MARKET VECTORS ETF TRUST Form 497 March 21, 2016

SUPPLEMENT DATED MARCH 18, 2016 TO THE PROSPECTUS OF

MARKET VECTORS ETF TRUST

Dated May 1, 2015

This Supplement updates certain information contained in the above-dated Prospectus for Market Vectors ETF Trust (the "Trust") regarding Market Vectors Rare Earth/Strategic Metals ETF (the "Fund"), a series of the Trust. You may obtain copies of the Fund's Prospectus free of charge, upon request, by calling toll-free 1.800.826.2333 or by visiting the Van Eck website at www.vaneck.com.

The first paragraph under the "Principal Investment Strategies" section of the Prospectus is hereby deleted and replaced with the following:

The Fund normally invests at least 80% of its total assets in securities that comprise the Fund's benchmark index. The Rare Earth/Strategic Metals Index is comprised of companies primarily engaged in a variety of activities that are related to the producing, refining and recycling of rare earth and strategic metals and minerals. Such companies may include micro-, small- and medium-capitalization companies and foreign and emerging market issuers. The Rare Earth/Strategic Metals Index includes companies that generate at least 50% of their revenues from (or, in certain circumstances, at least 50% of their assets related to) rare earth/strategic metals or have mining projects with the potential to generate at least 50% of their revenues from rare earth/strategic metals when developed. Rare earth/strategic metals are industrial metals that are typically mined as by-products or secondary metals in operations focused on precious metals and base metals. Compared to base metals, they have more specialized uses and are often more difficult to extract. Currently, approximately 43 elements in the periodic table are considered rare earth/strategic metals. Rare earth metals (or rare earth elements), a subset of strategic metals, are a collection of chemical elements that are crucial to many of the world's most advanced technologies, such as cellular phones, high performance batteries, flat screen televisions, green energy technology, and are expected to be critical to the future of hybrid and electric cars, high-tech military applications and superconductors and fiber-optic communication systems. The Rare Earth/Strategic Metals Index may include A-shares issued by Shanghai-listed companies trading via Shanghai-Hong Kong Stock Connect ("Stock Connect"). As of December 31, 2015, the Rare Earth/Strategic Metals Index included 20 securities of companies with a market capitalization range of between approximately \$45 million and \$1.9 billion and a weighted average market capitalization of \$523 million. As of December 31, 2014, approximately 24% of the Fund's investments consisted of securities of Chinese issuers. These amounts are subject to change. The Fund's 80% investment policy is non-fundamental and may be changed without shareholder approval upon 60 days' prior written notice to shareholders.

The section captioned "Principal Risks of Investing in the Fund" is revised by deleting the "Index Tracking Risk" and replacing it with the following:

Index Tracking Risk. The Fund's return may not match the return of the Rare Earth/Strategic Metals Index for a number of reasons. For example, the Fund incurs a number of operating expenses not applicable to the Rare Earth/Strategic Metals Index and incurs costs associated with buying and selling securities, especially when rebalancing the Fund's securities holdings to reflect changes in the composition of the Rare Earth/Strategic Metals Index and raising cash to

meet redemptions or deploying cash with newly created Creation Units (defined herein). The Fund also bears the costs and risks associated with buying and selling securities while such costs and risks are not factored into the return of the Rare Earth/Strategic Metals Index. In addition, the Fund may not be able to invest in certain securities included in the Rare Earth/Strategic Metals Index, or invest in them in the exact proportions in which they are represented in the Rare Earth/Strategic Metals Index, due to legal restrictions or limitations imposed by the governments of certain countries (including the availability of China A-shares through Stock Connect), a lack of liquidity on stock exchanges in which such securities trade, potential adverse tax consequences or other regulatory reasons. The Fund is expected to value certain of its investments based on fair value prices. To the extent the Fund calculates its net asset value ("NAV") based on fair value prices and the value of the Rare Earth/Strategic Metals Index is based on securities' closing prices on local foreign markets (i.e., the value of the Rare Earth/Strategic Metals Index is not based on fair value prices), the Fund's ability to track the Rare Earth/Strategic Metals Index may be adversely affected. For tax efficiency purposes, the Fund may sell certain securities to realize losses causing it to deviate from the performance of the Rare Earth/Strategic Metals Index. In light of the factors discussed above, the Fund's return may deviate significantly from the return of the Rare Earth/Strategic Metals Index.

The section captioned "Principal Risks of Investing in the Fund" is revised by adding the following after the "Special Risk Considerations of Investing in Chinese Issuers":

Risks of Investing through Stock Connect. The Fund may invest in A-shares listed and traded on the Shanghai Stock Exchange through Stock Connect, or on such other stock exchanges in the People's Republic of China ("PRC") which participate in Stock Connect from time to time or in the future. Trading through Stock Connect is subject to a number of restrictions that may affect the Fund's investments and returns. For example, trading through Stock Connect is subject to aggregate investment quotas that limit total purchases and sales through Stock Connect as well as daily quotas that limit the maximum daily net purchases on any particular day, each of which may restrict or preclude the Fund's ability to invest in Stock Connect A-shares. In addition, investments made through Stock Connect are subject to trading, clearance and settlement procedures that are untested in the PRC, which could pose risks to the Fund. Moreover, Stock Connect A-shares generally may not be sold, purchased or otherwise transferred other than through Stock Connect in accordance with applicable rules. A primary feature of Stock Connect is the application of the home market's laws and rules applicable to investors in A-shares. Therefore, the Fund's investments in Stock Connect A-shares are generally subject to PRC securities regulations and listing rules, among other restrictions. Finally, uncertainties in PRC tax rules governing taxation of income and gains from investments in Stock Connect A-shares could result in unexpected tax liabilities for the Fund. The withholding tax treatment of dividends and capital gains payable to overseas investors currently is unsettled.

The Stock Connect program is a pilot program in its initial stages. Further developments are likely and there can be no assurance as to the program's continued existence or whether future developments regarding the program may restrict or adversely affect the Fund's investments or returns. In addition, the application and interpretation of the laws and regulations of Hong Kong and the PRC, and the rules, policies or guidelines published or applied by relevant regulators and

2

exchanges in respect of the Stock Connect program are uncertain, and they may have a detrimental effect on the Fund's investments and returns.

The section captioned "Additional Information About the Funds' Investment Strategies and Risks" is revised by deleting the "Index Tracking Risk" and replacing it with the following:

Index Tracking Risk. Each Fund's return may not match the return of its Index for a number of reasons. For example, a Fund incurs a number of operating expenses not applicable to its Index and incurs costs associated with buying and selling securities, especially when rebalancing the Fund's securities holdings to reflect changes in the composition of its Index and, to the extent the Fund creates and redeems Creation Units in cash, raising cash to meet redemptions or deploying cash in connection with newly created Creation Units. A Fund also bears the costs and risks associated with buying and selling securities while such costs and risks are not factored into the return of its Index. A Fund may not be fully invested at times, either as a result of cash flows into the Fund (if the Fund effects creations and redemptions for cash) or reserves of cash held by the Fund to pay expenses or meet redemptions. In addition, a Fund may not be able to invest in certain securities included in its Index, or invest in them in the exact proportions in which they are represented in its Index, due to legal restrictions or limitations imposed by the governments of certain countries (including the availability of China A-shares through Stock Connect), a lack of liquidity on stock exchanges in which such securities trade, potential adverse tax consequences or other regulatory reasons. Moreover, a Fund may be delayed in purchasing or selling securities included in its Index. Any issues a Fund encounters with regard to currency convertibility (including the cost of borrowing funds, if any) and repatriation may also increase the index tracking risk. For tax efficiency purposes, a Fund may sell certain securities to realize losses causing it to deviate from the performance of its Index.

Each Fund is expected to fair value certain of the foreign securities it holds except those securities primarily traded on exchanges that close at the same time the Fund calculates its NAV. To the extent a Fund calculates its NAV based on fair value prices and the value of its Index is based on securities' closing prices (i.e., the value of its Index is not based on fair value prices) or if a Fund otherwise calculates its NAV based on prices that differ from those used in calculating its Index, the Fund's ability to track its Index may be adversely affected. The need to comply with the tax diversification and other requirements of the Internal Revenue Code may also impact a Fund's ability to replicate the performance of its Index. In addition, if a Fund utilizes depositary receipts and other derivative instruments, its return may not correlate as well with its Index as would be the case if the Fund purchased all the securities in its Index directly. Actions taken in response to proposed corporate actions could result in increased tracking error. In light of the factors discussed above, each Fund's return may deviate significantly from the return of its Index.

The section captioned "Additional Information About the Funds' Investment Strategies and Risks" is revised by adding the following as the last risk factor of that section:

Risks of Investing through Stock Connect. (Market Vectors Rare Earth/Strategic Metals ETF only.) The Fund may invest in A-shares listed and traded on the Shanghai Stock Exchange through Stock Connect, or on such other stock exchanges in the PRC which participate in Stock Connect from time to time or in the future. Trading through Stock Connect is subject to a number

of restrictions that may affect the Fund's investments and returns. For example, trading through Stock Connect is subject to aggregate investment quotas that limit total purchases and sales through Stock Connect as well as daily quotas that limit the maximum daily net purchases on any particular day, each of which may restrict or preclude the Fund's ability to invest in Stock Connect A-shares. In addition, investments made through Stock Connect are subject to trading, clearance and settlement procedures that are untested in the PRC, which could pose risks to the Fund. Moreover, Stock Connect A-shares generally may not be sold, purchased or otherwise transferred other than through Stock Connect in accordance with applicable rules. A primary feature of Stock Connect is the application of the home market's laws and rules applicable to investors in A-shares. Therefore, the Fund's investments in Stock Connect A-shares are generally subject to PRC securities regulations and listing rules, among other restrictions. Finally, uncertainties in PRC tax rules governing taxation of income and gains from investments in Stock Connect A-shares could result in unexpected tax liabilities for the Fund. The withholding tax treatment of dividends and capital gains payable to overseas investors currently is unsettled.

The Stock Connect program is a pilot program in its initial stages. Further developments are likely and there can be no assurance as to the program's continued existence or whether future developments regarding the program may restrict or adversely affect the Fund's investments or returns. In addition, the application and interpretation of the laws and regulations of Hong Kong and the PRC, and the rules, policies or guidelines published or applied by relevant regulators and exchanges in respect of the Stock Connect program are uncertain, and they may have a detrimental effect on the Fund's investments and returns.

The section of the Prospectus entitled "Market Vector® Global Rare Earth/Strategic Metals Index" is hereby deleted and replaced with the following:

The Rare Earth/Strategic Metals Index is a rules based, modified capitalization weighted, float adjusted index intended to give investors a means of tracking the overall performance of companies involved in the rare earth and strategic metals segment. To be eligible for the Rare Earth/Strategic Metals Index, companies must (i) generate at least 50% of their revenues from (or, in certain circumstances, have at least 50% of their assets related to) rare earth/strategic metals or (ii) with mining projects that have the potential to generate at least 50% of their revenues from rare earth/strategic metals. The Rare Earth/Strategic Metals Index includes "Refiners," "Recyclers" and "Producers" of rare earth/strategic metals and minerals.

To be eligible for the Rare Earth/Strategic Metals Index, stocks must have a market capitalization of greater than \$150 million as of the end of the month prior to the month in which a rebalancing date occurs and may include Shanghai-listed companies trading via Shanghai-Hong Kong Stock Connect.

As of December 31, 2015, the Rare Earth/Strategic Metals Index included 20 securities of companies with a market capitalization range of between approximately \$45 million and \$1.9 billion and a weighted average market capitalization of \$523 million. These amounts are subject to change.

The Rare Earth/Strategic Metals Index is the exclusive property of MVIS (a wholly owned subsidiary of the Adviser), which has contracted with Solactive AG to maintain and calculate the Rare Earth/Strategic Metals Index. Solactive AG uses its best efforts to ensure that the Rare Earth/Strategic Metals Index is calculated correctly. Irrespective of its obligations towards MVIS, Solactive AG has no obligation to point out errors in the Rare Earth/Strategic Metals Index to third parties. Market Vectors Rare Earth/Strategic Metals ETF is not sponsored, endorsed, sold or promoted by MVIS and MVIS makes no representation regarding the advisability of investing in the Market Vectors Rare Earth/Strategic Metals ETF.

The Rare Earth/Strategic Metals Index is reconstituted and rebalanced quarterly.

Please retain this supplement for future reference.

5

SUPPLEMENT DATED MARCH 18, 2016 TO THE

STATEMENT OF ADDITIONAL INFORMATION OF

MARKET VECTORS ETF TRUST

Dated May 1, 2015, as amended and restated on January 27, 2016

This Supplement updates certain information contained in the above-dated Statement of Additional Information for Market Vectors ETF Trust (the "Trust") regarding Market Vectors Rare Earth/Strategic Metals ETF (the "Fund"), a series of the Trust. You may obtain copies of the Fund's Statement of Additional Information free of charge, upon request, by calling toll-free 1.800.826.2333 or by visiting the Van Eck website at www.vaneck.com.

The section captioned "Taxes" of the Statement of Additional Information is revised by adding the following after "PRC Taxation (Market Vectors ChinaAMC A-Share ETF and Market Vectors ChinaAMC SME-ChiNext ETF Only)":

PRC Taxation (Market Vectors Rare Earth/Strategic Metals ETF Only)

The Fund's investments in A-shares will be subject to a number of PRC tax rules and the application of many of those rules is at present uncertain. PRC taxes that may apply to the Fund's investments include withholding taxes on dividends and interest earned by the Fund, withholding taxes on capital gains, business tax and stamp tax. Specific rules governing taxes on capital gains derived by ROFIIs and OFIIs from the trading of PRC securities have yet to be announced. In the absence of specific rules, the tax treatment of the Fund's investments in A-shares through the Sub-Adviser's RQFII quota should be governed by the general PRC tax provisions and provisions applicable to RQFIIs. Under these provisions, the Fund is generally subject to a tax of 10% on any dividends, distributions and interest it receives from its investment in PRC securities. A nonresident enterprise is subject to withholding tax at a rate of 10% on its capital gains. Withholding taxes on dividends, interest and capital gains may be taxed at a reduced rate under an applicable tax treaty, but the application of such treaties for an RQFII acting on behalf of a foreign investor (i.e., the Sub-Adviser acting on behalf of the Fund) is also uncertain and would depend on the approval of PRC tax authorities. It is also unclear how China's business tax may apply to activities of an ROFII such as the Sub-Adviser and how such application may be affected by tax treaty provisions. While it is unclear whether this tax will be applied to investments by an RQFII or what the methodology for calculating or collecting the tax will be, the PRC's Ministry of Finance announced that, effective November 17, 2014, the corporate income tax for QFIIs, RQFIIs and investments through Stock Connect, with respect to capital gains, will be temporarily lifted. The current PRC tax laws and regulations and interpretations thereof may be revised or amended in the future, including with respect to the possible liability of the Fund for obligations of the Sub-Adviser. Any revision or amendment in tax laws and regulations may adversely affect the Fund. If the PRC begins applying tax rules regarding the taxation of capital gains from A-share investment to RQFIIs, such as the Sub-Adviser, and/or begins collecting capital gains taxes on such investments (whether for the period described above or otherwise), the Fund could be subject to tax liability for any tax payments for which reserves have

not been made or that were not previously withheld. The impact of any such tax liability on the Fund's return could be substantial. The Fund may also be liable to the Sub-Adviser for any tax that is imposed on the Sub-Adviser by the PRC with respect to the Fund's investments. If the Fund's direct investments in A-shares through the Sub-Adviser's RQFII quota become subject to repatriation restrictions, the Fund may be unable to satisfy distribution requirements applicable to RICs under the Internal Revenue Code, and be subject to tax at the Fund level.

Please retain this supplement for future reference.

2