

Important information regarding your distributions

We are providing shareholders of the John Hancock Preferred Income Fund II with information concerning the portion of the distributions made for July 31, 2020, that was from a source other than net investment company book income. **No action is required on your part.**

The amounts and sources of distributions reported in this notice are estimates, are not being provided for tax reporting purposes and may later be determined to be from taxable net investment income, short-term gains, long-term gains (to the extent permitted by law), and return of capital. The actual amounts and sources for tax reporting purposes will depend upon the Fund's investment experience during the remainder of the fiscal year and may be subject to changes based on tax regulations. The Fund will send you a Form 1099-DIV for the calendar year that will tell you how to report these distributions for federal income tax purposes.

| Payable Date: | Ticker # | Fund Name | CUSIP |
|---------------|----------|-------------------------------|-----------|
| July 31, 2020 | HPF | John Hancock Preferred Income | 41013X106 |
| | | Fund II | |

| | For the period 7/1/2020-7/31/2020 | |
|--|-----------------------------------|----------------------------|
| | Current | % Breakdown of the Current |
| Source | Distribution (\$) | Distribution |
| Estimated Net Investment Income (1) | 0.0961 | 78% |
| Estimated Return of Capital (1), (2) | 0.0274 | 22% |
| Total per common share | 0.1235 | 100% |

| For the fiscal year-to-date period 8/1/2019-7/31/2020 3 | | | |
|---|---|--|--|
| Total Cumulative Distributions (\$) | % Breakdown of the Total Cumulative Distributions | | |
| 1.4456 | 96% | | |
| 0.0678 | 4% | | |
| 1.5134 | 100% | | |

⁽¹⁾ The amounts and sources of distributions reported above are only estimates on a book basis. These estimates may, and likely will, vary over time based on the investment activities of the Fund and changes in the value of portfolio investments. The sources of distributions may later be determined to be from taxable net investment income, short-term gains, long-term gains (to the extent permitted by law), and return of capital. Investors should understand that a return of capital is not a distribution from income or gains of a Fund.

⁽²⁾ On a tax basis, the estimated components of the current distribution and cumulative distribution would include an estimated return of capital of \$0.0093 (8%) and \$0.1138 (8%), respectively. These amounts are estimates and the actual amounts and sources for tax reporting purposes may change upon final determination of tax characteristics and may be subject to changes based on tax regulations. The Fund will send you a Form 1099-DIV for the calendar year that will tell you how to report these distributions for federal income tax purposes.

 $^{^{(3)}}$ The Fund's current fiscal year began on August 1, 2019, and will end on July 31, 2020.

If you have questions or need additional information, please contact your financial professional or call the John Hancock Investment Management Closed-End Fund Information Line at 1-800-843-0090, Monday through Friday between 8:00 a.m. and 7:00 p.m., Eastern Time.