

Keystone XL

Project in Canada

Project background

The Keystone XL Pipeline Project (Keystone XL) is a 36-inch diameter crude oil pipeline, beginning in Hardisty, Alberta and extending south to Steele City, Nebraska. The Keystone XL Pipeline offers a safe, reliable and environmentally responsible way to enhance market access by delivering crude oil to markets in the United States. The Canadian portion of Keystone XL includes approximately 530 kilometres (km) of pipeline and eight pump stations, traversing portions of southeastern Alberta (AB) and southwestern Saskatchewan (SK).

The National Energy Board – now called the Canada Energy Regulator – issued the Certificate for the Canadian portion of Keystone XL in 2010. Following this, we began facility construction at the Hardisty tank terminal, select pump stations, and horizontal directional drills at certain river crossings in 2011.

Since then, we have obtained all required easements in Canada, and have continued to conduct important project activities, including updates to environmental studies and ongoing stakeholder, landowner and Indigenous engagement. In May 2019, the National Energy Board approved outstanding pre-construction conditions for the project in Canada.



Anticipated Project schedule

Pipeline construction

- Q1 2020** – Announcement to progress construction
- Q2 2020** – Prime contractor award
- Q2 2020** – Pre-construction activities
- Q2 2020** – International Border crossing
- Q3 2020** – Alberta mainline construction activities
- Q3 2021** – Saskatchewan mainline construction activities
- Q2 2022** – Substantial completion
- Q3 2023** – Anticipated in-service date

Facilities construction

- Q1 2020** – Announcement to progress construction
- Q2 2020** – Prime contractor award
- Q2 2020** – Pre-construction activities
- Q2 2020** – Facilities construction activities
- Q1 2022** – Substantial completion
- Q3 2023** – Anticipated in-service date

Canada Project scope

The Canadian pipeline route extends from Hardisty, AB to Monchy, SK.

Alberta – Approximately 269 km of pipe and five pump stations

Saskatchewan – Approximately 261 km of pipe and three pump stations

Local benefits

Keystone XL will create substantial economic activity during both construction and operations, putting thousands of Canadians to work. We anticipate approximately 2,800 construction jobs will be created during peak construction periods across the right-of-way in Canada. Overall, construction will support approximately 17,000 jobs in Canada. These are direct, indirect and induced jobs generated by the business that will be created supplying goods and services to the project and the project's workforce. In total, the project will generate an estimated employment income of \$1.6 billion during construction. Once in-service, Keystone XL will also contribute an estimated \$7 million in additional annual property taxes to municipalities along the pipeline right-of-way, these dollars will support community services such as fire protection, policing, schools, hospital districts and waste management.



Anticipated annual property tax increase once Keystone XL is operational
\$4.35 million in Alberta



Anticipated annual property tax increase once Keystone XL is operational
\$2.97 million in Saskatchewan



Anticipated increase to the Canadian GDP associated with the construction of Keystone XL
\$2.4 billion



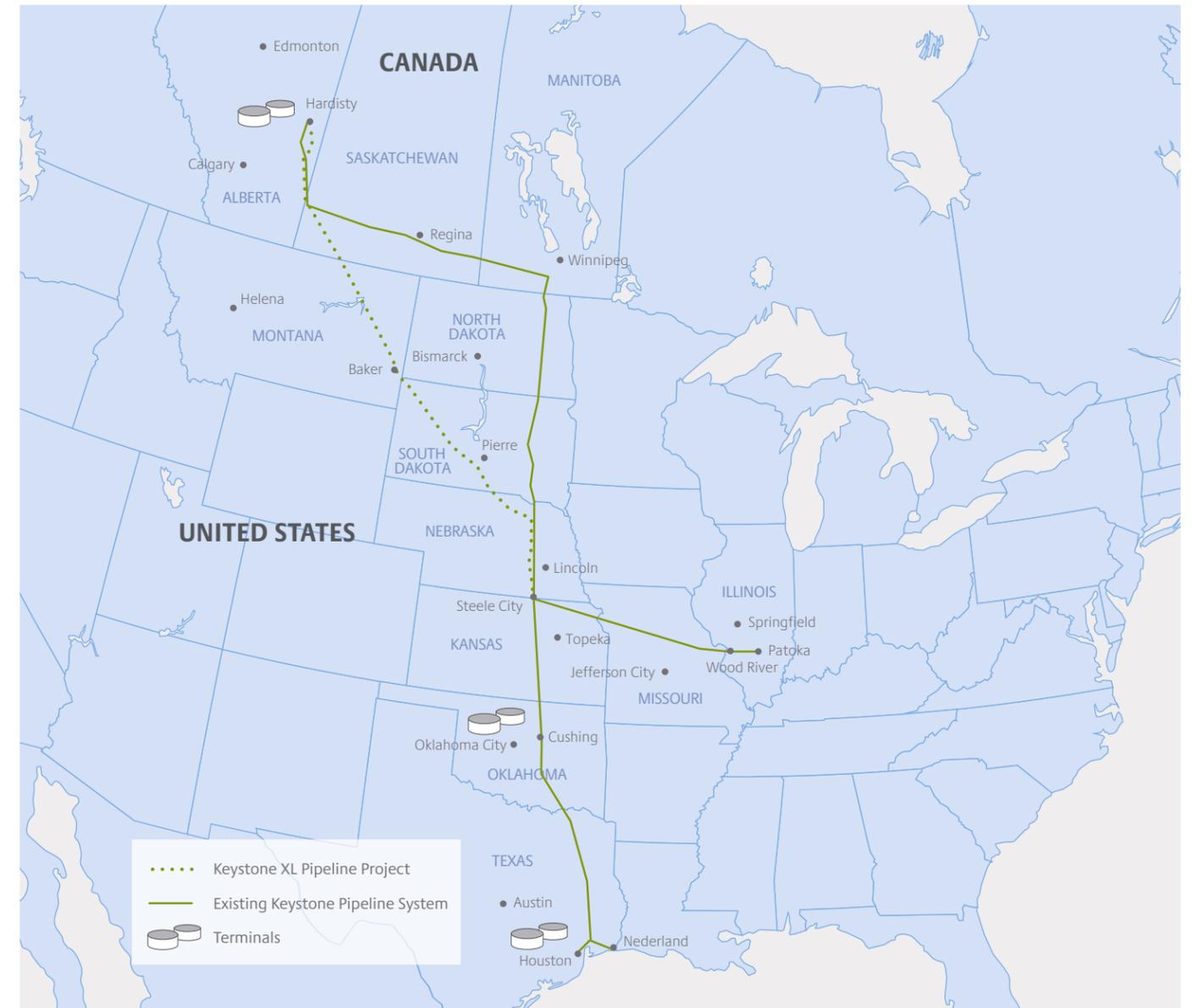
Peak construction jobs
2,800 in Canada



Safe delivery of
830,000 barrels of oil per day

Next steps

We are committed to continuing to engage communities along the Keystone XL right-of-way, and we will provide regular updates to stakeholders, landowners and Indigenous groups as we progress toward construction related activities and mainline and facilities construction.



Responsible stakeholder and rightsholder engagement

Guided by our values of safety, responsibility, collaboration and integrity, we are proud of the positive relationships we have built with our neighbours for the over 65 years. We recognize that ensuring Indigenous groups, as rightsholders, and our stakeholders are engaged and respected is critical to the project's success. We are committed to sharing information and seeking public input which results in better plans – for us, stakeholders, rightsholders and communities as a whole. We continue to document the entire stakeholder engagement process including the issues raised by stakeholders, landowners and Indigenous groups, along with the ways we address these issues.

Commitment to engagement and addressing concerns

Our approach to consultation and engagement with stakeholders, landowners, and Indigenous groups is focused on understanding concerns and addressing issues related to our projects and operations. We engage and consult early and often, invite feedback, provide updates and address concerns throughout the regulatory process, construction and operations. Our preference for addressing concerns is through direct and respectful discussion. Issues received or identified during these discussions are systematically tracked and followed to promote mutual resolution. If mutual resolution is not achievable, parties may consider use of the Canada Energy Regulator's (CER) collaborative Alternative Dispute Resolution (ADR) process.

Engaging Indigenous groups

Building and maintaining relationships with Indigenous groups near our projects and existing facilities has long been an integral part of our business. We recognize Indigenous groups as rightsholders who have a distinct relationship with the land. We know that our activities have the potential to impact the lives of Indigenous groups in a tangible way. We continue to work closely with Indigenous groups to understand the potential effects of the project on the exercise of Indigenous rights and any other interests of Indigenous peoples in the project area. The information we worked with Indigenous groups to collect was considered in the project planning process and evaluated by provincial and federal authorities, including the CER, as part of their regulatory review. We aim to conduct our activities in a way that fosters mutual understanding and benefit – this includes working with communities to identify and manage potential effects of our activities and provide enduring economic opportunities. We also provide business, employment, and training opportunities, as well as support community-led initiatives of Indigenous groups that focus on safety, community, environment and education.

Community benefits

Keystone XL will offer long-term economic benefits and help strengthen the economy on a local, provincial and national level:

- **Employment and business opportunities** – Construction requires the services of equipment operators, welders, mechanics, truck drivers, labourers, and more, as well as creates demand for local goods and services. Vendors interested in working with us can visit [TCEnergy.com](https://www.tcenergy.com) to register as an interested local service provider. We award contracts to qualified pipeline construction contractors and work with them to provide local employment opportunities.
- **Annual revenue to support local services** – Once operational, Keystone XL will provide tax payments to all levels of government. These annual tax payments help support schools, hospitals, emergency services and other local programs vital to communities.
- **Investment in local communities and Indigenous groups** – Giving back to the communities where we operate has always been part of our culture. Whether it's partnering with community groups, supporting local initiatives or encouraging our employees to be involved in their neighbourhoods, the goal of our Build Strong community investment program is to build strong and vibrant communities across North America. Visit [TCEnergy.com/BuildStrong](https://www.tcenergy.com/BuildStrong) for more information.



Managing our environmental footprint

Whether it's designing, building, or operating energy infrastructure, we are committed to being responsible environmental stewards on the land we share – and our environmental principles of stewardship, protection and performance help guide our decisions. As part of our commitment, and in support of the regulatory process, we assessed potential effects that may be associated with the construction and operation of the project. Some examples of possible effects associated with tank terminals, pump stations or pipeline projects include potential effects to soil, water, fish, and wildlife, air quality, and noise. The Environmental and Socio-Economic Assessment prepared for the project considers potential impacts on communities and groups whose interests informed our planning process, including the potential for a project to impact diverse groups of people. We propose mitigation and enhancement measures and evaluate the significance of residual effects once these measures are implemented. An Environmental Protection Plan was also developed to identify the necessary measures to be used during construction, and the best practices we use to guide operations of the assets throughout their life cycle to manage effects and maintain equivalent land capability.

Route selection

The project team employed a systematic and thorough route selection process using a variety of considerations, such as:

- desktop studies
- helicopter surveys
- ground verification and on-the-ground field survey
- engineering, geotechnical and environmental field studies
- co-location of the pipeline along existing disturbances and corridors to minimize new footprint

Route selection took into account the objectives of minimizing the total route length or land requirements, meeting applicable regulatory requirements and reducing the environmental footprint, while carefully assessing overall construction complexity and our ability to meet customer needs. Feedback received through stakeholder, landowner and Indigenous engagement informed the assessment of routes and sites.

What to expect during and after construction

The planning that goes into the construction and operation of our pipeline projects reflects commitments we've made and conditions we received during the regulatory review process. We track and report our progress on regulatory conditions with the CER and follow up on the commitments we've made to honour the relationships we've built with Indigenous groups, communities and landowners.

During pipeline construction there is an increase in traffic in and around the project area as well as heavy

equipment onsite for earthworks, material handling/hauling, welding and testing. We adhere to construction plans and the Environmental Protection Plan to ensure that the impacts of construction activities on communities are minimized.

The construction of the project will require the use of temporary work space and workforce accommodations to support construction. Where our plans include these features, we will continue the conversation with potentially affected stakeholders to hear and understand community interests.

Access to-and-from site is planned based on a number of factors including finding the safest and most efficient routes to our work site, existing infrastructure, new infrastructure required to support construction and municipal planning. Access planning is refined throughout project development and final plans will be communicated to communities prior to starting work.

Once construction is completed, the impacted land area – including our temporary work space and workforce accommodation areas – will be reclaimed to an equivalent land capability so that it can support various uses such as wildlife habitat or agricultural purposes, similar to the ability that existed previously. Measures are taken to prevent topsoil/surface material loss from wind and water erosion and to establish a vegetative cover native to the surrounding vegetation and land use. After the facilities are constructed, there will be minimal traffic associated with ongoing operations and maintenance.

On freehold lands, landowners have the right to fully use and enjoy the right-of-way subject to the terms of the right-of-way agreement, and CER and Damage Prevention Regulations. To provide public safety and to protect property and the environment, written consent from TC Energy is required for certain activities on the pipeline right of way and within the 30-metre prescribed area. These activities include but are not limited to: operating motor vehicles or mobile equipment, reducing or adding soil cover and any excavation or ground disturbance. Stakeholders may contact TC Energy with at least 10 working days' notice to apply for written consent at [writtenconsent.tcenergy.com](https://www.tcenergy.com/writtenconsent). After written consent has been received, request a locate by visiting [ClickBeforeYouDig.com](https://www.clickbeforeyoudig.com) or calling the appropriate provincial One-Call Centre.

At the end of a pipeline's lifecycle, the asset is taken out of service with as much thought and care as when it was proposed and constructed. We follow the CER processes for end-of-life planning. More information about pipeline end-of-life is available on our website at [TCEnergy.com/about/energy-101/lifecycle-of-a-pipeline](https://www.tcenergy.com/about/energy-101/lifecycle-of-a-pipeline).



Emergency preparedness and response

Our goal is to ensure that our pipeline and energy facilities operate safely every day and that the public, our employees, and the environment are protected during the unlikely event of an emergency situation or an incident involving our assets. All TC Energy safety initiatives are designed to advance one goal: Zero is Real. We are proud to have an industry leading safety record and continue to work towards our goal of zero safety incidents. Being prepared for the rare cases when something does go wrong is part of the commitment to ensuring the safety of the communities where we live and operate.

At the first sign of any potential issue on our pipeline systems, our control centre operators can stop the flow of product through the pipeline in minutes and investigate. If an irregular condition is detected, pipeline operators immediately dispatch emergency personnel to the scene to investigate. The pipeline is not restarted until it has been confirmed on site by qualified personnel that it is safe to do so.

Like all our 'operations, Keystone XL will have comprehensive Emergency Response Plans in place that outline the steps we'll take to respond in the unlikely event of an incident. We develop these plans throughout the project, and do not place a project into operations until they are finalized.

We work closely with emergency responders (Police, Fire & EMS) along our pipeline route so that everyone will be prepared in case of an incident. Every year, we host more than 130 safety exercises to ensure that we, and our first-response partners, are ready in the rare case of an incident.

In the event of an emergency, please contact TC Energy's 24-hour emergency line at 1-888-982-7222.

Find out more by visiting TCEnergy.com.



Contact us

We invite you to contact us with any questions or comments you have about the project.

Toll free phone number: 1-866-717-7473
E-mail: keystone@tcenergy.com

Or write to:

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Connect with us online at:

www.keystone-xl.com
Twitter: @KXLPipeline
Facebook: @KXLPipeline
Instagram: @tcenergy

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Please be aware that as planning progresses, new information becomes available and details may change from the time of this printing. Please contact TC Energy with any questions. TC Energy follows the Official Languages Act and respects your choice to receive relevant information from us in English or in French. Please contact us if you prefer to receive French-language materials and updates.