# **KINDER MORGAN**Northeast Expansion Project

Ashby Board of Selectmen
Ashby, MA
Wednesday, April 23<sup>rd</sup>, 2014







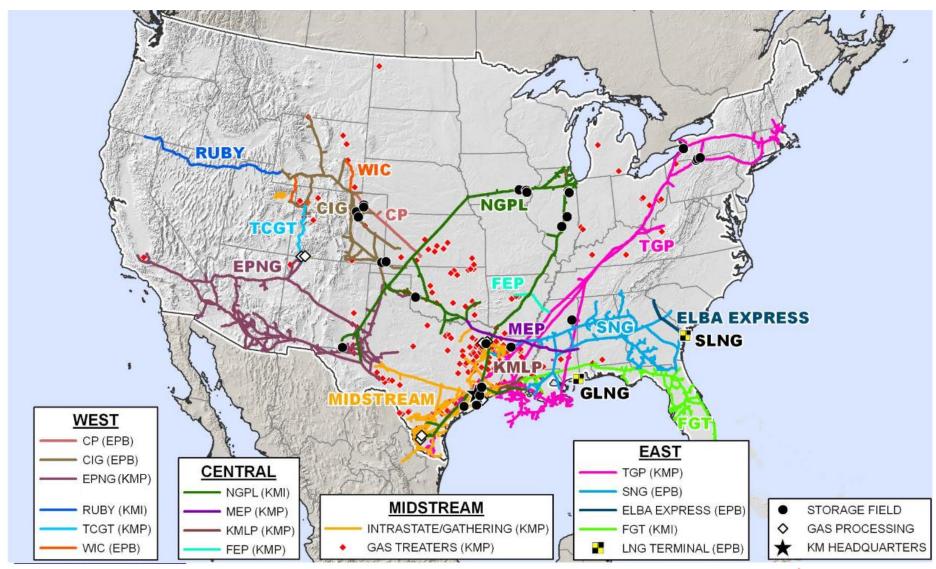
## About Kinder Morgan



- Kinder Morgan is one of the largest, most experienced energy companies in North America. We own an interest in or operate approximately 80,000 miles of pipelines and 180 terminals.
- Kinder Morgan employs approximately 11,500 people throughout the United States and Canada.
- We are committed to operating our assets in a safe, ethical and transparent manner.
- We ensure public safety and safe pipeline operations through employee training, regular testing, right-of-way aerial and foot patrols and adherence to our comprehensive Integrity Management plan and procedures.
- Kinder Morgan does not have a Political Action Committee (PAC), or make any political contributions.



## Kinder Morgan Natural Gas Pipelines

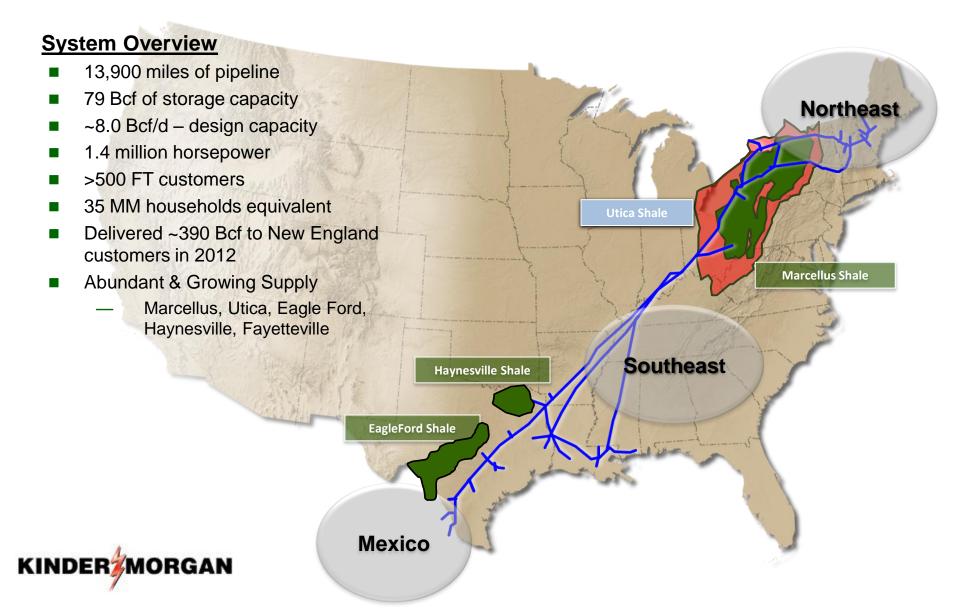




## U.S. Shale Plays



## Tennessee Gas Pipeline



## Customers in New England

#### **New England LDC Customers**

- EnergyNorth Natural Gas (NH)
- Northern Utilities (ME)
- Fitchburg Gas & Electric Light Co. (MA)
- Colonial Gas Co. (MA)
- Essex County Gas Co. (MA)
- Boston Gas Co. (MA)
- NSTAR Gas Co. (MA)
- Bay State Gas Co. aka Columbia Gas of MA (MA)
- Blackstone Gas Co. (MA, Municipal)
- Narragansett Electric Co. d/b/a National Grid (RI)
- Holyoke Gas & Electric (MA, Municipal)
- Westfield Gas & Electric Dept. (MA, Municipal)
- Berkshire Gas Co. (MA)
- Connecticut Natural Gas Co. (CT)
- Southern Connecticut Gas Co. (CT)
- Yankee Gas Services Co. (CT)

#### **New England Power Generators**

- Granite Ridge LLC
- Entergy RISE
- Blackstone GDFSUEZ



## **MASSACHUSETTS**





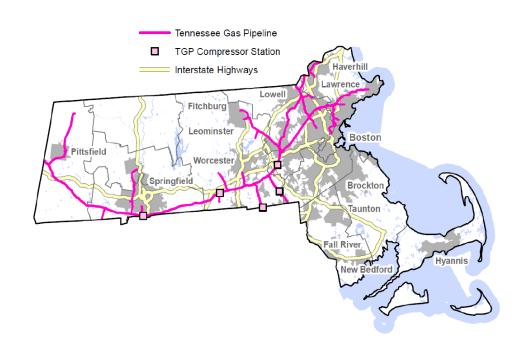




## **KINDER MORGAN MASSACHUSETTS ASSETS**

#### In Massachusetts,

- Kinder Morgan operates approximately 600 miles of pipeline
- Kinder Morgan employed 46 people in 2013
- Kinder Morgan's total 2013 payroll was \$3.6 million
- In 2013, Kinder Morgan paid approximately \$5.85 million to state and local taxing bodies.
- In 2013, Kinder Morgan paid over \$1.4 million to Middlesex County taxing bodies.



Kinder Morgan operates assets in eight counties throughout Massachusetts: Berkshire, Essex, Hampden, Hampshire, Middlesex, Norfolk, Suffolk and Worcester

## TGP IN MASSACHUSETTS

- Tennessee Gas Pipeline operates offices in Agawam and Hopkinton, MA.
- In partnership with the Berkshire Natural Resource Council, TGP is a supporter of Olivia's Overlook near Lenox, MA.
- The Tennessee Gas Pipeline
   Company is an active
   stakeholder of the Kampoosa
   Bog Stewardship Committee,
   a group overseeing the
   preservation of the Kampoosa
   Bog, a MA state designated
   "Area of Critical Environmental
   Concern" (ACEC) in
   Stockbridge, MA.





## The Need for the Northeast Expansion Project (NEEP)

KINDER







## Northeast Energy Crisis

Unprecedented gas capacity constraints on existing pipelines (Source: ISO-NE, EIA.gov)

**Highest** and most volatile gas commodity costs in the nation

(Source: ISO-NE, EIA.gov)

#### **BloombergBusinessweek**

**Global Economics** 

Northeast's Record Natural Gas Prices Due to Pipeline Dearth

By Matthew Philips 🏏 🐉 | February 06, 2014



Insufficient pipelines boosting natural gas price

ISO-New England says price up to \$56.06 per megawatt hour

Published 2:58 FM FDT Mar 18, 2014



Price Spikes in New England

By Oilprice.com, January 08, 2014, 09:20:21 AM EDT

## BOSTON **BUSINESS JOURNAL**

Mass. faces gas shortage despite national surge

Despite abundant new sources of natural gas. New England faces shortages -- and may pay the price

#### THE RECORDER

Gas line limits boost New **England electricity prices** 

Associated Press uesday, March 18, 2014

(Published in print: Wednesday, March 19, 2014)



Associated Press



Study: Adding natural gas capacity could cut Maine electric bills by \$120 million annually

Some environmental groups, however, have questioned whether the region is best served by becoming more dependent on the fuel.



## **Northeast Energy Crisis**

#### United States Senate

December 20, 2013

The Honorable Ernest Moniz Secretary U.S. Department of Energy 1000 Independence Ave SW Washington, DC 20585

Dear Secretary Moniz

We write to express our concern short the natural gas and energy market challenges fixing the New Rigidar rejon and the effect that high energy prices we having on commerce and businesses in our states. We were very encouraged to learn that the first interagency Quadermain Energy Review will focus on energy infrastructure. Given that New England faces the some of the highest natural gas prices in the nation, we urge you to consider the unique regional challenges faining New Englands as the Department of Energy undertakes this review.

New England states currently rely beavily on natural gas for electricity production and residential beating, with natural-jaes firely indisent spordatory. 25 erectors of the power generated in the New England region in 2012. The predominance of natural gas for power generation in the New England region in 2012. The predominance of natural gas for power generation has reasonable in our england in the control of the control

While New England continues to nake articles in increasing the use of reasowable sources of energy, our region's sevens in inspressing at quality reducing pollution, and trustilizing to a clean one type occupier continues to a realizability and reliability of affects before a trust gas prices are required. Depth the absolutes of chomestic natural gas resources. Depth the absolutes of chomestic natural gas resources and for natural gas prices elesewhere in the United States, the high domand for natural gas to meet heating and electricity meets, coupled with significantly contrained pipeline congety into the region, has driven up natural gas and wholesale electricity prices and threatened reliability in New England. According to the U.S. Energy information Administration (EUA), New England offen sees entural gas upor prices higher than the national average. This years where, the average price at the Algonopin Citygate trading point is wided year enders for New England antarul gas were over SPAMDIM. In contrast, the natural gas get price at Henry Hub (the price point for natural gas futures traded on the NYMEDY was \$3.43AMBHE a nearly half the price.)

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LETTER FROM THE NEW ENGLAND U.S. SENATE DELEGATION TO DEPARTMENT OF ENERGY SECRETARY MONIZ – December 13, 2013

Regulatory Commission (FERC), the New England market is particularly at risk for service disruption due to limited pipeline capacity into the region. This not only threatens reliability but also results in more volatile natural gas and power prices during periods of high demand."

Energy infrastructure in the region is simply inadequate to meet demand and has been a key factor in the energy price volatility."



### Governors' Statement on Northeast Energy Infrastructure

- In Dec. 2013, New England Governors called attention to the shortage of energy infrastructure.
- An open letter was signed by Governors
   Malloy (CT), LePage (ME), Patrick (MA),
   Hassan (NH), Chafee (RI), and Shumlin (VT).
- "To ensure a reliable, affordable and diverse energy system, we need investments in additional energy efficiency, renewable generation, natural gas pipelines, and electric transmission."
- "These investments will provide affordable, clean, and reliable energy to power our homes and businesses; make our region more competitive by reducing energy costs; attract more investment to the region; and protect our quality of life and environment."













#### New England Governors' Commitment to Regional Cooperation on Energy Infrastructure Issues

Securing the future of the New England economy and environment requires strategic investments in our region's energy resources and infrastructure. These investments will provide affordable, clean, and reliable energy to power our homes and businesses; make our region more competitive by reducing energy costs; attract more investment to the region; and protect our quality of life and environment.

As the region's electric and natural gas systems have become increasingly interdependent, ensuring that we are efficiently using existing resources and securing additional clean energy supplies will be critical to New England's economic future. To ensure a reliable, affordable and diverse energy system, we need investments in additional energy efficiency, renewable generation, natural gas pipelines, and electric transmission. These investments will also serve to balance intermittent generation, reduce peak demand, and displace some of the least efficient and most polluting fossil fuel generation, enabling the states to meet clean energy and greenhouse gas reduction goals while improving the economic competitiveness of our region.

New England ratepayers can benefit if the states collaborate to advance our common goals. The Governors therefore commit to continue to work together, in coordination with ISO-New England and through the New England States Committee on Electricity (NESCOE), to advance a regional energy infrastructure imitative that diversifies our energy supply portfolio while ensuring that the benefits and costs of transmission and pipeline investments are shared appropriately among the New England States. At the same time, we must respect individual state perspectives, particularly those of host states, as well as the natural resources, environment, and economy of the States, and ensure that the citizens and other stakeholders of our region, including NEPOOL, are involved in the process. The Governors are committed to achieving consensus as we move forward, consistent with haws and policies across the region.

The New England States believe that investments in local renewable generation, combined heat and power, and renewable and competitively-priced heating for buildings will support local markets and result in additional cost savings, new jobs and economic opportunities, and environmental gains. The New England States further believe that these investments must be advanced in a coordinated approach in order to maximize ratepayer savings and system integrity. We will continue to advocate at ISO-New England, NEPOOL, and elsewhere for greater integration and utilization of renewable generation; development of new natural gas pipeline infrastructure; maximizing the use of existing transmission infrastructure; investment, where appropriate, in new transmission infrastructure; and continuation of the inclusion of energy efficiency — and the addition of distributed generation — in load forecasting and transmission planning.

Cooperation on

with NESCOE to ensure that we are nd goals. Our commitment to work dby precent regional energy infrastructure d other regional organizations. We mic development, promote job growth, system reliability, and protect and our existing efforts will ensure that we are and economic future for our region that

Dannel P. Malloy Governor of Connecticut

Deval L. Patrick Governor of Massachusetts

Lincoln D. Chafee

Paul R. LePage
Paul R. LePage

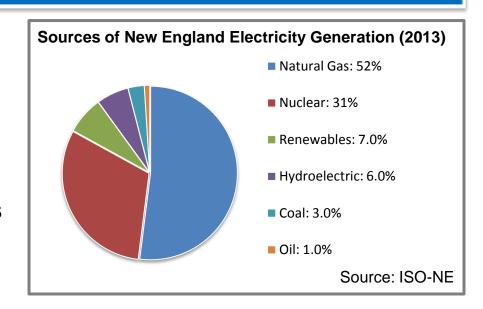
Maggie Hassan Margaret Wood Hassan

Peter Shumlin



## Current Sources of New England Natural Gas

- In 2013, New England relied on natural gas for 52% of its electricity produced, more than any other source. (Source: ISO-NE)
- Tennessee Gas Pipeline and Algonquin Gas Pipeline are the two major pipelines transporting natural gas to New England. (Source: U.S. Energy Information Administration)



- In 2008, the Northeast received only 14% of its natural gas from Appalachia/Eastern U.S. sources such as the Marcellus shale. By 2012, the Northeast received 60% of its gas from Appalachian shale sources. (Source: Navigant North American Natural Gas Study)
- In 2013, the Northeast region received 92% of its gas supply from Eastern US sources. (Source: Navigant North American Natural Gas Market Outlook, Spring 2013)

## Northeast Expansion Project Introduction









## Northeast Expansion Project Overview

- The Northeast Expansion Project will expand the existing Tennessee Gas Pipeline system within New York, Massachusetts, New Hampshire and Connecticut.
- The project, as currently configured, would result in the construction of approx. 250 miles of new pipeline, additional meter stations, compressor stations and modifications to existing facilities.
- The expansion will help meet increased demand in the U.S. Northeast for transportation capacity for natural gas.
- Following completion, the proposed project will bring an estimated increased capacity of up to 2.2 Bcf/d to the Northeast, which is equivalent to an additional 1.5MM households.
- Pending receipt of necessary regulatory approvals, the proposed project is estimated to be placed inservice by November 2018.
- The project is estimated to generate an additional \$25M to local taxing bodies in MA.

#### **Estimated Project Schedule**

Action	Timing
Outreach Meetings	Ongoing
Route Selection and Permit Preparation	Ongoing
Agency Consultations	Ongoing
File for FERC pre-filing	October 2014
KM Open Houses	November – December 2014
FERC Scoping Meetings	January – February 2015
FERC filing	August 2015
Anticipated FERC approval	November 2016
Proposed Start of Construction Activity	January 2017
Proposed In-Service	November 2018

## **Proposed NEEP Route**



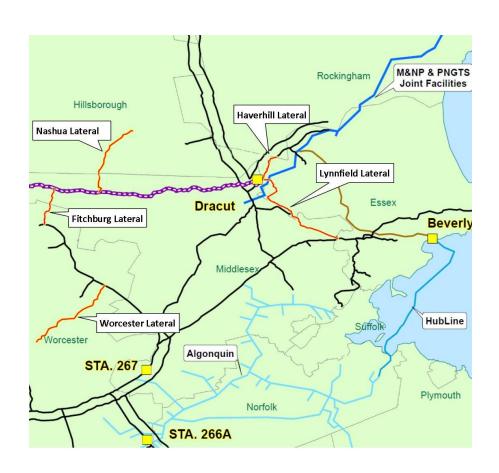
\*Any final route determination is subject to surveying, land acquisition and easements, environmental impact assessments, permitting and stakeholder input.



## **NEEP Components**

#### **Proposed NEEP Components:**

- MA Mainline
- NY Mainline
- Nashua Lateral (MA/NH)
- Worcester Lateral (MA)
- Pittsfield Lateral (MA)
- Stamford Delivery Loop (CT)
- Wallingford Delivery Loop (CT)
- Fitchburg Lateral Extension (MA)
- Haverhill Lateral (MA)
- Lynnfield Lateral (MA)
- 300 Line CT Lateral (CT)





## Regulatory Oversight

Federal, state and local agencies will have extensive regulatory authority over the proposed project. Some of these include:

#### **Federal**

- Federal Energy Regulatory Commission
- U.S. Army Corps of Engineers New England District
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Department of Agriculture
- U.S. Department of the Interior National Park Service
- U.S. Bureau of Land Management

#### **State**

- Massachusetts State Legislature
- MA Energy Facilities Siting and Licensing Board
- MA Environmental Policy Act
- MA Department of Environmental Protection
- MA Coastal Zone Management
- MA Historical Commission

- MA Department of Agricultural Resources
- MA Department of Fish and Game Division of Wildlife and Fisheries

#### Local

MA Town Conservation Commissions





### **Preliminary Northeast Expansion Project Town List (MA)**

#### **Berkshire County**

- Dalton, MA
- Hinsdale, MA
- Lenox, MA
- Peru, MA
- Pittsfield, MA
- Richmond, MA
- Washington, MA
- Windsor, MA

#### **Essex County**

- Andover, MA
- Lynnfield, MA
- Methuen, MA

#### **Franklin County**

- Ashfield, MA
- Conway, MA
- Deerfield, MA
- Erving, MA

- Montague, MA
- Northfield, MA
- Orange, MA
- Shelburne, MA
- Warwick, MA

#### **Hampshire County**

- Plainfield, MA

#### **Middlesex County**

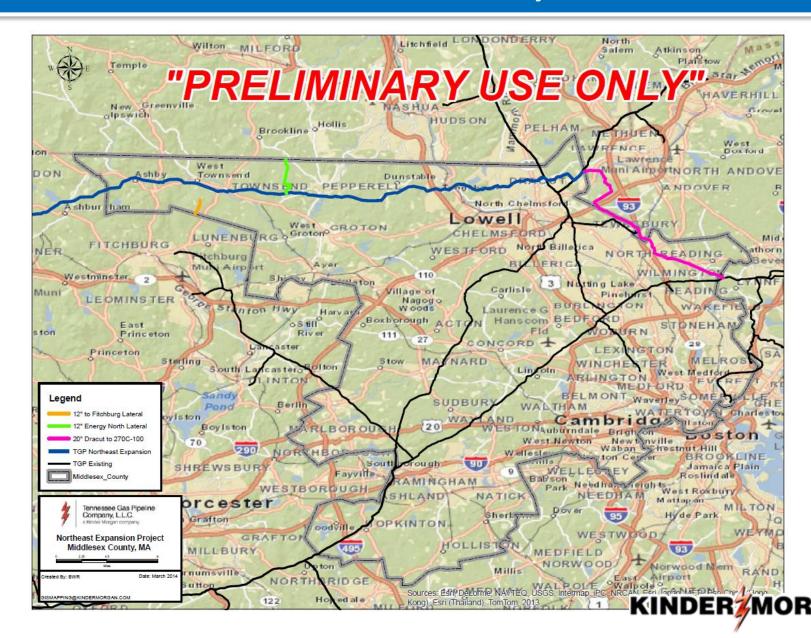
- Ashby, MA
- Dracut, MA
- Dunstable, MA
- Groton, MA
- Lowell, MA
- North Reading, MA
- Pepperell, MA
- Reading, MA
- Tewksbury, MA
- Townsend, MA

- Tyngsborough, MA
- Wilmington, MA

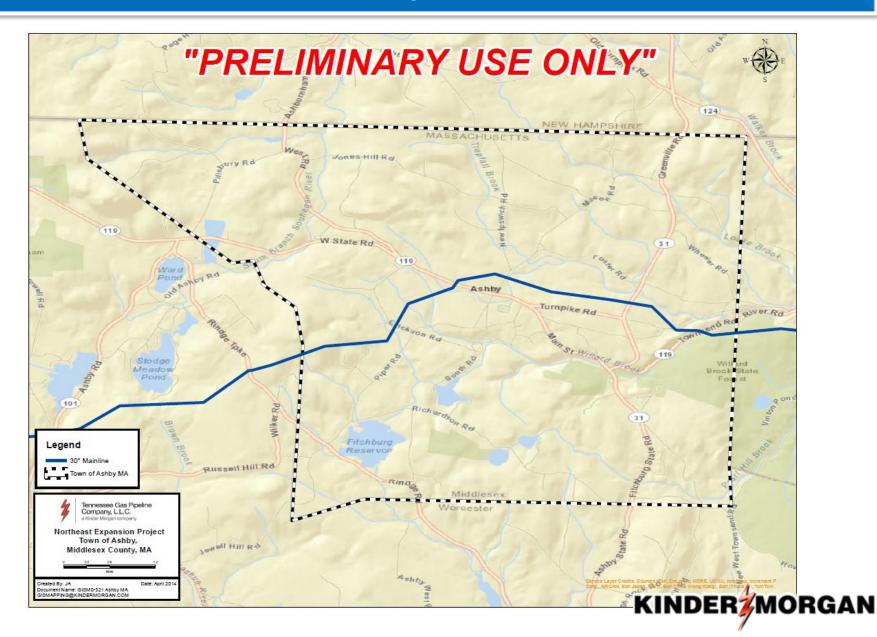
#### **Worcester County**

- Ashburnham, MA
- Athol, MA
- Berlin, MA
- Bolton, MA
- Boylston, MA
- Gardner, MA
- Lunenburg, MA
- Northborough, MA
- Royalston, MA
- Shrewsbury, MA
- West Boylston, MA
- Winchendon, MA

## Middlesex County, MA



## Ashby, MA



## **NEEP Project Benefits**









## **Project Benefits**

- An estimated additional \$25M to local taxing bodies in MA
- Estimated creation of 3,000 construction-related jobs
- Economic stimulus to surrounding areas during construction (retail, hospitality, etc.)
- Providing long-term energy reliability to the region
- Creates potential new source of energy for communities
- Platform for growth; expandable to meet future needs













# Next Steps Our Commitment to Local Communities







## Massachusetts Outreach

#### **Project Briefings:**

- Governor Deval Patrick
- Office of U.S. Senator Elizabeth Warren
- Office of U.S. Senator Ed Markey
- Office of Congressman Jim McGovern
- Office of Congressman John Tierney
- State Senator Benjamin Downing
- State Senate Majority Leader Stan Rosenberg
- State Senator Stephen Brewer
- State House Speaker Robert DeLeo
- State Representative Stephen Kulik
- State Representative William Pignatelli
- State Representative Tricia Farley-Bouvier
- State Representative

- Hank Naughton, Jr.
- State House Minority Leader Bradley Jones
- Department of Public Utilities
- Office of Energy and Environmental Affairs
- Department of Fish and Game
- Coastal Zone Management
- Department of Agricultural Resources
- Department of Energy Resources
- Department of Environmental Protection

#### **Town Contacts:**

- Dalton
- Hinsdale
- Lenox
- Peru
- Pittsfield
- Richmond

- Washington
- Windsor
- Andover
- Lynnfield
- Methuen
- Ashfield
- Conway
- Deerfield
- Erving
- Greenfield
- Montague
- Northfield
- Orange
- Shelburne
- Warwick
- Plainfield
- Ashby
- Dracut
- Dunstable
- Groton
- Lowell
- North Reading
- Pepperell
- Tewksbury
- Townsend
- Tyngsborough

- Wilmington
- Ashburnham
- Athol
- Berlin
- Bolton
- Boylston
- Gardner
- Lunenburg
- Northborough
- Royalston
- Shrewsbury
- Winchendon
- Worcester





## Kinder Morgan in the Community

Kinder Morgan supports community development projects in the areas we work.



In 2013, Kinder Morgan donated 3,000 tree saplings to elementary schools in seven counties across NJ and PA to celebrate Arbor Day.



In 2013, Parkway Pipeline supported the Collins, MS Fire Department.



In 2013, Tennessee Gas Pipeline donated to the Milford Beach in the Delaware Gap National Recreation Area to keep it open for the summer.



In 2012, Parkway Pipeline (a KM subsidiary) provided the funding for the construction of a new playground in Pelican Park in Mandeville, LA



## Kinder Morgan Foundation

 The Kinder Morgan Foundation funds programs that promote the academic and artistic interests of young people in the many cities and towns across North America where Kinder Morgan operates.



Berkshire Museum, Pittsfield, MA



Florida Mesa Elementary School, Durango, CO



Please Touch Museum, Philadelphia, PA



www.kindermorgan.com/community

## Northeast Expansion Project



## Kinder Morgan Asset Map

