

Kayne Anderson MLP Investment Company Provides Unaudited Balance Sheet Information and Announces its Net Asset Value and Asset Coverage Ratios at December 31, 2016

Houston, TX – January 4, 2017 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) today provided a summary unaudited statement of assets and liabilities and announced its net asset value and asset coverage ratios under the Investment Company Act of 1940 (the "1940 Act") as of December 31, 2016.

As of December 31, 2016, the Company's net assets were \$2.3 billion, and its net asset value per share was \$20.07. As of December 31, 2016, the Company's asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 410% and the Company's asset coverage ratio under the 1940 Act with respect to total leverage (debt and preferred stock) was 302%.

Kayne Anderson MLP Investment Company Statement of Assets and Liabilities December 31, 2016 (Unaudited)

	(in millions)	Per Share	
Investments	\$ 4,045.4	\$ 35.58	
Cash and cash equivalents	12.8	0.11	
Deposits	0.3	-	
Accrued income	0.6	0.01	
Receivable for securities sold	1.0	0.01	
Income tax receivable	7.7	0.07	
Other assets	8.4	0.07	
Total assets	4,076.2	35.85	
Term loan	65.0	0.57	
Senior notes	767.0	6.75	
Preferred stock	300.0	2.64	
Total leverage	1,132.0	9.96	
Other liabilities	7.6	0.07	
Deferred income tax liability	654.4	5.75	
Total liabilities	662.0	5.82	
Net assets	\$ 2,282.2	\$ 20.07	

The Company had 113,687,509 common shares outstanding as of December 31, 2016.

Long-term investments were comprised of Midstream MLP (93%), Midstream Company (4%), Shipping MLP (2%) and General Partner MLP (1%).

The Company's ten largest holdings by issuer at December 31, 2016 were:

		Units / Shares (in thousands)	Amount (\$ millions)	Percent of Long-Term Investments
1.	Enterprise Products Partners L.P. (Midstream MLP)	18,731	\$506.5	12.5%
2.	Williams Partners L.P. (Midstream MLP)	10,902	414.6	10.2%
3.	Energy Transfer Partners, L.P. (Midstream MLP)*	10,691	382.8	9.5%
4.	ONEOK Partners, L.P. (Midstream MLP)	6,907	297.1	7.3%
5.	Plains All American Pipeline, L.P. (Midstream MLP)	8,902	287.5	7.1%
6.	MPLX LP (Midstream MLP)**	6,833	248.0	6.1%
7.	DCP Midstream Partners, LP (Midstream MLP)***	5,897	226.3	5.6%
8.	Western Gas Partners, LP (Midstream MLP)****	3,841	225.9	5.6%
9.	Buckeye Partners, L.P. (Midstream MLP)	2,748	181.8	4.5%
10.	Magellan Midstream Partners, L.P. (Midstream MLP)	2,304	174.2	4.3%

^{*} On November 21, 2016, Energy Transfer Partners, L.P. and Sunoco Logistics Partners L.P. ("SXL") announced an agreement to combine in a unit-for-unit merger. As of December 31, 2016, the Company owned 3,843 units (\$92.3 million) of SXL.

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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 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.

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^{**} Includes 4,578 common units (\$158.5 million) and 2,255 preferred units (\$89.5 million).

^{***} On January 4, 2017, DCP Midstream Partners, LP announced a closing of a transaction to combine with DCP Midstream, LLC. The combined company will be renamed DCP Midstream, LP.

^{****} Includes 3,707 common units (\$217.8 million) and 134 preferred units (\$8.1 million).