factors, nuances and intangible considerations. Our approach is not based solely on statistical analysis but includes a combination of both quantitative and qualitative considerations. The considerations outlined in DBRS methodologies are not intended to be exhaustive. In certain cases, a major strength can compensate for a weakness that would be more critical for a peer company. Conversely, there are cases where one weakness is so critical that it overrides the fact that the company may be strong in most other areas.

DBRS rating methodology is underpinned by a stable rating philosophy, which means that in order to minimize the rating changes due primarily to global economic changes, DBRS generally factors the impact of a cyclical economic environment into its rating. Consequently, DBRS takes a longer-term "through the cycle" view of a company and, as such, rating changes are not based solely on normal economic cycles. Rating revisions do occur, however, when it is clear that a structural change, either positive or negative, has transpired or appears likely to transpire in the near future. An equally important aspect of DBRS analysis is its broad industry coverage, which it undertakes in order to understand the major differences and subtle nuances within a particular industry and to form an appropriate rating of a company relative to its competitors.

As a framework, DBRS rating methodologies consist of three components that together form the basis of the rating: an assessment of the company's general business risk profile based on cross-industry and macro business considerations; an assessment of the company's financial risk profile primarily based on quantitative ratio analysis; and consideration of industry-specific factors and measures particularly unique to the company. To some extent, the business risk and financial risk profiles are interrelated. The degree of financial risk considered acceptable for a company depends to a large measure on the business risks it faces.

Critical in the determination of a rating is the application of the analyst's experience and expertise in forming an initial rating opinion and recommendation for the rating committee and the role of the DBRS rating committee as the final decision maker. DBRS rating committees, which comprise experienced and knowledgeable DBRS personnel, strive to provide objective and independent rating decisions that are based upon all relevant information and factors, incorporate both global and local considerations, apply DBRS-approved methodologies and reflect the opinion of DBRS.

---

## II. General Business Risk Profile

---

A fundamental component of DBRS analysis is the consideration of macro business factors that apply to most, if not all, industries within the corporate sector. The general business risk profile is largely a qualitative assessment of the environment a company is affected by and operates in. An assessment of the general business risk profile serves as a backdrop for the analysis of the company's financial risk profile as well as other qualitative and quantitative factors that are particularly unique to the company. Differing business risk profiles impact the assessment of a company's financial risk profile, and thus, it is important to understand the extraneous influences and business factors a company is or could be affected by despite its financial strength.

### KEY CONSIDERATIONS IN EVALUATING A COMPANY'S BUSINESS RISK PROFILE

The following considerations, while not intended to be an exhaustive list, indicate the key areas DBRS considers in evaluating a company's business risk profile:

#### *Economic Environment*

The importance of the industry within the overall economy, in terms of either how it impacts or is impacted by the economy, shapes a company's viability. Also of importance is how the industry is influenced by current economic factors such as inflation or deflation, supply and demand, interest rates, currency swings and demographics.

#### *Legislative and Regulatory Environment*

Whether an industry is regulated is key, as the degree of regulation and legislative oversight can severely restrict or assist a company depending on its stage of growth, industry influence and regulatory relations. A regulated industry imposes a certain rigour and governance. It is also important to understand the frequency of change or stability in industry rules and whether regulations may require companies to make costly modifications to their infrastructure.

#### *Competitive Environment*

The nature of the market structure (e.g., monopoly versus oligopoly) determines the extent of competitiveness and the barriers to entry a company may face. Many industries are undergoing significant structural changes such as consolidation or deconsolidation, excess capacity or competitive threats from new capacity in "low-cost" countries such as China, Brazil and Russia in both domestic and international markets. Even small changes in the competitive environment can have a profound impact on a company.

#### *Country Risk*

Governments often intervene in their economies and occasionally make substantial changes in policy regarding competition, ownership, wage and price controls, restrictions on foreign currency, capital and imports/exports, among other things. Such policy changes can significantly affect a company, and therefore, considerations include the company's main location or country of operation, the extent of government intervention and support and the degree of economic and political stability. The assessment of country risk is not limited to direct government actions to interfere with the private sector, but also encompasses the full range of financial and economic events that can spill across a country, causing widespread defaults in otherwise healthy corporate credits. As such, country risk can have considerable implications for corporate ratings. A country ceiling is assigned to corporate foreign currency ratings based on the country's susceptibility to systemic shocks and the private sector's ability to maintain its foreign currency debt payments when shocks occur.

### *Industry Cyclicalities*

Cyclicalities is influenced by factors such as levels of consumer spending, consumer confidence and the strength of the economy. The degree of cyclicalities is influenced by the market segment in which a company specializes. Non-cyclical industries are better able to withstand dramatic economic changes as are companies with more predictable cycles than those with significant peaks and troughs. It is important to examine a company's strategies and performance over the longer term and understand them in cyclical highs and lows.

### *Management*

The capability and strength of management is a pivotal factor to company success. An objective profile of management can be obtained by assessing the following: the appropriateness of core strategies; rigour of key policies, processes and practices; management's reaction to problem situations; its appetite for growth, either organically by adding new segments or through acquisition; its ability to smoothly integrate acquisitions without business disruption; and its track record in achieving financial results. Retention strategies and succession planning for senior roles are also critical considerations.

### *Corporate Governance*

Effective corporate governance requires a healthy tension between management, the board of directors and the public. There is no one "right" approach for all companies. A good board can have a profound impact on growing companies, those in fragile financial states or those undergoing significant change. Beyond a review of management, assessment should focus on the appropriateness of board composition and structure (including the independence and expertise of the audit committee) to approve executive compensation and corporate strategy, and to oversee execution and opportunities for management self-interest. Other important areas include the extent of disclosure of financial and non-financial information (including aggressiveness of accounting practices and control weaknesses), share ownership (including director's) and shareholder rights.

---

## III. General Financial Risk Profile

---

The financial risk profile is largely a quantitative assessment of the company's financial strength and an estimation of its future performance and financial profile. DBRS reviews three key areas: earnings, cash flow and additional measures for balance sheet and financial flexibility. Within each area, DBRS focuses on key metrics and considerations, which are assessed over time noting that the trend in the ratios is also important to the rating. However, ratios alone cannot be used as an absolute test of financial strength. With a focus on future expectations, the primary goal of financial risk assessment is to understand the interrelationship between the numbers, interpret what they mean and determine what they indicate about the company's ability to service and repay debt on a timely basis given the industry background.

### **KEY CONSIDERATIONS IN EVALUATING A COMPANY'S FINANCIAL RISK PROFILE**

The following financial considerations and ratios tend to be analyzed for the majority of industries in the corporate sector. There may be additional quantitative factors and ratios that are considered on an industry-specific basis, which are noted under Section IV – Industry-Specific Factors.

Also refer to the *Corporate Sector – Glossary of Ratio Definitions* at [www.dbrs.com](http://www.dbrs.com).

#### *(1) Earnings*

DBRS earnings analysis focuses on core or normalized earnings and in doing so considers issues such as the sources, mix and quality of revenue; the volatility or stability of revenue; the underlying cost base (e.g., the company is a low-cost producer); optimal product pricing; and potential growth opportunities.

Accordingly, earnings as presented in the financial statements are often adjusted for non-recurring items or items not considered part of ongoing operations. DBRS generally reviews company budgets and forecasts for future periods. Segmented breakdowns by division are also typically part of DBRS's analysis.

Typical earnings ratios include

- Gross margin
- Return on common equity
- Return on capital
- EBIT margin and EBITDA margin

### *(2) Cash Flow/Coverage*

DBRS cash flow analysis focuses on the core cash flow generating ability of the company to service current debt obligations and other cash requirements as well as the future direction of cash flow. From a credit analysis perspective, insufficient cash sources can create financial flexibility problems even though net income metrics may be favourable. DBRS evaluates the sustainability and quality of a company's core cash flow by focusing on cash flow from operations and free cash flow before and after working capital changes. Using core or normalized earnings as a base, DBRS adjusts cash flow from operations for as many non-recurring items as possible. In terms of outlook, DBRS focuses on the projected direction of free cash flow, the liquidity and coverage ratios, and the company's ability to internally versus externally fund debt reduction and future capital expenditure and dividend/stock repurchase programs, as applicable.

Typical cash flow ratios include

- EBIT interest coverage and EBITDA interest coverage
- EBIT fixed charges coverage
- Cash flow/total debt and cash flow/adjusted total debt
- Cash flow/capital expenditures
- Capital expenditures/depreciation
- Debt/EBITDA
- Dividend payout ratio

### *(3) Balance Sheet and Financial Flexibility Considerations*

As part of determining the overall financial risk profile, DBRS evaluates various other factors to measure the strength and quality of the company's assets and its financial flexibility.

From a balance sheet perspective, DBRS focuses on the quality and composition of assets including goodwill and other intangibles, off-balance-sheet risk, and capital strength including the quality of capital, appropriateness of leverage to asset quality, and the ability to raise new capital. DBRS also reviews the company's strategies for growth including capital expenditures, plans for maintenance or expansion, and the expected source for funding these requirements. Where the numbers are considered significant and the adjustments would meaningfully impact the credit analysis, DBRS adjusts certain ratios for items such as operating leases, derivatives, securitizations, hybrid issues, off-balance-sheet liabilities and various other accounting issues.

Typical balance sheet ratios include

- Current ratio
- Turnover – receivables and inventory
- Asset coverage (times)
- Per cent total debt to capital and per cent adjusted total debt to capital
- Per cent adjusted net debt to capital

The following factors focus on the company's liquidity:

- Maintaining sufficient bank lines or cash balances;
- Prudent use of cash balances for dividends or stock repurchases;

- Terms and conditions of credit facilities including unique terms and/or financial covenants;
- Debt management approach, including dependence on short-term versus long-term debt, fixed versus variable rate debt and debt maturity schedule;
- Interest rate and/or foreign exchange exposure;
- Relationship and strength or weakness of a parent holding company or associated companies, if applicable.

---

## IV. Industry-Specific Factors

---

Each industry within the corporate sector has unique features that cannot be broadly applied across all industries. For example, capital spending is a key area in the utilities industry, reserves are particular to the mining industry, adequate R&D is critical in the pharmaceutical industry, and seasonality has a significant impact on merchandisers. For engineering and construction companies, which are highly labour intensive, the ability to attract skilled workers is often of key importance. Against the backdrop of the general business and financial risk profiles, a company's unique strengths, weaknesses and industry-specific issues need to be factored into the credit analysis to form an appropriate rating. These particular business and financial issues and measures also help shape the company's status relative to its peers.

### KEY CONSIDERATIONS IN EVALUATING ENGINEERING AND CONSTRUCTION COMPANIES

The engineering and construction group of companies are primarily involved with medium- to larger-scale construction projects that range from standard commercial and/or public buildings to highly complex infrastructure projects. The methodology is applied broadly to companies within the industry, even though the range of activities can vary substantially among them (e.g., from general contractors to companies that have specialized engineering, project management and maintenance capabilities).

A summary of the key considerations and drivers of the DBRS ratings for companies principally operating within the engineering and construction industry are listed below. The considerations are segmented into primary and secondary rating factors and supplement the macro-business and -financial considerations discussed in Section II and Section III, respectively.

### PRIMARY FACTORS

#### *Risk Management*

Risk management policies are of core importance to the ratings of construction and engineering firms. The inability to effectively identify risks inherent in potential projects or manage risks once contracts have been signed can lead to substantial losses. Risk management is particularly important for large-scale and/or complex projects, as well as in instances where bidding competition is high. Companies that have formalized policies and procedures in place to accept or reject projects and to monitor them are viewed favourably by DBRS. Examples of such policies and procedures include risk management committees, executive having to approve projects that reach a specific size threshold and third-party project assessments, as well as consistency in the company's strategy. The effectiveness of project-tracking software and other controls (e.g., ones that quickly identify potential project issues), the management of supplier and/or subcontractor relationships (including back-to-back contracts, a review of their credit profiles and bonding) and the ability to tailor a project's payment terms to risk exposure (e.g., larger upfront payments and hedging strategies) are also reviewed.

#### *Project Complexity and Company Expertise*

DBRS assesses the level of complexity of the major projects in which construction and engineering companies are involved as a means of determining their business risk profiles. Companies typically involved in the engineering and/or construction of relatively standardized structures (e.g., government buildings, hospitals, toll roads and bridges) are generally viewed as having lower risk profiles. Such projects are usually less likely

to incur large cost overruns (if tendered on a fixed-price contract basis, which accounts for the bulk of contracts) and are not contingent on performance requirements (given the lack of process work). This contrasts with highly technical or specialized construction projects that may involve relatively nascent technologies (e.g., an alternative-energy plant) or unique specifications (e.g., tunnels, nuclear plants and adding on to existing buildings), which expose a company to a wider range of potential challenges.

Time and cost overruns are generally the primary project risks because most contracts are based on fixed prices for many of the costs rather than being cost-plus contracts. Cost estimation is more challenging for projects that are less standardized. This is particularly the case for process work, when specific performance targets must be met that may be heavily dependent on the performance of equipment suppliers.

When assessing risk, DBRS takes into account a company's expertise in specific areas and its operating track record (i.e., its profitability trend), particularly with respect to more complex projects. The industry is highly labour intensive. Attracting top talent is often of key importance, given the highly technical nature of many engineering projects, and labour availability during periods of strong demand also needs to be considered. Additional factors that are reviewed when evaluating project complexity include the location of a project (e.g., is the location remote?), the relative importance of the project and the reliability of key suppliers and/or subcontractors, equipment and materials. However, given the large number of projects in which a company may be engaged at any one time, attention is focussed primarily on larger projects, which could have a material impact on a company's financial profile.

### ***Financial Volatility***

Construction and engineering companies are affected to varying degrees by cyclical changes in the economy and/or commodity prices, which can lead to volatility in financial performance. DBRS notably takes into account the proportion of public (i.e., government) to private contracts, which indicates the sensitivity of a company's financial profile to changes in economic demand (e.g., GDP growth rates) and commodity cycles. The operating performance of a company with a proportionally larger share of sales from government-related contracts is generally less volatile and viewed more favourably in terms of business risk; government projects are less sensitive to economic shifts (and may even be counter-cyclical) and are of lower credit risk (albeit also often less profitable). The extent of the impact of cyclical changes partly depends on the regions in which a company operates, with globally diversified companies being less affected. The size (and mix, if available) of a company's backlog is also reviewed because large backlogs tend to reduce the impact of slowing demand on earnings, at least over the near term. When evaluating the risk profiles of construction and engineering companies, stability or growth in profitability measures provide an important indication of a company's ability to evaluate and manage the risks inherent in projects.

### ***Size and Liquidity***

The scale of a company, particularly with respect to business volume and equity base, provides added support for the rating. A relatively high-volume business (as seen in sales and backlog) can indicate the company has a strong market position, which can be an advantage in the project bidding process over smaller, lesser-known companies. Larger companies tend to have increased opportunities for efficiency gains and greater negotiating leverage (e.g., material sourcing and concessions from subcontractors) and have a larger customer base that promotes repeat business. The size of a company's equity base and cash position is also an important consideration. For example, a large equity base and cash reserves provide an increased ability to absorb both potentially significant one-time writedowns and/or losses on projects and often volatile working capital requirements. Consideration is also given to a company's saleable assets, which could provide an additional source of liquidity, if needed. Furthermore, larger companies with reasonable capital structures tend to have greater financing options and bonding capacity, which can be a positive over smaller companies when bidding on contracts. The flexibility to take an equity position in underlying projects (e.g., concession projects) may also serve as a benefit, but this strategy also involves additional risk (see Project Ownership below).

## SECONDARY FACTORS

### *Nature of Contracts*

The proportion of cost-plus to fixed-price contracts is reviewed. Fixed-price contracts have higher relative risks, notably related to potential cost overruns, but tend to have greater margin upside relative to cost-plus contracts (with built-in contingencies). DBRS also notes whether subcontractors are used, which generally leads to lower profitability but can be a means for companies to transfer project risk and increase operating flexibility (with lower fixed costs in the form of labour and capital equipment). In this respect, DBRS reviews the contracting and subcontracting practices of a company, including risk transfer and allocation. While risk is reduced, there remains the potential for subcontractor bankruptcy, which generally results in increased costs to complete a particular project.

### *Diversification*

Revenue diversification should provide increased earnings stability, mainly in the form of reduced reliance on a particular geographic region, end market, business or project. Companies with relatively stable financial performance are viewed favourably, particularly given the volatility that has historically characterized the industry. DBRS also reviews the size of projects relative to a company's balance sheet. Excess exposure to large projects often increases a company's risk profile given the increased ramifications of the project.

### **Geographic Diversification**

Revenues and earnings distributed among several regions reduce exposure to changing business conditions or input price shocks in a particular market, which may result mainly from economic fluctuations (mainly having an impact on commercial and industrial projects), government spending (e.g., civil infrastructure and public facilities) or currency fluctuations. A very strong market position or growing presence in a region that is highly profitable yet modest as a share of revenue would receive added consideration. Projects in emerging markets have been a key source of growth for many companies given the fast pace of economic development in those regions, particularly resource-based countries. However, there are risks to entering these less stable countries (e.g., political) with clients that are potentially less creditworthy. As such, the policies put in place by companies entering less established markets to protect their interests and their history in such markets are evaluated as part of risk management.

### **Customer Diversification**

Companies that are exposed to a significant number of projects across different customer groups are generally viewed most favourably, given the likelihood for earnings stability. Excess exposure to a limited number of customers increases risk of payment default (depending on the credit profile of the customer), which would have a significant negative impact on a company's financial profile. Government and utility customers are generally viewed as more stable and less risky than customers focussed on historically more volatile sectors, notably those heavily levered to prevailing commodity prices (which often dictate the demand for project development and construction).

### **Sector or Business Diversification**

DBRS assesses the extent to which a company is diversified by business segment (e.g., oil and gas, power or mining projects). Companies with a high exposure to more volatile segments may face an increased potential for project losses in the event of a sharp or steady downturn in that sector. However, such companies are not necessarily viewed as having above-average risk profiles because consideration is given to the strength of their track records in specific sectors, their specialized capabilities and their market positions.

DBRS also assesses the mix of a company's revenues by business line, which could include a varying mix of construction, engineering, project management and maintenance (M&M) and investment in concession projects. Each type of business generally provides different profitability and risk characteristics. Companies that are involved with more than one type of business beyond pure construction are generally viewed more

favourably, partly due to the recurring nature of revenues and earnings of M&M and concessions. Pure construction is generally a low-margin business (particularly for less technical projects) due to higher levels of competition, which can lead to aggressive project bidding. However, risk is usually low (albeit related to project scale and sophistication) and can be managed to a degree with the use of subcontractors.

### ***Project Ownership***

Primarily to assess financial flexibility and risk, DBRS reviews the extent to which construction and engineering companies invest equity in concession projects. Concession projects (e.g., toll roads) are generally viewed as having modest risk profiles relative to pure construction projects once concession infrastructure development has been completed. This is mainly due to the typically stable source of revenues and earnings (although business volume risk does exist). However, the use of equity by companies investing in a particular project can increase risk in the event that the project fails. The size of an equity investment relative to a company's balance sheet equity, the market value (if available) of its ownership position in other concessions or assets (which can be highly saleable) and the credit rating of the particular concession are all taken into account when assessing the risk of an equity investment. Larger companies have an enhanced ability to invest in projects, which provides an advantage with respect to the bidding process. Importantly, concession investments typically include a debt component that is non-recourse to the parent company (i.e., funded via a subsidiary). DBRS is generally more tolerant of higher leverage and lower coverage ratios for a specific rating when total debt includes a measurable non-recourse component.

### ***Market Position***

Companies with a long-established market presence and reputation are in a stronger position to bid on projects as opposed to new entrant companies. However, companies focussed primarily on less complex projects (e.g., public building or commercial office construction) generally face a higher degree of competition during the bidding process, which can limit new project wins, and margin upside as a result of aggressive bidding.

### ***Barriers to Entry***

Similar to market position, DBRS views favourably high barriers to entry in the key markets of engineering and construction companies. This may result from a highly skilled workforce, a low-cost position (e.g., scale economies and logistics) and relationships with suppliers and subcontractors. Barriers to entry are considered high for global engineering companies and relatively low for pure construction companies and have a direct impact on competition and profitability.

### ***Legal and Environmental***

DBRS assesses the potential impact of lawsuits related to environmental claims, largely from the use of certain materials in project construction and/or production processes. As a result, there is a risk of future costs and/or penalties related to pollution or legal liability (e.g., asbestos-related lawsuits). The potential impact on cash flow is a key consideration.

### ***Regional Characteristics***

DBRS assesses the importance of several characteristics when analyzing engineering and construction companies operating in a specific geographic region. DBRS reviews the strength of the country of domicile and any other countries of significance in the business mix, the relevant political risk considerations, the tax environment, the potential government or government agency support (which can be very important with respect to client payment guarantees), the availability of skilled labour and key materials, the importance of the industry in question to the country of domicile and the expected stability and economic outlook for the geographic environment in which the company operates.

As noted, projects based in emerging markets often provide increased political risk that could have a negative impact on profitability. To gain a better sense of how risk is mitigated in non-Western markets, DBRS assesses a company's experience in the market, including the history of any projects, its market share, the strength of its relationships and how it structures contracts.

Copyright © 2010, DBRS Limited, DBRS, Inc. and DBRS Ratings Limited (collectively, DBRS). All rights reserved. The information upon which DBRS ratings and reports are based is obtained by DBRS from sources DBRS believes to be accurate and reliable. DBRS does not audit the information it receives in connection with the rating process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission or for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report providing a DBRS rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS. PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT <http://www.dbrs.com/about/disclaimer>. ADDITIONAL INFORMATION REGARDING DBRS RATINGS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON <http://www.dbrs.com>.



*Insight beyond the rating.*

[www.dbrs.com](http://www.dbrs.com)

---

**Corporate Headquarters**

DBRS Tower  
181 University Avenue  
Suite 700  
Toronto, ON M5H 3M7  
TEL +1 416 593 5577