

Kayne Anderson MLP/Midstream Investment Company Announces \$125 Million Redemption of its Series F Mandatory Redeemable Preferred Shares

Houston, TX – January 14, 2020 – Kayne Anderson MLP/Midstream Investment Company (NYSE: KYN) (the "Company") announced today that it will redeem all 5,000,000 shares of its 3.50% Series F Mandatory Redeemable Preferred Shares (the "Series F MRP Shares"), with an aggregate liquidation preference of \$125 million, on February 13, 2020.

Holders of record as of January 15, 2020, of the Series F MRP Shares, will receive the regular monthly dividend payment amount on February 3, 2020. On February 13, 2020, Series F MRP holders will receive the liquidation preference per share of \$25.00, plus accumulated but unpaid dividends for the first twelve days of February. The paying agent is American Stock Transfer & Trust Company, which is the Company's transfer agent.

The Company expects to fund the Series F MRP Shares redemption with proceeds from the previously announced private placement of \$100 million of Series L MRP Shares and \$75 million of Series M MRP Shares to be issued in February.

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This press release shall not constitute an offer to sell or a solicitation to buy, nor shall there be any sale of any securities in any jurisdiction in which such offer or sale is not permitted.

Kayne Anderson MLP/Midstream Investment Company is a non-diversified, closed-end management investment company registered under the Investment Company Act of 1940, as amended, whose common stock is traded on the NYSE. KYN'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 ("MLPs"), and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing of natural gas, natural gas liquids, crude oil, refined petroleum products or coal (collectively with MLPs, "Midstream Energy Companies").

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 detail in the Company's filings with the SEC, available at www.sec.gov. 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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