

Filed Pursuant to Rule 433 under the Securities Act
Registration Statement No. 333-275151
Issuer Free Writing Prospectus dated October 28, 2025
CUSIP #: 63743HGA4
ISIN#: US63743HGA41

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION

Medium-Term Notes, Series D
With Maturities of Nine Months or More from Date of Issue

Floating Rate Notes

Issuer:	National Rural Utilities Cooperative Finance Corporation
Expected Ratings*:	A2 / A (Moody's / Fitch)
Principal Amount:	\$500,000,000
Security Type:	Senior Unsecured
Interest Rate Basis:	Floating rate based on Compounded SOFR, calculated and reset quarterly
Spread:	+33 basis points
Issue Price:	100% of Principal Amount
Trade Date:	October 28, 2025
Original Issue Date:	October 30, 2025 (T+2)
Maturity Date:	October 30, 2026
Interest Payment Dates:	Each January 30, April 30, July 30 and October 30, commencing January 30, 2026
Interest Payment Date Convention:	Modified Following Business Day, Adjusted
Day Count:	Actual/360
Payment at Maturity:	The payment at maturity will be 100% of the Principal Amount plus accrued and unpaid interest, if any
Optional Redemption:	None
Basis:	As Principal
Agent:	Mizuho Securities USA LLC
Form of Note: (Book-Entry or Certificated)	Book-Entry
Denominations:	\$2,000 x \$1,000
Other Terms:	None

* Note: A securities rating is not a recommendation to buy, sell, or hold securities and may be subject to revision or withdrawal at any time.

It is expected that delivery of the notes will be made against payment therefor on or about October 30, 2025 which is the second trading day following the date hereof (such settlement cycle being referred to as T+2). Purchasers of notes should note that the ability to settle secondary market trades of the notes effected prior to the first business day before the settlement date may be affected by the T+2 settlement. Accordingly, purchasers who wish to trade the notes prior to the first business day before the settlement date will be required to specify an alternative settlement cycle at the time of any such trade to prevent a failed settlement and should consult their own legal advisors.

The issuer has filed a registration statement (including a prospectus) with the U.S. Securities and Exchange Commission (“SEC”) for this offering. Before you invest, you should read the prospectus for this offering in that registration statement, and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by searching the SEC online database (EDGAR®) at www.sec.gov. Alternatively, you may obtain a copy of the prospectus from Mizuho Securities USA LLC by calling toll-free at 1-800-685-4786.