2019/20 Winter Propane Market Update

December 11, 2019 | Washington, DC
(Inventory data as of 12/6/19; residential heating fuel prices as of 12/9/19)

By
U.S. Energy Information Administration
PADD 1A (New England) propane inventories above the 5-year range

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019

*propane/propylene for fuel use only
PADD 1B (Mid-Atlantic) propane inventories above the 5-year range

PADD 1B propane* inventories
million barrels

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019

*propane/propylene for fuel use only
PADD 2 (Midwest) propane inventories below the 5-year range

PADD 2 propane* inventories
million barrels

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019

*propane/propylene for fuel use only
PADD 2 (Midwest) propane inventories below 5-year-average levels

PADD 2 propane* inventories, difference from 5-year average
million barrels

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019

*propane/propylene for fuel use only
Selected state propane* inventories

Kansas propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)

- 5 year monthly range
- 5 year average
- 2019/2020 weekly inventories
- 2018/2019 monthly inventories


Michigan propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)

- 5 year monthly range
- 5 year average
- 2019/2020 weekly inventories
- 2018/2019 monthly inventories


Illinois, Indiana, Ohio propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)

- 5 year monthly range
- 5 year average
- 2019/2020 weekly inventories
- 2018/2019 monthly inventories


Iowa, Minnesota, Wisconsin propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)

- 5 year monthly range
- 5 year average
- 2019/2020 weekly inventories
- 2018/2019 monthly inventories


*propane/propylene for fuel use only

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019
PADD 3 (Gulf Coast) propane inventories above the 5-year range

PADD 3 propane* inventories
million barrels

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019
*propane/propylene for fuel use only

U.S. Energy Information Administration
PADD 3 (Gulf Coast) propane inventories above 5-year average levels

PADD 3 propane* inventories, difference from 5-year average
million barrels

Source: EIA, Weekly Petroleum Status Report, data through December 6, 2019

*propane/propylene for fuel use only
Mt. Belvieu, TX and Conway, KS prices close to parity as strong winter heating and grain drying elevate demand above average levels for this time of year.

Propane spot prices (Conway, KS and Mont Belvieu, TX) dollars per gallon

Source: EIA, Bloomberg, data through December 10, 2019
NOAA’s projected temperatures:
December 16 – Dec. 20, 2019, and December 18 – Dec. 24, 2019

- NOAA forecasts a warming trend across the Lower 48, with temperatures in the normal and below-normal range to give way to a high probability of above-normal temperatures going into the holiday weekend.
- The gradual warming, as well as the apparent end of the corn harvest, should result in a return to more seasonal propane demand patterns in the latter half of December across the Midwest, and below-average demand in the rest of the country, with Alaska outside the Southeast the only region expected to see above-average heating fuel demand.

A = temperatures above normal
N = equal chance that temperatures are above normal, normal, or below normal
B = temperatures below normal

Source: NOAA, Dec. 10, 2019
The late maturity, and poor weather, have delayed harvest, with some producers no longer planning to bring the crop in this season.

Source: USDA National Agricultural Statistics Service

* USDA 2013 data incomplete. Weeks 40 and 41 not available.
Northeast propane prices, generally dictated by tariff on TEPPCO* pipeline, currently sufficiently high to warrant imports from overseas.

*TEPPCO = Enterprise TE Products Pipeline Company LLC

Source: EIA, Bloomberg, data through December 10, 2019; Enterprise Products Partners L.P., Effective Tariffs, FERC No. 54.42.0
Low corn prices, and elevated propane prices due to space heating demand, may result in an early end to the corn harvest.
Expected warming, and rebuilding of local stocks, have allowed prices in the Midwest to come off their recent highs.

Propane spot prices
Dollars per gallon

Source: EIA, Bloomberg, data through December 10, 2019
Edmonton propane spot prices remain above Conway, as demand for Western Canadian propane now draws more product to Asia.
State Heating Oil and Propane Program (SHOPP) updates

• SHOPP is a collaborative program between states and EIA that provides weekly wholesale and retail prices for heating oil and propane at the state level.

• EIA expanded SHOPP in October 2014 to include 14 additional states in propane price data collection. In 2016, EIA added 10 new states to its wholesale propane price publication. This should be taken into consideration when comparing the average prices for the U.S., PADD 1, PADD 1B, PADD 1C, and PADD 2 averages.

• EIA has been providing more granular inventory data to states on a weekly basis since the 2016/2017 heating season.

• EIA implemented two new samples for residential heating oil and propane in October 2019. Under the new sampling methodology EIA is publishing standard errors for SHOPP prices.
Maps of states participating in Winter Fuels Survey

Petroleum Administration for Defense Districts
Winter Heating Fuels Survey — PADD 1 and 2 represented States

Petroleum Administration for Defense Districts
Winter Heating Fuels Survey — PADD 1, 2, 3, and 4 represented States

HEATING OIL

PADD 1: East Coast
- PADD 1A: New England
  - Connecticut
  - New Hampshire
  - Maine
  - Rhode Island
  - Massachusetts
  - Vermont
- PADD 1C: Lower Atlantic
  - North Carolina
  - Virginia

PADD 2: Midwest
- Indiana
- Iowa
- Minnesota
- Nebraska
- New Jersey
- New York
- Pennsylvania
- Kentucky
- Michigan
- Wisconsin

PADD 3: Gulf Coast

PADD 4: Rocky Mountain

PROPNANE

PADD 1: East Coast
- PADD 1A: New England
  - Connecticut
  - Maine
  - Massachusetts
  - New Hampshire
  - Rhode Island
  - Vermont
- PADD 1C: Lower Atlantic
  - North Carolina
  - Virginia

PADD 2: Midwest
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Michigan
- Minnesota
- Missouri
- Nebraska
- North Dakota
- Ohio
- Oklahoma
- South Dakota
- Tennessee
- Texas
- Virginia

PADD 3: Gulf Coast
- Alabama
- Mississippi
- Arkansas
- Texas

PADD 4: Rocky Mountain
- Colorado
- Montana
- Idaho
- Utah

Source: EIA, Heating Oil and Propane Update
Retail propane prices this heating season below prices for the same week last year in PADDs 1 and 2, with PADD 2 prices stabilizing after recent increases.

Source: State Heating Oil and Propane Program, data through December 9, 2019
Various days-of supply/disposition measures

U.S. weekly stocks of propane/propylene

days of supply & disposition

Note: *disposition = domestic product supplied + exports
Source: U.S. Energy Information Administration, Weekly Petroleum Status Report, data through December 6, 2019
For more information, please see EIA’s webinar on Propane Market Indicators and Measures of Supply Adequacy
For more information


State Energy Portal | www.eia.gov/state

Winter Heating Fuels Site | www.eia.gov/special/heatingfuels/

Movements of Propane by Rail | http://www.eia.gov/dnav/pet/pet_move_railNA_a_EPLLPA_RAIL_mbbl_m.htm

Today in Energy | www.eia.gov/todayinenergy

Short-Term Energy Outlook | www.eia.gov/steo


Annual Energy Outlook | www.eia.gov/aeo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer