Energy Transfer Partners, L.P.
Form 424B3
March 28, 2011

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The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the attached prospectus are not an offer to sell these securities, and we are not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-171697

SUBJECT TO COMPLETION, DATED MARCH 28, 2011
PRELIMINARY PROSPECTUS SUPPLEMENT
TO PROSPECTUS DATED JANUARY 13, 2011

11,750,000 Common Units
Representing Limited Partner Interests

Energy Transfer Partners, L.P.

We are selling 11,750,000 common units representing limited partner interests.

Our common units are listed on the New York Stock Exchange under the symbol ETP. The last reported sale price of our common units on the NYSE on March 25, 2011 was $53.13 per common unit.

Investing in our common units involves risks. See Risk Factors on page S-11 of this prospectus supplement and beginning on page 4 of the accompanying prospectus.

	Price to Public	***Underwriting Discounts and Commissions***	***Proceeds to ETP (before expenses)***
Per Common Unit	$	$	$
Total	$	$	$

The underwriters have an option to purchase a maximum of 1,762,500 additional common units to cover over-allotments.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the common units will be made on or about March , 2011.

Joint Book-Running Managers

MORGAN STANLEY
BofA MERRILL LYNCH
CITI
BARCLAYS CAPITAL
CREDIT SUISSE
WELLS FARGO SECURITIES
J.P. MORGAN

Co-Managers

RBC CAPITAL MARKETS
UBS INVESTMENT BANK
MADISON WILLIAMS AND COMPANY
MORGAN KEEGAN & COMPANY, INC.
OPPENHEIMER & CO.

March , 2011

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PROSPECTUS SUPPLEMENT

PROSPECTUS

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of this offering of common units. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to the common units. Generally, when we refer only to the prospectus, we are referring to both parts combined. If the information relating to the offering varies between the prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus, any free writing prospectus we may authorize to be delivered to you and the documents we have incorporated by reference. Neither we nor the underwriters have authorized anyone else to give you additional or different information. We are not offering the common units in any jurisdiction where the offer and sale is not permitted. You should not assume that the information in this prospectus supplement, in the accompanying prospectus or any free writing prospectus we may authorize to be delivered to you is accurate as of any date other than the date on the front of those documents. You should not assume that any information contained in the documents incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

None of Energy Transfer Partners, L.P., the underwriters or any of their respective representatives is making any representation to you regarding the legality of an investment in our common units by you under applicable laws. You should consult with your own advisors as to legal, tax, business, financial and related aspects of an investment in the common units.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information included or incorporated by reference in this prospectus supplement. It does not contain all of the information that may be important to you. You should read carefully the entire prospectus supplement, the accompanying prospectus, the documents incorporated by reference and the other documents to which we refer herein for a more complete understanding of our business and the terms of this offering, as well as the tax and other considerations that are important to you in making your investment decision.

Unless the context otherwise requires, references to (1) Energy Transfer, ETP, we, us, our and similar terms, as well as references to the Partnership, are to Energy Transfer Partners, L.P. and all of its operating limited partnerships and subsidiaries and (2) ETE are to Energy Transfer Equity, L.P., the owner of our general partner. Unless we indicate otherwise, the information presented in this prospectus supplement assumes that the underwriters do not exercise their option to purchase additional common units.

Energy Transfer Partners, L.P.

Overview

We are a publicly traded limited partnership that owns and operates a diversified portfolio of energy assets. Our natural gas operations include intrastate natural gas gathering and transportation pipelines, two interstate pipelines, natural gas gathering, processing and treating assets located in Texas, New Mexico, Arizona, Louisiana, Arkansas, Mississippi, West Virginia, Colorado and Utah, and three natural gas storage facilities located in Texas. These assets include more than 17,500 miles of pipeline in service and a 50% interest in a joint venture that has approximately 185 miles of interstate pipeline in service. Our intrastate and interstate pipeline systems transport natural gas from several significant natural gas producing areas, including the Barnett Shale in the Fort Worth Basin in north Texas, the Bossier Sands in east Texas, the Permian Basin in west Texas and New Mexico, the Eagle Ford Shale in south and central Texas, the San Juan Basin in New Mexico, the Fayetteville Shale in Arkansas, and the Haynesville Shale in north Louisiana. Our gathering and processing operations are conducted in many of these same producing areas as well as in the Piceance and Uinta Basins in Colorado and Utah. We are also one of the three largest retail marketers of propane in the United States, serving more than one million customers across the country.

We have experienced substantial growth over the last several years through a combination of internal growth projects and strategic acquisitions. Our internal growth projects consist primarily of the construction of natural gas transmission pipelines, both intrastate and interstate. From September 1, 2003 through December 31, 2010, we made growth capital expenditures, excluding capital contributions made in connection with the Midcontinent Express Pipeline and Fayetteville Express Pipeline joint ventures, of approximately $6.3 billion, of which approximately $5.0 billion was related to natural gas transmission pipelines. We have budgeted growth capital expenditures of $775 million to $885 million for 2011. These amounts do not include capital contributions that we may make to the Fayetteville Express Pipeline joint venture or the ETP-Regency Midstream Holdings, LLC joint venture described below under Recent Developments. Primarily as a result of these internal growth projects and acquisitions, we have increased our cash flow from operating activities from $162.7 million for the twelve months ended August 31, 2004 to $1.2 billion for the year ended December 31, 2010. We have also increased our cash distributions from $0.325 per common unit for the quarter ended November 30, 2003 ($1.30 per common unit on an annualized basis) to $0.89375 per common unit for the quarter ended December 31, 2010 ($3.575 per common unit on an annualized basis), an increase of 175%.

Our Business

Intrastate Transportation and Storage Operations

We own and operate approximately 7,700 miles of intrastate natural gas transportation pipelines and three natural gas storage facilities. We own the largest intrastate pipeline system in the United States. Our intrastate pipeline system interconnects to many major consumption areas in the United States. Our intrastate

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transportation and storage segment focuses on the transportation of natural gas from various natural gas producing areas to major natural gas consuming markets through connections with other pipeline systems. Our intrastate natural gas pipeline system has an aggregate throughput capacity of approximately 14.3 billion cubic feet per day, or Bcf/d, of natural gas. For the year ended December 31, 2010, we transported an average of 12.3 Bcf/d of natural gas through our intrastate natural gas pipeline system. We also provide natural gas storage services for third parties for which we charge storage fees as well as injection and withdrawal fees from the use of our three natural gas storage facilities. Our storage facilities have an aggregate working gas capacity of approximately 74.4 Bcf. In addition to our natural gas storage services, we utilize our Bammel gas storage facility to engage in natural gas storage transactions in which we seek to find and profit from pricing differences that occur over time. These transactions typically involve a purchase of physical natural gas that is injected into our storage facilities and a related sale of natural gas pursuant to financial futures contracts at a price sufficient to cover our natural gas purchase price and related carrying costs and provide for a gross profit margin.

Our intrastate transportation and storage operations accounted for approximately 49% and 56% of our total consolidated operating income for the years ended December 31, 2010 and December 31, 2009, respectively.

Based primarily on the increased drilling activities and increased natural gas production in the Barnett Shale in north Texas, the Bossier Sands in east Texas and the Eagle Ford Shale in south Texas, we have pursued a significant expansion of our natural gas pipeline system in order to provide greater transportation capacity from these natural gas supply areas to markets for natural gas. This expansion initiative, which has resulted in the completion of approximately 1,000 miles of large diameter pipeline ranging from 20 inches to 42 inches with approximately 9.7 Bcf/d of natural gas transportation capacity, includes the following pipeline projects:

In April 2007, we completed the 243-mile pipeline from Cleburne in north Texas to Carthage in east Texas, which we refer to as the Cleburne to Carthage pipeline, to expand our capacity to transport natural gas produced from the Barnett Shale and the Bossier Sands to our Texoma pipeline and other pipeline interconnections. The Cleburne to Carthage pipeline is primarily a 42-inch diameter natural gas pipeline. In December 2007, we completed two natural gas compression projects that added approximately 90,000 horsepower on the Cleburne to Carthage pipeline, increasing our natural gas deliverability at the Carthage Hub to more than 2.0 Bcf/d.

In April 2008, we completed our approximately 150-mile Southeast Bossier 42-inch natural gas pipeline, which we refer to as the Southeast Bossier pipeline. This pipeline connects our Cleburne to Carthage pipeline and our East Texas pipeline to our Texoma pipeline. The Southeast Bossier pipeline has an initial throughput capacity of 900 million cubic feet per day, or MMcf/d, that can be increased to 1.3 Bcf/d with the addition of compression. The Southeast Bossier pipeline increases our takeaway capacity from the Barnett Shale and Bossier Sands and provides increased market access for natural gas produced in these areas.

In July 2008, we completed our 36-inch Paris Loop natural gas pipeline expansion project in north Texas. This 135-mile pipeline initially provided us with an additional 400 MMcf/d of capacity out of the Barnett Shale, which increased to 900 MMcf/d in May 2009. The Paris Loop originates near Eagle Mountain Lake in northwest Tarrant County, Texas and connects to our Houston Pipe Line system near Paris, Texas.

In August 2008, we completed an expansion of our Cleburne to Carthage pipeline from the Texoma pipeline interconnect to the Carthage Hub through the installation of 32 miles of 42-inch pipeline. This expansion, which we refer to as the Carthage Loop, added 500 MMcf/d of pipeline capacity from Cleburne to the Carthage Hub. In September 2009, we increased the capacity of the Carthage Loop to 1.1 Bcf/d by adding compression to this pipeline.

In August 2008, we completed the first segment of our 36-inch Maypearl to Malone natural gas pipeline expansion project. This 25-mile pipeline extends from Maypearl, Texas to Malone, Texas, and provides an additional 600 MMcf/d of capacity out of the Fort Worth Basin.

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In January 2009, we completed our Southern Shale natural gas pipeline project, which consists of 31 miles of 36-inch pipeline that originates in southern Tarrant County, Texas and delivers natural gas to our Maypearl to Malone pipeline expansion project. The Southern Shale pipeline provides an additional 700 MMcf/d of takeaway capacity from the Barnett Shale.

In January 2009, we completed our 36-inch Cleburne to Tolar natural gas pipeline expansion project. This 20-mile pipeline extends from Cleburne, Texas to Tolar, Texas and provides an additional 400 MMcf/d of takeaway capacity from the Barnett Shale.

In February 2009, we completed our 56-mile Katy Expansion pipeline project. This 36-inch expansion project increased the capacity of our existing ETC Katy natural gas pipeline in southeast Texas by more than 400 MMcf/d.

In August 2009, we completed our Texas Independence Pipeline, which consists of 143 miles of 42-inch pipeline originating near Maypearl, Texas and ending near Henderson, Texas. This pipeline connects our ET Fuel System and North Texas System with our East Texas pipeline. The Texas Independence Pipeline expands our ET Fuel System s throughput capacity by an incremental 1.1 Bcf/d and, with the addition of compression, the capacity may be expanded to 1.75 Bcf/d.

In December 2010, we completed a 63-mile natural gas pipeline that originates in Shelby County, Texas, and terminates in Nacogdoches County, Texas. This pipeline, which we refer to as the Lumberjack Pipeline, was placed into partial service in August 2010, and full service began in December 2010. This project consists of 20- and 24-inch pipe and has an initial capacity of 645 MMcf/d. The pipeline interconnects with two interstate pipelines in addition to our Houston Pipe Line system.

In December 2010, we completed a 50-mile, 24-inch pipeline that originates in northwest Webb County, Texas and extends to our existing Houston Pipe Line rich gas gathering system in eastern Webb County, Texas. The project, which we refer to as the Dos Hermanas Pipeline, has a capacity of approximately 400 MMcf/d. As part of the project, approximately 6,000 horsepower of compression will be added to the Houston Pipe Line system.

In October 2010, we announced plans to construct the Chisholm Pipeline, the initial phase of which will consist of approximately 83 miles of 20-inch pipeline, extending from DeWitt County, Texas to our LaGrange Processing Plant in Fayette County, Texas. The Chisholm Pipeline will have an initial capacity of 100 MMcf/d, with an anticipated capacity expansion exceeding 300 MMcf/d. The project will utilize existing processing capacity at our LaGrange Plant. After processing, the residue volumes will be transported on our Oasis Gas Pipeline system. This initial phase of this pipeline is expected to be in service by the second quarter of 2011.

In February 2011, we announced that we had entered into multiple long-term agreements with shippers to provide additional transportation services from the Eagle Ford Shale located in south Texas. To facilitate these agreements, we will construct a natural gas pipeline, which we refer to as the Rich Eagle Ford Mainline, or REM, a processing plant and additional facilities. The 160-mile, 30-inch REM will have a capacity of 400 MMcf/d, with the ability to expand capacity to 800 MMcf/d. This rich gas gathering system, which is expected to be in service by the fourth quarter of 2011, will originate in Dimmitt County, Texas and extend to our soon to be completed Chisholm Pipeline for ultimate deliveries to our existing processing plants and to a new 120 MMcf/d processing plant.

These pipeline projects are supported by principally fee-based contracts for periods ranging from five to 15 years.

Interstate Transportation Operations

We own and operate the Transwestern pipeline, an open-access natural gas interstate pipeline extending from the gas producing regions of west Texas, eastern and northwest New Mexico, and southern Colorado primarily to pipeline interconnects off the east end of its system and to pipeline interconnects at the California border. Including the recently completed projects described below, Transwestern comprises approximately

2,700 miles of pipeline with a capacity of 2.1 Bcf/d. The Transwestern pipeline has access to three significant gas basins: the Permian Basin in west Texas and eastern New Mexico, the San Juan Basin in northwest New Mexico and southern Colorado, and the Anadarko Basin in the Texas and Oklahoma panhandle. Natural gas sources from the San Juan Basin and surrounding producing areas can be delivered eastward to Texas intrastate and mid-continent connecting pipelines and natural gas market hubs as well as westward to markets like Arizona, Nevada and California. Transwestern s customers include local distribution companies, producers, marketers, electric power generators and industrial end-users.

During 2007, we initiated the Phoenix project, consisting of 260 miles of 42-inch and 36-inch pipeline lateral, with a throughput capacity of 500 MMcf/d, connecting the Phoenix area to Transwestern s existing mainline at Ash Fork, Arizona. The Phoenix lateral pipeline was completed in February 2009.

During the third quarter of 2008, we completed the San Juan Loop pipeline, a 26-mile loop that provides an additional 375 MMcf/d of capacity to Transwestern s existing San Juan lateral. This expansion project supports the Phoenix project by providing additional throughput capacity from the San Juan Basin natural gas producing area to Transwestern s primary transmission pipeline to supply natural gas for the Phoenix lateral pipeline.

In October 2008, we entered into a 50/50 joint venture with Kinder Morgan Energy Partners, L.P., or KMP, for the development of the Fayetteville Express Pipeline, an approximately 185-mile 42-inch pipeline that will originate in Conway County, Arkansas, continue eastward through White County, Arkansas and terminate at an interconnect with Trunkline Gas Company in Quitman County, Mississippi. In December 2009, Fayetteville Express Pipeline, LLC, or FEP, the entity formed to own and operate this pipeline, received approval of its application for authority from the Federal Energy Regulatory Commission, or FERC, to construct and operate this pipeline. On December 17, 2009, the FERC issued an order granting FEP authorization to construct and operate the pipeline, subject to certain conditions, and FEP accepted the FERC s certificate authorization on December 18, 2009. Construction began on this project in March 2010 and the pipeline was placed in service in December 2010. The pipeline has an initial capacity of 2.0 Bcf/d. FEP has secured binding 10-year commitments for transportation of gas volumes with energy equivalents totaling 1.8 Bcf/d. The new pipeline interconnects with Natural Gas Pipeline Company of America, or NGPL, in White County, Arkansas, Texas Gas Transmission in Coahoma County, Mississippi, and ANR Pipeline Company in Quitman County, Mississippi. NGPL is operated and partially owned by Kinder Morgan, Inc., which owns the general partner of KMP.

In January 2009, we announced that we had entered into an agreement with a wholly-owned subsidiary of Chesapeake Energy Corporation, or Chesapeake, to construct an approximately 175-mile 42-inch interstate natural gas pipeline, which we refer to as the Tiger Pipeline. The pipeline connects to our dual 42-inch pipeline system near Carthage, Texas, extends through the heart of the Haynesville Shale and ends near Delhi, Louisiana, with interconnects to at least seven interstate pipelines at various points in Louisiana. The Tiger Pipeline has an initial throughput capacity of 2.0 Bcf/d, which capacity may be increased up to 2.4 Bcf/d with added compression. The agreement with Chesapeake provides for a 15-year commitment for firm transportation capacity of approximately 1.0 Bcf/d. We have also entered into agreements with EnCana Marketing (USA), Inc., a subsidiary of EnCana Corporation, and other shippers that provide for 10-year commitments for firm transportation capacity on the Tiger Pipeline equal to the full initial design capacity of 2.0 Bcf/d in the aggregate. In April 2010, the FERC approved our application for authority to construct and operate the pipeline, and construction began on this project in June 2010. The Tiger Pipeline was placed in service in December 2010. Additionally, in February 2010, we announced that we had entered into a 10-year commitment for an additional 400 MMcf/d of capacity, bringing the pipeline s long-term contractual commitments to 2.4 Bcf/d. In February 2011, the FERC approved our application for authority to construct and operate an expansion of the Tiger Pipeline to add 400 MMcf/d of capacity. This expansion is expected to be completed in the second half of 2011.

Our interstate pipeline segment formerly included our 50% interest in Midcontinent Express Pipeline, LLC, or MEP, a 50/50 joint venture with KMP that owns the Midcontinent Express Pipeline. The Midcontinent Express Pipeline is an approximately 500-mile interstate natural gas pipeline that originates near Bennington, Oklahoma, routes through Perryville, Louisiana, and terminates at an interconnect with Transcontinental Gas Pipe Line Corporation s interstate natural gas pipeline in Butler, Alabama. The first zone

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of the pipeline was placed in service in April 2009 and the second zone of the pipeline was placed in service in August 2009. On May 26, 2010, we transferred to ETE, in exchange for ETP common units owned by ETE, substantially all of our interest in MEP. ETE, in turn, contributed the MEP interest to Regency Energy Partners LP, or Regency, in exchange for 26.3 million Regency common units. As of March 25, 2011, we held a 0.1% interest in MEP.

Our interstate transportation segment accounted for approximately 13% and 12% of our total consolidated operating income for the years ended December 31, 2010 and December 31, 2009, respectively.

Midstream Operations

We own and operate approximately 7,000 miles of in-service natural gas gathering pipelines, three natural gas processing plants, 17 natural gas treating facilities, and ten natural gas conditioning facilities. Our midstream segment focuses on the gathering, compression, treating, blending, processing and marketing of natural gas, and our operations are currently concentrated in major producing basins, including the Barnett Shale in north Texas, the Bossier Sands in east Texas, the Austin Chalk trend and Eagle Ford Shale in south and southeast Texas, the Permian Basin in west Texas, the Piceance and Uinta Basins in Colorado and Utah and the Haynesville Shale in north Louisiana. Many of our midstream assets are integrated with our intrastate transportation and storage assets.

Our midstream segment accounted for approximately 21% and 12% of our total consolidated operating income for the years ended December 31, 2010 and December 31, 2009, respectively.

Retail Propane Operations

We are one of the three largest retail propane marketers in the United States, serving more than one million customers across the country. Our propane operations extend from coast to coast with concentrations in the western, upper midwestern, northeastern and southeastern regions of the United States. Our propane business has grown primarily through acquisitions of retail propane operations and, to a lesser extent, through internal growth.

Our retail propane operations accounted for approximately 17% and 20% of our total consolidated operating income for the years ended December 31, 2010 and December 31, 2009, respectively. The retail propane segment is a margin-based business in which gross profits depend on the excess of sales price over propane supply cost. The market price of propane is often subject to volatile changes as a result of supply or other market conditions over which we have no control.

Our propane business is largely seasonal and dependent upon weather conditions in our service areas. Historically, approximately two-thirds of our retail propane volume and substantially all of our propane-related operating income are attributable to sales during the six-month peak-heating season of October through March. This generally results in higher operating revenues and net income in the propane segment during the period from October through March of each year, and lower operating revenues and either net losses or lower net income during the period from April through September of each year. Cash flow from operations is generally greatest during the period from December to May of each year when customers pay for propane purchased during the six-month peak-heating season. Sales to commercial and industrial customers are much less weather sensitive.

Business Strategy

Our business strategy is to increase unitholder distributions and the value of our common units. We believe we have engaged, and will continue to engage, in a well-balanced plan for growth through acquisitions, internally generated expansion, and measures aimed at increasing the profitability of our existing assets.

We intend to continue to operate as a diversified, growth-oriented master limited partnership with a focus on increasing the amount of cash available for distribution on each common unit. We believe that by pursuing independent operating and growth strategies for our natural gas operations and retail propane business, we will be best positioned to achieve our objectives.

We expect that acquisitions in natural gas operations will be the primary focus of our acquisition strategy going forward, although we also expect to continue to pursue complementary propane acquisitions. We also

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anticipate that our natural gas operations will provide internal growth projects of greater scale compared to those available in our propane business as demonstrated by our significant number of completed natural gas pipeline projects as well as our recently announced pipeline projects.

We believe that we are well-positioned to compete in both the natural gas transportation and storage industry and the retail propane industry based on the following strengths:

We believe that the size and scope of our operations, our stable asset base and cash flow profile, and our investment grade status will be significant positive factors in our efforts to obtain new debt or equity financing in light of current market conditions.

Our experienced management team has an established reputation as highly-effective, strategic operators within our operating segments. In addition, our management team is motivated to effectively and efficiently manage our business operations through performance-based incentive compensation programs and through ownership of a substantial equity position in Energy Transfer Equity, L.P., the entity that indirectly owns our general partner and therefore benefits from incentive distribution payments we make to our general partner.

Natural Gas Operations Business Strategies

Enhance profitability of existing assets. We intend to increase the profitability of our existing asset base by adding new volumes of natural gas under long-term producer commitments, undertaking additional initiatives to enhance utilization and reducing costs by improving operations.

Engage in construction and expansion opportunities. We intend to leverage our existing infrastructure and customer relationships by constructing and expanding systems to meet new or increased demand for midstream and transportation services.

Increase cash flow from fee-based businesses. We intend to seek to increase the percentage of our midstream business conducted with third parties under fee-based arrangements in order to reduce our exposure to changes in the prices of natural gas and natural gas liquids.

Growth through acquisitions. We intend to continue to make strategic acquisitions of midstream, transportation and storage assets in our current areas of operation that offer the opportunity for operational efficiencies and the potential for increased utilization and expansion of our existing and acquired assets.

Propane Business Strategies

Pursue internal growth opportunities. In addition to pursuing expansion through acquisitions, we have aggressively focused on high return internal growth opportunities at our existing customer service locations. We believe that by concentrating our operations in areas experiencing higher-than-average population growth, we are well positioned to achieve internal growth by adding new customers.

Growth through complementary acquisitions. We believe that our position as one of the three largest propane marketers in the United States provides us a solid foundation to continue our acquisition growth strategy through consolidation.

Maintain low-cost, decentralized operations. We focus on controlling costs, and we attribute our low overhead costs primarily to our decentralized structure.

Recent Developments

Acquisition of LDH Energy Asset Holdings LLC

On March 22, 2011, we and Regency announced that ETP-Regency Midstream Holdings, LLC, or ETP-Regency LLC, a joint venture owned 70% by us and 30% by Regency, had entered into a purchase agreement with Louis Dreyfus Highbridge Energy LLC, pursuant to which ETP-Regency LLC has agreed to acquire all of the membership interests in LDH Energy Asset Holdings LLC, or LDH, for $1.925 billion in cash, subject to customary purchase price adjustments. We refer to this acquisition as the LDH Acquisition. We and Regency will each make an initial capital contribution to ETP-Regency LLC in proportion to our respective equity interests to fund the purchase price for the acquisition of LDH. ETP-Regency LLC will be managed by a two-person board of directors, with us and Regency each having the right to appoint one director. We will operate the assets on behalf of the joint venture with the existing LDH employees. We intend to use the net proceeds of this offering to repay borrowings currently outstanding under our revolving credit facility, which facility we expect to utilize to fund our pro rata share of the purchase price of LDH, approximately $1.35 billion, upon closing. Please see Use of Proceeds below.

LDH owns and operates a diverse set of midstream energy assets that represents critical infrastructure connecting high-growth production areas to end-markets. The LDH assets include NGL and refined products storage facilities located in Mont Belvieu, Texas and Hattiesburg, Mississippi; a 12-inch long-haul intrastate NGL pipeline, which we refer to as the West Texas Pipeline, originating in the Permian Basin in west Texas, passing through the Barnett Shale production area and terminating at Mont Belvieu; NGL fractionation and natural gas processing facilities near Baton Rouge and New Orleans, Louisiana; and a 20% equity interest in the Sea Robin wet gas processing plant near Henry Hub, Louisiana. The Mont Belvieu storage facility has approximately 43 million barrels, or MMBbls, of capacity in 24 underground salt dome caverns, and 10 brine ponds with combined capacity of approximately 23 MMBbls. The Hattiesburg facility has 3.9 MMBbls of usable capacity in three salt dome caverns, with 9.6 MMBbls of total cavern capacity, and two brine ponds with combined capacity of over 75,thousand barrels, or MBbls. The intrastate pipeline assets include the 1,066-mile West Texas Pipeline with 144 MBbls per day, or MBPD, of capacity, 12 pump stations providing 21,500 horsepower of compression, and over 20 injection points. The NGL fractionation and processing facilities consist of one fractionation unit with 25 MBPD of capacity, two cryogenic processing plants with combined capacity of 82 MMcf/d, and an 85-mile gathering system. The Sea Robin wet gas processing plant has 850 MMcf/d of natural gas capacity and 26 MBPD of NGL capacity. In addition, we expect to pursue several potential growth projects in close proximity to the existing LDH assets.

The completion of the acquisition is subject to customary closing conditions, including customary regulatory approvals. We expect the transaction to close in the second quarter of 2011.

Cash Distribution for Fourth Quarter

We declared a cash distribution for the fourth quarter of 2010 of $0.89375 per unit, or $3.575 per unit on an annualized basis. The cash distribution was paid on February 14, 2011 to unitholders of record as of February 7, 2011.

Our Principal Executive Offices

We are a limited partnership formed under the laws of the State of Delaware. Our executive offices are located at 3738 Oak Lawn Avenue, Dallas, Texas 75219. Our telephone number is (214) 981-0700. We maintain a website at http://www.energytransfer.com that provides information about our business and operations. Information contained on this website, however, is not incorporated into or otherwise a part of this prospectus supplement or the accompanying prospectus.

Our Organizational Structure

As a limited partnership, we are managed by our general partner, Energy Transfer Partners GP, L.P., which in turn is managed by its general partner, Energy Transfer Partners, L.L.C. Energy Transfer Partners, L.L.C. is ultimately responsible for the business and operations of our general partner and conducts our business and operations, and the board of directors and officers of Energy Transfer Partners, L.L.C. make decisions on our behalf.

The chart on the following page depicts our organizational structure and ownership of us after giving effect to this offering (assuming no exercise of the underwriters option to purchase additional common units and that the general partner does not make a capital contribution to maintain its current approximate 1.8% general partner interest).

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Energy Transfer Partners Ownership and Organizational Chart

Ownership of Energy Transfer Partners After This Offering

Public common units	74.3%
General partner interest(1)	1.7%
Common units owned by Energy Transfer Equity	24.0%
	100.0%

(1) Assumes that the general partner does not make a capital contribution to maintain its current general partner interest following the offering.

(2) Includes approximately 611,000 common units owned by management of Energy Transfer Partners, L.P.

The Offering

Common units offered	11,750,000 common units 13,512,500 common units if the underwriters exercise in full their option to purchase additional common units.
Units outstanding after this offering	206,018,429 common units, or 207,780,929 common units if the underwriters exercise in full their option to purchase an additional 1,762,500 common units.
Use of proceeds	We will receive net proceeds of approximately $ million from the sale of the 11,750,000 common units offered hereby, after deducting underwriting discounts and commissions and estimated offering expenses. We will use the net proceeds from this offering and from the underwriters exercise of their option to purchase additional common units, if any, to repay amounts outstanding under our revolving credit facility, to fund capital expenditures related to pipeline construction projects and for general partnership purposes. We expect to utilize our revolving credit facility to fund our pro rata share of the purchase price of LDH, approximately $1.35 billion, upon closing. Please read Use of Proceeds.
Cash distributions	Under our partnership agreement, we must distribute all of our cash on hand at the end of each quarter, less reserves established by our general partner. We refer to this cash as available cash, and we define its meaning in our partnership agreement. We declared a quarterly cash distribution for our fourth quarter of 2010 of $0.89375 per common unit, or $3.575 on an annualized basis. We paid this cash distribution on February 14, 2011 to unitholders of record at the close of business on February 7, 2011. Please read Cash Distribution Policy beginning on page S-22 for more information.
Limited call right	If at any time our general partner and its affiliates own more than 80% of our outstanding common units, our general partner has the right, but not the obligation, to purchase all of the remaining common units at a price not less than the then-current market price of the common units. Management and other affiliates of our general partner will own approximately 25% of our common units after this offering.
Limited voting rights	Our general partner manages and operates us. Unlike the holders of common stock in a corporation, you will have only limited voting rights on matters affecting our business. You will have no right to elect our general partner or its officers or directors. Our general partner may not be removed except by a vote of the holders of at least 662/3% of the outstanding units, including units owned by our general partner and its affiliates, voting together as a single class. Management and other affiliates of our general partner will own approximately 25% of our outstanding common units after this offering.

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Estimated ratio of taxable income to distributions	We estimate that if you own the common units you purchase in this offering through December 31, 2013, you will be allocated, on a cumulative basis, an amount of federal taxable income for that period that will be less than 20% of the cash distributed to you with respect to that period. Please read Material Tax Considerations in this prospectus supplement for the basis of this estimate.
Material tax consequences	For a discussion of other material federal income tax considerations that may be relevant to prospective unitholders who are individual citizens or residents of the United States, please read Material Federal Income Tax Considerations in the accompanying prospectus.
Exchange listing	Our common units are traded on the New York Stock Exchange under the symbol ETP.
Risk factors	There are risks associated with this offering and our business. You should consider carefully the risk factors beginning on page S-11 of this prospectus supplement and beginning on page 4 of the accompanying prospectus and the other risks identified in the documents incorporated by reference herein before making a decision to purchase common units in this offering.

RISK FACTORS

An investment in our common units involves risk. You should carefully read and consider each of the following risk factors and the risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2010, together with all of the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus, before investing in our common units.

We may not be able to consummate the LDH Acquisition.

The purchase agreement related to the LDH Acquisition contains customary and other closing conditions, including the receipt of customary regulatory approvals. If we are unable to consummate the LDH Acquisition, we would not realize the expected benefits of the proposed acquisition. In addition, we will have incurred, and will remain liable for, transaction costs, including legal, accounting, financial advisory and other costs relating to the LDH Acquisition whether or not it is consummated. The closing of this offering is not contingent upon the closing of the LDH Acquisition.

Any acquisition we complete, including the LDH Acquisition, is subject to substantial risks that could adversely affect our financial condition and results of operations and reduce our ability to make distributions to unitholders.

Any acquisition we complete, including the proposed LDH Acquisition, involves potential risks, including, among other things:

- the validity of our assumptions about revenues, capital expenditures and operating costs of the acquired business or assets, as well as assumptions about achieving synergies with our existing businesses;
- a failure to realize anticipated benefits, such as increased distributable cash flow per unit, enhanced competitive position or new customer relationships;
- a decrease in our liquidity by using a significant portion of our available cash or borrowing capacity to finance the acquisition;
- a significant increase in our interest expense or financial leverage if we incur additional debt to finance the acquisition;
- difficulties operating in new geographic areas or new lines of business;
- the incurrence or assumption of unanticipated liabilities, losses or costs associated with the business or assets acquired for which we are not indemnified or for which the indemnity is inadequate;
- the inability to hire, train or retrain qualified personnel to manage and operate our growing business and assets, including any newly acquired business or assets;
- the diversion of management s attention from our existing businesses; and
- the incurrence of other significant charges, such as impairment of goodwill or other intangible assets, asset devaluation or restructuring charges.

If we consummate future acquisitions, our capitalization and results of operations may change significantly. As we determine the application of our funds and other resources, unitholders will not have an opportunity to evaluate the economics, financial and other relevant information that we will consider.

Also, our reviews of businesses or assets proposed to be acquired are inherently incomplete because it generally is not feasible to perform an in-depth review of businesses and assets involved in each acquisition given time constraints imposed by sellers. Even a detailed review of assets and businesses may not necessarily reveal existing or potential problems, nor will it permit a buyer to become sufficiently familiar with the assets or businesses to fully assess their deficiencies and potential. Inspections may not always be performed on every asset, and environmental problems are not necessarily observable even when an inspection is undertaken.

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USE OF PROCEEDS

We will receive net proceeds of approximately $ million from the sale of the 11,750,000 common units we are offering, after deducting underwriting discounts and commissions and estimated offering expenses.

We will use the net proceeds of this offering and any net proceeds from the underwriters exercise of their option to purchase additional common units to repay amounts outstanding under our revolving credit facility, to fund capital expenditures related to pipeline construction projects and for general partnership purposes. We expect to utilize our revolving credit facility to fund our pro rata share of the purchase price of LDH, approximately $1.35 billion, upon closing.

As of March 21, 2011, an aggregate of approximately $585.3 million of borrowings were outstanding under our revolving credit facility, and there were $24.9 million of letters of credit outstanding. The weighted average interest rate on the total amount outstanding at March 21, 2011 was 0.82%. Our revolving credit facility matures on July 20, 2012. We use revolving credit loans to fund growth capital expenditures and working capital requirements.

The underwriters may, from time to time, engage in transactions with and perform services for us and our affiliates in the ordinary course of business. Affiliates of certain of the underwriters are lenders under our revolving credit facility and, accordingly, will receive proceeds from this offering. Please read Underwriting Relationships with Underwriters.

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PRICE RANGE OF COMMON UNITS AND DISTRIBUTIONS

Our common units are listed on the NYSE under the symbol ETP. The last reported sale price of the common units on the NYSE on March 25, 2011 was $53.13. As of March 25, 2011, we had issued and outstanding 194,268,429 common units, which were beneficially held by approximately 285,000 unitholders. The following table sets forth the range of high and low sales prices of the common units, on the NYSE, as well as the amount of cash distributions paid per common unit for the periods indicated.

	Price Ranges Low	Price Ranges High	Cash Distributions Per Unit(1)
Fiscal Year 2011			
First Quarter Ending March 31, 2011 (through March 25, 2011)	$ 50.80	$ 55.50	N/A(2)
Fiscal Year 2010			
Fourth Quarter Ended December 31, 2010	$ 48.01	$ 52.00	$ 0.89375
Third Quarter Ended September 30, 2010	$ 44.97	$ 51.95	$ 0.89375
Second Quarter Ended June 30, 2010	$ 40.06	$ 49.99	$ 0.89375
First Quarter Ended March 31, 2010	$ 42.69	$ 47.76	$ 0.89375
Fiscal Year 2009			