## OAKTREE ASSET-BACKED INCOME FUND INC.

## Supplement dated October 27, 2025, to the Prospectus and Statement of Additional Information, dated August 8, 2025

This is a supplement (the "Supplement") to the Prospectus and Statement of Additional Information, dated August 8, 2025, of Oaktree Asset-Backed Income Fund Inc. (the "Fund"). You should read this Supplement in conjunction with the Prospectus (the "Prospectus") and Statement of Additional Information, dated August 8, 2025 (the "SAI"). The SAI has been filed with the SEC and is incorporated by reference in its entirety into the Prospectus. Certain capitalized terms used and not defined herein have the meanings set forth in the Prospectus and SAI.

The initial offering period during which Oaktree and/or its affiliates may purchase Shares on behalf of, or transfer Shares to, investors that contribute capital to the Fund has been extended to the earlier of (i) December 19, 2025, and (ii) the date that the Fund reaches \$250 million in net assets. Accordingly, effective immediately, the sub-sections entitled "Other Payments" in the "Plan of Distribution" section of the Prospectus and the "Distribution of Fund Shares" section of the SAI are hereby deleted in their entirety and replaced with the following:

## "Other Payments

Oaktree and/or its affiliates may purchase Shares on behalf of, or transfer Shares to, investors that contribute capital to the Fund through the purchase of Shares during an initial offering period. Such Shares will have the same rights as other Shares of the same Share class. Such purchases will continue until the earlier of (i) December 19, 2025, and (ii) the date that the Fund reaches \$250 million in net assets. Such payments will be made from the assets of Oaktree and/or its affiliates (and not the Fund). If these purchases by Oaktree and/or its affiliates occur they may create an incentive for Shareholders to invest additional amounts in the Fund. Because the Adviser's Management Fee is based on a percentage of the value of the Fund's net assets, any Shares purchased for investors by Oaktree and/or its affiliates will result in increased net revenues to the Adviser if the increase in fee income due to the increased asset base offsets the costs associated with contributing the proceeds to purchase these additional Shares. There is a risk that any such investors may submit their shares for repurchase by the Fund, particularly after payments from Oaktree and/or its affiliates have ceased. As with repurchase requests by other shareholders, such repurchases could have a significant negative impact on the Fund, including on the Fund's liquidity.

In addition, from time to time, Oaktree and/or its affiliates may contribute cash to the Fund in its sole discretion."

Please retain this Supplement for reference.