

# Putnam VT Sustainable Future Fund

## The fund's portfolio

9/30/21 (Unaudited)

### COMMON STOCKS (100.0%)(a)

	Shares	Value
<b>Aerospace and defense (0.4%)</b>		
Atlas Crest Investment Corp. (acquired 2/10/21, cost \$222,560) (Private)(NON)(F)(RES)(P2)	22,256	\$177,870
		<b>177,870</b>
<b>Banks (1.9%)</b>		
First Republic Bank	4,432	854,844
		<b>854,844</b>
<b>Beverages (0.5%)</b>		
Zevia PBC Class A(NON)	19,400	223,294
		<b>223,294</b>
<b>Biotechnology (6.8%)</b>		
Exact Sciences Corp.(NON)	6,905	659,082
Ginkgo Bioworks Holdings, Inc.(NON)	42,063	487,510
Ginkgo Bioworks Holdings, Inc.(NON)(S)	11,100	128,649
Regeneron Pharmaceuticals, Inc.(NON)	1,240	750,423
Seagen, Inc.(NON)	4,240	719,952
Vertex Pharmaceuticals, Inc.(NON)	1,530	277,527
		<b>3,023,143</b>
<b>Building products (1.5%)</b>		
AZEK Co., Inc. (The)(NON)	13,618	497,466
Trex Co., Inc.(NON)	1,655	168,694
		<b>666,160</b>
<b>Capital markets (2.2%)</b>		
MSCI, Inc.	1,570	955,094
		<b>955,094</b>
<b>Chemicals (6.7%)</b>		
Diversey Holdings, Ltd.(NON)	27,042	433,754
Ecolab, Inc.	2,465	514,248
Ingevity Corp.(NON)	8,360	596,653
Koninklijke DSM NV (Netherlands)	4,007	800,914

Novozymes A/S Class B (Denmark)	8,960	613,426
		<b>2,958,995</b>
<b>Commercial services and supplies (1.1%)</b>		
Herman Miller, Inc.	12,630	475,646
		<b>475,646</b>
<b>Containers and packaging (1.7%)</b>		
Ball Corp.	8,535	767,894
		<b>767,894</b>
<b>Diversified consumer services (1.1%)</b>		
Chegg, Inc. <sup>(NON)</sup>	7,085	481,922
		<b>481,922</b>
<b>Diversified financial services (1.6%)</b>		
Eurazeo SA (France)	7,551	709,657
		<b>709,657</b>
<b>Diversified telecommunication services (1.1%)</b>		
Liberty Global PLC Class C (United Kingdom) <sup>(NON)</sup>	17,120	504,355
		<b>504,355</b>
<b>Electric utilities (1.4%)</b>		
NextEra Energy, Inc.	8,075	634,049
		<b>634,049</b>
<b>Electrical equipment (1.9%)</b>		
Sunrun, Inc. <sup>(NON)(S)</sup>	19,440	855,360
		<b>855,360</b>
<b>Electronic equipment, instruments, and components (2.9%)</b>		
Trimble Inc. <sup>(NON)</sup>	9,555	785,899
Zebra Technologies Corp. Class A <sup>(NON)</sup>	995	512,843
		<b>1,298,742</b>
<b>Food products (3.1%)</b>		
Laird Superfood, Inc. <sup>(NON)(S)</sup>	14,424	275,210
McCormick & Co., Inc. (non-voting shares)	7,645	619,474
Nomad Foods, Ltd. (United Kingdom) <sup>(NON)</sup>	17,705	487,950
		<b>1,382,634</b>
<b>Health-care equipment and supplies (16.2%)</b>		
Cooper Cos., Inc. (The)	1,915	791,487
Danaher Corp.	4,849	1,476,230
DexCom, Inc. <sup>(NON)</sup>	1,420	776,541

Edwards Lifesciences Corp. <sup>(NON)</sup>	8,980	1,016,626
Hologic, Inc. <sup>(NON)</sup>	3,145	232,132
IDEXX Laboratories, Inc. <sup>(NON)</sup>	995	618,791
Insulet Corp. <sup>(NON)</sup>	1,710	486,033
Mesa Laboratories, Inc. <sup>(S)</sup>	1,754	530,339
Nevro Corp. <sup>(NON)</sup>	3,140	365,433
ResMed, Inc.	2,505	660,193
Warby Parker, Inc. Class A <sup>(NON)</sup>	4,500	238,725
		<hr/>
		<b>7,192,530</b>
<b>Health-care providers and services (1.1%)</b>		
HealthEquity, Inc. <sup>(NON)</sup>	7,800	505,128
		<hr/>
		<b>505,128</b>
<b>Health-care technology (2.4%)</b>		
GoodRx Holdings, Inc. Class A <sup>(NON)(S)</sup>	11,710	480,344
Teladoc Health, Inc. <sup>(NON)</sup>	4,725	599,177
		<hr/>
		<b>1,079,521</b>
<b>Hotels, restaurants, and leisure (3.5%)</b>		
Chipotle Mexican Grill, Inc. <sup>(NON)</sup>	625	1,135,950
Vail Resorts, Inc. <sup>(NON)</sup>	1,220	407,541
		<hr/>
		<b>1,543,491</b>
<b>Industrial conglomerates (0.8%)</b>		
Roper Technologies, Inc.	820	365,827
		<hr/>
		<b>365,827</b>
<b>Insurance (0.6%)</b>		
Greenlight Capital RE, Ltd. (acquired 8/10/21, cost \$280,000) (Private) (Cayman Islands) <sup>(NON)(F)(RES)(P1)</sup>	28,000	249,228
		<hr/>
		<b>249,228</b>
<b>Interactive media and services (1.9%)</b>		
Bumble, Inc. Class A <sup>(NON)(S)</sup>	8,230	411,335
Pinterest, Inc. Class A <sup>(NON)</sup>	8,564	436,336
		<hr/>
		<b>847,671</b>
<b>Internet and direct marketing retail (2.4%)</b>		
1stDibs.com, Inc. <sup>(NON)(S)</sup>	18,257	226,387
Etsy, Inc. <sup>(NON)</sup>	2,290	476,228
thredUp, Inc. Class A <sup>(NON)</sup>	16,243	352,311
		<hr/>
		<b>1,054,926</b>
<b>IT Services (2.8%)</b>		
	8,615	600,466

GoDaddy, Inc. Class A <sup>(NON)</sup>		
Mastercard, Inc. Class A	1,060	368,541
Remitly Global, Inc. <sup>(NON)(S)</sup>	1,320	48,444
Shopify, Inc. Class A (Canada) <sup>(NON)</sup>	170	230,483
		<hr/>
		<b>1,247,934</b>
<b>Life sciences tools and services (4.6%)</b>		
Absci Corp. <sup>(NON)(S)</sup>	10,200	118,626
Bio-Rad Laboratories, Inc. Class A <sup>(NON)</sup>	1,260	939,897
Thermo Fisher Scientific, Inc.	1,765	1,008,397
		<hr/>
		<b>2,066,920</b>
<b>Mortgage real estate investment trusts (REITs) (1.4%)</b>		
Hannon Armstrong Sustainable Infrastructure Capital, Inc. <sup>(R)(S)</sup>	11,805	631,331
		<hr/>
		<b>631,331</b>
<b>Pharmaceuticals (1.6%)</b>		
Zoetis, Inc.	3,750	728,025
		<hr/>
		<b>728,025</b>
<b>Road and rail (1.2%)</b>		
Lyft, Inc. Class A <sup>(NON)</sup>	9,820	526,254
		<hr/>
		<b>526,254</b>
<b>Semiconductors and semiconductor equipment (6.0%)</b>		
Applied Materials, Inc.	5,580	718,313
ASML Holding NV (NY Reg Shares) (Netherlands)	985	733,933
Cree, Inc. <sup>(NON)(S)</sup>	3,880	313,232
NXP Semiconductors NV	1,610	315,351
ON Semiconductor Corp. <sup>(NON)</sup>	12,390	567,090
		<hr/>
		<b>2,647,919</b>
<b>Software (15.3%)</b>		
Adobe, Inc. <sup>(NON)</sup>	2,366	1,362,154
Ceridian HCM Holding, Inc. <sup>(NON)</sup>	4,400	495,528
CrowdStrike Holdings, Inc. Class A <sup>(NON)</sup>	3,265	802,472
DocuSign, Inc. <sup>(NON)</sup>	3,335	858,529
Dynatrace, Inc. <sup>(NON)</sup>	16,866	1,196,980
Everbridge, Inc. <sup>(NON)</sup>	4,452	672,430
Lightspeed Commerce, Inc. (Canada) <sup>(NON)</sup>	7,655	738,666
Nuance Communications, Inc. <sup>(NON)</sup>	4,330	238,323
Verra Mobility Corp. <sup>(NON)</sup>	30,470	459,183
		<hr/>
		<b>6,824,265</b>
<b>Specialty retail (0.4%)</b>		

EVgo, Inc. Class A <sup>(NON)</sup>	24,110	196,497
		<b>196,497</b>
<b>Textiles, apparel, and luxury goods (1.9%)</b>		
lululemon athletica, Inc. (Canada) <sup>(NON)</sup>	2,065	835,706
		<b>835,706</b>
<b>Total common stocks (cost \$27,884,722)</b>		<b>\$44,512,832</b>

#### SHORT-TERM INVESTMENTS (8.1%)<sup>(a)</sup>

	Shares	Value
Putnam Cash Collateral Pool, LLC 0.09% <sup>(AFF)</sup>	3,035,550	\$3,035,550
Putnam Short Term Investment Fund Class P 0.08% <sup>(AFF)</sup>	562,131	562,131
<b>Total short-term investments (cost \$3,597,681)</b>		<b>\$3,597,681</b>

#### TOTAL INVESTMENTS

<b>Total investments (cost \$31,482,403)</b>		<b>\$48,110,513</b>
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#### FORWARD CURRENCY CONTRACTS at 9/30/21 (aggregate face value \$848,992) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation
<b>Bank of America N.A.</b>						
	Euro	Sell	12/15/21	\$352,892	\$361,438	\$8,546
<b>Barclays Bank PLC</b>						
	British Pound	Sell	12/15/21	182,052	186,923	4,871
<b>HSBC Bank USA, National Association</b>						
	British Pound	Sell	12/15/21	87,859	90,211	2,352
<b>JPMorgan Chase Bank N.A.</b>						
	Euro	Sell	12/15/21	77,608	79,489	1,881
<b>State Street Bank and Trust Co.</b>						

	Euro	Sell	12/15/21	80,044	81,981	1,937
<b>UBS AG</b>						
	Euro	Sell	12/15/21	47,795	48,950	1,155
<b>Unrealized appreciation</b>						<b>20,742</b>
<b>Unrealized (depreciation)</b>						<b>—</b>
<b>Total</b>						<b>\$20,742</b>

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

## 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 September 30, 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 "the SEC" represent the Securities and Exchange Commission, 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 \$44,503,776.

(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 \$427,098, or 0.96% 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 9/30/21
<b>Short-term investments</b>					
Putnam Cash Collateral Pool, LLC*#	\$3,586,710	\$21,406,490	\$21,957,650	\$2,754	\$3,035,550
Putnam Short Term Investment Fund**	1,464,610	9,547,087	10,449,566	1,031	562,131
<b>Total Short-term investments</b>	<b>\$5,051,320</b>	<b>\$30,953,577</b>	<b>\$32,407,216</b>	<b>\$3,785</b>	<b>\$3,597,681</b>

\* 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 receives cash collateral, 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 and there were no realized or unrealized gains or losses during the period.

# At the close of the reporting period, the fund received cash collateral of \$3,035,550 for securities loaned. 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 \$3,002,876.

\*\* 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. At the close of the reporting period, fair value pricing was also used for certain foreign securities in the portfolio.

(R) Real Estate Investment Trust.

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

(P1) The investment is an irrevocable commitment made in a private investment transaction to purchase shares of a special purpose acquisition corporation upon consummation of a merger or other identified acquisition transaction in the aggregate amount of \$280,000, the deferred settlement.

(P2) Represents an investment in the shares of a special purpose acquisition corporation that are subject to certain restrictions on transfer and awaiting finalization of a resale registration statement that the company has filed with the SEC.

At the close of the reporting period, the fund maintained liquid assets totaling \$280,000 to cover the settlement of certain securities.

**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 Depositary 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. At the close of the reporting period, fair value pricing was used for certain foreign securities in the portfolio. 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.

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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
<b>Common stocks*:</b>			
Communication services	\$1,352,026	\$—	\$—
Consumer discretionary	3,916,045	196,497	—
Consumer staples	1,605,928	—	—
Financials	2,441,269	709,657	249,228
Health care	14,595,267	—	—
Industrials	2,889,247	—	177,870
Information technology	12,018,860	—	—
Materials	2,312,549	1,414,340	—
Utilities	634,049	—	—
<b>Total common stocks</b>	<b>41,765,240</b>	<b>2,320,494</b>	<b>427,098</b>
Short-term investments	—	3,597,681	—
<b>Totals by level</b>	<b>\$41,765,240</b>	<b>\$5,918,175</b>	<b>\$427,098</b>

	Valuation inputs		
Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$20,742	\$—
<b>Totals by level</b>	<b>\$—</b>	<b>\$20,742</b>	<b>\$—</b>

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

At the start and close of the reporting period, Level 3 investments in securities represented less than 1% of the fund's net assets and were not considered a significant portion of the fund's portfolio.

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)	\$860,000
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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](http://www.sec.gov), or visit Putnam's Individual Investor Web site at [www.putnaminvestments.com](http://www.putnaminvestments.com)