

# Remote Monitoring that Reduces Leaks and CO2 Emissions

Nationwide | *Deployed on 4G NB-IoT and LTE-M Cellular Networks*

## SCENARIO

More than 2.6 million miles of oil and gas pipelines crisscross the United States. As oil and gas companies transition to less emission-intensive energy sources, they must monitor and maintain these pipes to address safety concerns and limit leaks. In fact, the Pipeline and Hazardous Materials Safety Administration (PHMSA) requires pipeline inspections every two months.

But inspection points are typically five to 10 miles apart, and the actual driving distance between them can be much longer. Even for just a few onsite inspections a day, the hours, fuel costs, GHG emissions, and environmental impact add up.

## SOLUTION

OmniMetrix has found a more efficient—and energy-efficient—way. This provider of critical asset management services uses an AT&T Internet of Things (IoT) remote monitoring solution to help customers monitor the condition of their steel pipelines. This system both reduces the GHG emissions associated with inspectors driving from site to site and collects detailed, timely information about pipeline health, helping companies reduce leakages.

## RESULTS

Across multiple pipeline companies and thousands of sensors, the AT&T IoT solution not only reduced inspection travel time, labor, and fuel costs, remote monitoring shrunk fuel usage by around 22,000 gallons of gas a year—equivalent to almost 200 metric tons of CO<sub>2</sub>e<sup>4</sup>.

The solution team noted that it is currently very difficult to collect data on methane emissions, as many factors impact the reduction of these emissions from pipeline infrastructure.

