

# Petrochemical feedstock infrastructure

## Petrochemical feedstocks

Petrochemical feedstocks are components of natural gas. The majority of natural gas is methane, but also contains other components such as ethane and propane, commonly referred to as natural gas liquids.

An increase in the availability of natural gas liquids to be used as petrochemical feedstocks will encourage additional petrochemical processing and investment in Alberta

## Why are they important

Methane and natural gas liquids are the ingredients for petrochemical processing to produce building blocks that enable modern life, such as: plastics, anti-freeze, fertilizers, fabrics, solar panels, children's toys, food preservatives, electronics, and many more products.

This program seeks to take advantage of the opportunity recommended by the [Energy Diversification Advisory Committee](#) to capitalize on Alberta's competitive feedstock advantage and reduce risk for investors further down the value chain. The Committee identified the expansion of Alberta's petrochemical sector as a key opportunity to take advantage of growing Asian demand for consumer products.

## How are feedstocks collected

Ethane and other components are separated or processed from natural gas in a variety of ways, often at a large-scale processing facility but it can also occur in smaller facilities located closer to the production site.

Straddle plants extract certain natural gas liquids, including ethane, from major natural gas transmission pipelines and then ship them to other processing or manufacturing plants.

## The market

The program would support the expansion of Alberta's petrochemical processing sector by incenting investments in infrastructure to recover natural gas liquids, with a focus on ethane. This includes field extraction, straddle plants, and fractionation plants.

According to the [Energy Diversification Advisory Committee](#) report, a concern for further downstream energy investment in Alberta is the lack of certainty for feedstock supply. With new infrastructure to extract incremental natural gas liquids, they will be available as feedstocks for processing and adding value, in Alberta as opposed to being exported.

A long-term, stable, and competitive supply of feedstocks is a major concern that industry must consider when making investments in petrochemical processing. Expanded supplies of natural gas liquids meet a necessary condition for industry to construct and operate world-class petrochemical processing facilities in Alberta.

## Program funding

A total of \$500 million in funding is available for the program: \$300 million in grants and \$200 million in loan guarantees.

## The relationship with PDP

This infrastructure program is complementary to the next round of the Petrochemicals Diversification Program (PDP) in that increased supplies of ethane and other raw components may be needed in order to supply the petrochemical manufacturing facilities being applied for under the PDP.

This program is intended to encourage natural gas midstream projects to support liquids extraction with a focus on ethane recovery.

