IF YOU BUILD IT: THE KEYSSTONE XL PIPELINE
AND SMALL BUSINESS JOB GROWTH

HEARING
BEFORE THE
SUBCOMMITTEE ON AGRICULTURE, ENERGY AND
TRADE
OF THE
COMMITTEE ON SMALL BUSINESS
UNITED STATES
HOUSE OF REPRESENTATIVES
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The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2360, Rayburn House Office Building. Hon. Scott Tipton [chairman of the subcommittee] presiding.

Present: Representatives Tipton, Graves, Luetkemeyer, Huelskamp, and Murphy.

Chairman TIPTON. Good morning. Our hearing will come to order.

I would like to thank all of you for taking the time to be able to be here as we examine the potential economic benefits of constructing the Keystone XL pipeline and what it would mean for small business job growth. We have an excellent panel with us today to discuss this very important issue and I look forward to hearing all of their thoughts.

We hear a lot about “shovel ready” projects, those that can be started immediately, putting Americans to work with good paying jobs while building the infrastructure necessary to be able to help fuel the economy. We also hear a lot about the need to be able to adopt an “all of the above” strategy when it comes to energy development in our country that utilizes all of the resources and technologies available in North America to supply us with the affordable energy that we need to be able to grow our economy. Both issues are vitally important to our economic future.

The Keystone pipeline can help us reach those goals. It is good for job creation, good for energy security, and as I think we will see here today, good for small businesses.

The potential economic benefits of this pipeline to the American economy are tremendous. TransCanada, the company petitioning the administration to be able to build the pipeline, estimates that it would spend approximately $7 billion to construct the full project. The draft supplemental environmental impact study issued by the Department of State earlier this year estimated that the pipeline would create approximately 42,100 direct and indirect jobs. Those are not only construction jobs; those are jobs in lodging, food services, transportation, warehousing, and several other segments of our economy.

While individual studies’ findings are not broken down to the impact of large versus small businesses, 99.7 percent of all businesses
in the United States are classified as small. TransCanada states it has contracts with more than 50 suppliers across the United States. Therefore, it is not unfounded to presume construction of the pipeline will create thousands of jobs for small businesses.

A study by the Energy Policy Research Foundation concluded that the Keystone expansion would provide net economic benefits of $100 million to $600 million annually, in addition to the immediate boost in construction employment. Similarly, a 2009 report from the Canadian Energy Research Institute commissioned by the American Petroleum Institute predicts that the Keystone XL pipeline will add $172 billion to America’s gross domestic product by 2035 and will create an additional 1.8 million person-years of employment in the United States over the next 22 years.

Constructing the Keystone XL pipeline will help ensure an abundant, nearby, and stable supply of oil which will not only enhance our national security and make us less reliant on foreign oil imports from unfriendly nations and regions to this country; it could have the added economic benefit of keeping domestic fuel prices in check which would help ease the financial burden on hard-working American families and small businesses. This Committee has held several hearings on the importance of affordable energy to the viability of small businesses. Just as important, according to the project's environmental impact statement, construction of the Keystone XL pipeline can accomplish these goals with minimal adverse environmental effects.

At a time when we should be focusing on economic growth and energy security, moving forward with this project is simply commonsense. We have a rare opportunity to create thousands of jobs immediately, many through small businesses, and do so in a responsible way. Let's build it.

Again, I would like to thank all of our witnesses for their participation and their insights. I now recognize the ranking member for his opening statement. Mr. Murphy.

Mr. MURPHY. Thank you, Mr. Chairman. And thank you all for being here this morning to discuss such an important topic, and I look forward to hearing all of your testimonies this morning.

The 875-mile Keystone pipeline project, which has the potential to transport 830,000 barrels of oil from Canada to refineries in the United States, could have substantial impacts on small businesses and job creation in both the short term and long term. It is also important to address the environmental issues that surround this large project.

This pipeline project has been a controversial issue that has generated a great deal of discussion and research, and we have a unique opportunity today to clear the misconceptions about the benefits and costs of this large project.

In terms of new jobs the Keystone expansion may create, estimates vary widely. TransCanada's submission to the State Department projects that the pipeline would create more than 40,000 jobs. On the other hand, research done by Cornell University shows that the project would create between 2,500 and 4,650 in temporary construction jobs, partially because a large portion of the primary material input—steel pipe—probably would not be produced in the United States.
For small business, the indirect economic effects are key. As workers deploy to communities along the pipeline’s path, significant opportunities may be created for local small businesses. In addition, small firms involved in the manufacturing of pipeline components stand to benefit should this initiative receive regulatory approval. Taken together, this project represents real benefits for small businesses.

While Keystone’s potential boost to jobs and local businesses has been at the center of the discussion, energy prices are another critical factor. While tapping into the new sources of oil from Canada seems to carry the promise of low-end gas prices, understanding whether the pipeline will have a meaningful impact on prices is a critical component of this discussion.

Finally, such a large fossil fuel development project must include a discussion of its potential impacts on the climate, and understanding whether this project would increase or decrease carbon emission is important. I am particularly interested in the witnesses’ perspectives on this matter.

Keystone XL has the potential to bring both jobs and larger energy supplies to the United States. Congress must explore all of the fundamental facts of the problems before deciding on whether the project can move forward.

With that in mind I want to thank all of the witnesses and thank Chairman Tipton for holding this hearing, and I yield back. Thank you.

Chairman TIPTON. Thank you, Mr. Murphy.

I would like to take just a moment to be able to explain the timing lights that are in front of you. You will each have five minutes to be able to deliver your testimony. The light will start out as green. When you get to one minute remaining it will move to yellow, and finally it will turn to red. And as you are all well aware, if you see that you will be bodily taken, drawn, and quartered. We would appreciate you trying to limit your testimony to that time limit but we will have you wrap up as well.

Our first witness is Mr. Brent Booker, Secretary-Treasurer of the Building and Construction Trades Department of the AFL-CIO. A graduate of the University of Virginia, he is a member of the Laborers Local 795 New Albany, Indiana, and has worked at Laborers International Union of North American Headquarters since 2001. He was elected Labor Secretary, Co-Chairman, and President of the National Maintenance Agreement Policy Committee in 2009, and represented his organization in negotiations with TransCanada for the Keystone XL pipeline.

Welcome to the Small Business Committee, Mr. Booker. Please proceed with your testimony.
STATEMENTS OF BRENT BOOKER, SECRETARY-TREASURER, BUILDING AND CONSTRUCTION TRADES DEPARTMENT, AFL-CIO; PETER BOWE, PRESIDENT AND CEO, ELLICOTT DREDGES; MAT BRAINERD, PRESIDENT, BRAINERD CHEMICAL COMPANY; CHRISTOPHER R. KNITTEL, WILLIAM BAR-TON ROGERS PROFESSOR OF ENERGY ECONOMICS, SLOAN SCHOOL OF MANAGEMENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

STATEMENT OF BRENT BOOKER

Mr. BOOKER. Thank you. On behalf of the two million skilled craft professionals in the United States and Canada that comprise the 13 national and international unions of the Building and Construction Trades Department, AFL-CIO, I wish to thank you and the members of the Committee for holding this hearing today.

America's building trades unions emphatically support the construction of the Keystone pipeline. Our unions have been actively involved in this project since its inception almost five years ago, and we are adamant in our belief that the economic, energy security, and national security benefits associated with the construction of this pipeline are too many and too significant to allow it to be derailed by a narrow and misguided political agenda being advanced by a small minority of ill-advised environmental groups.

 Simply put, Keystone XL is in the national interest of the United States of America.

For over four years now, the American construction industry has been in the throes of a "depression." While the stock markets and the media celebrated the news two weeks ago that the national unemployment rate fell to 7.5 percent in April, little attention was given to the fact that the national unemployment rate for construction workers remains above 13 percent.

For many members of our unions, the Keystone XL project is not just a pipeline; it is, in fact, in the most literal sense of the phrase, a lifeline. Far too many of them have lost their homes and are struggling just to put food on the table. And given the scrutiny this project has received, any further delay by the Obama administration would be unconscionable.

Unfortunately, they must also face the additional emotional burden of having their chosen profession denigrated by a number of environmental groups. In its recent Supplemental Draft Environmental Impact Statement (SDEIS), the State Department effectively dismissed the Keystone oppositions' basic argument: which is that the construction of the Keystone pipeline will lead to an increased greenhouse gas emission. And even though the State Department was not obligated to have analyzed any environmental impacts outside of the United States, the SDEIS provides a clear life-cycle analysis of greenhouse gas production that would be connected to the development of the Canadian oil sands, as well as the environmental impact to wildlife, forests, threatened and endangered species, and water resources. In each instance, all key issues raised by the SDEIS have been adequately addressed.

Misguided groups, like 350.org and the Sierra Club, have chosen to impose a value judgment that holds a construction job to be of lesser value because by its very nature a construction project has
a completion date and therefore, that individual job will come to an end at some point. They call these jobs “temporary” as a means to diminish their importance and validity, and to entice others to join their chorus of negativity in the mistaken belief that these jobs have no real value to our society.

It was those types of hard-working professionals who built the “Alberta Clipper” pipeline project which the Obama administration approved way back in August of 2009. Ironically, the Alberta Clipper project just happens to be a pipeline very similar to Keystone XL in two compelling areas: (1) both are roughly 1,000 miles long; and (2) both are specifically designed to transport Canadian crude oil from the oil sands region of Alberta to refineries in America.

Upon approval of the construction permit for the Alberta Clipper, the State Department said, and I quote, “The department found that the addition of crude oil pipeline capacity between Canada and the United States will advance a number of strategic interests of the United States.”

We could not agree more.

Additionally, the Keystone XL TransCanada has agreed to implement 57 safety measures above and beyond those mandated by federal agencies relating to the construction, operation, and design of the pipeline. Yet, the most effective action they took to ensure safe construction of this pipeline was to sign a project labor agreement. By embracing a PLA, TransCanada recognized the value realized through a partnership with America’s building trades unions, not the least of which is the assurance that the project will be built by the safest, most highly trained and productive pipeline workforce found anywhere in the world.

And it also bears noting that the family-sustaining wages and benefits that will be paid on this project through the PLA will have a dramatic effect on local economies with communities all along the proposed route. In fact, over 4,000 workers have already performed roughly 1 million hours of work on the southern leg of Keystone, running from Cushing, Oklahoma to Port Arthur, Texas. And the economic impact from the wages and benefits paid through the PLA is noticeable.

KBMT News in Port Arthur did a recent story detailing how the construction of the southern leg was providing a boost to the local economy, as workers are spending heavily on things like clothing, hotels, and restaurants. Additionally, from lumber to sand, and from gravel to fuel, massive quantities of materials that are needed for the project are being purchased locally up and down the route between Cushing and Port Arthur.

The Keystone PLA is already proving to be a major contributor to the local economies along the southern route, and it is also structured to ensure safe, quality construction with “on time, on budget” results through the steady supply of the world’s safest, most highly trained, and high productive skilled workforce found anywhere on the globe.

Our unions, in partnership with our signatory contractors, invest roughly $1 billion a year of their own money, not taxpayers’ money, to operate approximately 1,900 skilled craft training centers in both the United States and Canada.
In sum, the Keystone XL project will create tens of thousands of good paying jobs here in the United States. It will increase the nation’s energy security by providing a reliable source of crude oil from a friendly and stable trading partner. It will further boost the American manufacturing resurgence, and it will provide state and local governments with new sources of revenue that can help them alleviate budgetary problems that will lead to the creation of even more jobs. And being a private-funded project will do so without any taxpayer dollars. Any further delay by the Obama administration is unacceptable.

Thank you for inviting me to testify today. I appreciate to hear your comments.

Chairman TIPTON. Thank you very much, Mr. Booker, and we would like to recognize that our chairman of the full Small Business Committee, Sam Graves, is here and we certainly appreciate you joining us.

Up next we have Mr. Peter Bowe, President and CEO of Ellicott Dredges in Baltimore, Maryland. Patented in 1885, Ellicott is the world’s oldest and largest builder of medium-sized cutter suction dredges. In his over 30 years at Ellicott, Peter has served as President, Treasurer, Vice President, General Manager, and member of the Board of Directors. He received his undergraduate degree from Yale College and his MBA from Harvard University.

Thank you very much for being with us today, Mr. Bowe. Please proceed with your testimony.

STATEMENT OF PETER BOWE

Mr. BOWE. Good morning, Chairman Tipton, Chairman Graves, Ranking Member Murphy. Thank you for having me.

My name is Peter Bowe. I am here to speak today on behalf of my company, Ellicott Dredges and the National Association of Manufacturers.

Ellicott, based in Baltimore, Maryland, is the oldest and largest manufacturer of dredging equipment. We built all the dredges used in the original construction of the Panama Canal. Our dredges are used not just for canals and ports but also for mining and environmental cleanups, like the reclamation of tailing ponds from oil sands operations in Alberta. Investment in infrastructure, especially energy infrastructure, accounts for much of our demand, and energy development also funds the investment intended to buy our equipment.

Today, we have 200 employees at our plant in Baltimore and a second plant in Wisconsin.

So why do we care about the Keystone pipeline? What does that have to do for us? For us, it’s all about jobs. Not the construction jobs from the pipeline itself but ongoing jobs every year for decades to come, all related to the production of oil from the oil sands deposits. This oil needs the Keystone pipeline. The oil sands in Alberta are one of the largest markets worldwide for dredging equipment. The dredges rehandled the tailings generated by the mining process. Tailings are the wet waste, which is a combination of clay, sand, and water after the oil-bearing bitumen has been removed. All the oil sands projects generate substantial volumes of tailings which are deposited into ponds. The producers have been criticized...
for water usage but now, because of the tailings reclamation process, they recycle 85 to 90 percent of the water used, and the dredges are an integral part of the recycling process.

Alberta government regulations require the producers to reclaim these ponds. This is a substantial obligation which requires an investment of hundreds of millions of dollars annual. For example, Suncor, just one of the producers, has said it will invest a billion dollars in just a two year period before this process.

I have enclosed in my written testimony a picture of a type of dredge that we make. A typical machine can weigh over 500 tons or could require us to spend as much as $10 million per machine on vendors around the United States and dozens of states. Mostly small companies but big ones, too, like Caterpillar. When we make a sale from a Canadian oil sands environmental project, we rely on these vendors from all across the country to export a product which is almost completely American made. At any given time, it would not be unusual for us to have 20 percent of our 200 employees working on oil sands-related projects.

But it is not just the dredge business which benefits from oil sands. Two-way trade between the U.S. and the province of Alberta exceeds U.S. trade with U.K., South Korea, or France. Twenty-five hundred U.S. companies export goods and services to Canada in support of the oil sands. The value of these exports is supposed to be between 8 and 15 billion for the next 25 years.

Back to the point of how Keystone affects the oil sands business which is so important to us.

There is now a substantial dislocation in the distribution network for oil sands. The result is that oil sands product pricing is depressed and selling at a big discount compared to West Texas Intermediate. This discount is hurting the producers, leading them to postpone or even cancel some of the oil sands projects. We have seen our workload diminished by the impact of this price discount. Oil sands production costs vary depending on the project but are estimated at $50–$60/barrel. So it does not take much of a discount to make a particular project uneconomic.

A recent Wall Street Journal article from April tells the story well. "Amid a bottleneck of too few pipelines and too much new oil across the U.S. Midwest, Canadian producers have started agreeing to steeper and steeper discounts to get their oil to American refiners, but government officials and industry executives and analysts expect continued price swings and market pressure until more pipelines are built."

The U.S. State Department’s 2013 Environmental Impact Statement corroborated this conclusion, saying “These steep crude discounts are a disincentive to producers to proceed with new extraction projects.” Growth in domestic U.S. and Western Canadian production has put pressure on the crude logistics system. This discounting in pricing is expected to continue until and unless adequate capacity becomes available to enable crudes to move to the U.S. and Canadian markets. Indeed, our Canadian clients are postponing new projects which would have required our equipment.

One way or the other, Canadians will eventually solve their distribution problems with or without U.S. governmental collaboration. To the extent this process is delayed, the producers will suffer
economic loss and their U.S. suppliers, like us, Ellicott Dredges, will suffer as well, including diminished employment. We urge you to approve that Keystone pipeline expeditiously. We should rely on the proposition that Canadians are fully capable of acting as custodians of their own environment and that Canadian oil is not only environmentally superior to that from say Venezuela but certainly more secure politically compared to our other existing options.

Thank you for your time this morning.
Chairman TIPTON. Thank you, Mr. Bowe.
Our next witness is Mr. Mat Brainerd. Mat is the chairman and CEO of Brainerd Chemical Company headquartered in Tulsa, Oklahoma. Brainerd is a 54-year-old family-owned company that employs 83 people in its Oklahoma and North Carolina facilities. The company serves 3,000 customers nationwide and he has been recognized as one of the top 100 chemical distributors in the United States. He is testifying on behalf of the National Association of Chemical Distributors, for which he is currently serving as Vice Chairman of the Board. Thank you for being here, Mr. Brainerd, and please proceed with your testimony.

STATEMENT OF MAT BRAINERD

Mr. BRAINERD. Thank you, Chairman Tipton. Thank you, Chairman Graves, and thank you, Ranking Member Murphy for allowing me to testify on this important issue.
I am the CEO and chairman of Brainerd Chemical Company, and I am a small businessman. My father started this business in 1959 and I have been running this business since 1979. We do have 83 employees, as you just mentioned. We have three facilities in Oklahoma and North Carolina, and we serve 3,000 customers. I am the vice chairman of the National Association of Chemical Distributors (NACD), on whose behalf I am testifying here today.
The average NACD member has 26 employees and $26 million in annual sales, and collectively, we provide ingredients to nearly a million businesses. NACD members are leaders in health, safety, security, and environmental performance through implementation of Responsible Distribution, which is a third-party verified management system and a condition of membership.
Chemical Distributors take title to bulk volumes, break them down into smaller volumes, and in many cases, blend them and transport them to customers. We are a highly specialized critical link in the supply chain. Our industry is the predominant supplier of chemicals to small business.
I am not here to discuss environmental impacts or the best pipeline route, nor am I qualified to do so. I am well qualified to discuss how this pipeline will benefit my company and industry.
The pipeline would help us in three distinct ways. First, as with most industries, chemical distribution benefits from economic growth. Second, it would reduce our cost for aromatic and aliphatic chemicals, diesel, and rail cars. Third, it improves the economics of fracturing, which is an important market to us.
My written testimony discusses the economic benefits of building the pipeline. Here I will just say that economic growth floats all
boats and our industry is no exception. I want to focus here on how it will reduce costs and improve markets for us. Transporting crude is expensive. The pipeline would provide a reliable supply of crude from Canada, which would lower refining costs, increase our domestic fuel supply, and create downward pricing pressure.

The refining process produces vital products besides fuels. Toluene and xylene, for instance, are two of the nine chemicals my company buys and distributes and are created by this process. Since the beginning of 2012, toluene has averaged about $4.50 a gallon and xylene about $3.35 a gallon. In that time, I have purchased more than a million gallons of these two chemicals alone. Obviously, any price reductions would significantly lower my supply costs. Similarly, the pipeline should create downward pressure on diesel prices. In an industry that depends on trucks to move our products to market, fuel costs are very important. As a small businessman, I spend approximately $60,000 per month on diesel to move my products to market. If prices dropped just 5 percent, that would save $36,000 a year or the equivalent of one full-time employee.

Diesel also is a cost component of receiving chemicals by rail from my suppliers. Next month, my rail shipper is charging a 27 percent markup for certain goods to defray its costs. I also lease railcars. When operating these cars, I must pay a diesel surcharge, so any downward pressure on prices help my bottom-line.

One outgrowth of shale oil expansion is the tremendous demand for railcars to ship crude oil to market, creating currently a backlog of 42,000 railcars. In my business, prices to lease railcars have doubled solely due to this shortage. If the pipeline is built, it would relieve some of the demand pressure. In my competitive industry, the cost savings in chemicals, diesel, and tank cars ultimately passes on to my customers.

The shale oil boom has also created a major market for us because our products are critical to the extraction process. For instance, hydrochloric acid is used to “acidize” wells, which removes calcium and mineral deposits to increase flow through that well. Since pipelines improve the economics of operating these fields, it supports this market and my industry. It is my hope that the efforts of this Subcommittee will expedite permitting the XL pipeline.

Thank you for allowing me to give this testimony.

Chairman TIPTON. Thank you very much, Mr. Brainerd.
I would now like to yield to Ranking Member Murphy for the introduction of this witness.

Mr. MURPHY. Thank you.
Dr. Christopher Knittel is the William Barton Rogers Professor of Energy Economics at the Sloan School of Management at the Massachusetts Institute of Technology. He joined the faculty at MIT in 2011, having taught previously at the University of California at Davis and Boston University. Professor Knittel received his undergraduate degree in economics and political science from the California State University and masters in economics from UC Davis and a Ph.D. in economics from UC Berkeley. His research focuses on environmental economics, industrial organization, and applied econometrics.
Thank you for being with us today.
STATEMENT OF CHRISTOPHER R. KNITTEL

Mr. KNITTEL. Thank you, Chairman Tipton, Chairman Graves, Ranking Member Murphy, and the members of the Committee for inviting me here today. My name is Christopher Knittel. I am the William Barton Rogers Professor of Energy Economics in the Sloan School of Management at MIT. I am also the co-director of the Center for Energy and Environmental Policy Research, also at MIT.

Inevitably, discussions related to oil and greenhouse gas emissions tend to get overblown. Discussions surrounding many of the issues behind the Keystone XL pipeline are no different. In my testimony, I will discuss the likely consequences of the Keystone XL pipeline along five dimensions: oil prices, greenhouse gas emissions, profits, jobs, and national security.

First, the effect of the Keystone XL pipeline on oil prices. Here the economics are pretty straightforward. Energy economists and energy analysts tend to agree that, with few exceptions, the oil market is a world oil market. That is, when a barrel of oil is pumped out of the ground, it competes with supplies of oil across the entire globe. The world market is an artifact of the low cost of shipping oil. A consequence of this is that it is very difficult for increases in product in any one country to have a long-term impact on the price of oil.

The situation in the Midwest with Midwest oil and Canadian tar sands is, however, one exception. Due to pipeline capacity constraints connecting the Midwest and Canada with the Gulf Coast, the price of oil selling in Cushing, Oklahoma—known as the Western Texas Intermediate, or WTI—is currently selling at a discount compared to a barrel of oil in just about every benchmark location in the world. Most notably, the Brent crude crude reflecting the price of oil in Europe. The discount has recently fallen below $10 per barrel, but last year it averaged more than $17 per barrel, and has been over $30 per barrel over the last 24 months.

Because of pipeline limitations, oil produced in both Canada and North Dakota cannot make it to the Gulf Coast and must therefore be refined in Canada or the Midwest. Refineries are able to get a discount on this oil because of the limited options available to oil producers. Recent work by Severin Bornstein of UC Berkeley and Ryan Kellogg of the University of Michigan shows that because pipeline capacity for refined products is not similarly constrained, the lower price paid by the refineries is not passed on to consumers. The benefits accrue, instead, to the refineries.

Building the Keystone and Keystone XL pipelines will push the price that producers of North Dakotan and Canadian oil can capture closer, if not fully, to the world price. Therefore, these pipelines will tend to increase oil prices paid by refineries in the Midwest, but the work by Bornstein and Kellogg implies that this will not increase the price paid by consumers at the price because they are not enjoying that discount currently.

There will be no appreciable change in the world price of oil, certainly not enough to base policy decisions on. While more supply always puts downward pressure on prices, when gauging the size of the supply increase it is important to understand the size of the market. To put things in perspective, the 800,000 barrels per day that will flow over the Keystone XL pipeline represents less than
1 percent of the world oil supplies. The increase in oil production that results from the pipeline will be even smaller.

Second, the effect of the Keystone XL pipeline on greenhouse gas emissions. Here the economics are also pretty straightforward. While some have called the XL pipeline “game over” for the climate, I believe this is simply not true. And this is not because I doubt the seriousness of climate change. Much of my academic research promotes policies to reduce greenhouse gas emissions. It might seem surprising that the XL pipeline would have little impact on greenhouse gas emissions given how energy intensive Canadian bitumen, or tar sands, is to produce. Tar sands are certainly more energy intensive than the average oil refined in the U.S., requiring more energy at the extraction phase, as the bitumen must be separated from the sand and water. More energy also must be used to upgrade the bitumen for refining.

No one can deny that this added energy and the greenhouse gas emissions associated with this oil. Two numbers are often discussed when it comes to the added greenhouse gas emissions. First, the increase in emissions during the production and refining stage of Canadian tar sands compared to the average oil sold in the U.S. is roughly 80 percent, according to the State Department and many other sources. This number ignores the fact that the majority of greenhouse gas emissions associated with the use of oil is when you burn the oil or burn the refined product. Here, the State Department estimates that these lifecycle emissions of tar sands are roughly 17 percent higher than the average oil sold in the U.S.

The problem with both of these metrics is that it compares it to the average oil. The more relevant comparison is what oil the tar sands would replace. A recent Cambridge Energy Research Associates analysis found that Canadian tar sands is actually cleaner on a greenhouse gas emissions basis than heavy Californian oil and heavy Venezuelan oil.

The main point is that the policy debate has focused on the wrong metrics when it comes to greenhouse gas emissions, focusing on the average oil sold in the U.S. rather than the oil that it would replace.

Let me just summarize because as my students will attest I often go over time and here is no exception.

The pipeline will have a big impact on profits and will also have an impact on jobs. And the most important component of the jobs impact is to realize that the economy is currently under full employment. And even short-term impacts or short-term increases in jobs can have very big long-term impacts. This is the argument for economic stimulus when the economy is in recession. Here, rather than the government doing the stimulus, the pipeline will do it itself.

And with that I will gladly take questions. Thank you.

Chairman TIPTON, Thank you, Dr. Knittel. And probably worthy of note, your students are the ones who wanted me to add the line about being drawn and quartered.

I do appreciate all of your testimony and I know a number of our members make an effort to be here. We have multiple meetings that are going on that we are supposed to be at simultaneously, so I will defer my questions till the end.
Mr. Luetkemeyer, if you would like to proceed with your questions.

Mr. LUETKEYEMER. Thank you, Mr. Chairman.

I guess the first question that I have got is with regards to the safety of transporting the oil. Is there a problem with safety with regards to transporting? Mr. Booker, you build them.

Mr. BOOKER. The pipeline would be the safest method that you could deliver oil. At this distance, this amount of barrels a day, there is not a safer way to transport the oil than to put it in a pipeline.

Mr. LUETKEYEMER. What kind of safety precautions do you put in place when you build a pipeline like this?

Mr. BOOKER. In this particular pipeline they have gone above and beyond. They have put 57 additional. Part of that is they have sensors all along the route that is going to be monitored 24 hours a day. So if there is a drop in pressure at the control center for TransCanada, they will be able to shut off the pipeline to mitigate any type of spills that would happen.

Mr. LUETKEYEMER. We have in this country, with the Alaska pipeline, we have another pipeline to look at. I think within the last years it was built, it was built with a specific purpose, to transport oil long distances. What has your experience been with regards to that? Are you aware with any problems with regards to the Alaskan pipeline?

Mr. BOOKER. Not that I am aware of. When you look at the alternatives of a pipeline versus what is happening today they are putting it on the back of railcars and they are transporting the oil in the back of a railcar. And the pipeline is a huge number of times more safe than putting it on the back of a railcar. I am not familiar with there being any accidents or major spills with the Alaskan pipeline.

Mr. LUETKEYEMER. I thought the Russians have built a big pipeline across Russia and Europe to deliver oil over there. How is that working out? Do they have any problems with that one? Are you aware of any?

Mr. BOOKER. I am not aware of any.

Mr. LUETKEYEMER. Okay.

Mr. Knittel, you talked about greenhouse gas, which kind of stirred me here a little bit. Can you elaborate a little bit longer on your comments that you made with regards to greenhouse gas? You thought that this was a better way to approach? There would be less greenhouse gas? If you look at the transportation of other methods and the way that oil is refined, is that basically what you said?

Mr. KNITTEL. The main thrust of that point is that the policy debate has focused on comparing tar sands with the average oil refined in the U.S., and that is just the wrong metric. The counterfactual or the alternative story that you would like to say is suppose we did not have the Keystone XL pipeline so tar sands production decreased. The question is what oil will replace that tar sands? And it is not the average oil sold in the U.S. It is very likely to be Venezuela heavy oil, which actually has about a 17 percent or is dirtier than tar sands.
The analogy that I was going to use if I had the time was it is like me telling my son he cannot have a bag of chips because potato chips are worse than his typical food, only to see him put the chips away and grab an ice cream sandwich to eat. That is the comparison. The real comparison is what oil will this tar sands oil replace? And there is very good reason to believe that it would actually replace oil that is even dirtier on a greenhouse gas emissions basis.

Mr. LUETKEYEMER. Okay. So we arguing or we are making points today about providing jobs, being cleaner, it is a safe way to transport the oil. What is the problem with why can we not get this done in your estimation?

Mr. Bowe, do you deal with this every day?

Mr. BOWE. I did not get into the politics of it but Mr. Booker’s comment about the environmental reaction that oil is somehow bad, either in general principal it is bad, is not a premise I accept myself.

Mr. LUETKEYEMER. Okay. Mr. Brainerd, what do you think?

Mr. BRAINERD. You know, all I have to go by is what I listen to in the media and it sounds like President Obama has an issue with this and he is being pushed on by constituents that have given him a lot of money.

Mr. LUETKEYEMER. Mr. Booker, what do you think? Why can we not get this done? You guys have a lot at stake here. You have a lot of jobs and it is good for the economy. And Mr. Knittel down there, he said there are no greenhouse gas and oil emission problems, environmental problems.

Mr. BOOKER. No doubt, I agree with the doctor. This is going to create good jobs, good paying jobs. The hold up, I will say what Mr. Brainerd said. When you look at the media, it boils down to the environmental movement, calling this—taking this as their major issue. And placing pressure on it. It is our hope and our wish that at the end of the day we are going to side with jobs, creating good jobs for good Americans.

Mr. LUETKEYEMER. I see my time is up. It looks like we need to find a way to diffuse the issue of the environment. It looks like Mr. Knittel did a good job of talking about them along the way here. So thank you for your testimony today. I yield back.

Chairman TIPTON. Thank you very much. Ranking Member Murphy is also deferring, so Mr. Huelskamp, if you would like to proceed with your questions.

Mr. HUELSKAMP. Thank you, Mr. Chairman. I appreciate the gentleman testifying here. I want to relay a story to you all and ask some follow-up questions.

Myself and many other members or most of the members of the Republican Congress have had an opportunity to meet privately with the president of the United States, and this is one issue that did come up in discussion. And the president was asked for his particular position on Keystone XL. We were hoping we would get a little indication from the president that given the changes in the proposed route and such that we could move forward on the project. What I found interesting was his comment that there are two sides on this issue. On one side is about everybody in this room and others that would like to see it built, and the president indicated on the other side are quite a few environmentalist groups
that are certainly opposed. But what was most interesting was when the president said, “And I am in the middle.” Of course, if you are in the middle you could probably let the project go forward given your administration has a pretty clear position on that other than folks down the line, but the president is certainly on one side. He is against construction and moving forward. He is against, I guess, the creation of those jobs.

And maybe Mr. Booker would start. What do we need to tell the president, and apparently the closest staff to him, what does he need to know in order to encourage him to make the right decision for America on this project?

Mr. BOOKER. Our message is simple. It is about creating good paying jobs. You know, putting highly skilled people to work to build the safest method of transportation for this oil to come down from Canada into the United States to market. So it is a jobs message for us.

Mr. HUELSKAMP. And I appreciate that. And we have been talking about jobs for a long time. Of course, the president has as well. The economy is not exactly moving forward as any of us would hope. That message does not seem to be working with the White House. What else can we tell them? I mean, the idea that—and I am from Kansas. The pipeline is built to the Kansas border and five miles into Nebraska. We are just waiting. We have some refinery expansion going on and are waiting for that crude as well. What else can we tell the president of the United States? Because he single-handedly is the one that is holding up this project. I am looking for other suggestions.

Mr. Brainerd.

Mr. BRAINERD. I will throw in here for a second. If you want to talk about safety, I think Mr. Booker made a good comment. If you put it on the pipeline, it is going to be a whole lot safer on the pipeline. If you put it in railcars and we have derailments, you have a whole lot more environmental issues with heavy crude. And the cleanup on that heavy crude we have seen in the Gulf. You understand what that is all about. If you put it in trucks, it is even worse. So from a safety standpoint, that pipeline makes the most sense.

From an economic standpoint, what it does for this country in economic recovery and growth is huge. What it will do downstream for the next 20 years is huge. And as I indicate in my testimony, we are the downstream benefactors of that crude, and what we do with it is put it in the paints and coatings and cleaning airplanes and building the PCs, and it goes on and on and on, and in clothing, and so forth. So the economic benefits just, in my opinion, are incredible.

I heard what Mr. Knittel said with regard to it being only 1 or 2 percent of this world; however, if we can displace Venezuelan crude, we should be doing business with our friends.

Mr. HUELSKAMP. Other comments?

Mr. BOWE. I do not think any of us here want to denigrate rail traffic. It is certainly important to the country. But again, The Wall Street Journal did a story in the last four weeks about a massive increase in rail traffic oil spills as the rail is used to move the Balkan oil from North Dakota. They are both relatively safe. Clearly,
a pipeline is the safest. I think we all agree with that. So if you are trying to make a choice on that, you cannot argue with the pipeline alternative. What will happen is there will be more consequences.

I think in terms of how to persuade the administration, for the foreseeable future the transportation industry in this country needs liquid petroleum products in one form or another. They cannot be displaced and they will not be displaced. And that cost factors into everything that we consume, whether you drive a car or not. If you consume any product, there are transportation costs built into that. So I think we need to acknowledge I do not think it will cause a dependence on liquid fuels and say that is not necessarily a bad thing. Energy is a big part of economy and our lifestyle.

Mr. HUELSKAMP. Thank you, gentlemen. I appreciate the testimony. I am just trying to find a way to convince folks that we would like more jobs. We would like to help grow the economy. We would like to become North American energy independent. And everybody in that room I mentioned all claimed they wanted those goals. And here is one thing that we can actually help move to that end. I appreciate your input. I appreciate especially Mr. Booker being here today and the other gentlemen as well. Thank you. I yield back.

Chairman TIPTON. Thank you, Mr. Huelskamp.

I now yield to Ranking Member Murphy.

Mr. MURPHY. Thank you, Mr. Chairman. Thank you all, again, for your testimonies.

Dr. Knittel, you spoke briefly about the environmental impact globally. Have you thought at all or done any analysis on the impact to the environment in some of the local communities where this pipeline perhaps will be running through?

Mr. KNITTEL. I have not done specific analysis to that, and I certainly believe those to be important. And I think that is one reason why they changed the route in the first place. And again, I believe there are tradeoffs here. My goal in this proceeding is to hopefully interject facts related to both greenhouse gas emissions, how it will affect oil prices, gasoline prices, jobs, and national security. I think on both sides, things, like I said, tend to get blown out. It is not going to have a large impact on greenhouse gas emissions. It also would not likely have a big impact on world oil prices or the price paid by consumers at the pump. There are local environmental issues that have to be weighed against the benefits, just as any investment in fossil fuels.

The key to the other side of the benefits is that it will raise the price that North Dakotan oil producers get for their oil, which will have spillover effects on jobs. But I, in no way, want to denigrate or reduce the concern or the fact that local environmental issues certainly have to be weighed against those benefits.

Mr. MURPHY. You mentioned greenhouse gases. There again, just help me clarify. Some groups have indicated that because of the pipeline it will speed up the flow of this fuel south, this oil south, and that will increase greenhouse gases into the atmosphere. And I know that this is very tough to calculate. It is sort of fungible these numbers. What is your thought on that? Will this really add to it because it is getting there quicker?
Mr. KNITTEL. Well, there is probably little doubt that it will increase production of tar sands in Canada, but if that comes at the reduction of heavy Venezuelan oil then there might actually be a benefit in terms of greenhouse gas emissions. Again, climate change is one of the most important issues that our country has to address. And I think there is a long list of policies that I would encourage policymakers to adopt, but most of those are going to focus on finding alternatives to oil in the long run and other fossil fuels in the long run. Using the Keystone XL pipeline as somewhat of a symbolic argument against oil is probably not an effective use of our time in terms of reducing greenhouse gas emissions.

Mr. MURPHY. So you do not necessarily think that this will not bring down oil prices for us domestically. How do you think domestic consumers will benefit from this?

Mr. KNITTEL. Well, so, as mentioned, you know, currently the refineries in the Midwest and also Canada are paying a lower price for the oil that they use to refine. In typical cases that would be passed on to consumers, but because refined product pipeline capacity is not constrained they are able to shift those refined products throughout the U.S. So they are able to capture those rents or those profits from that lower price. So as the pipeline is built, what would inevitably happen is it will push the price—the Midwestern and Canada price of oil up towards the world price of oil. Because the current discount is not being passed on to consumers, the increase in the price paid by the refineries will also not be passed on to consumers. So there would be little impact in the price that consumers pay at the pump.

Mr. MURPHY. Mr. Brainerd, we touched briefly on the idea that if this oil is not brought south through Keystone XL, that we will, in fact, be using Venezuela oil, perhaps, or maybe from somewhere else. Explain to me with your chemical company what the effects would be if it is Venezuelan versus Canadian versus something else.

Mr. BRAINERD. As far as the products that we get from the downstream oil it would not make a difference. The crude that is used is refined and cleaned, and whether it has to be cleaned with higher solids or heavy oils does not affect us. It really is part of the refining process.

Mr. MURPHY. And what do you expect to have for jobs for your own company if Keystone XL were to go through? What would happen? I mean, would you hire? What would happen with your company?

Mr. BRAINERD. Well, we are back to economic recovery and growth. What happens in my industry if—or my business if we have a reduction in cost of diesel or reduction in the cost of supply of chemicals we buy, that will be passed on to our customers in the grand majority of the cases. And the reason for that is we have a very competitive marketplace. We are selling commodities, so as the price drops it is passed on to the end-user. As the end-user gets a better price, you are going to see better economics from that.

So what I am saying is we are able to, again, create economic recovery and growth.

Mr. MURPHY. Thank you.
Mr. Bowe, it sounds like, from what I understand, if we do not, in fact, build this Keystone XL, that Canadians will build pipelines east and west out of their country and it will happen. How does that affect your company with the dredges? Will you continue to supply them? Are you in touch with the Canadians already? Have they reached out to you to say, “Hey, if you all do not get your act together and do this that we are going to need your help building these dredges and other assets?”

Mr. Bowe. Well, eventually, when oil sands are produced, it will create this reclamation demand. So anything that accelerates the development of oil sands will lead to the type of work that my company is involved in. I think that the Keystone makes so much sense because it is about getting the pipeline to refineries which already exist, which could use it. So the alternatives eventually will be decided on, whether that is going to the Asian markets, but that has its own other set of problems. It would certainly delay the impact on us. And when and if that happens we will sell dredges, whether there is a Keystone pipeline built or not. But in the meantime, we are absolutely hearing from the Canadian construction firms that service the oil sands that the oil sands producers are having trouble economically and pushing that trouble onto them in terms of price pressure on the bids that they have to make or even canceling or delaying projects all together.

Mr. Murphy. Just out of curiosity, I read a report recently that said 74 percent of manufacturers are having shortages finding qualified labor for building certain items. Are you seeing that within your company? It sounds like you use a mixed sourcing of small businesses up to Caterpillar.

Mr. Bowe. Yeah. We have a skilled workforce of machinists, mechanics, and a lot of engineers. I would say that actually the labor market is tight for skilled people already and we hire in Baltimore and the western side of Wisconsin.

Mr. Murphy. Thank you. I yield.

Chairman Tipton. Thank you, Mr. Murphy.

I think I would like to start with Mr. Booker and go back to one of your first comments that I think is very disturbing. You mentioned 13 percent unemployment among construction workers. And I guess coming from my district out in Colorado, my two largest communities, Grand Junction and Pueblo, Colorado, have a real unemployment level right now sitting around 20 percent. So I truly question some of the statistics that we are seeing coming out of the federal government in regards to the employment rate dropping in this country and seeing some of the recovery going on because it may be in isolated areas, but we are seeing people that really need to be able to get back to work.

Mr. Booker, I would like to be able to get your comment. AFL-CIO, you deal with a variety of different industries. Has it been your experience, been your observation that to the AFL-CIO that you have seen improvements in technology, that we are doing things safer in an environmentally better way? Do you have a dedicated workforce that wants to be able to do the job right?

Mr. Booker. No doubt about it. You know, since 2008, when we went into the recession, at the fourth quarter of 2008, the construction industry has been hit the largest. Statistically, if you look
it has been hovering around at least two times what the national average has been. The last couple months the construction industry unemployment has dropped down a little bit, but those numbers do not take into account the hundreds of thousands of people who left the construction industry to go find work in other industries.

The economic impact of this project and other construction projects is going to drive the economy back. If it was the first one in, it is usually the last one out, but when the construction picks up that means the economy is heading in the right direction.

So we have the people, we have the skills for the people. I said in my comments we spend by the building trade unions a billion dollars a year on a training infrastructure, at 1,900 training facilities all across the United States and Canada. These people are ready to work. We have the people available to work. We just do not have the jobs right now.

Chairman TIPTON. So would it make sense to you if we can create American jobs on American soil to be able to put Americans back to work, we do not require any federal funds at all, let us just get the job done, the Keystone pipeline XL, would that fit that?

Mr. BOOKER. Oh, without a doubt. You took the words out of my mouth.

Chairman TIPTON. Great. I appreciate it. And also, just to follow up, and if a few of you would like to make a comment on this as well, basically a lot of the decisions that you are seeing right now boil down to politics. Do you think it would be advisable to be able to recommend to this president, to this Congress, that it is about time that we put people rather than politics first and let us get back to work? Mr. Booker.

Mr. BOOKER. Again, you took the words out of my mouth. Put the politics aside. Let us look at the facts. Let us look at what this project means. Let us look at what this being a privately funded project, $7 billion investment that is going to create tens of thousands of jobs for American workers, highly skilled workers making an honest living, a respectable wage with health care benefits, with pension benefits. This project will create that. So yes, please, let us put the politics aside and let us get this thing approved and let us let Americans go to work and build the world’s safest pipeline.

Chairman TIPTON. Mr. Bowe, would you concur with that?

Mr. BOWE. I would. I think environmentalists are people, too, but the trouble is that many of them are extremists who frankly would like to see businesses like mine—they would not care if it was put out of business because they do not care if we have cars and trucks that move goods around this country. And I think the majority of people do want that type of activity going on. So we should move ahead with this as quickly as we can.

Chairman TIPTON. Mr. Brainerd.

Mr. BRAINERD. Thank you, Congressman.

I think one quick comment. We talked so much about what is going on today and what this will do for us today, but we do not talk a lot about what it is going to do for the next 20 years. And the downstream benefits of this project long term are tremendous. The jobs that it is going to put in play now are important, but the jobs it is going to put in play long term are also tremendous.
Another aspect of the pipeline is that there are two locations—Cushing, Oklahoma being one of those—where we are also going to get domestic oil that is going to plug into this pipeline that we have not otherwise had in the past. And again, I defer to Dr. Knittel as he discusses the 1 or 2 percent coming out of Canada. But we are also going to be getting this large volume of oil that we are currently trying to figure out how to move out of the Dakotas, out of the north, and putting that economically on that pipeline so that it can move into the refineries economically.

I go back to the same thing with diesel. Maybe I am not an economist—and I am not—but as I watch these things happening and I am watching how we plug into this pipeline, the infrastructure of our country being built, this is how we build recovery.

Chairman TIPTON. Mr. Knittel.

Mr. KNITTEL. To address your question, certainly facts should always drive policy and we should always put the politics aside. And the facts here, there are important facts on both the pro side and the con side—the effect on jobs, the effect on profits, the shrinking of the WTI Brent price gap. That is the benefit. We do have to weigh those against environmental concerns. One of the main thrusts of my testimony though is that those are going to tend to be more local environmental concerns rather than greenhouse gas emissions. And those are the facts that we want to focus on in determining.

Chairman TIPTON. I would like to go maybe a little bit on the environmental end of it. We have some people here representing industry, workers in industry. Do you happen to believe that it is important—do you like clean air? Do you like clean water?

Mr. BOOKER. Absolutely. I mean, our members every day are involved in projects. We certainly endorse the “all of the above” energy strategy. Our members, where they work, they live in those towns and they want the clean water and the clean air. We build solar plants. We build wind turbines. We build nuclear. We build power plants. We build natural gas power plants. We are stewards of our environment. We support a clean, healthy, safe environment without a doubt. This project, you know, what Dr. Knittel said, it does not have the impact that the environmental extremist groups are saying that it has. The facts do not point to that.

Chairman TIPTON. Mr. Bowe.

Mr. BOWE. I think one constituency that has not spoken today is the Canadians. I think speaking for myself, I have faith that the Canadian people care at least as much about the environment as we do. They have a reputation for that and I think we need to give them credit for the efforts they take on their part as it relates to the supply of this resource.

Chairman TIPTON. Mr. Brainerd.

Mr. BRAINERD. I cannot talk from the refiner’s side; I can only talk from the downstream product side, the products coming out of the refineries. But from the clean air standpoint, absolutely. We always say give the chemicals to the people who know how to handle it so that we do not have the pollution, so that we do not have the air emission, so that people who know how to handle the chemicals properly are not causing the environmental concerns.
Chairman TIPTON. Do you make every effort to do it in an environmentally safe and sound way?

Mr. BRAINERD. Absolutely. And that is part of the NACD's responsible distribution commitment and third party verification. We do what we are responsibly supposed to be doing with the chemicals and we do it through a third party verification program proving that we are doing this correctly.

Chairman TIPTON. I appreciate that. I think that is probably one of the big challenges we always face. Rather than moving into camps of yes and no, we ought to be able to seek those opportunities to be able to create a win-win and this seems to be a scenario in which we can actually be able to achieve that.

Dr. Knittel, I think one of the great opportunities that we get from all of our testimony is to be able to learn things, and that is the purpose of these hearings. For me, it was remarkable to be able to hear that the Canadian tar sands, which by the sound might be more harmful or actually safer than some of the oil that we are importing currently from Venezuela, to be able to come in and to be able to develop that resource here.

I do want to move on one other point, I think the importance for this company, being able to put our people back to work. Will Canada sell their product one way or the other?

Mr. BOWE. Well, Dr. Knittel mentioned there is a world market for oil, and certainly there is. And the world market takes into account the cost of transportation, the cost of refining. So the Canadian oil sands are a resource looking for a market. And the bottlenecks in the distribution and logistics prevent that from happening, so that is somewhat a factor of market economics. As oil prices go up, if they do go up globally for whatever reason, then that would make the oil sands more economic to get them to China, for example. But because it is a global market, if oil sands is good on the market it will tend to reduce prices they otherwise would be. I mean, if you were the owner of that resource you would be looking to develop it. You would be looking to get it to market. And we hope that it happens. If oil prices go lower for whatever reason, then they become less economic and that would delay the time period when they might go to any end-use market.

Chairman TIPTON. I am willing to bet if you build dredges and somebody on the East Coast was not willing to buy one, you will find a market on the West Coast or down in the Gulf. You will sell your product. That has got to be part of the job.

Mr. BOWE. Most of our business is exports.

Chairman TIPTON. Most of your business is actually exports. And I think when we look at this, talking about some of the environmental impacts, if that pipeline were to be built west rather than coming south, then it is going to be put on ships. What is going to be the environmental impact as we are burning the fuel to be able to transport that over? And who is going to do it and develop that and refine that product in a more environmentally sound way—the United States of America or China? And we are
downwind from China, by the way. So it would probably be a good thing to be able to develop that resource here.

I know we have taken a little more of your time than we probably were scheduled for but I think this is an incredibly important topic. When we are looking at really being able to benefit the American consumer, I always thought it was very interesting when President George H. W. Bush was taking about American moving to an “all of the above” strategy, to be able to create American energy security, to develop American resources on our soil, the futures market dropped 10 percent while he was talking. So I am a supply guy, and I think if we were creating that here many of us that are a little more seasoned that can remember the oil embargo by the Arabs back in the ‘70s, when we started moving, under Jimmy Carter’s direction to be able to create American security in this country, ironically the prices started to come down out of the Middle East. If we start to compete as Americans, if we develop and work with friendly neighbors with the Canadians, we can develop energy right here and get our people back to work. And I think when I am talking to the families in my district, I am seeing hearts that are broken right now because moms and dads are worried about being able to provide for their children.

Mr. Booker, Mr. Bowe, Mr. Brainerd, Dr. Knittel, I appreciated your comments, it is time for us to put the politics aside. Let us put Americans back to work. The time is now. Let’s build this. Let’s get the job done. And if we are talking, going back to Mr. Huelskamp’s statement, in terms of what we can do, if you want to work with us, contact us and I think the ranking member will be with us there as well. Let us bring some of those AFL-CIO members here. Let’s bring people that are building some of those dredges. Let’s get some of our chemical folks here. Let’s bring in some of your students that are probably going to be looking for a job when they graduate as well. Let’s meet right here on the capital and let’s send a message right now to this president and this Congress. Let’s put America back to work. Thank you, gentlemen, for coming.

I do want to take one moment, a personal privilege here, and she has stepped out. So she is going to have to go to the videotape here, but Lori Salley, who is on our staff, was just recently married, and we certainly want to be able to congratulate here.

Thank you all for coming. Did you have any further questions that you would like to follow up with, Mr. Murphy?

Mr. MURPHY. Thank you, Mr. Chairman. I just want to thank you all again for your time. I certainly learned a lot today and I am open for any follow up if anything comes up, and I look forward to working with you all in the future. Thank you.

Chairman TIPTON. Great. Well, as many of you know, H.R. 3, the Northern Route Approval Act is scheduled to be on the House floor next week. For these reasons and many more, I urge my colleagues to be able to support this very important legislation.

I ask unanimous consent that members have five legislative days to be able to submit their statements and supporting materials for the record.

Without objection, so ordered. This hearing is now adjourned.

[Whereupon, at 11:08 a.m., the Subcommittee was adjourned.]
Testimony of Brent Booker  
Secretary-Treasurer  
Building and Construction Trades Department, AFL-CIO  

Before the Committee on Small Business  
US House of Representatives  

Expediting the Keystone XL Pipeline: Economic Benefits and Jobs  
May 16, 2013
Mr. Chairman and Members of the Committee,

On behalf of the two million skilled craft professionals in the United States and Canada that comprise the thirteen national and international unions of the Building and Construction Trades Department, AFL-CIO, I wish to thank you and the members of this Committee for holding this hearing and delving into the economic and job creation aspects associated with the construction of the Keystone XL pipeline.

America's Building Trades Unions emphatically support the construction of the Keystone pipeline which will move oil from deposits in Canada to existing refineries in Texas, Oklahoma and the Midwest. Our unions have been actively involved with this project for almost 5 years now, and we are adamant in our belief that the economic, energy security, and national security benefits associated with the construction of this pipeline are too many and too significant to allow it to be derailed by a narrow and misguided political agenda being advanced by a small minority of ill-advised environmental groups.

Keystone was conceived, designed and built to transport Canadian and U.S. crude oil production to U.S. refineries. Phases I and II are currently operating safely, supplying domestic crude oil to domestic refineries, which is helping to displace offshore imports from dangerous and unfriendly regimes and regions around the world. Phase III will be completed by the end of this year, and will operate in the same, safe manner as Phases I and II. The Keystone XL leg will reduce the cost and improve the safety and efficiency in the movement of crude oil in the United States. That, combined with jobs, investments, tax revenue and energy security benefits, points to an unmistakable conclusion that Keystone XL will be of considerable benefit to the U.S. economy and to U.S. consumers.

Simply put, Keystone XL is in the national interests of the United States of America.

And the men and women that I am privileged to represent are the ones that are on the front lines of understanding what this project truly means for America.

For over 4 years now, the American construction industry has been in the throes of a “depression.”

I did not say recession, I said depression.

While the stock markets and the media celebrated the news two weeks ago that the national unemployment rate fell to 7.5 percent in April, little attention was given to the fact that the national unemployment rate for construction workers remains above 13 percent.

So, when I say that skilled craft professionals in America are the ones that are on the front lines of understanding what this project truly means to America, those numbers are the foundation upon which I base that observation.

And yet, those of us who understand the importance of the construction industry continue to scratch our heads over the lack of attention to this national crisis in an industry whose recovery and
overall health is, according to a recent report from the St. Louis Federal Reserve Bank, and I quote, “a necessary ingredient for strong and sustained recovery of economic activity and a reduction in the unemployment rate.”

In other words, as the construction industry goes, so goes the U.S. economy.

But, you wouldn’t know that from watching our reading the news.

With the exception of the first Friday of every month when the Department of Labor releases its monthly jobs report, the economy and the long-term job disaster that’s been enveloping the country for five years now goes virtually unmentioned by the national news media. The plight of many millions of Americans who are actually out of work, and especially those who work in the construction industry, is apparently not very newsworthy.

It is hard to believe that what the Center on Budget and Policy Priorities calls the “longest, and by most measures worst economic recession since the Great Depression” consistently fails to garner any attention among the media and many of our nation’s elected leaders.

For many members of our unions, the Keystone XL project is not just a pipeline; it is, in the most literal sense of the phrase, a lifeline. Far too many of them have lost their homes and are struggling just to put food on the table.

And given the unprecedented scrutiny this project has faced, any further delay by the Obama Administration would be unconscionable.

Unfortunately, they must also face the additional emotional burden of having their chosen profession denigrated by a number of environmental groups.

In its recent Supplemental Draft Environmental Impact Statement (SDEIS), the State Department effectively dismissed the Keystone opposition’s basic argument: which is that the construction of the Keystone pipeline will lead to increased greenhouse gas emission. And even though the State Department was not obligated to have analyzed any environmental impacts outside of the United States, the SDEIS provides a clear life-cycle analysis of greenhouse gas production that would be connected to the development of the Canadian oil sands, as well as the environmental impact to wildlife, forests, threatened and endangered species, and water resources. In each instance, all key issues raised by the SDEIS have been adequately addressed.

In fact, more than 12,000 pages of documents have been published on KXL—including four federal environmental reviews in the past five years—and in each instance the conclusion is the same: there will be no discernible impact on greenhouse gases through the construction of this pipeline.

So now, after having the validity of their climate change argument debunked by the State Department, the environmental com-
The community has now resorted to attacking the nature of the work that members of our unions have chosen as careers.

Misguided groups like 350.org and the Sierra Club have chosen to impose a value judgment that holds construction jobs to be of lesser value because by its very nature a construction project has a completion date and therefore that individual job will come to an end at some point. They call these jobs, quote “temporary” as a means to diminish their importance and validity, and to entice others to join their chorus of negativity in the mistaken belief that these jobs have no real value to our society.

When self-imposed moral arbiters like 350.org or the Sierra Club dismiss out of hand the thousands of jobs that will be created through the construction of the Keystone XL project, then they are, in effect, dismissing the lives, families, careers—and even the basic existence—of millions of hard-working Americans who work to construct, repair and advance this great nation.

And it was those types of hard-working professionals who built the “Alberta Clipper” pipeline project which the Obama Administration approved way back in August of 2009. Ironically, the Alberta Clipper project just happened to be a pipeline very similar to Keystone XL in two compelling areas: Number One, both are roughly 1,000 miles long; and Number Two, both are specifically designed to transport Canadian crude oil from the Oil Sands region of Alberta, to refineries in America.

Upon approval of the construction permit for the Alberta Clipper pipeline, the State Department said, and I quote, “The department found that the addition of crude oil pipeline capacity between Canada and the United States will advance a number of strategic interests of the United States.”

We couldn’t agree more. And since the Keystone XL pipeline will originate in the exact same town as the Alberta Clipper—specifically, Hardisty, Alberta—the conclusions reached by the State Department in relation to the Alberta Clipper should agree to Keystone XL and guide the decision to approve the construction permit.

Now, I know it may be difficult for hard-core environmental extremists to believe this, but America’s Building Trades Unions actually agree with the notion that our nation needs to begin the shift to a less carbon-intensive society. After all, a vast portion of our members enjoy, embrace and work to protect the natural resources of the United States. And we have a significant number of our members employed today building solar and wind farms; retro-fitting commercial office buildings to make them more efficient; and working to lessen the environmental impact of hundreds of existing power plants across the nation. But, we are also realistic to know that a complete transition to renewable energy in America will take decades.

The fight over Keystone is not a fight about oil vs. renewable energy. That’s a complete fallacy. The United States will be reliant on fossil fuels for decades because renewable energy has not ad-
vanced to the point where it alone can provide base load, affordable, and accessible power for our nation’s growing energy needs.

So, the fundamental question then becomes: Where do you want to get your oil from? The Keystone XL project offers America the choice of either importing the oil that we will need from a trusted ally like Canada, or to continue to rely on oil supplies in dangerous regions of the world that do not share American values.

When confronted by environmental activists who oppose this project, our unions have asked them to pay a visit to a military hospital or veteran rehabilitation center and speak to the brave men and women of our armed forces who have sacrificed so much in Afghanistan and Iraq in order to secure our energy interests in that region of the world. Ask those heroes, we say, if they would prefer to see America rely upon Canada for crude oil, rather than the Middle East.

Regardless of the negative characterizations and denunciations bandied about by the project’s opponents, there remains an indisputable fact that jobs will be created and supported in the extraction and refining of Canadian oil; the construction of the pipeline itself; and in the U.S. manufacturing and service sectors.

And it is worth noting that TransCanada agreed early on to construct this pipeline under a Project Labor Agreement.

The PLA was signed by TransCanada Corporation, the Laborers International Union of North America, the International Brotherhood of Teamsters, the United Association of Plumbers and Pipefitters, the International Union of Operating Engineers, the International Brotherhood of Electrical Workers, and the Pipeline Contractors Association.

Additionally, TransCanada has agreed to implement 57 safety measures above and beyond those mandated by federal agencies relating to the construction, operation and design of the pipeline.

Yet, the most effective action they took to ensure the safe construction of this pipeline was to sign a project labor agreement.

By embracing a PLA, TransCanada recognized the value realized through a partnership with America’s Building Trades Union, not the least of which is the assurance that the project will be built by the safest, most highly trained and productive pipeline workforce found anywhere in the world.

But, they also recognized our capacity for effective grassroots advocacy, which we have demonstrated though our efforts here in Washington, DC, as well as in cities and towns all along the pipeline route. Whenever there was a field hearing or town hall meeting, rank and file members of our unions were there in force delivering a pro-jobs, pro-Keystone message.

And it also bears noting that the family-sustaining wages and benefits that will be paid on this project through the PLA will have a dramatic effect on the local economies of communities all along the proposed route.

In fact, over 4,000 workers have already performed roughly 1 million hours of work on the southern leg of Keystone, running
from Cushing, Oklahoma to Port Arthur, Texas. And the economic impact from the wages and benefits being paid through the PLA is noticeable.

KBMT News in Port Arthur did a recent story detailing how the construction of the southern leg was providing a boost to the local economy, as workers are spending heavily on things like clothing, hotels and restaurants.

Additionally, from lumber to sand, and from gravel to fuel, massive quantities of materials are being purchased locally up and down the route between Cushing and Port Arthur.

In sum, the Keystone PLA is already proving to be a major contributor to the local economies along the southern route. And it is also structured to ensure safe, quality construction with “on time, on budget” results through the steady supply of the world’s safest, most highly trained and highly productive skilled craft workforce found anywhere on the globe.

Allow me to elaborate on that last point for a moment...because it is important not only in the context of this project, but it speaks to some broader misconceptions about who we are and the contributions America’s Building Trades Unions make not only to our industry, but to our society at large.

Our unions, in partnership with our signatory contractors, invest roughly $1 billion per year to operate approximately 1,900 skilled craft training centers in both the United States and Canada.

By way of example, one of those training centers is located in Tulsa, Oklahoma, and is operated by Local 798 of the United Association of Plumbers and Pipefitters. Local 798 is widely regarded as “the pipe-liners local.”

Few industries have seen more rapid or more constant change than the pipeline industry. Constantly emerging new technologies and ever-changing demands mean constant challenge—not least of all for the men and women who must master new technologies and meet the demands of the pipelining workplace. Through the most extensive and technologically advanced training found anywhere in the world, Local 798 is giving its members access to the training they need not only to keep pace with industry change, but to ensure the safe and environmentally sound construction of pipelines like Keystone XL.

Local 798’s training is specifically designed to assist its members in keeping up-to-date with all the new technologies in welding, fabrication, inspection, bending-engineering and any other areas that benefit the industry and, most importantly, ensure the safe construction of pipelines.

In addition, the Local 798 Training Center collaborates with contractors in developing specific welding procedures for specific jobs, and provides welder testing services for any pipeline construction job—domestic or overseas, on-shore or off-shore.

And to be sure, each of the other signatory unions to the PLA are similar in their innovative and state-of-the-art approaches to skilled craft training and workforce development.
These are the types of highly trained skilled craft professionals that will be developed to build the Keystone XL pipeline.

And speaking of highly trained professionals, PLAs like the one governing the Keystone project are routinely used to provide career training pathways for our nation's transitioning military veterans. Through the “Helmets to Hardhats” program, our unions have provided jobs and apprenticeship opportunities for tens of thousands of military veterans over the course of its ten year history.

And the Keystone project will not only create jobs with family-sustaining wages and benefits, but it will also spur an economic multiplier effect across the U.S. economy. According to the State Department Environmental Impact Statement, construction of the Keystone XL pipeline will:

• Contribute roughly $3.4 billion to our nation's GDP;
• Drive the purchase of an estimated $3.1 billion worth of construction materials and support services;
• Directly employ thousands and thousands of construction workers;
• Produce total expected earnings by the workers on this project in the neighborhood of $2 billion.
• And last but not least, support the creation of tens of thousands of additional jobs throughout the United States.

And those jobs include ones being created by Siemens, which has been manufacturing the heart of the Keystone project—the 237 electric, and emissions-free, motors that will drive the pumps that transport the oil through the pipeline.

According to Siemens, building these motors required 450 highly skilled workers at their plant in Norwood, Ohio. The company recently invested more than $40 million to refurbish and re-tool the plant to meet the manufacturing needs of today's economy.

Construction of this pipeline will also produce needed government revenue at the federal, state and local levels. And these new resources can then provide the wherewithal for state and local governments to invest in new schools and other forms of needed infrastructure improvements. In fact, the Department of State estimates that 31 counties across three states will collect a total of $35 million in property taxes.

To be clear, the Keystone XL project will create tons of thousands of good paying jobs here in the United States and Canada. It will increase the Nation's energy security by providing a reliable source of crude oil from a friendly and stable trading partner. It will further boost the American manufacturing resurgence. And it will provide State and local governments with new sources of revenue that can help them alleviate budgetary problems that will lead to the creation of even more jobs.

And being a privately-funding project, Keystone will accomplish all of this without the need for taxpayer dollars.

The choice is clear and, again, any further delay by the Obama Administration is unacceptable.
Thank you for inviting America’s Building Trades Unions to express our views before the Committee today.
Good Morning, Chairman Tipton, and Ranking Member Murphy, and members of the Subcommittee on Agriculture, Energy and Trade.

My name is Peter Bowe. I am pleased to be with you here today to speak on behalf of my company, Ellicott Dredges, LLC, and the National Association of Manufacturers (NAM).

Ellicott Dredges, based in Baltimore, Maryland, is the oldest and largest U.S. manufacturer of dredging equipment. We built all of the dredges used in the original construction of the Panama Canal over a century ago. Since our founding in 1885 we have built over 2500 dredges with prices as high as $30 million and as low as one hundred thousand dollars. These dredges are used not just for canals and ports, and niche markets like beach restoration, but more often for mining and for environmental cleanups like lake desiltation or PCB removal, or case in point here, reclamation of tailing ponds from oil sands production in Canada. We export over half of our sales, selling to over twenty countries a year. Investment in infrastructure, especially energy infrastructure, accounts for much of our demand, and energy development often funds the investment needed to buy our equipment.

Today we have 200 employees in the US with factories in Baltimore and Wisconsin as well as two small factories in Europe. We employ skilled manufacturing positions, like mechanics and machinists, as well as dozens of degreed engineers.

So what does the Keystone pipeline have to do with us, and why do we care? 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.

The oil sands in Alberta are one of the largest markets worldwide for dredging equipment. Our dredges are used to rehandle the tailings generated by the mining process. Tailings are the wet waste which is a combination of clay, sand, and water after the oil-bearing bitumen has been removed. All the oil sands projects gen-
erate substantial amounts of tailings which are deposited into ponds. Oil sands producers have been criticized for water usage, but now, thanks to tailings reclamation, they recycle 85% to 90% of the water they use, and dredges are an integral part of the recycling process.

Alberta government regulations require the oil producers to reclaim these ponds, to restore the land to a self-sustaining condition. This is a substantial obligation which requires an investment of hundreds of millions of dollars annually. For example, Suncor, one of over a dozen oil sands producers, has said it will invest a billion dollars for tailings reclamation over a two year period.
Shown above is a picture of one type of dredge or pumping equipment we make for the oil sand producers. A typical machine can weigh over 500 tons. It is carefully designed, with safety and long term reliability and efficiency as important considerations. A machine like this could require us to spend as much as $10 million on vendors located around the United States like gear boxes from Ohio or upstate New York, or electrical equipment from Illinois, or
steel fabrications from Wisconsin, Kentucky or South Carolina, or foundry parts from Pennsylvania, Alabama, Georgia, or Mississippi, or cranes from Kansas. And year in, year out, Caterpillar, which provides us with diesel engines, is our single biggest supplier. So we buy from both big and small companies. When we make a sale for a Canadian oil sands environmental project, we rely on literally hundreds of vendors from across the country to export a product which is almost all American-made—and though I am reluctant to admit it, we have a few American competitors also serving the same market which add to the favorable economic impact that oil sands development has on American manufacturing and American exports.

At any given time, it wouldn’t be unusual for 20% of our employees to be working on oil sands-related projects.

It is certainly not just the dredge business which benefits from oil sands exploration and development.

Two way trade between the USA and just the province of Alberta is more than with the UK, South Korea or Francs.¹

About 2500 US companies export goods and services to Canada in support of oil sands—Ellicott Dredges is just one of those.² The value of those exports annually is projected to range from $8b up to $15B, for the next 25 years³.
Back to the point of how Keystone XL is likely to affect the oil sands business, which is so important to Ellicott’s business: the Committee is probably already aware that the type of oil from oil sands serves certain specific refineries and that there is now a substantial dislocation in the current distribution network for oil sands product. The result of this dislocation is that oil sands product pricing is currently depressed and selling at a big price discount compared to oil price benchmarks such as the West Texas Intermediate (WTI) or Brent.
This discount is hurting the oil producers, leading them to postpone or even cancel oil sands project developments. We have seen our workload diminished by the impact of this price discount. Oil sands production costs vary depending on the specific project, but have been estimated at 50–$60/BBL. It doesn’t take too much of discount to make oil sands uneconomic from a market perspective.

A recent Wall St Journal article tells the tale as well as anyone could. (WSJ, April 9/2013) “Amid a bottleneck of too few pipelines and too much new oil across the U.S. Midwest, Canadian producers have started agreeing to steeper and steeper discounts to get their oil to American refiners, their only foreign buyers.

But government officials, industry executives and analysts expect continued price swings and market pressure until more pipelines are built.

In January and February, Canadian heavy crude at times traded as much as $40 cheaper than U.S. benchmark oil. Recently, that differential has fallen back down to less than $20 a barrel. Because of the Midwest glut, U.S. oil trades at its own discount to international blends.

There’s still strong demand for Canada’s heavy crude, which many U.S. Gulf Coast refiners prize. But getting it to those buyers has become extremely difficult at U.S. output increasingly fills up the pipelines and storage facilities in between. That’s results in a market where refiners, not producers, are calling the shots.

“At the very core of it [Canadian producers] are competing to sell into refiners, and the refiners will just drop their prices,” said Don Moe, vice president for supply and marketing at MEG Energy Corp., a Calgary-based oil-sands producer,” End of WSJ citation.

The US State Department’s own 2013 Market Analysis, conducted as part of its Draft Environmental Impact Statement, corroborated this conclusion, that a lack of pipeline capacity is negatively affecting production and new project development. It noted:

*"...a $30 reduction in oil price, (such as) a decrease from $100 to $70, would result in all projects with a breakeven above $70 being delayed or cancelled” ....Sec 1.4–55)*

*"The incremental cost of ...rail versus pipeline is between $2 and $7.50” (1.4–56)*

*"These steep crude discounts are a disincentive to producers to proceed with new extraction projects.” (1.4–59)*

They also noted: “Until late 2010, WTI and Brent oil prices moved in parallel with only small differentials between them. Beginning in early 2011, that situation changed. Growth in domestic US and Western Canadian production put pressure on a crude logistics system that was designed to take crude oils to the Central US rather than out to the Coasts. The discounting has persisted into 2013 and is expected to continue unless and until adequate capacity becomes available to enable crudes to move to US and Canadian coastal markets.” (1.4–58)
Our Canadian clients are in fact postponing new projects which would have required our equipment for tailings recovery. Best case they are leaning heavily on suppliers like us for difficult price concessions to offset some of their logistics costs problems.

Pictured above is another customized dredge for oils sands tailings rehandling

One way or the other, Canadians will eventually solve their distribution problems, with or without US governmental collaboration. To the extent this process is delayed, the producers will suffer economic loss, and their US suppliers, like Ellicott Dredges, will suffer as well...including diminished employment.

We urge the Congress and the Administration to approve the Keystone pipeline as expeditiously as possible. We should rely on the proposition that the Canadians are fully capable of acting as
custodians of their own environment, and that Canadian oil is not only environmentally superior to that from, for example, Venezuela, but is certainly more secure politically compared to our other existing options. Thank you for the opportunity to testify this morning. I would be happy to answer your questions.

Footnotes

1 Dan Lederman, South Dakota State legislator, presentation for National Conference of State Legislatures, 11/7/11
2 Canadian Assoc of Petroleum Producers fact sheet, Feb, 2012
3 See number 1
Thank you, Chairman Tipton and Ranking Member Murphy, for allowing me to testify before your subcommittee on this extremely important issue. I am the Chairman and CEO of Brainerd Chemical Company, Inc., and I am a small businessman. Brainerd Chemical is a 54 year old company and I have been the owner since 1979, when I took over from my father, who started the company in 1959. We have 83 employees at three facilities located in Oklahoma and North Carolina, allowing the company to serve 3000 customers nationwide and become one of the top 100 chemical distributors in the United States. I am an active member of the National Association of Chemical Distributors (NACD) in which I currently serve as Vice Chairman of the Board, having previously served as its Treasurer and also Chairman of the Government Affairs Committee. I also serve as Chairman and President of the International Council of Chemical Trade Associations.

I am here today to represent the chemical distribution industry on behalf of the National Association of Chemical Distributors. NACD and its over 400 member companies are vital to the chemical supply chain providing products to over 750,000 businesses. The average member company has 26 employees, $26 million in sales, and 3 facilities. They make a delivery every seven seconds while maintaining a safety record that is more than twice as good as all manufacturing combined. NACD members are leaders in health, safety, security, and environmental performance through implementation of NACD’s Responsible Distribution® program, a third-party verified management practice system established in 1991 as a condition of membership.

It is my hope that my testimony here today will help dispel the notion that the construction of the Keystone XL pipeline is not of concern to small businesses, but solely to the titans of industry in the oil and refining industries. This is simply not the case. Small businesses like mine and my colleagues in the chemical distribution industry would be directly and beneficially affected by its con-
struction, leading to reduced costs for both ourselves and, ultimately, our customers.

Chemical distribution serves the role of taking title to bulk volumes of chemicals, breaking them down into smaller units, in some cases blending them, and transporting them to customers. Since we transport chemicals, we are appropriately a heavily regulated industry. Thus, we serve a highly specialized and critical function and are a critical link in the chain of manufacturing our nation's goods. Of particular importance to this committee, it should be noted that, while we serve large manufacturers, our industry primarily is the predominant supplier of chemicals to small businesses. It is through the existence and health of our industry that hundreds of thousands of small industrial users and manufacturers are able to operate.

I am not here to discuss environmental impacts or the best routes for building the pipeline. Quite simply, these issues are beyond my expertise and area of knowledge. What I am well qualified to discuss, however, is how construction of this pipeline will benefit my company and the chemical distribution industry.

The pipeline would transport crude oil from the oil sands region of Alberta, Canada, to the existing Keystone Pipeline System in Nebraska. It also could accept U.S. crude from the Bakken oil fields in Montana and North Dakota. Of particular interest to me, a second segment of the Keystone XL pipeline system, the Gulf Coast Project, is proceeding separately to connect existing pipeline facilities in Oklahoma to refineries in Texas, and is expected to be completed in 2013. When completed, the entire Keystone XL pipeline system would ultimately have capacity to transport 830,000 barrels of crude oil per day to U.S. market hubs. This is an important opportunity for my industry and the country.

My industry would benefit from building the pipeline in three distinct ways. First, like many industries, chemical distribution benefits from economic growth generally. Second, building the pipeline would reduce our costs for aromatic and aliphatic chemicals, diesel and rail tank cars. Third, it would benefit the economics of hydraulic fracturing, which is an important market that many in our industry serve.

Chemical distribution would benefit not only from direct cost reductions, but from economic growth. Much has been written about the economic benefits of the pipeline. For instance, the Energy Policy Research Foundation found that “the Keystone expansion would provide net economic benefits from improved efficiencies in both the transportation and processing of crude oil of $100 million–$600 million annually.” These transportation cost efficiencies would create a downward pressure on prices for the products created by crude oil. A report from the Canadian Energy Research Institute (CERI) estimated that as oil sands increases in Canada, economic activity quickens and demand for US goods and services increase rapidly, indirectly resulting in more than 300,000 new U.S. jobs, as well as $40 billion in GDP in 2020.

Currently, moving crude to U.S. locations is expensive. If Canada cannot move its crude economically, it may well seek other mar-
kets; Asia is one potentially attractive market. Many have expressed concern that if we do not construct the pipeline, we could lose access to this market permanently. If we do build the pipeline, the reliable supply of crude from Canada will result in lower refining costs and more efficient refinery operations. A reliable source of heavy crude will increase our domestic fuel supply and reduce our exposure to volatility in unstable foreign regions, thus alleviating upward price pressures.

To understand why the pipeline is directly important to my industry, you need to understand fluid catalytic cracking (FCC), also known as “cat cracking.” Cat cracking is one of the most important conversion processes used in petroleum refineries. It is widely used to convert the high-boiling, high-molecular weight hydrocarbon fractions of petroleum crude oils to more valuable gasoline, olefinic gases, and other products. The fluid catalytic cracking process breaks large hydrocarbon molecules into smaller molecules through catalyst, heat and pressure to vaporize and then break the hydrocarbons. There are a number of products that come out of this process, including aliphatics which are formed by the initial breakup of the large molecules and are further converted to aromatics such as toluene and xylene.

The reason for walking through this process is to show how crude oil becomes a chemical product that I buy and then distribute to my customers. Toluene and xylene, for instance, are two of the nine chemicals that my company distributes that are created by the cat cracking process. In short, these refineries are my supplier's suppliers. Since the beginning of 2012, costs for toluene and xylene have averaged about $4.50 and $3.35, respectively. In that time, I have purchased more than a million gallons of these two chemicals alone. Obviously, any opportunity to lower costs would have an enormous impact on my costs.

These products are in turn shipped to my customers. The economics of the pipeline is that it should result in increased cracking of lower cost crude, combined with reductions in imports from other countries such as Venezuela. With increases in the amount of crude transported through pipelines, feedstock costs to make toluene and other chemicals can be expected to drop. With the increased supply available through shifting refining to a source of crude that is transported at lower cost, it should put downward pressure on prices. Since our industry is fiercely competitive, much of these savings will be passed onto our customers.

Similarly, the pipeline should result in decreased diesel costs. In April, national average diesel fuel costs were reported to be $3.93/gallon. In an industry that depends on trucks to move our products to market, fuel cost is of tremendous importance to our industry. As a small businessman, I spend approximately $60,000 per month on diesel to move my products to market. If prices dropped just 5%, that would save $36,000 per year, or the equivalent of a full time employee. Again, in our competitive industry, some of these savings ultimately would be passed onto customers, and ultimately, the cost of finished goods.
The cost of diesel also impacts the cost of receiving chemicals by rail from my suppliers. For instance, for this coming June, my shipper will be charging a 27 percent mark-up for certain goods to defray rail diesel costs to move these chemicals from the refiners to my facility. Additionally, I lease rail tank cars. When operating these cars, I must pay a diesel cost. So any downward pressure on diesel prices will help my bottom line.

The rapid expansion of shale hydraulic fracturing has been a boon to the nation. One negative impact to the chemical distribution industry, however, is that this expansion has created tremendous and sudden demand for rail tank cars to service bringing crude oil to market due to the lack of a pipeline to serve this function. This demand competes directly with many in our industry's need to ship chemicals from suppliers to their facilities by rail. Rail tank car manufacturers have responded to this and been building new cars as quickly as possible, but there still remains a 42,000 rail tank car backlog. The result is that the cost to lease rail cars has increased dramatically. In my business alone, prices have about doubled solely due to this shortage. If the Keystone XL pipeline is built, there will still be increased demand for rail tank cars as compared to before the shale oil boon, but the demand pressure will somewhat ease, and consequently, so will the lease price for these cars.

The shale oil boon has also created a strong market for our products. This is now a major market for our products, as our products are critical to keeping shale oil flowing in the extraction process. For instance, hydrochloric acid is used to "acidize" a well, removing calcium and mineral deposits in order to increase flow. Similarly, xylene, which I referred to previously, is used as a paraffin breaker, thereby dissolving paraffin and allowing increased flow. Surfactants are sometimes used alone or in conjunction with these chemicals to lower surface tension and allow minerals or paraffin to pass through the well. These are just some of the chemicals I and my industry colleagues sell to shale oil producers. A pipeline with a receiving station to accept crude from shale oil fields greatly benefits the economics of operating this type of field; thus it creates a more favorable market for our members of my industry. In this instance, the Keystone XL pipeline will be able to accept crude from the Bakken oil fields in Montana and North Dakota.

Mr. Chairman and Ranking Member, thank you again for allowing me to testify today before this subcommittee on behalf of NACD. I hope it has provided additional insight on the importance of the Keystone XL pipeline to small businesses and the chemical distribution industry.
STATEMENT OF CHRISTOPHER KNITTEL
WILLIAM BARTON ROGERS PROFESSOR OF ENERGY ECONOMICS
CO-DIRECTOR, CENTER FOR ENERGY AND ENVIRONMENTAL POLICY RESEARCH,
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

U.S. HOUSE COMMITTEE ON SMALL BUSINESS,
SUBCOMMITTEE ON AGRICULTURE, ENERGY, AND TRADE

“IF YOU BUILD IT: THE KEYSSTONE XL PIPELINE AND SMALL BUSINESS JOB GROWTH”

MAY 16, 2013

EMAIL: KNITTEL@MIT.EDU
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Thank you Chairman Tipton, Ranking Member Murphy, and members of the Committee for inviting me here today. My name is Christopher Knittel. I am the William Barton Rogers Professor of Energy Economics in the Sloan School of Management at the Massachusetts Institute of Technology, I am the Co-Director of the Center for Energy and Environmental Policy Research also at the Massachusetts Institute of Technology, and Co-Founder of the E2e Project, a joint project between the Center for Energy and Environmental Policy Research and the University of California Energy Institute to study the economics behind energy efficiency.

I. Introduction

Inevitably, discussions related to oil and greenhouse gas emissions tend to get overblown. Discussions surrounding many of the issues behind the Keystone XL pipeline are no different. In my testimony, I will discuss the likely consequences of the Keystone XL pipeline along four dimensions: (1) oil prices, (2) greenhouse gas emissions, (3) jobs, and (4) national security.

II. The effect of the Keystone XL pipeline on oil prices

Here the economics are pretty straightforward.

Energy economists and energy analysts tend to agree that, with a few exceptions, the oil market is a world oil market. That is, when a barrel of oil is pumped out of the ground, it competes with supplies of oil across the entire globe. The world market is an artifact of the low cost of shipping oil. A consequence of this is that it is very difficult for increases in production in any one country to have a long-term impact on the price of oil.

The situation in the Midwest and Canadian tar sands is, however, one exception. Due to pipeline capacity constraints connecting the Midwest and Canada with the Gulf Coast, the price of a barrel of oil selling in Cushing, Oklahoma—known as Western Texas Intermediate, or WTI—is currently selling at a discount compared to a barrel of oil in just about every other benchmark location in the world, most notably the Brent crude price reflecting the price of oil in Europe. The discount has recently fallen below $10 per barrel, but last year averaged more than $17 per barrel, and has been over $30 per barrel during the last two years.

Because of limitations on pipeline capacity, oil produced in both Canada and North Dakota cannot make it out to the Gulf Coast and must therefore be refined in Canada or the Midwest. Refiners are able to get a discount on this oil because of the limited options available to oil producers. Recent work by Severin Borenstein of UC Berkeley and Ryan Kellogg of the University of Michigan shows that because pipeline capacity for refined products is not similarly constrained, the lower price paid by refineries is not passed on to consumers. The benefits accrue, instead, to refineries.¹

Building the Keystone and Keystone XL pipelines will push the price North Dakotan and Canadian oil producers can capture closer, if not fully, to the world price. Therefore, these pipelines will tend to increase oil prices paid by refiners in the Midwest, but the work by Borenstein and Kellogg implies that this will not increase the price paid by consumers at the pump.

There will be no appreciable change in the world price of oil, certainly not enough to base policy decisions on. While more supply always puts downward pressure on prices, when gauging the size of the supply increase it is important to understand the size of the market. To put things in perspective, the 800,000 barrels per day that will flow over the Keystone XL pipeline represent less than 1 percent of world oil supplies. The increase in oil production that results from the Keystone XL pipeline will be even smaller.

III. The effect of the Keystone XL pipeline on greenhouse gas emissions

Here the economics are also pretty straightforward.

While some have called the Keystone XL pipeline “game over” for the climate, I believe it is simply not true. This is not because I doubt the seriousness of climate change. Much of my academic research promotes policies to reduce greenhouse gas emissions. It might seem surprising that the Keystone XL pipeline would have little impact on greenhouse gas emissions given how energy intensive Canadian bitumen, or tar sands, is to produce. Tar sands are certainly more energy intensive than the average oil refined in the US—requiring more energy at the extraction phase, as the bitumen must be separated from the sand and water it is found with. More energy must also be used to upgrade the bitumen for refining.

No one can deny this added energy and the greenhouse gas emissions associated with the oil. Two numbers are often discussed when it comes to these added greenhouse gas emissions. First, the increase in emissions during the production and refining stage of Canadian bitumen compared to the average oil sold in the US is roughly 80 percent, according to the State Department and many other sources.\(^2\) This number, however, ignores the fact that the majority of the greenhouse gas emissions associated with oil use come when you burn the refined product. These emissions are the same regardless of the source oil. The policy debate should focus on the emissions over the oil’s entire life cycle. Here the State Department estimates that these “lifecycle emissions” of tar sands are roughly 17 percent higher than the average oil sold in the US.\(^3\)

The problem with both of these metrics, however, is that the average oil sold in the US is not the relevant comparison, on both accounts. Trying to assess whether the Keystone XL pipeline will increase the greenhouse gas emissions worldwide from their current levels, the relevant comparison is that between the emissions of the oil from the Canadian tar sands and the oil that it will re-

\(^2\)The Congressional Research Service estimates this to be between 70 to 110 percent higher. http://www.fas.org/sgp/crs/misc/R42537.pdf.
\(^3\)The Congressional Research Service estimates this to be between 14 to 20 percent higher. http://www.fas.org/sgp/crs/misc/R42537.pdf.
place, which is not necessarily the average oil refined or sold in the US.

A recent Cambridge Energy Research Associates analysis finds that the average Canadian tar sands oil is cleaner than heavy Californian and heavy Venezuelan oil. These two sources are the likely oil sources that Canadian tar sands would replace. Given this, it is possible that the Keystone XL pipeline might actually reduce greenhouse gas emissions.

The main point, however, is that the policy debate has focused on the wrong metrics when it comes to greenhouse gas emissions. Focusing on the average oil sold in the US is like convincing my four-year-old son, Caiden, to not eat a bag of potato chips because potato chips are less healthy than the typical food he eats, only to see him put the chips away and grab an ice cream sandwich.

Finally, in the absence of the Keystone XL pipeline, some of the oil will leave North Dakota and Canada in some other—less efficient—way. This may be through rail or using inefficient local refineries and shipping the refined products through refined-product dedicated pipelines. These inefficiencies have their own greenhouse gas consequences.

**IV. The effect of the Keystone XL pipeline on profits**

Here the economics are also pretty straightforward.

One of the most compelling arguments for building the Keystone XL pipeline is that it will increase the profits of oil producers, not only in Canada, but also along the entire pipeline route—notably North Dakota, the second leading oil producing state in the country. As I mentioned, currently, oil selling as far south as Cushing, Oklahoma sells at a discount price relative to the world price for oil. The farther north you go, the greater the likely discount, as these resources get further away from pipeline capacity.

Currently, Canada exports about 3 million barrels per day to the US and North Dakota produces about 800 thousand barrels a day. Therefore, even today's roughly $8 price difference reduces producer revenues by $30 million a day. Building the Keystone XL pipeline would increase the revenues of not only the oil companies using the pipeline, but also those of companies getting their oil out through alternative methods. This is because once the pipeline is built (and even before), the price gap between oil sold in this region and the world price will decline, if not be eliminated completely. Even production not using the pipeline will be able to command the world price. This is a very good reason for building the pipeline.

Finally, any discussion of policy related to oil production should include some discussion of its impact on national security. There is the potential for a small benefit from a national security perspective. Increasing the amount of oil we import from Canada can re-

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5 http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTIMUSCA2&f=M.

duce military conflict that is, partially at least, dependent on oil production.

However, in a global oil market where the price of North Dakota and Canadian oil will depend directly on world supply, and also realizing that the Keystone XL pipeline is likely to have no impact on how much oil our allies import from other countries, the national security benefits are likely to be small.

VI. Summary

To summarize, the Keystone XL pipeline relates to many issues concerning oil markets. Understanding the effects of the pipeline on energy prices, greenhouse gas emissions, and energy security is straightforward. The pipeline will push the prices for oil in the Midwest and Canada closer to the world price, but these price increases will not be felt by consumers.

The pipeline will have little impact on greenhouse gas emissions. While this seems inconsistent with the fact that Canadian tar sands are more energy intensive than the average oil refined in the US, the focus on the average oil is misplaced. There is good reason to believe that additional supplies of Canadian tar sands will displace even dirtier oil from Venezuela. This is where the policy discussion should focus.

Finally, I circle back to one of the main topics of the hearing: jobs. The pipeline's effect on jobs is amplified by the fact that the economy is still recovering from the Great Recession. When an economy is at less than full employment, short-term stimulus measures, such as governmental stimulus or capital-intensive projects like the Keystone XL pipeline, can have longstanding effects beyond the short-term employment effects tied to the actual project. While these are complex and difficult to measure, from a timing perspective, there is no better time.

I would like to thank the entire committee once again for inviting me to participate in this discussion. I will gladly respond to any questions.
May 15, 2013

The Honorable U.S. Representative Sam Graves, Chairman
House Small Business Committee
2361 Rayburn House Office Building (RHOB)
Washington, DC 20515

VIA FAX: 202.225.8221

Dear Chairman Graves,

Thank you for the opportunity to provide my comments on the proposed Keystone XL pipeline to you and your committee members.

As you know, the U.S. Department of State published the DRAFT Supplemental Environmental Impact Statement (EIS) for the Keystone XL pipeline project and accepted comments on the document through April 22, 2013. Based on the extensive reviews that have been completed on this project, I believe the pipeline can be safely operated in the United States and urge the Department of State to finalize the EIS and issue the Presidential Permit.

Much of the land in South Dakota that will be crossed by the pipeline is private property, and landowners hold a strong bond to their land. Many landowners have expressed concerns about potential impacts to their land, and these concerns must continue to be addressed by TransCanada. As a state with an agriculture-based economy, our environment and natural resources constitute the livelihood of many South Dakotans. I fully support efforts to enforce TransCanada’s promise to protect our land.

At the request of many South Dakotans, I have carefully reviewed this project before offering my support. The draft EIS is a major factor in my decision, but is not the only factor that contributed to my conclusion. The 2008 South Dakota Legislature, sharing many of the common concerns about the project, required the formation of the South Dakota Underground Pipeline Task Force. The purpose of the task force was to evaluate the adequacy of existing regulations pertaining to pipelines in South Dakota. The task force, after a thorough public review of all aspects of pipeline operation in South Dakota, determined existing laws and regulations were adequate to ensure the safe and reliable operation of underground pipelines in our state. If you would like to review the task force findings, their final report is available via the website of the South Dakota Department of Environment and Natural Resources (http://denr.sd.gov/boards/pipeinf.asp).

In addition to my review and that of the task force, both the Keystone and Keystone XL pipeline projects have been thoroughly vetted by the South Dakota Public Utilities Commission (PUC) through its permitting process. The process undertaken by the PUC included significant public input, data collection, and formal hearings. At the conclusion of the PUC’s process, they issued permits for both pipelines. In TransCanada’s application to the PUC, they estimate between 1,100 and 1,400 workers...
will be employed during construction. It was also estimated that, once in operation, the Keystone XL pipeline will generate approximately $10 million per year in property taxes, boosting revenue for affected local governments and school districts. Extensive public records from the hearing process for both pipelines are available via the website of the PUC (http://puc.sd.gov).

TransCanada has also conducted emergency response exercises in September 2010 and 2012 near Yankton, South Dakota. Furthermore, TransCanada has responded in a timely and appropriate manner to four minor pump station releases on the existing Keystone pipeline in South Dakota. The exercises and the response to these releases have shown that TransCanada is prepared to respond to a release from its pipeline.

There has been much focus by President Obama and the U.S. Congress on growing our national economy and creating jobs. South Dakota shares those goals. One avenue we are pursuing is to use the opportunity created by the success of North Dakota's oil and gas production. However, one of the limiting factors for oil and gas development in the region is the lack of pipelines to move crude oil to market. The Keystone XL pipeline, through the Bakken Marketlink, helps alleviate this problem by moving up to 100,000 barrels per day of crude oil from the Williston Basin to U.S. refining markets. The Keystone XL pipeline will provide additional capacity our region needs to maximize oil and gas production. In light of the federal government's recent report, which substantially increased the estimate for recoverable oil in the Williston Basin, the need for a new pipeline is even greater.

It has been said this pipeline will benefit only foreign companies and not the United States. I respectfully disagree. Having reliable sources of affordable energy is what powers our economy and allows people in the United States to enjoy a high quality of life. If we fail to secure this source of crude oil now, other countries, perhaps those with environmental controls substandard to our own will certainly do so.

Every barrel of oil we produce domestically or obtain from close allies, such as Canada, is better for our economy and our national security. The Keystone XL pipeline is in our nation's interest, not only because of the positive impacts the project will bring to our economy and security, but also because the necessary regulations are in place to protect the land and waters of our great nation.

Thank you again for the opportunity to provide these comments to you and your committee on this very important national issue.

Sincerely,

Dennis Daugaard

DD:n
Dear Ms. Walker:

We are writing to strongly support TransCanada’s proposed Keystone XL pipeline and urge you to swiftly finalize the draft SEIS. Keystone XL will be critical to improving American energy security and boosting our economy, and I strongly encourage its expeditious approval.

Our communities are members of the Ports-to-Plains Alliance, a grassroots coalition of cities, counties, businesses, economic development organizations and chambers of commerce from a ten-state, 2,300 mile long transportation and economic development corridor that stretch from Texas to Alberta, Canada.

Keystone XL has undergone one of the most thorough environmental assessments ever conducted. In this latest environmental review, the State Department again concludes that Keystone XL will not significantly affect the environment. With over 57 additional mitigation measures to be undertaken by TransCanada, Keystone XL is much safer, more efficient, and more reliable than other modes of crude oil transport examined by the State Department.

Opponents have argued that Keystone XL will increase greenhouse gas emissions through increased oil sands production. However the draft SEIS notes that not building the pipeline would not significantly limit oil sands development or U.S. consumption of heavy oil. If the pipeline is not completed, that oil would simply be transported by rail or other greenhouse gas generating means rather than through a pipeline.

Keystone XL will provide tremendous economic benefits for our country, our region in particular. As the draft SEIS outlines, the project will support over 42,100 jobs during the construction phase and will generate over $5 billion in economic activity, including $2.05 billion in worker salaries. For local governments along the pipeline corridor, $65 million in tax revenue will help fund necessary
Support for Findings of the Supplemental Environmental Impact Statement for the Keystone XL Pipeline
April 18, 2013
Page 2

Infrastructure projects, education, and medical services. Furthermore, the development of Alberta’s oil sands will have a significant economic impact on the U.S. For every two jobs created in the oil sands, one is created in the United States, as our number one trading partner relies heavily on American-made equipment and expertise. It will also provide improved access to domestic oil supplies from the Bakken Formation in North Dakota and Montana.

Keystone XL will also allow America to end its dependence on oil from the Middle East and Venezuela by improving access to North American supplies. Relying upon regimes that are in many cases unstable and unfriendly to the United States is simply bad energy and national security policy. We have seen the shocks to our economy from oil price spikes caused by turmoil in these regions. It is much preferable to develop stable, secure domestic and Canadian sources.

As leaders from the region that the Keystone XL pipeline will traverse, we applaud the thoroughness of the approval process. The State Department draft EIS and the Nebraska Department of Environmental Quality Supplemental EIS both find no significant environmental concerns that should prevent the construction of this valuable project. We also know that TransCanada will construct the Keystone XL with industry best practices that will meet or exceed all existing pipeline regulatory standards.

The Keystone XL pipeline is clearly in the nation’s interest and will be a valuable tool in strengthening our national security and energy security. Therefore, we respectfully request that upon completion of this review period, the Department of States move expeditiously to approve the pipeline and grant TransCanada the Presidential Permit it needs to proceed.

Sincerely,

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Stephanie Salazar  
President & CEO  
Broomfield Economic Development Corp.  
Broomfield, CO 80021

Bob Sivertsen  
President  
Highway 2 Association  
Havre, MT 59501

Benjamin Snow  
President  
Rapid City Economic Development Partnership  
Rapid City, SD 57701

Jack Taylor  
Contract Director  
SPIRIT 54  
Liberal, KS 67901

Jack Taylor  
Executive Director  
S.P.I.R.I.T.  
Liberal, KS 67905

Terri Thiel  
Executive Director  
Dickinson Convention & Visitors Bureau  
Dickinson, ND 58601

Harvey T. Thompson  
SPIRIT 54  
Liberal, KS 67901

Marilyn Thompson  
Board Member  
SPIRIT 54  
Liberal, KS 67901

Lorie Vincent  
Executive Director  
The High Ground of Texas  
Stratford, TX 79084

Terry Wegman  
Executive Director  
Big Spring EDC  
Big Spring, TX 79720

Pamela Welch  
Executive Director  
Midland Development Corporation  
Midland, TX 79701

Shawn Wenko  
Assistant Director  
Williston Economic Development  
Williston, ND 58801

John Zimmerman  
Board Member  
SPIRIT 54  
Hutchinson, KS 67504

Sandra Adams  
President  
Lamesa Chamber of Commerce  
Lamesa, TX 79331
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<td>Ray Knudsen</td>
<td>Senior Engineer/Treasurer/Director</td>
<td>LeanOptions Consulting</td>
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Jackie Stratton  
President  
Rimbey & District Chamber of Commerce  
Rimbey, AB T0C2J0

Pat Tenney  
Executive Director  
Lloydminster Chamber of Commerce  
Lloydminster, AB T9V0Y8