Kayne Anderson

Midstream/Energy Fund

Kayne Anderson Midstream/Energy Fund Provides Unaudited Balance Sheet Information and Announces its Net Asset Value and Asset Coverage Ratios at August 31, 2017

Houston, TX – September 6, 2017 – Kayne Anderson Midstream/Energy Fund, Inc. (the "Fund") (NYSE: KMF) 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 August 31, 2017.

As of August 31, 2017, the Fund's net assets were \$333 million and its net asset value per share was \$15.12. As of August 31, 2017, the Fund's asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 461% and the Fund's asset coverage ratio under the 1940 Act with respect to total leverage (debt and preferred stock) was 343%.

Kayne Anderson Midstream/Energy Total Return Fund Statement of Assets and Liabilities August 31, 2017 (Unaudited)

| (0114441154) | | | | | |
|--|---------------|-------|----|-----------|--|
| | (in millions) | | Pe | Per Share | |
| Investments | \$ | 468.0 | \$ | 21.24 | |
| Cash and cash equivalents | | 1.5 | | 0.07 | |
| Deposits | | 0.2 | | 0.01 | |
| Accrued income | | 1.7 | | 0.08 | |
| Receivable for securities sold | | 2.1 | | 0.10 | |
| Other assets | | 0.9 | | 0.04 | |
| Total assets | | 474.4 | | 21.54 | |
| Term loan | | 11.0 | | 0.50 | |
| Notes | | 91.0 | | 4.13 | |
| Unamortized notes issuance costs | | (0.4) | | (0.02) | |
| Preferred stock | | 35.0 | | 1.59 | |
| Unamortized preferred stock issuance costs | | (0.3) | | (0.01) | |
| Total leverage | | 136.3 | | 6.19 | |
| Payable for securities purchased | | 2.0 | | 0.09 | |
| Other liabilities | | 3.0 | | 0.14 | |
| Total liabilities | | 5.0 | | 0.23 | |
| Net assets | \$ | 333.1 | \$ | 15.12 | |
| | | | | | |

The Fund had 22,034,170 common shares outstanding as of August 31, 2017.

As of August 31, 2017, equity and debt investments were 88% and 12%, respectively, of the Fund's long-term investments of \$468 million. Long-term investments were comprised of Midstream Company (48%), MLP and MLP Affiliate (37%), Other Energy (3%), and Debt (12%).

The Fund's ten largest holdings by issuer at August 31, 2017 were:

| | | Units / Shares (in thousands) | Amount (\$ millions) | Percent of Long-Term Investments |
|-----|--|----------------------------------|----------------------|--|
| 1. | ONEOK, Inc. (Midstream Company) | 702 | \$38.0 | 8.1% |
| 2. | Plains GP Holdings, L.P. (Midstream MLP) | 1,392 | 31.3 | 6.7% |
| 3. | Enbridge Energy Management, L.L.C. (Midstream MLP) | 1,882 | 27.1 | 5.8% |
| 4. | The Williams Companies, Inc. (Midstream Company) | 900 | 26.8 | 5.7% |
| 5. | Targa Resources Corp. (Midstream Company) | 506 | 22.6 | 4.8% |
| 6. | Energy Transfer Partners, L.P. (Midstream MLP) | 1,007 | 19.1 | 4.1% |
| 7. | Enbridge, Inc. (Midstream Company) | 477 | 19.1 | 4.1% |
| 8. | KNOT Offshore Partners LP (Midstream Company) | 802 | 18.9 | 4.0% |
| 9. | GasLog Partners LP (Midstream Company) | 740 | 16.8 | 3.6% |
| 10. | Golar LNG Partners LP (Midstream Company) | 752 | 16.5 | 3.5% |

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The Fund 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 Fund's investment objective is to provide a high level of total return with an emphasis on making quarterly cash distributions to its stockholders by investing at least 80% of its total assets in securities of companies in the Midstream/Energy Sector, consisting of: (a) Midstream Master Limited Partnerships ("MLPs"), (b) Midstream Companies, (c) Other MLPs and (d) Other Energy Companies. The Fund anticipates that the majority of its investments will consist of investments in Midstream MLPs and Midstream Companies. See Glossary of Key Terms on page ii of the Prospectus for definitions of certain key terms.

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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