MLP Investment Company

Kayne Anderson MLP Investment Company Completes Public Offering of Mandatory Redeemable Preferred Stock

Houston, TX – May 10, 2011 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) announced today that it has completed a public offering of preferred stock of 4,000,000 shares of Series D Mandatory Redeemable Preferred Shares ("Series D MRP Shares") at a price of \$25.00 per share. The Series D MRP Shares pay cash dividends at a rate of 4.95% per annum and have a mandatory redemption date of June 1, 2018. The Series D MRP Shares have commenced trading on the New York Stock Exchange (NYSE) under the symbol "KYN Pr D".

The Company will use the net proceeds from the offering of approximately \$98 million to repay borrowings under its revolving credit facility, to make additional portfolio investments that are consistent with its investment objectives and policies and for general corporate purposes.

###

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 NYSE. 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, and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This press release contains "forwardlooking 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 objectives will be attained.

CONTACT:

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