ADEX MINING INDIUM ZINC HYDROMET TEST RESULTS

Toronto – January 20, 2011 – Adex Mining Inc. ("Adex" or the "Company") (TSX-V: ADE) is pleased to announce results from its zinc/indium hydrometallurgical pilot test program being conducted at the pilot facilities of Thibault and Associates Inc. ("Thibault") in Fredericton, New Brunswick.

Indium sponge metal grading 96.25% indium and zinc metal grading 98.89% zinc were produced from the pilot plant operations in December 2010/January 2011. Feed for the successful pilot run originated from zinc/indium concentrate from previous testwork on the North Zone ("NZ") from Adex's wholly-owned Mount Pleasant Mine Property ("Mount Pleasant" or the "Property") located in southwestern New Brunswick, Canada.

In addition to the pilot testing, computer simulation of the proprietary, chloridebased process technology is in progress by Thibault to optimize operating and plant design parameters for the hydrometallurgical flowsheet.

"I continue to be very optimistic," stated Errol Farr, Adex President and CEO. "As previously stated, the potential to produce and direct market high grade indium and zinc products places Adex in a unique position amongst junior mining companies."

The hydromet process, developed by Thibault for Adex, involves chloride leaching of zinc sulphide concentrate containing approximately 4500 ppm indium and recovering indium and zinc through a series of solvent extraction and solution purification unit operations. In addition to the production of high purity indium and zinc, the technology is designed to optimize on the regeneration of leaching reagents and to assure compliance with environmental guidelines.

Indium production at Mount Pleasant is planned at 40 tonnes per year ("tpy"), with about 4,000 tpy of zinc metal. Adex also plans to produce about 1500 tpy of tin metal either as high purity metal or as metal contained in tin concentrate.

QUALIFIED PERSON

J. Dean Thibault, P. Eng., Senior Process Chemical Engineer and Principal of Thibault & Associates Inc., an independent qualified person as defined by NI 43-101, supervised the preparation of the technical information contained in this press release in compliance with NI 43-101.

ABOUT ADEX

Adex Mining Inc. is a Canadian junior mining company with an experienced management team. The Company is focused on developing its flagship Mount Pleasant Mine Property, a multi-metal project that is host to promising tungsten-molybdenum and tin-indium-zinc mineralization. Located in Charlotte County, New Brunswick, the Mount Pleasant Mine Property is 80 kilometres south of

Fredericton, the provincial capital, and 65 kilometres from the United States border. The common shares of Adex trade on the TSX Venture Exchange under the stock symbol "ADE".

FOR FURTHER INFORMATION PLEASE CONTACT:

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No securities commission or regulatory authority has approved or disapproved the contents of this press release.

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Certain statements in this press release may constitute "forward-looking" statements which involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements of Adex, its subsidiary or the industry in which they operate to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. When used in this press release, the words "estimate", "believe", "anticipate", "intend", "expect", "plan", "may", "should", "will", the negative thereof or other variations thereon or comparable terminology are intended to identify forward-looking statements. Such statements reflect the current expectations of the management of Adex with respect to future events based on currently available information and are subject to risks and uncertainties that could cause actual results, performance or achievements to differ materially from those expressed or implied by those forward-looking statements. These risks and uncertainties are detailed from time to time, including, without limitation, under the heading "Risk Factors", in reports filed by Adex with the Alberta, British Columbia and Ontario Securities Commissions which are available at www.sedar.com and to which readers of this press release are referred for additional information concerning Adex, its prospects and the risks and uncertainties relating to Adex and its prospects. New risk factors may arise from time to time and it is not possible for management to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance and achievements of Adex to be materially different from those contained in forward-looking statements. Although the forward-looking statements contained in this press release are based upon what management believes to be reasonable assumptions, Adex cannot assure investors that actual results will be consistent with these forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

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