MLP Investment Company

Kayne Anderson MLP Investment Company Announces \$30 Million Redemption of its Series E MRP Shares

Houston, TX – December 16, 2015 – Kayne Anderson MLP Investment Company (the "Company") (NYSE:KYN) announced that it will redeem 1,200,000 shares of its Series E Mandatory Redeemable Preferred Shares ("Series E MRP Shares") with an aggregate liquidation preference of \$30 million on January 15, 2016. Following the redemption, 1,200,000 Series E MRP Shares will remain outstanding.

Holders of record as of December 15, 2015 of the Series E MRP Shares (including the shares being redeemed) will receive the regular monthly dividend payment amount on January 4, 2016. On January 15, 2016, holders will receive the liquidation preference per share of \$25.00, plus accumulated but unpaid dividends. 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 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 (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 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.

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