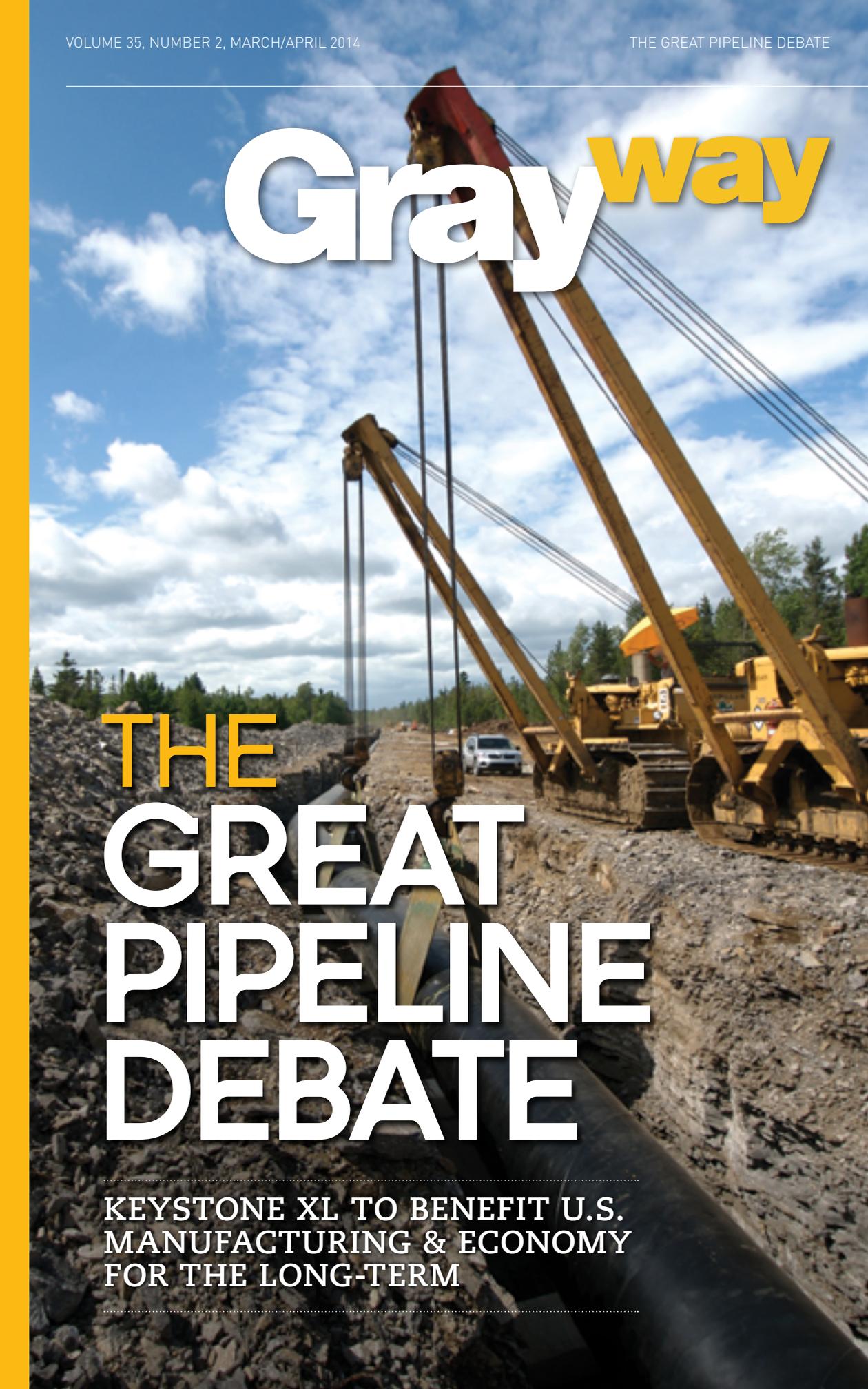


Grayway



THE GREAT PIPELINE DEBATE

KEYSTONE XL TO BENEFIT U.S.
MANUFACTURING & ECONOMY
FOR THE LONG-TERM



THIS ISSUE / The Great Pipeline Debate



Stephen Gray
Chief Executive Officer

The benefits of a strong manufacturing base to the U.S. economy are immeasurable, but to achieve a strong manufacturing base, we need an efficient supply chain of raw materials.

Currently, oil from the Keystone pipeline reaches the U.S., but it does not reach our manufacturing base efficiently, as it is moved mostly by rail. The proposed pipeline would vastly improve Canadian oil transportation within the U.S., resulting in cheaper end products and more jobs—more jobs during the construction phase of the pipeline, but also more jobs in manufacturing. In this issue of the *GrayWay*, we review the obstacles surrounding the proposed Keystone pipeline, and make the case that this is a project worthy of support from our Gray network.

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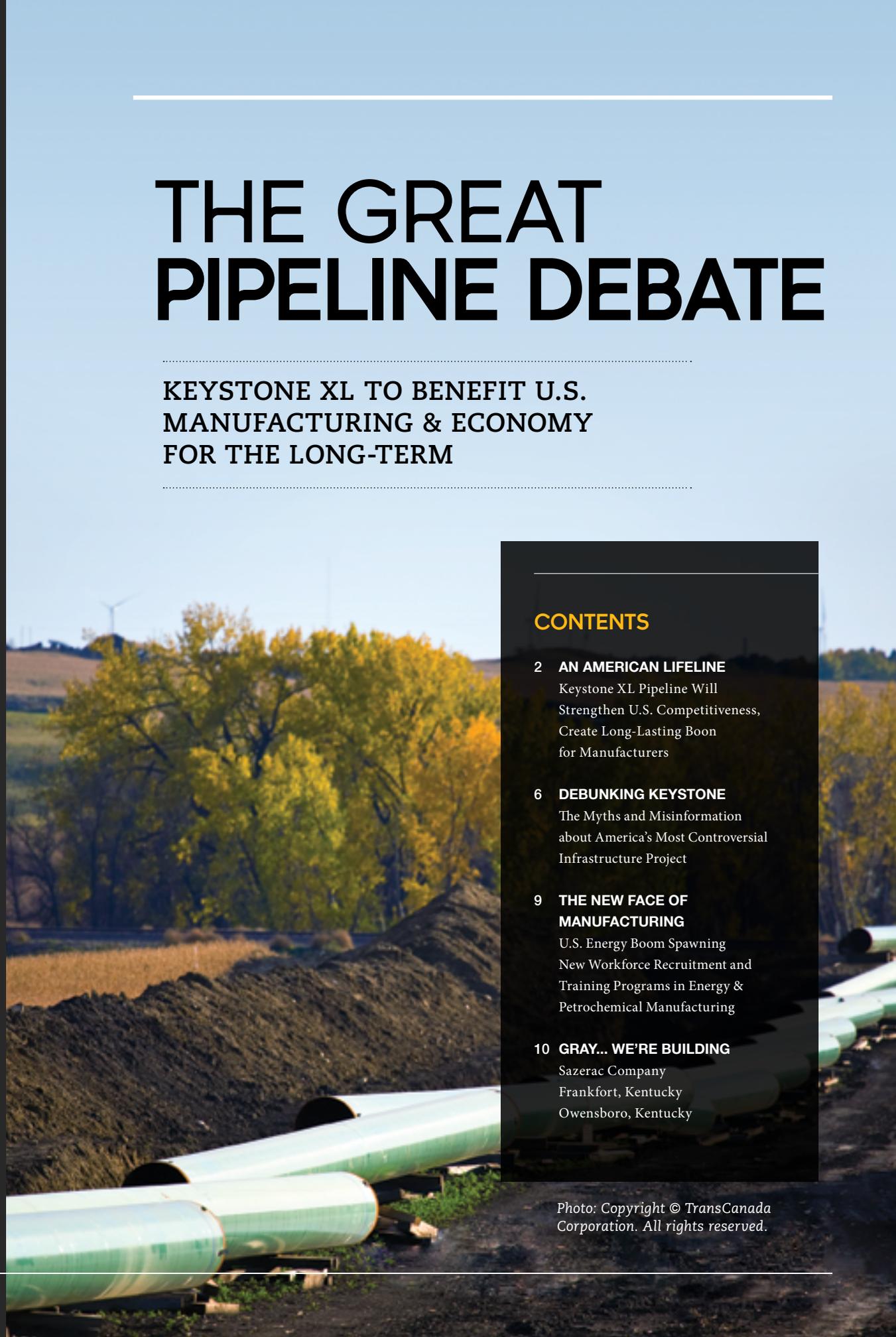
THE GREAT PIPELINE DEBATE

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Sazerac Company
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AN AMERICAN LIFELINE

KEYSTONE XL PIPELINE WILL STRENGTHEN U.S. COMPETITIVENESS, CREATE LONG-LASTING BOON FOR MANUFACTURERS



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The debate surrounding the building of a 1,179-mile, 36-inch-diameter pipeline that would deliver crude oil from Canada's oil sands to the U.S. Gulf Coast has been long and contentious, to say the least. It's been some five years since an extension to the existing Keystone pipeline—which currently runs from Alberta, Canada to Cushing, Oklahoma—was proposed and, in that time, it has become one of the most scrutinized and controversial pipeline projects in U.S. history.

The U.S. State Department released its long-awaited final environmental impact statement (EIS) in January, and the president's decision to approve or reject the pipeline proposal was expected to hinge on the results of this study. But the Obama administration recently announced the decision would be delayed yet again, following a state district court's decision to invalidate the proposed Nebraska route. The administration said no decision will be made until this route is clarified and agencies have been given a comment period, but, in an election year, many are speculating that this delay is politically motivated.

Americans across the nation, representing a wide variety of business, industry, environmental and other special interest groups, have weighed in on the debate, and manufacturers are no exception.

In October of last year, 165 multi-faceted business and industry leaders, including manufacturers, issued a letter to President Obama, urging approval of the project. The letter noted, "We are at an inflection point in our economic recovery. Whether economic growth will remain modest or pick up speed will depend on maintaining investor confidence and strengthening America's competitiveness. The decision on Keystone XL will affect both."

But why are these leaders so convinced Keystone will be a long-term boon to U.S. manufacturing and the overall economy? The answer may lie in simple economics.

Few have doubted that Keystone will have a positive impact on U.S. job growth and the overall economy, but debate continues over how long these benefits will be sustained once the pipeline becomes operational. TransCanada, the pipeline company that owns Keystone, and its supporters say the economic benefit would be long-lasting, while opponents contend most of the impact will be felt during the construction phase, and the jobs created would largely be temporary.

The final EIS from the State Department estimated that, during the construction phase alone, the project would support over 42,000 direct and indirect jobs nationwide, equaling over \$2 billion in earnings. Additionally, the project would contribute approximately \$3.4 billion to the U.S. gross domestic product.

And while many of the jobs created on the construction side are temporary by nature, other industries in the pipeline's supply chain will create long-term jobs, especially in manufacturing. Some economists estimate the pipeline would create 20,000 manufacturing and construction jobs, and tens-of-thousands additional spin-off jobs within this supply chain.

"We're talking about thousands of more jobs from the pipe being manufactured," said Davis Sheremata, spokesperson for TransCanada. "There is pipe being made in Arkansas, pump motors in Ohio, transformers in Pennsylvania—we have workers in almost every state in the nation benefitting from this."

“These workers are going to be paid very well, and do things like put their kids through school, pay their mortgages, put money towards their pensions and their retirement, and save for a rainy day,” he said.

Peter Bowe is president of [Ellicott Dredges, LLC](#), a Baltimore-based manufacturer that makes equipment used in reclamation of tailing ponds from oil sands production in Canada. In May of last year, Bowe testified in front of Congress—along with several other manufacturers—in support of Keystone.

In his testimony, Bowe stated, “For us, it’s all about jobs—not construction jobs for the pipeline itself, but ongoing jobs, every year for decades to come, all related to the production of oil from the Alberta oil sands deposits. This oil needs the Keystone pipeline.”

Bowe says if Keystone is not approved, the distribution barrier will result in lower prices per barrel of oil, creating price pressures for vendors throughout the Canadian oil sands supply chain.

“The fact is the Keystone pipeline is an off-take of the oil sands product that is necessary to deliver it to market, and anything which makes their job of production and distribution easier is good for their supply chain, of which we are a part,” said Bowe. “So, the lack of Keystone is a temporary obstacle to the distribution of oil.”

“You can look it up and see that folks there are getting, in some cases, \$20 to \$40 less per barrel than the market price,” said Bowe. “And, the principal reason for this is not that the oil is any different, it’s

because of the obstacles in the transportation process. So, until those obstacles are resolved, the producers are going to have pricing problems.”

Manufacturers have also been deeply involved in the debate over U.S. energy independence, and whether or not Keystone oil will ultimately be utilized as an energy source in the U.S., or be exported overseas.

While TransCanada and its supporters maintain the oil delivered by Keystone will largely be utilized by U.S. refineries and petrochemical manufacturers, opponents believe transporting it to the Gulf Coast can only mean one thing: exportation to foreign countries. Specifically, critics have asserted that Keystone oil will ultimately end up in China, given the [significant investment the Chinese government has made](#) in Canadian oil sands companies in recent years. Some have estimated this investment to be over \$30 billion.

According to the [U.S. Energy Information Administration \(EIA\)](#), the U.S. is the largest oil consumer in the world, importing approximately 10.6 million barrels of petroleum per day from about 80 countries.

“Both the International Energy Agency and the EIA are forecasting that the U.S. is going to continue to be a net importer of oil through 2040, and will need to import between 4 and 6 million barrels a day to meet our energy demand,” said Sheremata. “Keystone will help meet part of that demand.”

Sheremata contends the business model of exporting Canadian oil overseas—only to import it back to the U.S.—simply doesn’t make sense.

“Given market conditions and the fact that you are getting an inexpensive crude to use as feedstock to refine and to turn into the domestic market makes much more fiscal sense than to export the raw material,” explained Sheremata. “So what we’re hearing is that the export option is very unlikely to be economically justified for a lengthy period of

time, given transport costs and market conditions. It’s unlikely that very much, if any, of this oil will be exported.”

Bowe agrees and believes that the market will ultimately determine where oil from Keystone ends up.

“As a manufacturer, I want more energy available in the States, and that will tend to reduce prices which will be good for us,” he said. “So, even if the oil ends up going to China, that would mean that the market price is such that it’s worthwhile for them to ship it and pay for that cost all the way over there—it’s still displacing some other source of supply. (Oil from Keystone) should be allowed to move freely. If it makes sense to come to the States, it will.”

In February, Bowe co-authored an [Op-Ed in *Forbes Magazine* in support of the pipeline](#), concluding, “The Keystone XL pipeline represents a lifeline for American workers and the U.S. economy, and the longer we wait for approval, the longer the creation of thousands of high-paying manufacturing jobs for American workers is put on hold. Our companies and employees are ready to go to work tomorrow to support the Keystone pipeline. It is time for President Obama to accept the facts and approve the project.”



Eric Spiegel

Bowe is just one of countless business and industry leaders who have publicly supported approval of Keystone XL. [Eric Spiegel](#), CEO of industrial and engineering giant [Siemens Corporation USA](#), has also made his support known.

“As the U.S. works to develop a comprehensive energy and environmental policy that addresses climate concerns, ensures adequate supplies of reliable energy, promotes energy independence and improves our national security, the Keystone XL project can be an important piece in moving this country forward,” he said.



Ellicott Dredges president Peter Bowe at the company’s Baltimore manufacturing facility. The 125-year-old company has sold dredging equipment to customers in over 100 countries.

DEBUNKING KEYSTONE

The Myths and Misinformation about America's Most Controversial Infrastructure Project

The Keystone XL pipeline project is, no doubt, a colossal undertaking, with hundreds of miles of pipeline to be assembled and buried along its route. As with any infrastructure project of this magnitude, it is vitally important to fully examine the pros and cons, ensuring the rewards outweigh the risks, and that it has support from those who would be impacted the most. But after a half-decade of study and debate, many believe the hysteria surrounding the Keystone XL pipeline has been overblown and unfounded... and it's not just those connected to the pipeline who think so.

Here are some of the controversies surrounding the Keystone XL pipeline—the criticisms, myths and misinformation—and what is being done to alleviate concerns surrounding the project.

Greenhouse Gas Emissions

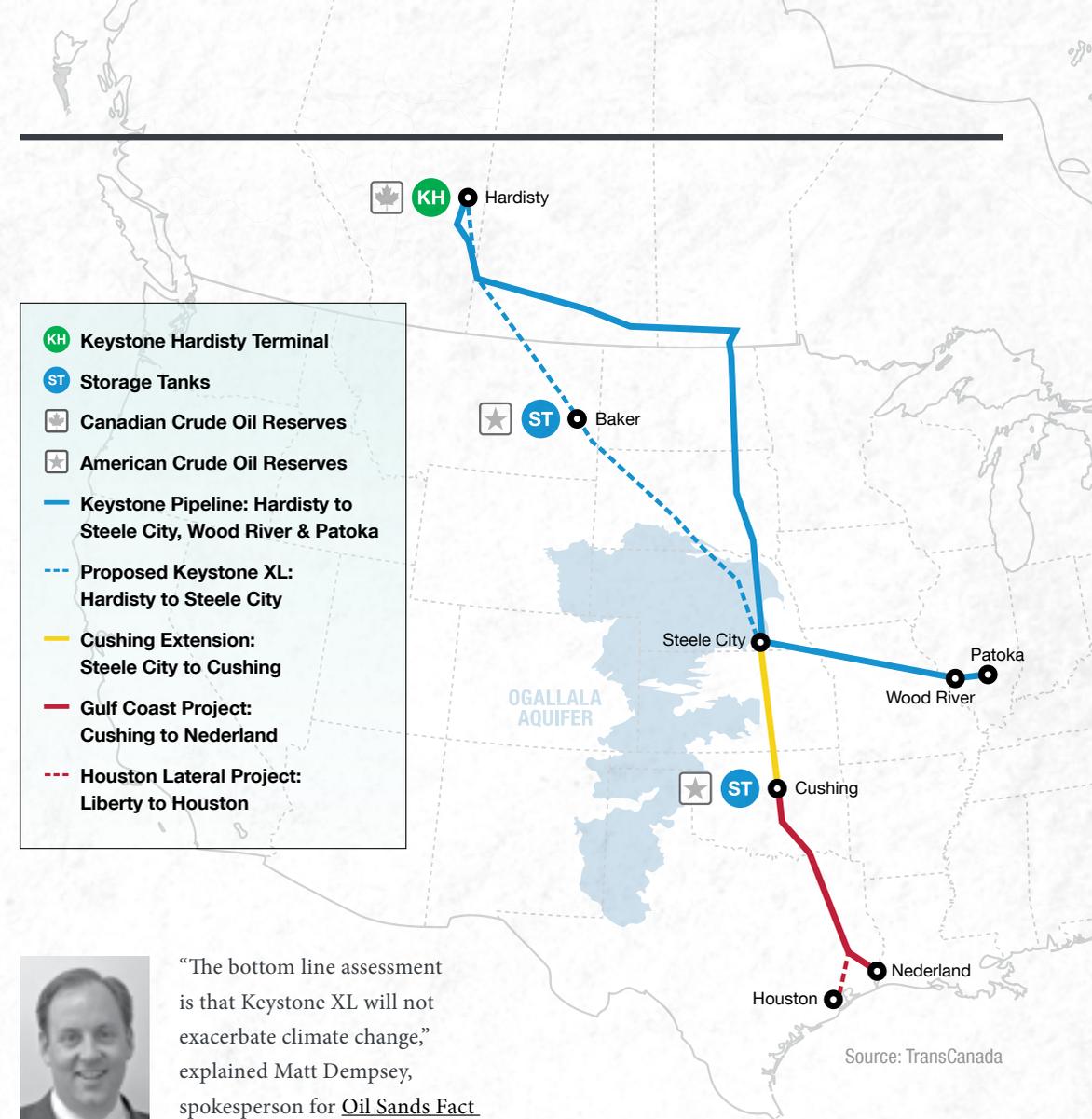
Hands-down, the most contentious debate surrounding the Keystone XL pipeline is one all too familiar to those in manufacturing and other industries that rely on fossil fuels as a feedstock and/or energy source: greenhouse gas emissions. Some believe the construction of the pipeline, as well as the extraction and development of the crude oil it will deliver, will increase the use of fossil fuels that will, in turn, create more greenhouse gas emissions and exacerbate climate change.

Davis Sheremata, spokesperson for Keystone's pipeline company TransCanada, says a number

of exhaustive studies by some of the country's leading experts in climate change have indicated that Keystone will do little to increase greenhouse gas emissions from fossil fuels. Even so, a small yet very loud subset of opponents are not backing down on this claim.

"Oil sands only produce about one-seventh of one percent of global greenhouse gas emissions—so the impact is actually fairly small," Sheremata said.

The U.S. State Department recently released its final environmental impact statement (EIS) on the Keystone XL project, assessing the potential impacts associated with the project and its alternatives. While the study acknowledged greenhouse gas emissions would, in fact, increase as Canada's oil sands are developed, tapping these reserves is not dependent upon extending the existing pipeline.



Matt Dempsey

"The bottom line assessment is that Keystone XL will not exacerbate climate change," explained Matt Dempsey, spokesperson for Oil Sands Fact Sheet, a coalition of business groups that support oil sands development. "That's because this oil is going to get to market, one way or another. Oil sands in Canada will be developed and reach America's Gulf Coast by other means (if the pipeline is not approved), like by tanker truck or railway."

Dempsey also said transporting crude oil by pipeline is by far the safest and most environmentally friendly mode of transportation, not to mention the most efficient.

"The State Department has a couple of different mentions where they talk about which (mode of transportation) is the safest and most environmentally sound, and every instance came back that the pipelines were the best," he said.

Pipeline Safety

Running a pipeline underground that will contain crude oil is sure to get people talking, especially those who live and work near the pipeline's route. In the case of Keystone, complicating the situation even further is the Ogallala aquifer, a vast but shallow water table located underneath the Great Plains that is a water source for thousands of people located around its proposed route.

Two fairly recent and highly publicized oil spills—the Kalamazoo River oil spill and the BP spill in the Gulf of Mexico—provided ample reason for pause when Keystone was proposed, and with the latest spill in the Galveston Bay off the coast of Texas, anxiety over oil spills has once again been heightened.

According to Sheremata, TransCanada has gone to great lengths to not only listen to concerns from landowners and environmentalists, but has developed additional safety measures in order to protect the environment from the threat of a pipeline leak or spill.

“There’s a myth out there that the aquifer is completely untouched by industrial activity when, really, there is about 20,000 miles of pipeline running through it—including the first phase of Keystone,” said Sheremata.

Sheremata said aquifers lie under much of the United States, and tens of millions of barrels of oil and refined products move over aquifers in the U.S. safely every day. The first Keystone pipeline already lies atop the Ogallala aquifer and has delivered more than 560 million barrels of oil to U.S. refineries since it began operating in 2010, he said.

“Keystone XL is not a threat to the Ogallala aquifer, and that is supported by experts like [Jim Goeke](#)—a research hydrogeologist who has studied this unique structure for four decades—and environmental assessments by the [Nebraska Department of Environmental Quality](#) and the [U.S. State Department](#).”

“We voluntarily agreed to 59 additional conditions with the [Pipeline and Hazardous Materials Safety Administration](#) (PHMSA) to provide even greater confidence regarding the safe operation and monitoring of Keystone XL,” said Sheremata.

Sheremata said no other pipeline to date has been built with such comprehensive safety and operating conditions. These include:

- A higher number of remotely controlled shutoff valves
- Increased pipeline inspections
- Higher construction standards
- Increased standards for pipeline integrity and maintenance
- Burying the pipe deeper in the ground

Despite such rigid safety measures, a possibility of an oil spill from the Keystone pipeline still exists, and TransCanada has a [response plan](#) already in place.

Sheremata said, in a such a scenario, TransCanada will bear 100 percent of the burden for pipeline repair and cleanup, ensuring landowners and municipalities have little to no impact.

In the unlikely event of a spill, Sheremata said the topography of the ground surrounding the Ogallala aquifer would limit how far the oil could travel, making cleanup relatively easy.

In an [article](#) published by *The Washington Post*, Jim Goeke provided the reasoning behind this theory when he said, “people were concerned that any spill would contaminate and ruin the water in the entire aquifer, and that’s just practically impossible. To do that, the oil would essentially have to run uphill.”

Goeke added, “Any leakage would be very localized... A spill wouldn’t be nice, but it would certainly be restricted to within a half-mile of the pipeline.”



THE NEW FACE OF MANUFACTURING

U.S. Energy Boom Spawning New Workforce Recruitment and Training Programs in Energy & Petrochemical Manufacturing

Photo Courtesy of: Duke Energy Academy at Purdue University

The U.S. energy boom is being credited for reviving manufacturing across a variety of sectors, especially in the energy and petrochemical markets. This growth is crucial to keeping the U.S. economy and jobs on an upward trajectory, but as baby boomers migrate out of the workforce by the thousands, finding skilled workers to fill these jobs is a growing challenge.

To ensure a secure energy future for the U.S., it is vital to increase the number of people entering the fields of science, technology, engineering and math (STEM), and provide them with the right skills and training to easily transition into these jobs. The good news: business, industry and education leaders are rising to this challenge with new programs aimed at doing just that.

For example, last summer, Houston-based [ExxonMobil](#) announced a \$500,000 investment to fund a local workforce training program that will enable area community colleges to prepare thousands of residents for jobs in the growing local chemical manufacturing industry. ExxonMobil, the world’s largest publicly traded international oil and gas company, said the initiative will build on the success of the nationally recognized [Lee College](#)

[ExxonMobil Process Technology Program](#), and will benefit 50,000 students and educators over the next five years.

“The jobs that will become available in our area over the next decade represent a life-changing opportunity for many in our community,” said Texas state senator [Rodney Ellis](#). “With the average annual salary in the Texas chemical industry at \$86,000, this landmark partnership among our schools, business community and ExxonMobil can help make the dream of economic independence come true for a lot of families.”

For the younger set, [Duke Energy](#)—the largest electric power holding company in the U.S.—sponsors the [Energy Academy at Purdue University](#) in Indiana, aimed at inspiring high school students and their teachers for future leadership in energy sciences and engineering. This week-long summer course covers STEM-related energy topics including power generation, transportation, power transmission, energy efficiency and new research frontiers. Students tour energy plants, work on energy-related research projects, debate energy policy, and conduct hands-on demonstrations.

In March, Purdue announced it will be expanding the Energy Academy to 84 participants this year.

GRAY... WE'RE BUILDING



Gray has been selected to design and build two highly automated facilities by spirits supplier Sazerac Company: an 83,000 s.f. warehouse facility at the Buffalo Trace Distillery in Frankfort, Ky.; and a 223,000 s.f. distribution facility at the Glenmore Distillery in Owensboro, Ky. These facilities are designed to improve bottling, distribution, and barrel warehouse storage capacity. Both facilities will have state-of-the-art automated storage and retrieval systems (AS/RS) that use satellite technology to store pallets in multiple deep storage lanes. The Sazerac Company, one of the largest family-owned distilling companies in the nation, is the first spirits supplier to use AS/RS technology in the U.S.



BUFFALO TRACE DISTILLERY
Frankfort, Kentucky

Gray will design the Buffalo Trace building to reflect the distillery's existing façade, thereby maintaining its status as a National Historic Landmark. Some 40 full-time jobs will be created over the next two to three years to operate this facility.



GLENMORE DISTILLERY
Owensboro, Kentucky

The Glenmore Distillery distribution center will feature additional equipment, and improvements will be made to the existing barrel warehouses. An estimated 20 full-time jobs will be added at this center over the next two to three years.



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