

CLEARBRIDGE ENERGY MIDSTREAM OPPORTUNITY FUND INC.  
c/o GEORGESON LLC  
1290 Avenue of the Americas, 9<sup>th</sup> Floor  
New York, NY 10104

**EVERY VOTE IS IMPORTANT  
EASY VOTING OPTIONS:**



**VOTE ON THE INTERNET**  
Log on to:  
[www.proxy-direct.com](http://www.proxy-direct.com)  
or scan the QR code  
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**VOTE BY PHONE**  
Call 1-800-337-3503  
Follow the recorded instructions  
*available 24 hours*



**VOTE BY MAIL**  
Vote, sign and date this **WHITE** Proxy  
Card and return in the  
postage-paid envelope

Please detach at perforation before mailing.

**WHITE PROXY**

**CLEARBRIDGE ENERGY MIDSTREAM OPPORTUNITY FUND INC.  
PROXY FOR THE ANNUAL MEETING OF PREFERRED STOCKHOLDERS  
TO BE HELD ON APRIL 14, 2023**

**THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS.** The undersigned hereby appoints Jane E. Trust, Thomas C. Mandia, Jeanne M. Kelly, George P. Hoyt, Tara Gormel, and Marc De Oliveira and each of them proxies with several powers of substitution to attend the Annual Meeting of Preferred Stockholders of ClearBridge Energy Midstream Opportunity Fund Inc. (the "Fund") scheduled to be held at Franklin Templeton, 280 Park Avenue, 7th Floor, New York, New York on April 14, 2023 at 10:30 a.m. (Eastern time), or at any adjournment or postponement thereof, to cast on behalf of the undersigned all votes that the undersigned is entitled to cast at such meeting and otherwise to represent the undersigned at the meeting with all powers possessed by the undersigned if personally present at the meeting. The undersigned hereby acknowledges receipt of the Notice of the Annual Meeting of Stockholders and of the accompanying Proxy Statement (the terms of each of which are incorporated by reference herein) and revokes any proxy heretofore given with respect to such meeting.

**This proxy, if properly executed, will be voted in the manner directed by the stockholder. If no direction is made, this proxy will be voted "FOR" the proposals and in the discretion of the proxies upon such other business as may properly come before the meeting.**

**VOTE VIA THE INTERNET:** [www.proxy-direct.com](http://www.proxy-direct.com)  
**VOTE VIA THE TELEPHONE:** 1-800-337-3503

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**CHANGE OF ADDRESS**

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PLEASE MARK, SIGN, DATE THIS WHITE PROXY ON THE REVERSE SIDE AND RETURN IT PROMPTLY USING THE ENCLOSED ENVELOPE.

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# EVERY STOCKHOLDER'S VOTE IS IMPORTANT

## Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Preferred Stockholders to be held on April 14, 2023.

The Proxy Statement and WHITE Proxy Card are available at:

<https://www.proxy-direct.com/gsc-33163>

If you have any questions, please call Georgeson, the Fund's proxy solicitor, toll free at 1-800-868-1391

We may, at any time prior to the Meeting, elect to change the place of the Meeting (including holding the meeting through a "virtual" or online method) and/or postpone or cancel the Meeting in accordance with applicable law. We are monitoring the public health impact of the coronavirus (COVID-19) and other potential pandemics. The health and well-being of our employees, stockholders, directors, officers, and other stakeholders are paramount. If public health developments warrant, we may change the date or location of the annual meeting. Any such change will be announced as promptly as practicable, through a press release and a filing with the Securities and Exchange Commission, as well as any other notification required by state law. We encourage you to check our website ([www.franklintempleton.com/investments/options/closed-end-funds](http://www.franklintempleton.com/investments/options/closed-end-funds)) prior to the Meeting if you plan to attend the Meeting.

Please detach at perforation before mailing.

If no specific instructions are provided, this proxy will be voted "FOR" the proposals and in the discretion of the proxies upon such other business as may properly come before the meeting

TO VOTE MARK BLOCKS BELOW IN BLUE OR BLACK INK AS SHOWN IN THIS EXAMPLE:

### **A** Proposals The Board of Directors unanimously recommends a vote "FOR" for the following proposals.

1. Election of two Class III Directors:

	FOR	AGAINST	ABSTAIN
01. Robert D. Agdern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02. Eileen A. Kamerick	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. To ratify the selection of PricewaterhouseCoopers LLP as the Fund's independent registered public accountants for the fiscal year ending November 30, 2023.

FOR	AGAINST	ABSTAIN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. The transaction of such other business as may properly come before the Meeting or any adjournments or postponements thereof.

### **B** Authorized Signatures — This section must be completed for your vote to be counted. — Sign and Date Below

Note: Please sign exactly as your name(s) appear(s) on this WHITE Proxy Card, and date it. When shares are held jointly, each holder should sign. When signing as attorney, executor, guardian, administrator, trustee, officer of corporation or other entity or in another representative capacity, please give the full title under the signature.

Date (mm/dd/yyyy) — Please print date below

Signature 1 — Please keep signature within the box

Signature 2 — Please keep signature within the box

Scanner bar code

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