**Products**

**Light Ends**

**Gases (e.g., Methane, Ethane, Propane, Butane)**

* used as fuel for heating, cooking, and electricity generation
* used as feedstock for petrochemical processes.

**Liquefied Petroleum Gas (LPG) (includes Propane and Butane)**

* used as fuel for heating, cooking, and in vehicles.

**Gasoline**

* used primarily as fuel in internal combustion engines for cars and small trucks.

**Middle Distillates**

**Naphtha**

* used as a feedstock for producing high octane gasoline, solvents, and in the petrochemical industry to produce ethylene and propylene

**Kerosene**

* used as fuel for jet engines, heating, and lighting.

**Diesel Fuel**

* used in diesel engines, which are found in trucks, buses, boats, and trains, as well as in power generation.

**Heavy Ends**

**Gas Oil**

* used in diesel engines, heating, and as a feedstock for catalytic cracking to produce lighter products.

**Lubricating Oils**

* used to reduce friction in engines and machinery.

**Fuel Oils**

* used for heating, power generation, and in ships.

**Residuum (Residue)**

**Heavy Fuel Oil**

* used in industrial boilers, ships, and power plants.

**Asphalt/Bitumen**

* used for road construction, roofing, and waterproofing.

**Gasoline (most produced)**

Gasoline is used primarily as a transportation fuel. Gasoline consumption is affected by a variety of factors including gasoline prices, disposable income, employment, weather, vehicle miles traveled, as well as regulations on fuel economy.

The underlying commodity for the gasoline futures contract has been reformulated blendstock for oxygenate blending (RBOB), the petroleum component of gasoline in many areas of the country prior to the addition of ethanol to produce finished gasoline.

During the summer months, the underlying commodity of the RBOB front month contract is required to be gasoline with a lower [Reid vapor pressure](http://www.eia.gov/todayinenergy/detail.cfm?id=11031) (RVP) specification, a more expensive type of gasoline to refine. Starting March 1, RBOB futures prices tend to increase several cents from February averages to reflect the higher valued commodity. This, in turn, is reflected in a higher crack spread.

On September 1, the underlying commodity of the RBOB front month contract reverts back to a higher RVP specification, representing a lower-cost gasoline. The gasoline crack spread declines to reflect the lower price of gasoline.

Summer is the driving season resulting in higher domestic demand for gasoline.

As domestic gasoline consumption declines during the winter months, distillate consumption historically rises as consumers in the United States, particularly in the U.S. northeast, use distillate for heating purposes. With the increased demand, distillate crack spreads are usually highest from October to February. distillate is increasingly used as a low-sulfur transportation fuel

The seasonal consumption pattern of gasoline, with higher demand in the summer than in the winter, affects inventory management by refiners and end users. In the summer driving season, gasoline inventories tend to decline whereas in the fall and winter, gasoline inventories are replenished.

The futures curve for gasoline, for example, exhibits the seasonality inherent to the product's consumption. Prices for summer months are higher, which encourages inventory builds in the transition months between seasons to satisfy future demand.

**Distillate (second most produced).**

Distillate is used as a transportation fuel, and heating and power generation purposes. Distillate's use as a heating fuel drives the seasonal pattern of higher consumption during the winter months. Distillate consumption is affected by economic growth and weather conditions as well as vehicle efficiency and miles traveled of heavy-duty vehicles.

The underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD), a distillate with sulfur content of less than 15 parts per million (ppm).

Distillate inventories also exhibit seasonality based on distillate's use as a heating fuel in the winter months, although this effect has declined in recent years as distillate is increasingly used as a low-sulfur transportation fuel. In areas of the United States, such as the Northeast, where distillate is still widely used for heating, inventories display a more pronounced seasonal pattern of decreasing in the winter time and increasing in the summer.

**Crack spread**

The crack spread is the difference between the cost of crude oil and the market price of petroleum products obtained from it (gasoline if 1:1 and if 3:2:1 then gasonline x 2 diesel x 1 in 3 barrels).

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If there's a high demand for gasoline but limited refining capacity, the crack spread for gasoline may widen. If a refiner expects the crack spread to widen, they might buy crude oil futures and sell refined product futures.