

## Summary prospectus

# John Hancock ESG Large Cap Core Fund

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus and other information about the fund, including the Statement of Additional Information and most recent reports, online at [www.jhinvestments.com/prospectuses](http://www.jhinvestments.com/prospectuses). You can also get this information at no cost by calling 800-225-5291 (Class A and Class C) or 888-972-8696 (Class I and Class R6) or by sending an email request to [info@jhinvestments.com](mailto:info@jhinvestments.com). The fund's prospectus and Statement of Additional Information, both dated March 1, 2023, as may be supplemented, and most recent financial highlights information included in the shareholder report, dated October 31, 2022, are incorporated by reference into this summary prospectus.

## Tickers

A: JHJAX    C: JHJCX    I: JHJIX    R6: JHJRX

## Investment objective

To seek long-term capital appreciation.

## Fees and expenses

This table describes the fees and expenses you may pay if you buy, hold, and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the tables and examples below.** You may qualify for sales charge discounts on Class A shares if you and your family invest, or agree to invest in the future, at least \$50,000 in the John Hancock family of funds. Intermediaries may have different policies and procedures regarding the availability of front-end sales charge waivers or contingent deferred sales charge (CDSC) waivers (See Appendix 1 - Intermediary sales charge waivers, which includes information about specific sales charge waivers applicable to the intermediaries identified therein). More information about these and other discounts is available from your financial professional and on pages 18 to 20 of the prospectus under "Sales charge reductions and waivers" or pages 123 to 127 of the fund's Statement of Additional Information under "Sales Charges on Class A and Class C Shares."

Shareholder fees (%) (fees paid directly from your investment)	A	C	I	R6
Maximum front-end sales charge (load) on purchases, as a % of purchase price	5.00	None	None	None
Maximum deferred sales charge (load) as a % of purchase or sale price, whichever is less	1.00 (on certain purchases, including those of \$1 million or more)	1.00	None	None
Small account fee (for fund account balances under \$1,000) (\$)	20	20	None	None

Annual fund operating expenses (%) (expenses that you pay each year as a percentage of the value of your investment)	A	C	I	R6
Management fee	0.75	0.75	0.75	0.75
Distribution and service (Rule 12b-1) fees	0.25	1.00	0.00	0.00
Other expenses	0.26	0.26	0.26	0.16
<b>Total annual fund operating expenses</b>	<b>1.26</b>	<b>2.01</b>	<b>1.01</b>	<b>0.91</b>
Contractual expense reimbursement <sup>1</sup>	-0.14	-0.14	-0.14	-0.15
<b>Total annual fund operating expenses after expense reimbursements</b>	<b>1.12</b>	<b>1.87</b>	<b>0.87</b>	<b>0.76</b>

**1** The advisor contractually agrees to reduce its management fee or, if necessary, make payment to the fund in an amount equal to the amount by which expenses of the fund exceed 0.75% of average daily net assets of the fund. For purposes of this agreement, "expenses of the fund" means all fund expenses, excluding (a) taxes, (b) brokerage commissions, (c) interest expense, (d) litigation and indemnification expenses and other extraordinary expenses not incurred in the ordinary course of the fund's business, (e) class-specific expenses, (f) borrowing costs, (g) prime brokerage fees, (h) acquired fund fees and expenses paid indirectly, and (i) short dividend expense. This agreement expires on February 28, 2024, unless renewed by mutual agreement of the advisor and the fund based upon a determination that this is appropriate under the circumstances at that time. The advisor also contractually agrees to waive a portion of its management fee and/or reimburse expenses for the fund and certain other John Hancock funds according to an asset level breakpoint schedule that is based on the aggregate net assets of all the funds participating in the waiver or reimbursement, including the fund (the participating portfolios). This waiver equals, on an annualized basis, 0.0100% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$75 billion but is less than or equal to \$125 billion; 0.0125% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$125 billion but is less than or equal to \$150 billion; 0.0150% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$150 billion but is less than or equal to \$175 billion; 0.0175% of that portion of the aggregate net assets of all the participating

## John Hancock ESG Large Cap Core Fund

portfolios that exceeds \$175 billion but is less than or equal to \$200 billion; 0.0200% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$200 billion but is less than or equal to \$225 billion; and 0.0225% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$225 billion. The amount of the reimbursement is calculated daily and allocated among all the participating portfolios in proportion to the daily net assets of each participating portfolio. During its most recent fiscal year, the fund's reimbursement amounted to 0.01% of the fund's average daily net assets. This agreement expires on July 31, 2024, unless renewed by mutual agreement of the fund and the advisor based upon a determination that this is appropriate under the circumstances at that time.

### Expense example

This example is intended to help you compare the cost of investing in the fund with the cost of investing in other mutual funds. Please see below a hypothetical example showing the expenses of a \$10,000 investment for the time periods indicated and then, except as shown below, assuming you sell all of your shares at the end of those periods. The example assumes a 5% average annual return and that fund expenses will not change over the periods. Although your actual costs may be higher or lower, based on these assumptions, your costs would be:

Expenses(\$)	A	C		I	R6
		Sold	Not Sold		
1 year	608	290	190	89	78
3 years	867	617	617	308	275
5 years	1,144	1,070	1,070	544	489
10 years	1,935	2,133	2,133	1,224	1,106

### Portfolio turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the fund's performance. During its most recent fiscal year, the fund's portfolio turnover rate was 16% of the average value of its portfolio.

### Principal investment strategies

Under normal market conditions, the fund invests at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities of large-capitalization companies or sectors that meet the manager's sustainability criteria. The fund considers large-capitalization companies to be those companies in the capitalization range of the S&P 500 Index, which was approximately \$3.56 billion to \$2,066 billion as of December 31, 2022. Equity securities include common and preferred stocks and their equivalents. The manager seeks companies meeting its sustainability criteria with high quality characteristics including strong environmental, social, and governance (ESG) records.

The manager employs a bottom-up financial analysis that includes a review of ESG issues and how they may impact stock valuation or performance. ESG factors reflect a variety of key sustainability issues that can influence company risks and opportunities and span a range of metrics including board diversity, climate change policies, and supply chain and human rights policies. Companies that meet the manager's ESG requirements or sustainability criteria typically have strong sustainability data and policy reporting, for example publishing a comprehensive corporate sustainability report. The fund may also invest up to 20% of its total assets in the equity securities of foreign issuers, including American Depositary Receipts (ADRs) and Global Depositary Receipts (GDRs). The fund may focus its investments in a particular sector or sectors of the economy. The manager may sell stocks for several reasons, including when the stock no longer meets the manager's ESG or sustainability criteria, or when the stock declines in value and no longer reflects the manager's investment thesis. The fund will not invest in any companies with material exposure to agricultural biotechnology, coal mining, hard rock mining, tobacco, or weapons/firearms. The fund also will not invest in any companies with major recent or ongoing controversies involving animal welfare, environmental, governance, human rights, product safety, or workplace matters. The fund will also not invest in energy or power companies with fossil fuel production or generation capacity that have not demonstrated a commitment to aligning their business model with a low-carbon economy, such as companies making investments in new fossil fuel production or refining; fossil fuel power generation capacity; or nuclear power generation.

The manager employs active shareowner engagement to raise environmental, social, and governance issues with the management of select portfolio companies, and may file shareholder proposals on behalf of the fund. Through this effort, the manager seeks to encourage company managements toward greater transparency, accountability, disclosure, and commitment to ESG issues.

### Principal risks

An investment in the fund is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Many factors affect performance, and fund shares will fluctuate in price, meaning you could lose money. The fund's investment strategy may not produce the intended results.

The fund's main risks are listed below in alphabetical order, not in order of importance. *Before investing, be sure to read the additional descriptions of these risks beginning on page 6 of the prospectus.*

**Economic and market events risk.** Events in the U.S. and global financial markets, including actions taken by the U.S. Federal Reserve or foreign central banks to stimulate or stabilize economic growth, may at times result in unusually high market volatility, which could negatively impact performance. Reduced liquidity in credit and fixed-income markets could adversely affect issuers worldwide. Banks and financial services companies could suffer losses if interest rates rise or economic conditions deteriorate.

**Equity securities risk.** The price of equity securities may decline due to changes in a company’s financial condition or overall market conditions.

**ESG investing risk.** Incorporating ESG criteria and investing primarily in instruments that have certain ESG characteristics, as determined by the manager, carries the risk that the fund may perform differently, including underperforming, funds that do not utilize an ESG investment strategy, or funds that utilize different ESG criteria.

**Foreign securities risk.** Less information may be publicly available regarding foreign issuers, including foreign government issuers. Foreign securities may be subject to foreign taxes and may be more volatile than U.S. securities. Currency fluctuations and political and economic developments may adversely impact the value of foreign securities. If applicable, depositary receipts are subject to most of the risks associated with investing in foreign securities directly because the value of a depositary receipt is dependent upon the market price of the underlying foreign equity security. Depositary receipts are also subject to liquidity risk.

**Information technology companies risk.** Information technology companies can be significantly affected by rapid obsolescence, short product cycles, competition from new market entrants, and heightened cybersecurity risk, among other factors.

**Large company risk.** Larger companies may grow more slowly than smaller companies or be slower to respond to business developments. Large-capitalization securities may underperform the market as a whole.

**Liquidity risk.** The extent (if at all) to which a security may be sold without negatively impacting its market value may be impaired by reduced market activity or participation, legal restrictions, or other economic and market impediments.

**Operational and cybersecurity risk.** Cybersecurity breaches may allow an unauthorized party to gain access to fund assets, customer data, or proprietary information, or cause a fund or its service providers to suffer data corruption or lose operational functionality. Similar incidents affecting issuers of a fund’s securities may negatively impact performance. Operational risk may arise from human error, error by third parties, communication errors, or technology failures, among other causes.

**Preferred and convertible securities risk.** Preferred stock dividends are payable only if declared by the issuer’s board. Preferred stock may be subject to redemption provisions. The market values of convertible securities tend to fall as interest rates rise and rise as interest rates fall. Convertible preferred stock’s value can depend heavily upon the underlying common stock’s value.

**Sector risk.** When a fund focuses its investments in certain sectors of the economy, its performance may be driven largely by sector performance and could fluctuate more widely than if the fund were invested more evenly across sectors.

**Past performance**

The following information illustrates the variability of the fund’s returns and provides some indication of the risks of investing in the fund by showing changes in the fund’s performance from year to year and by showing how the fund’s average annual returns compared with a broad-based market index. Past performance (before and after taxes) does not indicate future results. All figures assume dividend reinvestment. Performance information is updated daily, monthly, and quarterly and may be obtained at our website, [jhinvestments.com](http://jhinvestments.com), or by calling 800-225-5291 (Class A and Class C), Monday to Thursday, 8:00 A.M.—7:00 P.M., and Friday, 8:00 A.M.—6:00 P.M., Eastern time, or 888-972-8696 (Class I and Class R6) between 8:30 A.M. and 5:00 P.M., Eastern time, on most business days.

Please note that after-tax returns (shown for Class A shares only) reflect the highest individual federal marginal income-tax rate in effect as of the date provided and do not reflect any state or local taxes. Your actual after-tax returns may be different. After-tax returns are not relevant to shares held in an IRA, 401(k), or other tax-advantaged investment plan. After-tax returns for other share classes would vary.

**Calendar year total returns (%)—Class A** (sales charges are not reflected in the bar chart and returns would have been lower if they were)

2017	2018	2019	2020	2021	2022
16.25	-0.18	30.33	18.17	29.79	-19.84



**Best quarter:** 2020, Q2, 22.06%  
**Worst quarter:** 2020, Q1, -20.93%

<b>Average annual total returns (%)—as of 12/31/22</b>	<b>1 year</b>	<b>5 year</b>	<b>Since inception (06/06/16)</b>
Class A (before tax)	-23.84	8.72	9.54
after tax on distributions	-23.92	8.26	9.53
after tax on distributions, with sale	-14.05	6.87	7.97
Class C	-21.20	9.03	10.00
Class I	-19.64	10.12	11.11
Class R6	-19.54	10.24	11.23
S&P 500 Index (reflects no deduction for fees, expenses, or taxes)	-18.11	9.42	11.65

## Investment management

**Investment advisor** John Hancock Investment Management LLC

**Subadvisor** Trillium Asset Management, LLC

## Portfolio management

The following individuals are jointly and primarily responsible for the day-to-day management of the fund's portfolio.

**Elizabeth R. Levy, CFA**

*Portfolio Manager*

Managed the fund since 2016

**Mitali Prasad, CFA**

*Portfolio Manager*

Managed the fund since 2021

**Cheryl I. Smith, Ph.D., CFA**

*Lead Portfolio Manager*

Managed the fund since 2016

## Purchase and sale of fund shares

The minimum initial investment requirement for Class A and Class C shares is \$1,000 (\$250 for group investments), except that there is no minimum for certain group retirement plans, certain fee-based or wrap accounts, or certain other eligible investment product platforms. The minimum initial investment requirement for Class I shares is \$250,000, except that the fund may waive the minimum for any category of investors at the fund's sole discretion. The minimum initial investment requirement for Class R6 shares is \$1 million, except that there is no minimum for: qualified and nonqualified plan investors; certain eligible qualifying investment product platforms; Trustees, employees of the advisor or its affiliates, employees of the subadvisor, members of the fund's portfolio management team and the spouses and children (under age 21) of the aforementioned. There are no subsequent minimum investment requirements.

Class A, Class C, Class I, and Class R6 shares may be redeemed on any business day by mail: John Hancock Signature Services, Inc., P.O. Box 219909, Kansas City, MO 64121-9909; or for most account types through our website: [jhinvestments.com](http://jhinvestments.com); or by telephone: 800-225-5291 (Class A and Class C); 888-972-8696 (Class I and Class R6).

## Taxes

The fund's distributions are taxable, and will be taxed as ordinary income and/or capital gains, unless you are investing through a tax-deferred arrangement, such as a 401(k) plan or individual retirement account. Withdrawals from such tax-deferred arrangements may be subject to tax at a later date.

## Payments to broker-dealers and other financial intermediaries

If you purchase the fund through a broker-dealer or other financial intermediary (such as a bank, registered investment advisor, financial planner, or retirement plan administrator), the fund and its related companies may pay the broker-dealer or other intermediary for the sale of fund shares and related services. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary and your salesperson to recommend the fund over another investment. These payments are not applicable to Class R6 shares. Ask your salesperson or visit your financial intermediary's website for more information.









© 2023 John Hancock Investment Management Distributors LLC, Member FINRA, SIPC  
200 Berkeley Street Boston, MA 02116  
800-225-5291, [jihinvestments.com](http://jihinvestments.com)

Manulife, Manulife Investment Management, Stylized M Design, and Manulife Investment Management & Stylized M Design are trademarks of The Manufacturers Life Insurance Company and are used by its affiliates under license.

A company of  **Manulife** Investment Management

SEC file number: 811-00560  
4670SP 3/1/23

[Click here for the prospectus](#)  
[Click here for the Statement of Additional Information](#)