

Is Keystone for the United States?

Oil has been the world's leading source of energy since the mid-1950s. Oil is the source of about one-third of the U.S. energy demand, increasing our dependence on foreign oil imports from places like Canada, Mexico, and OPEC, the Organization of the Petroleum Exporting Countries founded by Baghdad and Iraq. Crude oil pipelines started to spring up all across the world and America as early as the 1870s to transport and refine crude oil for products such as gasoline, diesel, and heating oil. TransCanada, one of the leading energy infrastructure companies in North America, currently operates the Keystone pipeline, a very large oil pipeline stretching from Hardisty, Alberta, to U.S. markets at Wood River and Patoka in Illinois, and from Steele City, Nebraska to Cushing, Oklahoma. This pipeline has provided large amounts of oil and energy resources for the U.S. since being built. A recent proposal by TransCanada to extend the pipeline through Texas to the Gulf Coast has become a very controversial issue in the past year. The Keystone XL pipeline, a privately funded project, would double the current capacity of oil transported in the U.S. per day, provide the U.S. with a more stable source of crude oil, and significantly increase employment and capital within America.

Despite the projects clear advantages, there are still major concerns about the potential environmental effects that could be associated with the project. Those opposing the Keystone XL pipeline base their argument on the fear of impacts the project could have on areas such as the Sand Hills in Nebraska and the Ogallala Aquifer. They also exhibit a strong concern for increase in greenhouse gas emission and concern for oil spills. The opposing arguments are very well supported, but they are overlooking the country's need for these resources and the hard

work by TransCanada to make sure that their pipelines are the safest and most reliable means of transportation for this crude oil.

The extension of the pipeline would include an additional 1700 mile tract of pipeline to transport oil from Cushing, Oklahoma to Houston and Port Author, Texas. A major benefit to the extension is that it could potentially increase the daily capacity of oil transported from 590,000 barrels per day (bpd) to 1.1 million barrels per day (Mbpd). The crude oil passing through this pipeline would be processed in refineries all across the Texas Gulf Coast. An increase to the already well operated pipeline would be an asset to the United States who consumes approximately 19.6 Mbpd of oil. The Keystone XL pipeline capacity in comparison with the total amount of oil used per day is very small, but when the U.S imports an average of 11.8 Mbpd of crude oil and petroleum products any small increase in the amount we can provide from our own refineries is crucial (Congressional Digest 293). Of the 19.6 millions of barrels of oil we use daily here in America only about 2.5 of that is domestically produced.

Maximizing on opportunities to increase our oil intake should be a major priority of the U.S. Many will argue the opposite because they believe we should shift from oil and petroleum products as an energy source all together; however, this should not be the case. I understand the need for alternative sources of energy and their importance for our environment, but with petroleum being the leading source of the United States energy consumption, at 37% of our energy use, we should take the opportunities when presented to harness a stable relationship with those potential providers (Energy Consumption 1). Another concern people voice about transporting this crude oil from Canada through the United States to the Gulf is that we are

transporting “dirty tar sands oil”, this meaning that the byproducts that come from refining and transporting one of the dirtiest fuels is very pollutant to our environment (idebate 1).

I agree with Cynthia Giles, EPA’s Assistant Administrator, when she says, “Pipeline oil spills are a very real concern” (cited in Larson). Pipeline spills, for one, potentially pose risk to the U.S. drinking water supply and also to land owners located along the proposed pipeline route. Opponents can look to at major pipeline spills that occurred last year in Michigan and Illinois, as well as two recent spills on TransCanada’s existing Keystone pipeline to emphasis the threat of the project to some of the vulnerable regions that it would pass through, such as the Sand Hills in Nebraska and the Ogallala Aquifer (EPA Objections). However, “pipelines are the most energy-efficient, safe, environmentally friendly and economic way to ship hydrocarbons” or bulk energy (Larson 140). In Larson’s collection about sustainable pipeline development, it recognizes that pipeline failures do occur but there are many safety provisions that are followed during the design stage of a pipeline that provide a minimum failure rate. This meaning, steps are taken to prevent corrosion and external interference of pipelines. To further elude the discrepancies of an argument based on “fear of spills/pipeline failures”, TransCanada explains on their website that if pipeline leaks are to occur they are small (Koenig 2). “Most pipeline leaks involve less than three barrels, 80% of spills involve less than 50 barrels, and less that 0.5% of spills total more than 10,000 barrels (Koenig 2). In comparison with the familiar Deepwater Horizon oil spill that gushed about 4.9 million barrels before being capped, most oil spills that would potentially occur would be minute. In response to the possible spills that could occur, TransCanada says, “using the most advanced technology, the pipeline will be monitored 24 hours a day through a centralized control centre, it will be built with thicker steel, operate at a lower pressure and use

advanced coatings to protect the surface from abrasion – all in an effort to further improve safety” (ideabate).

The aforementioned potential threat to the Ogallala Aquifer, an aquifer that provides drinking water to over 2 million people, and the Nebraska Sand Hills, a distinct ecoregion that sits atop the Aquifer, is what concerns environmentalist the most about the Keystone XL project. With that said, there should be no overlooking the efforts TransCanada has made to provide alternative routes for the extension. According to a summary of the Final Environmental Impact Statement, a statement required by the State Department to fully disclose the potential impacts of a project to decision makers and the public, TransCanada has provided 5 major route alternatives along with other pipeline design alternatives (Congressional Digest 301). These alternatives, the No Action Alternative, System Alternatives, Major Route Alternatives, and other realignments, were devised in accordance with EPA requirements (Congressional Digest 300-302). However, the Department of State (DOS) did not find any of the major alternatives to be “safer” or “environmentally preferable” to the proposed project design and route (Congressional Digest 302). The public’s concerns for environmental stability are what make permitting of the Keystone XL project so difficult. TransCanada has seen firsthand the extensive procedures that must be followed to ensure that the proposal is in the national interest.

Opponents of the Keystone XL project and environmentalist propose their own alternatives to the project. Some say that investing in tar sands delays the transition to clean energy (renewable energy such as solar and wind) (idebate). They suggest that the United States focus on efforts to use alternative sources of energy such as wind, solar, nuclear energy, and other renewable options. The problems with a deviation from oil as an energy source is our

current state of dependence on oil and the difficulties of harnessing energy such as wind and solar energy. According to Jim Pinto, author of *The Coming Oil Crisis*, “To get to a practical stage in solar energy, the initial hardware and infrastructure need to be publicly funded” (Pinto). The first problem with wind and solar power trying to compete with oil is the already large investments in oil infrastructure –extraction, pipelines, transportation, refining, and distribution (Pinto). These alternative forms of energy are cheaper in the long run, but they do not currently have the infrastructure to compete. For example, wind suffers from a lack of energy density because it requires a large number of wind generators to produce useful amounts of heat or electricity and these generators cannot just be placed anywhere (Alternative Energy). The second downfall to alternative energy is that 37% of U.S. yearly energy is provided by petroleum and oil products and those alternatives make up a much smaller portion. These alternatives cannot compete when they do not have the infrastructure set up to and when they do not have a stable entry into the energy market. As long as we are an oil addicted economy, I think the tar sands can play an important role in the world oil market.

Other than the increase of oil and energy capacity that the Keystone XL project can bring to the United States, this extension by TransCanada could also mean a more stable source of crude oil imports for this country. As mentioned briefly, the United States imports about 11.8 Mbpd of foreign oil for consumption, “among the largest sources of U.S. gross oil imports are Canada (2.5 Mbpd), the Persian Gulf (1.7 Mbpd), and Mexico (1.3 Mbpd)” (Congressional Digest). Recently however, imports from Mexico and the Persian Gulf have slowed due in part to the development in those countries and the U.S. increased production of oil and oil alternatives. To mitigate this decline in imports from places such as Venezuela and Mexico, it is necessary for

the U.S. to utilize additional sources such as the Canadian Keystone XL pipeline. Another factor that contributes to the added stability in oil supply the pipeline could bring is that Keystone XL helps the U.S. avoid buying oil from volatile regions. Brad Carson, the director of the National Energy Policy Institute, said to *Living on Earth* in June of 2011: “the dynamics of the oil market are important to remember here. Because right now, we are sending trillions of dollars a year to often hostile regimes, or regimes that are ambivalent toward the United States” (cited in idebate). Keystone XL would create a greater dependence on Canada for oil imports, but it also could potentially save us from negotiating with countries such as Libya and other hostile regions.

In addition to supply diversity and stability, the Keystone XL pipeline has a significant amount of economic benefit associated with expanding U.S. pipeline infrastructure. The Final Environmental Impact Statement for the Keystone XL project states, “the Keystone expansion would provide net economic benefits from improved efficiencies in both the transportation and to processing of crude oil of \$100 million to \$600 million annually, in addition to an immediate boost in construction” (Keystone Overview). Not only will the project facilitate growth in GDP, but we could also see a creation of jobs between 25,000 and 100,000. Some of the job created could be jobs for construction of the pipeline and jobs in refineries along the pipeline route. There are many arbitrary numbers allotted to the actual increase in the number of jobs this project could provide. Because of this, opponents of the project can strongly argue that people cannot clearly identify the amount of jobs that will be created and for what time period. This is true, but there is also no denying the increase in jobs that it will take to lay the infrastructure of this pipeline, manage it, monitor it, refine the oil, and also the indirect jobs and revenue it will

produce for companies like mitigation companies that will do work to compensate for the impacts to wetlands and vulnerable habitat.

The project is a \$7 billion oil sand project, which is an expensive project (Alberts). The cost of oil infrastructure and the investment it takes to complete a project of this size is very expensive. Many opponents see this amount of money going into the oil industry and ask the question “Why not spend that money harnessing alternative and cleaner sources of energy?” The answer to the question is in some ways revealed by Jim Pinto when he says, “to get to a practical stage in solar energy, the initial hardware and infrastructure need to be publicly funded”, and that means tax dollars. The Keystone XL project though expensive is a privately funded project by TransCanada and its contributors; meaning the products and pipeline could benefit U.S. consumers without the increase or use of their tax dollars, which all Americans like to hear.

We have seen that TransCanada’s Keystone extension could be a huge benefit to the United States. The project could double the daily capacity of oil transported in the United States, could provide a more stable source of crude oil, and could create a significant amount of economic benefit for the country. There are some concerns about effects to the environment that the Keystone pipeline could have, but with the proper precautions and procedures the pipeline could be built with minimal impacts. According to all evidence and the current level of U.S. dependence on oil as a form of energy, approval of the pipeline is crucial.

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