

SECTOR COMMENT

24 NOVEMBER 2015

Rate this Research



ANALYST CONTACTS

Paresh Chari 416-214-3837 Analyst

paresh.chari@moodys.com

Gavin Macfarlane 416-214-3864 VP-Senior Analyst

gavin.macfarlane@moodys.com

Michael Yake 416-214-3865

VP-Senior Analyst michael.yake@moodys.com

Donald S. Carter, CFA 416-214-3851 MD-Corporate Finance donald.carter@moodys.com

Jim Hempstead 212-553-4318 Associate Managing Director james.hempstead@moodys.com

Terry Marshall 416-214-3863 *Senior Vice President* terry.marshall@moodys.com Cross Sector - Canada

Alberta emissions program has limited impact on credit quality

On November 22, 2015 the Province of Alberta (Aaa stable) provided an overview of its long term emissions strategy. This strategy will have a limited near term effect on credit quality on rated industrial sectors including oil and gas, power and provincial credit quality. The announcement coincides with the publication of the final report from the Alberta Climate Change Advisory Panel and introduces new policies on coal and electricity, carbon pricing, capping oil sands emissions and reducing methane emissions. We expect clarity on implementation to be provided over time.

The Alberta government's new climate change strategy will have minimal impact on medium term oil sands development. The government pushed the proposed carbon tax increase out one year with 2016 now at C\$15/tonne and 2017 at C\$20/tonne. The tax will then increase to C\$30/tonne in 2018 and will increase each year after that. At C\$30/tonne, the incremental cost to the majority of oil sands facilities will be less than C\$1/bbl, compared to the current C\$15/tonne carbon tax. The newest feature of the Alberta government's climate change strategy is to cap total greenhouse gas (GHG) emissions at 100 Megatonnes per year for the oil sands, which is about 40% more than what is produced today. Growth, besides what is currently being completed, has stopped in the oil sands due to the low oil price environment, and the GHG limit will likely not be reached for the foreseeable future.

The strategy also includes the total phase out of coal emissions in Alberta by 2030, going beyond existing federal greenhouse gas legislation that has already placed an effective limit on the life of coal plants. TransAlta Corporation (Baa3 Under review down) has the largest and oldest fleet, and the announcement means that 8% of its current generation capacity will be phased out early. By comparison, Capital Power Corp (not rated), with a much younger fleet will see about 40% of its current generation capacity affected. The timeframe provides the opportunity for generators with coal fired assets to prepare for the transition away from coal and towards renewables - a fuel source that the government expects will replace about 2/3 of the lost coal production. The government has also indicated that it will not try to "unnecessarily strand assets" which opens the door to the possibility of compensation for companies that will have their units closed prior to the end of their useful life. Under federal rules some plants would have operated for decades past 2030, for example Keephills 3 (jointly owned by TransAlta and Capital Power) could have operated until 2061.

The carbon tax will generally drive the price of power upwards because coal is typically baseload and its emissions costs will be reflected in the price at which power from coal is sold. The higher power price will ultimately be borne by power customers in Alberta. For

MOODY'S INVESTORS SERVICE CROSS-SECTOR

companies that sell power under existing Alberta power purchase agreements these costs will typically be borne by the offtaker. TransAlta sells the vast majority of its coal fired generation under the form of these contracts and, as a result, has more limited exposure to emissions standards. TransCanada Corporation (Baa1 stable) is a significant offtaker of coal power under these PPA's, and has some exposure, however as noted we expect the carbon tax to lead to increases in prices, and not have an ongoing material effect on coal margins. Generators with less carbon intensive generation and merchant exposure will likely benefit from a higher power price.

While introducing a price on carbon emissions will raise Alberta's revenue, the province's strategy is designed to ensure that large emitters do not shift their investments to other jurisdictions that do not have a carbon tax in place. While this will ensure that emitting industries remain in the province, and therefore protect the revenue streams from these industries, the province will also focus on the relative competitiveness of these industries in a global context. As such, we expect that the net revenue, once allocations for emissions rights are applied, will reach C\$3 billion by 2018 once the strategy is fully phased in. Of this revenue, the province expects to use a significant portion for new program offerings to help offset the carbon tax, including offsets to low and middle income households and support transition to affected workers. The net fiscal impact of the carbon tax will be minimal on the fiscal position of the province, which we currently project to record deficits of C\$6.1 billion in 2015-16 and C\$5.4 billion in 2016-17.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

MOODY'S INVESTORS SERVICE CROSS-SECTOR

© 2015 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS ON ON TON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS MOODY'S PUBLICATIONS WITH THE EXPECTATION AND INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF FACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE. HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS FOR RETAIL INVESTORS TO CONSIDER MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS IN MAKING ANY INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

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 MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

For Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail clients. It would be dangerous for "retail clients" to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.

For Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

