

Kayne Anderson MLP Investment Company Closes Public Offering of Series F MRP Shares and Announces Redemption Notice for Series D MRP Shares

Houston, TX – April 3, 2013 – Kayne Anderson MLP Investment Company (the “Company”) (NYSE: KYN) announced the closing of a public offering of 5,000,000 shares of Series F Mandatory Redeemable Preferred Shares (“Series F MRP Shares”) at a price of \$25.00 per share (includes 600,000 shares that the underwriters purchased pursuant to their over-allotment option). The Series F MRP Shares pay cash dividends at a rate of 3.50% per annum and have a mandatory redemption date of April 15, 2020. Beginning on April 8, 2013, the Series F MRP Shares will be publicly traded on the NYSE under the symbol “KYN Pr F”.

The Company will use the net proceeds from the offering of approximately \$122.5 million to redeem its Series D Mandatory Redeemable Preferred Shares (NYSE: KYN Pr D)(“Series D MRP Shares”), to make investments in portfolio companies in accordance with its investment objective and policies, to repay indebtedness, and for general corporate purposes.

The Company also announced that it has filed with the Securities and Exchange Commission (the “SEC”) a notice of its intention to redeem all 4,000,000 of its Series D MRP Shares (total liquidation preference of \$100 million) with a redemption date of May 13, 2013. The redemption price is \$25.269375 per share. The redemption price per share is equal to the liquidation preference per share of \$25.00, plus (i) accumulated but unpaid dividends of \$0.144375, calculated using the current rate of 4.95% accrued to, but not including, the redemption date and (ii) a redemption premium of \$0.125 (0.5% of the liquidation preference per share). The paying agent is American Stock Transfer & Trust Company, which is the Company’s transfer agent.

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Kayne Anderson MLP Investment Company is a non-diversified, closed-end management investment company registered under the Investment Company Act of 1940, whose common stock is traded on the New York Stock Exchange. The Company's investment objective is to obtain a high after-tax total return by investing at least 85% of its total assets in energy-related master limited partnerships and their affiliates (collectively, “MLPs”), and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing of natural gas, natural gas liquids, crude oil, refined petroleum products or coal.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This press release contains "forward-looking statements" as defined under the U.S. federal securities laws. Generally, the words "believe," "expect," "intend," "estimate," "anticipate," "project," "will" and similar expressions identify forward-looking statements, which generally are not historical in nature. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ from the Company's historical experience and its present expectations or projections indicated in any forward-looking statements. These risks include, but are not limited to, changes in economic and

political conditions; regulatory and legal changes; MLP industry risk; leverage risk; valuation risk; interest rate risk; tax risk; and other risks discussed in the Company's filings with the SEC. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made. The Company undertakes no obligation to publicly update or revise any forward-looking statements made herein. There is no assurance that the Company's investment objective will be attained.

CONTACT:

KA Fund Advisors, LLC
Monique Vo, 877-657-3863
www.kaynefunds.com