MLP Investment Company

Kayne Anderson MLP Investment Company Prices a Private Placement of \$200 Million of Notes and \$25 Million of Mandatory Redeemable Preferred Shares

Houston, TX – October 13, 2014 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) announced today that it has reached a conditional agreement with institutional investors relating to a private placement of \$200 million of unsecured notes ("Notes") and \$25 million of Mandatory Redeemable Preferred Shares ("Series I MRP Shares"). Net proceeds from such offerings will be used to refinance existing indebtedness (including the redemption of the Company's \$60 million Series M Notes which mature on November 4, 2014), to make new portfolio investments and for general corporate purposes. The private placement is expected to close on October 29, 2014. The closing is subject to investor due diligence, legal documentation and other standard closing conditions.

| The table below sets forth the key terms of the Notes and the MRPS: |
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| Security | Amount (\$ in millions) | Rate | Maturity |
|---------------------|----------------------------|-------|----------|
| Series LL Notes | \$50 | 2.89% | 6 years |
| Series MM Notes | 40 | 3.26% | 8 years |
| Series NN Notes | 20 | 3.37% | 9 years |
| Series OO Notes | 90 | 3.46% | 10 years |
| | \$200 | | |
| Series I MRP Shares | \$25 | 3.86% | 8 years |

Neither the Notes nor the Series I MRP Shares will be registered under the Securities Act of 1933, and neither may be offered or sold in the United States absent registration or an applicable exemption from registration.

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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 NYSE. The Company's investment objective is to obtain a high aftertax 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 natural gas, natural gas liquids (including propane), 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 Fund'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 Fund'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 Fund undertakes no obligation to publicly update or revise any forward-looking statements made herein. There is no assurance that the Fund's investment objective will be attained.

CONTACT:

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