

Putnam VT Sustainable Future Fund

The fund's portfolio

3/31/21 (Unaudited)

COMMON STOCKS (96.8%)^(a)

	Shares	Value
Banks (2.4%)		
First Republic Bank	6,602	\$1,100,884
		<u>1,100,884</u>
Biotechnology (4.1%)		
Exact Sciences Corp. ^(NON)	4,285	564,677
Regeneron Pharmaceuticals, Inc. ^(NON)	1,040	492,066
Seagen, Inc. ^(NON)	3,500	486,010
Vertex Pharmaceuticals, Inc. ^(NON)	1,550	333,080
		<u>1,875,833</u>
Building products (1.6%)		
AZEK Co., Inc. (The) ^(NON)	8,508	357,761
Trex Co., Inc. ^(NON)	3,945	361,125
		<u>718,886</u>
Capital markets (2.0%)		
MSCI, Inc.	2,180	914,030
		<u>914,030</u>
Chemicals (5.3%)		
Diversey Holdings, Ltd. ^(NON)	11,732	172,578
Ecolab, Inc.	2,585	553,371
Ingevity Corp. ^(NON)	6,220	469,797
Koninklijke DSM NV (Netherlands)	4,139	700,404
Novozymes A/S Class B (Denmark)	7,660	490,641
		<u>2,386,791</u>

Commercial services and supplies (2.2%)

Herman Miller, Inc.	13,670	562,521
Interface, Inc.	33,640	419,827
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		982,348

Containers and packaging (1.7%)

Ball Corp.	9,355	792,743
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		792,743

Diversified consumer services (2.1%)

Chegg, Inc. <i>(NON)</i>	6,215	532,377
WW International, Inc. <i>(NON)</i>	12,935	404,607
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		936,984

Diversified financial services (2.4%)

Atlas Crest Investment Corp. (acquired 2/10/21, cost \$222,560) (Private) <i>(NON)(F)(RES)(PIPE)</i>	22,256	201,306
Climate Change Crisis Real Impact I Acquisition Corp. Class A (acquired 1/22/21, cost \$241,100) (Private) <i>(NON)(F)(RES)(PIPE)</i>	24,110	297,276
Eurazeo SA (France) <i>(NON)</i>	8,001	608,942
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		1,107,524

Diversified telecommunication services (1.0%)

Liberty Global PLC Class C (United Kingdom) <i>(NON)</i>	18,160	463,806
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		463,806

Electric utilities (1.4%)

NextEra Energy, Inc.	8,565	647,600
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		647,600

Electrical equipment (2.8%)

Array Technologies, Inc. <i>(NON)(S)</i>	12,621	376,358
Shoals Technologies Group, Inc. Class A <i>(NON)(S)</i>	9,306	323,663
Sunrun, Inc. <i>(NON)</i>	9,350	565,488
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		1,265,509

Electronic equipment, instruments, and components (2.5%)

Trimble Inc. <i>(NON)</i>	10,485	815,628
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Zebra Technologies Corp. Class A ^(NON)	615	298,386
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		1,114,014
Food products (3.2%)		
Laird Superfood, Inc. ^{(NON)(S)}	7,690	288,144
McCormick & Co., Inc. (non-voting shares)	7,475	666,471
Nomad Foods, Ltd. (United Kingdom) ^(NON)	18,775	515,562
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		1,470,177
Health-care equipment and supplies (13.5%)		
Cooper Cos., Inc. (The)	2,035	781,623
Danaher Corp.	6,099	1,372,763
DexCom, Inc. ^(NON)	1,210	434,862
Edwards Lifesciences Corp. ^(NON)	9,860	824,690
Hologic, Inc. ^(NON)	9,885	735,246
IDEXX Laboratories, Inc. ^(NON)	785	384,108
Insulet Corp. ^(NON)	1,520	396,598
Mesa Laboratories, Inc. ^(S)	1,914	466,059
Nevro Corp. ^(NON)	2,500	348,750
ResMed, Inc.	1,935	375,429
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		6,120,128
Health-care providers and services (1.1%)		
HealthEquity, Inc. ^(NON)	7,650	520,200
		<hr/>
		520,200
Health-care technology (2.0%)		
GoodRx Holdings, Inc. Class A ^(NON)	6,300	245,826
Teladoc Health, Inc. ^{(NON)(S)}	3,575	649,756
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		895,582
Hotels, restaurants, and leisure (2.7%)		
Chipotle Mexican Grill, Inc. ^(NON)	685	973,262
Vail Resorts, Inc.	790	230,411
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		1,203,673
Interactive media and services (1.3%)		
Bumble, Inc. Class A ^(NON)	2,020	126,008

Pinterest, Inc. Class A ^(NON)	6,524	482,972
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		608,980
Internet and direct marketing retail (1.1%)		
Etsy, Inc. ^(NON)	1,980	399,307
Stitch Fix, Inc. Class A ^(NON)	2,460	121,868
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		521,175
IT Services (3.5%)		
GoDaddy, Inc. Class A ^(NON)	8,955	695,087
Mastercard, Inc. Class A	1,940	690,737
Snowflake, Inc. Class A ^{(NON)(S)}	945	216,670
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		1,602,494
Life sciences tools and services (3.9%)		
Bio-Rad Laboratories, Inc. Class A ^(NON)	1,340	765,368
Thermo Fisher Scientific, Inc.	2,165	988,063
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		1,753,431
Mortgage real estate investment trusts (REITs) (1.1%)		
Hannon Armstrong Sustainable Infrastructure Capital, Inc. ^(R)	9,215	516,962
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		516,962
Multiline retail (1.0%)		
Dollar General Corp.	2,335	473,118
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		473,118
Pharmaceuticals (1.4%)		
Zoetis, Inc.	4,110	647,243
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		647,243
Road and rail (0.5%)		
Lyft, Inc. Class A ^(NON)	3,530	223,025
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		223,025
Semiconductors and semiconductor equipment (7.5%)		
Applied Materials, Inc.	9,540	1,274,544
ASML Holding NV (Netherlands)	1,455	898,259

Cree, Inc. <i>(NON)</i>	2,510	271,406
NXP Semiconductors NV	3,260	656,368
ON Semiconductor Corp. <i>(NON)</i>	7,130	296,679
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		3,397,256
Software (17.1%)		
Adobe, Inc. <i>(NON)</i>	2,596	1,234,060
Ceridian HCM Holding, Inc. <i>(NON)</i>	4,830	407,024
CrowdStrike Holdings, Inc. Class A <i>(NON)</i>	4,895	893,386
DocuSign, Inc. <i>(NON)</i>	3,785	766,273
Dynatrace, Inc. <i>(NON)</i>	18,516	893,212
Everbridge, Inc. <i>(NON)(S)</i>	4,712	571,000
Lightspeed POS, Inc. (Canada) <i>(NON)</i>	8,825	554,977
Nuance Communications, Inc. <i>(NON)(S)</i>	7,520	328,173
RingCentral, Inc. Class A <i>(NON)</i>	2,430	723,848
Talend SA ADR <i>(NON)</i>	10,865	691,449
Verra Mobility Corp. <i>(NON)</i>	32,320	437,451
Vertex, Inc. Class A <i>(NON)</i>	13,095	287,828
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		7,788,681
Textiles, apparel, and luxury goods (1.5%)		
lululemon athletica, Inc. (Canada) <i>(NON)</i>	2,185	670,161
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		670,161
Trading companies and distributors (2.9%)		
ThredUp, Inc. Class A <i>(NON)</i>	21,280	496,462
United Rentals, Inc. <i>(NON)</i>	2,505	824,922
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		1,321,384
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Total common stocks (cost \$27,247,859)		\$44,040,622

CONVERTIBLE PREFERRED STOCKS (1.1%)^(a)

	Shares	Value
Fortive Corp. Ser. A, 5.00% cv. pfd.	525	\$519,304
Total convertible preferred stocks (cost \$397,672)		\$519,304

SHORT-TERM INVESTMENTS (5.9%)^(a)

	Shares	Value
Putnam Cash Collateral Pool, LLC 0.10% ^(AFF)	2,225,810	\$2,225,810
Putnam Short Term Investment Fund 0.09% ^(AFF)	461,744	461,744
Total short-term investments (cost \$2,687,554)		\$2,687,554

TOTAL INVESTMENTS

Total investments (cost \$30,333,085)		\$47,247,480
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FORWARD CURRENCY CONTRACTS at 3/31/21 (aggregate face value \$852,953) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation
Bank of America N.A.						
	Euro	Sell	6/16/21	\$357,269	\$362,028	\$4,759
Barclays Bank PLC						
	British Pound	Sell	6/16/21	186,289	188,996	2,707
HSBC Bank USA, National Association						
	British Pound	Sell	6/16/21	89,904	91,139	1,235

JPMorgan Chase Bank N.A.

Euro	Sell	6/16/21	78,571	79,631	1,060
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State Street Bank and Trust Co.

Euro	Sell	6/16/21	81,037	82,134	1,097
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UBS AG

Euro	Sell	6/16/21	48,388	49,025	637
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Unrealized appreciation

11,495

Unrealized (depreciation)

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Total

\$11,495

* The exchange currency for all contracts listed is the United States Dollar.

Key to holding's abbreviations

ADR American Depository Receipts: represents ownership of foreign securities on deposit with a custodian bank

Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from January 1, 2021 through March 31, 2021 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Putnam Investments, LLC, references to "ASC 820" represent Accounting Standards Codification 820 *Fair Value Measurements and Disclosures* and references to "OTC", if any, represent over-the-counter.

(a) Percentages indicated are based on net assets of \$45,490,401.

(NON) This security is non-income-producing.

(RES) This security is restricted with regard to public resale. The total fair value of this security and any other restricted securities (excluding 144A securities), if any, held at the close of the reporting period was \$498,582, or 1.1% of net assets.

(AFF) Affiliated company. For investments in Putnam Cash Collateral Pool, LLC and Putnam Short Term Investment Fund, the rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period. Transactions during the period with any company which is under common ownership or control were as follows:

Name of affiliate	Fair value as of 12/31/20	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/21
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$3,586,710	\$6,605,807	\$7,966,707	\$1,160	\$2,225,810
Putnam Short Term Investment Fund**	1,464,610	5,710,819	6,713,685	424	461,744
Total Short-term investments	\$5,051,320	\$12,316,626	\$14,680,392	\$1,584	\$2,687,554

* No management fees are charged to Putnam Cash Collateral Pool, LLC. There were no realized or unrealized gains or losses during the period.

The fund may lend securities, through its agent, to qualified borrowers in order to earn additional income. The loans are collateralized by cash in an amount at least equal to the fair value of the securities loaned. The fair value of securities loaned is determined daily and any additional required collateral is allocated to the fund on the next business day. The remaining maturities of the securities lending transactions are considered overnight and continuous. The risk of borrower default will be borne by the fund's agent; the fund will bear the risk of loss with respect to the investment of the cash collateral. The fund received cash collateral of \$2,246,839, which is invested in Putnam Cash Collateral Pool, LLC, a limited liability company managed by an affiliate of Putnam Management. Investments in Putnam Cash Collateral Pool, LLC are valued at its closing net asset value each business day. There are no management fees charged to Putnam Cash Collateral Pool, LLC. The rate quoted in the security description is the annualized 7-day yield at the close of the reporting period. At the close of the reporting period, the value of securities loaned amounted to \$2,225,810.

** Management fees charged to Putnam Short Term Investment Fund have been waived by Putnam Management. There were no realized or unrealized gains or losses during the period.

(F) This security is valued by Putnam Management at fair value following procedures approved by the Trustees. Securities are classified as Level 3 for ASC 820 based on the securities' valuation inputs.

(R) Real Estate Investment Trust.

(S) This security is on loan, in part or in entirety, at the close of the reporting period.

(PIPE) Represents the asset to be received in a private investment in public entity (PIPE) commitment. At the close of the reporting period, the total related cost for PIPE commitments held was \$463,660.

At the close of the reporting period, the fund maintained liquid assets totaling \$222,560 to cover the settlement of certain securities.

The dates shown on debt obligations are the original maturity dates.

Security valuation: Portfolio securities and other investments are valued using policies and procedures adopted by the Board of Trustees. The Trustees have formed a Pricing Committee to oversee the implementation of these procedures and have delegated responsibility for valuing the fund's assets in accordance with these procedures to Putnam Management. Putnam Management has established an internal Valuation Committee that is responsible for making fair value determinations, evaluating the effectiveness of the pricing policies of the fund and reporting to the Pricing Committee.

Investments for which market quotations are readily available are valued at the last reported sales price on their principal exchange, or official closing price for certain markets, and are classified as Level 1 securities under ASC 820. If no sales are reported, as in the case of some

securities that are traded OTC, a security is valued at its last reported bid price and is generally categorized as a Level 2 security.

Investments in open-end investment companies (excluding exchange-traded funds), if any, which can be classified as Level 1 or Level 2 securities, are valued based on their net asset value. The net asset value of such investment companies equals the total value of their assets less their liabilities and divided by the number of their outstanding shares.

Many securities markets and exchanges outside the U.S. close prior to the scheduled close of the New York Stock Exchange and therefore the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the scheduled close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value certain foreign equity securities taking into account multiple factors including movements in the U.S. securities markets, currency valuations and comparisons to the valuation of American Depository Receipts, exchange-traded funds and futures contracts. The foreign equity securities, which would generally be classified as Level 1 securities, will be transferred to Level 2 of the fair value hierarchy when they are valued at fair value. The number of days on which fair value prices will be used will depend on market activity and it is possible that fair value prices will be used by the fund to a significant extent. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate. Short-term securities with remaining maturities of 60 days or less are valued using an independent pricing service approved by the Trustees, and are classified as Level 2 securities.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Management does not believe accurately reflects the security's fair value, the security will be valued at fair value by Putnam Management in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

To assess the continuing appropriateness of fair valuations, the Valuation Committee reviews and affirms the reasonableness of such valuations on a regular basis after considering all relevant information that is reasonably available. Such valuations and procedures are reviewed periodically by the Trustees. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

Forward currency contracts: The fund buys and sells forward currency contracts, which are agreements between two parties to buy and sell currencies at a set price on a future date. These contracts were used to hedge foreign exchange risk.

The U.S. dollar value of forward currency contracts is determined using current forward currency exchange rates supplied by a quotation service. The fair value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in fair value is recorded as an unrealized gain or loss. The fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed when the contract matures or by delivery of the currency. The fund could be exposed to risk if the value of the currency changes unfavorably, if the counterparties to the contracts are unable to meet the terms of their contracts or if the fund is unable to enter into a closing position.

For the fund's average contract amount on forward currency contracts, see the appropriate table at the end of these footnotes.

Master agreements: The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements (Master Agreements) with certain counterparties that govern OTC derivative and foreign exchange contracts entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master

Agreements, collateral posted to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, is presented in the fund's portfolio.

Collateral pledged by the fund is segregated by the fund's custodian and identified in the fund's portfolio. Collateral can be in the form of cash or debt securities issued by the U.S. Government or related agencies or other securities as agreed to by the fund and the applicable counterparty. Collateral requirements are determined based on the fund's net position with each counterparty.

Termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term and short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund did not have a net liability position on open derivative contracts subject to the Master Agreements.

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1: Valuations based on quoted prices for identical securities in active markets.

Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3: Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

	Valuation inputs		
Investments in securities:	Level 1	Level 2	Level 3
Common stocks*:			
Communication services	\$1,072,786	\$—	\$—
Consumer discretionary	3,805,111	—	—
Consumer staples	1,470,177	—	—
Financials	3,140,818	—	498,582
Health care	11,812,417	—	—
Industrials	4,511,152	—	—
Information technology	13,902,445	—	—
Materials	3,179,534	—	—
Utilities	647,600	—	—
	<u> </u>	<u> </u>	<u> </u>

Total common stocks	43,542,040	—	498,582
Convertible preferred stocks	—	519,304	—
Short-term investments	—	2,687,554	—
Totals by level	\$43,542,040	\$3,206,858	\$498,582

Valuation inputs

Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$11,495	\$—
Totals by level	\$—	\$11,495	\$—

* Common stock classifications are presented at the sector level, which may differ from the fund's portfolio presentation.

The following is a reconciliation of Level 3 assets as of the close of the reporting period:

Investments in securities:	Balance as of December 31, 2020	Accrued discounts/premiums	Realized gain/(loss)	Change in net unrealized appreciation/(depreciation)#	Cost of purchases	Proceeds from sales	Total transfers into Level & 3†	Total transfers out of Level 3†	Balance as of March 31, 2021
Common stocks*:									
Financials	\$—	\$—	\$—	\$34,922	\$463,660	\$—	\$—	\$—	\$498,582
Total common stocks	\$—	\$—	\$—	\$34,922	\$463,660	\$—	\$—	\$—	\$498,582
Totals	\$—	\$—	\$—	\$34,922	\$463,660	\$—	\$—	\$—	\$498,582

* Common stock classifications are presented at the sector level, which may differ from the fund's portfolio presentation.

† Transfers during the reporting period did not represent, in the aggregate, more than 1% of the fund's net assets measured as of the end of the period.

Includes \$34,922 related to Level 3 securities still held at period end.

The table below represents quantitative information on internally priced Level 3 securities that were valued using unobservable inputs. The table excludes securities with valuations provided by a broker.

Description	Fair Value	Valuation Techniques	Unobservable Input	Range of unobservable inputs (Weighted Average)	Impact to Valuation from an Increase in Input (1)
Private equity	\$201,306	Market transaction price	Liquidity discount	10%	Decrease

Private equity	\$297,276	Market transaction price	Liquidity discount	10%	Decrease
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(1) Expected directional change in fair value that would result from an increase in the unobservable input.

The volume of activity for the reporting period for any derivative type that was held at the close of the period is listed below and was based on an average of the holdings of that derivative at the end of each fiscal quarter in the reporting period:

Forward currency contracts (contract amount)	\$900,000
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For additional information regarding the fund please see the fund's most recent annual or semiannual shareholder report filed on the Securities and Exchange Commission's Web site, www.sec.gov, or visit Putnam's Individual Investor Web site at www.putnaminvestments.com