MLP Investment Company

Kayne Anderson MLP Investment Company Executes Definitive Agreements for Private Placement of \$140 Million of Notes and Completes a Private Placement of \$50 Million of Mandatory Redeemable Preferred Shares

Houston, TX – May 1, 2014 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) announced the execution of definitive agreements for the private placement of \$140 million of unsecured notes ("Notes") and the completion of a private placement of \$50 million of Mandatory Redeemable Preferred Shares ("Series H MRP Shares").

In conjunction with the execution of the definitive agreements, the Company received funding of \$80 million of the Notes and the \$50 million of the Series H MRP Shares (the "April Funding"). The remaining \$60 million of Notes will fund on July 30, 2014 (the "July Funding"). Proceeds from such offerings will be used to refinance existing indebtedness, to make new portfolio investments, and for general corporate purposes.

Security	April Funding (\$ in millions)	July Funding (\$ in millions)	Total Amount (\$ in millions)	Rate	Maturity
Notes					
Series II	_	\$ 30	\$ 30	2.88%	July 30, 2019
Series JJ	_	30	30	3.46%	July 30, 2021
Series KK	\$ 80	—	80	3.93%	July 30, 2024
	\$ 80	\$ 60	\$140		
Mandatory Redee	emable Preferred	Stock			
Series H	\$ 50	\$ -	\$ 50	4.06%	July 30, 2021

The table below sets forth the timing and key terms of the Notes and the Series H MRP Shares:

Neither the Notes nor the Series H 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.

###

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.

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