

Kayne Anderson MLP Investment Company Provides Unaudited Balance Sheet Information and Announces its Net Asset Value and Asset Coverage Ratios at March 31, 2011

Houston, TX – April 1, 2011 – Kayne Anderson MLP Investment Company (the “Company”) (NYSE: KYN) today provided a summary unaudited balance sheet and announced its net asset value and asset coverage ratios under the Investment Company Act of 1940 (the “1940 Act”) as of March 31, 2011.

As of March 31, 2011, the Company’s net assets were \$2.0 billion, and its net asset value per share was \$28.52. As of March 31, 2011, the Company’s asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 413% and the Company’s asset coverage ratio under the 1940 Act with respect to total leverage (debt and preferred stock) was 334%.

Kayne Anderson MLP Investment Company
Balance Sheet
March 31, 2011
(Unaudited)

	(in millions)	Per Share
Investments	\$ 3,259.1	\$ 47.43
Repurchase agreement	45.4	0.66
Deposits	0.5	0.01
Accrued income	0.9	0.01
Receivable for securities sold	5.5	0.08
Other assets	6.8	0.10
Total assets	<u>3,318.2</u>	<u>48.29</u>
Credit facility borrowings	58.0	0.84
Senior notes	620.0	9.02
Preferred stock	160.0	2.33
Total leverage	<u>838.0</u>	<u>12.19</u>
Payable for securities purchased	19.8	0.29
Deferred tax liability	486.4	7.08
Other liabilities	14.5	0.21
Total liabilities	<u>520.7</u>	<u>7.58</u>
Net assets	<u>\$ 1,929.5</u>	<u>\$ 28.52</u>

The Company had 68.71 million common shares outstanding as of March 31, 2011.

Long-term investments were comprised of Midstream MLPs (70%), MLP Affiliates (8%), General Partner MLPs (7%), Propane MLPs (5%), Shipping MLPs (5%), Upstream MLPs (1%) and Coal MLPs & Other (4%).

The Company's ten largest holdings by issuer at March 31, 2011 were:

	Units (in thousands)	Amount (\$ millions)	Percent of Long-Term Investments
1. Enterprise Products Partners L.P. (Midstream MLP)	6,438	277.2	8.5%
2. Magellan Midstream Partners, L.P. (Midstream MLP)	3,532	211.4	6.5%
3. Kinder Morgan Management, LLC (MLP Affiliate)	3,099	203.3	6.2%
4. Plains All American Pipeline, L.P. (Midstream MLP)	2,876	183.3	5.6%
5. MarkWest Energy Partners, L.P. (Midstream MLP)	3,481	168.7	5.2%
6. Williams Partners L.P. (Midstream MLP)	3,008	155.8	4.8%
7. Inergy, L.P. (Propane MLP)	3,741	150.0	4.6%
8. Energy Transfer Equity, L.P. (General Partner MLP)	2,899	130.4	4.0%
9. Copano Energy, L.L.C. (Midstream MLP)	3,189	113.5	3.5%
10. Energy Transfer Partners, L.P. (Midstream MLP)	2,025	104.8	3.2%

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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, 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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