In-line inspection.

At TC Energy, ensuring our pipelines and associated infrastructure operate safely is the most important aspect of our business.

While our customers, landowners, the public and the regulators expect it, TC Energy demands it. That's why we do everything we can to exceed expectations in the safe and reliable delivery of the energy North Americans need.

Pipelines are the safest, most efficient and environmentally responsible way to transport petroleum products, and TC Energy has an industry-leading safety record. From design and construction to operations and maintenance, safety is our top priority and our goal is to achieve zero incidents.

In-line inspection is a procedure TC Energy undertakes to inspect the internal condition of its pipelines. It is a key part of our pipeline integrity and maintenance program.



Inspecting our pipelines

TC Energy has over 70,000 kilometres (42,000 miles) of pipelines in North America. In addition to our pipeline safety and maintenance programs, part of ensuring our pipelines are in safe operating condition involves regularly inspecting our pipelines. This is done through a process called in-line inspection.

In-line inspection is a procedure TC Energy undertakes to inspect the internal condition of its pipelines. It is a key part of our pipeline integrity and maintenance program. It is done by using in-line inspection tools known as Smart Pipeline Inspection Gauges (Smart PIGs). Originally designed to clean the inside of a pipeline, these specialized tools travel through the pipeline collecting data which is then analyzed to determine the condition of the pipe. These tools are equipped with hundreds of electronic sensors that inspect the quality of the pipeline inside and out to identify even the tiniest crack, flaw or sign of corrosion. If an area of concern is identified, TC Energy investigates further to determine how to proceed with repairs or replacement to that section of the pipe if needed. The PIGs travel through the pipeline without interrupting the flow of product through the pipe.

TC Energy uses different types of Smart PIGs to detect for various deficiencies in the pipe. An electro-magnetic acoustic transducer (EMAT) PIG inspects for small cracks, and a magnetic flux leakage (MFL) PIG inspects for internal corrosion. Both are extremely accurate and provide a highly-detailed analysis of the interior of the pipeline.

When in-line inspection is taking place, temporary above-ground markers are installed every two to five kilometers (one to three miles). The markers track the progress of the PIG as it travels through the pipe. After the PIG passes through the section with the markers, the markers are removed and moved to the next section of pipe to be inspected. During TC Energy's in-line inspection activities, please do not remove or disturb the above-ground markers.



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Contact us

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