Market Talks
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COMMODITIES · BEGINNER · LESSON 8 OF 15

Natural Gas

How gas is used and moved, why it has three very different world prices, how LNG links them, and why gas is one of the most volatile markets of all

13 min read 8 quiz questions with answer key

COMMODITIES · BEGINNER · LESSON 8 OF 15

Natural Gas

IN ONE SENTENCE

Natural gas heats homes, fuels power stations and feeds industry. Unlike oil, it is hard to move: it travels by pipeline, or is cooled into liquefied natural gas (LNG) and shipped by tanker. That is why the world has three main gas prices: Henry Hub in the US, TTF in Europe and JKM in Northeast Asia. Gas prices follow the seasons and the weather, and storage data are watched closely every week. In 2026, the loss of Qatari LNG showed how fast these prices can jump.

What natural gas is used for

Natural gas is mostly **methane**, found underground, often in the same places as oil. It burns more cleanly than coal or oil and is used in three main ways:

- **Power generation.** Gas-fired power stations produce a large share of electricity in many countries, and they can be turned up or down quickly when demand changes.
- **Heating.** Homes and offices burn gas for heating and cooking, which is why demand jumps in cold winters.
- **Industry.** Factories use gas for heat and as a raw material, for example to make fertiliser and chemicals.

Gas prices are usually quoted per **million British thermal units (MMBtu)**, a unit of energy. In Europe, prices are quoted in **euros per megawatt hour (MWh)**.

Pipelines and LNG

Oil is easy to ship: put it in a tanker and send it anywhere. Gas is much harder to move, because it takes up a huge amount of space. There are two ways:

- **Pipelines** carry gas over land and under the sea. They are cheap to run once built, but they connect only the places they reach.
- **Liquefied natural gas (LNG).** Gas is cooled to about -162°C, where it becomes a liquid and takes up around 600 times less space. Special tankers carry it across oceans, and import terminals turn it back into gas.

LNG has grown into a large world trade. According to the EIA, world LNG trade reached a record **56.3 billion cubic feet per day** in 2025. The United States is now the **largest LNG exporter**: its exports rose 26% to **15.1 billion cubic feet per day** in 2025, about **26%** of the world total. Qatar and Australia are the next largest.

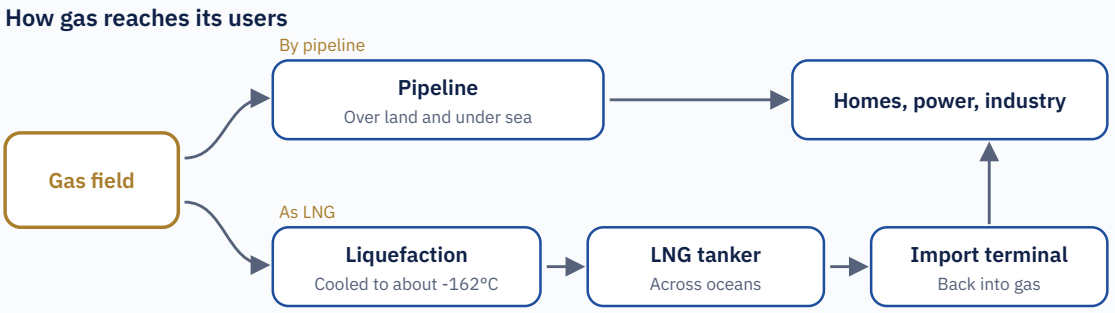


Figure 1. Gas travels by pipeline to nearby users, or is liquefied, shipped as LNG and turned back into gas.

Three world prices: Henry Hub, TTF and JKM

Because gas cannot move freely, each region has its own price:

- **Henry Hub** is the US benchmark. It is named after a pipeline hub in Louisiana and is the delivery point for the NYMEX natural gas futures contract (NG) at CME Group.
- **TTF**, the Title Transfer Facility in the Netherlands, is the main European gas price, quoted in euros per MWh.
- **JKM**, the Japan-Korea Marker, is the benchmark for LNG cargoes delivered to Northeast Asia, including Japan, South Korea, China and Taiwan.

The United States produces far more gas than it uses, so Henry Hub is usually much cheaper than TTF and JKM, which depend on imported gas. The difference is what makes it profitable to liquefy US gas and ship it abroad. In March 2026, according to the EIA, TTF averaged about **$14.89** per MMBtu above Henry Hub, and JKM about **$15.23** above it.

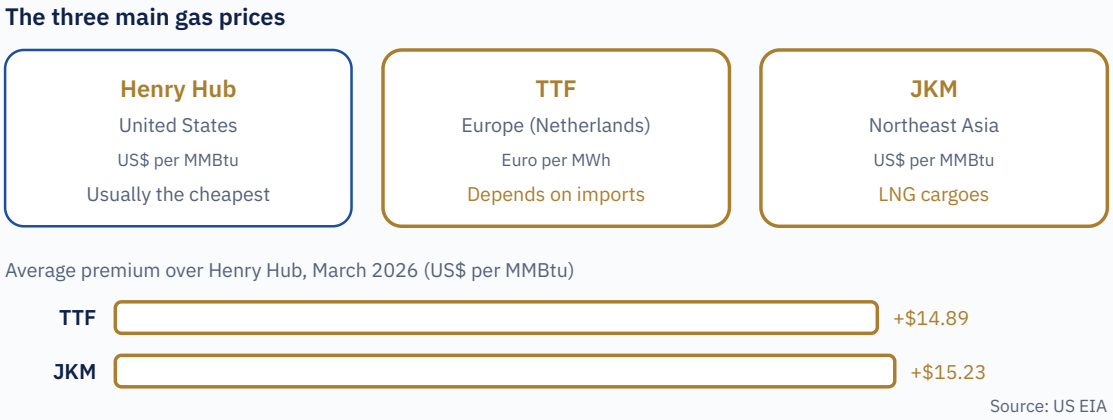


Figure 2. Henry Hub, TTF and JKM are the three main gas prices. In March 2026, TTF and JKM were about $15 per MMBtu above Henry Hub.

Seasons, weather and storage

Gas demand follows the calendar more than almost any other commodity. In **winter**, demand for heating rises sharply. In **summer**, demand for air conditioning lifts power use in hot regions. Production, by contrast, stays fairly steady through the year.

Storage fills the gap. In the US, gas is usually injected into underground storage from about **April to October**, the **injection season**, and withdrawn from about **November to March**, the **withdrawal season**. Whether storage is above or below its normal level for the time of year is one of the most important signs of whether the market is tight or loose.

The EIA publishes its **Weekly Natural Gas Storage Report** every Thursday at **10:30 a.m. New York time**. Traders compare the change in storage with what analysts expected, and prices often move sharply in the minutes after the release. Weather forecasts matter just as much: a colder forecast for the coming weeks can move prices before a single extra unit of gas is burned.

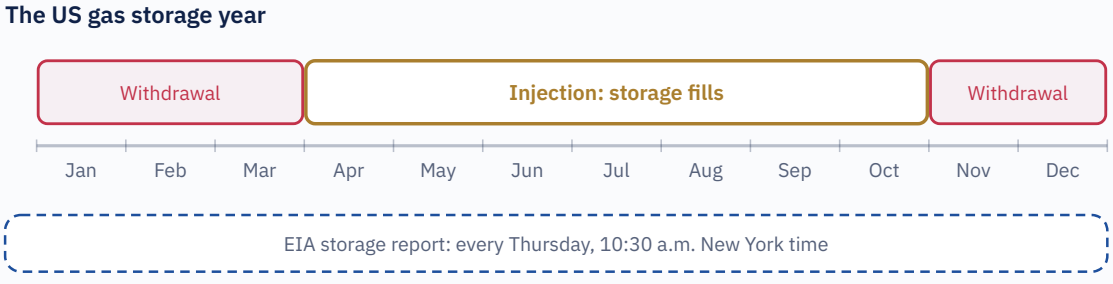


Figure 3. US gas storage usually fills from April to October and empties from November to March. Months run from left to right.

Why gas is so volatile

Natural gas is one of the most volatile major commodities. Demand can change quickly with the weather, but supply and storage cannot. When a cold spell hits, there is no fast way to bring more gas to where it is needed.

The start of 2026 gave a clear example. During a winter cold spell, the US Henry Hub month-ahead price reached a high of **$7.46** per MMBtu on January 28, then fell to about **$3.33** a week later as the weather turned milder. That is a fall of more than half in a week. In some local US markets, spot gas sold for more than **$100** per MMBtu during the coldest days.

By mid-November 2026, Henry Hub futures were trading at around **$3.18** per MMBtu.

2026: the loss of Qatari LNG

Qatar was the world's second-largest LNG exporter, and its giant **Ras Laffan** complex usually produces about a fifth of the world's LNG. Its exports all pass through the **Strait of Hormuz**.

- After shipping through the Strait of Hormuz was cut off at the end of February 2026, Ras Laffan **stopped production on March 2**, because it could no longer ship its LNG.
- On **March 18 and 19**, missile strikes hit the complex. QatarEnergy said the damage would take **three to five years** to repair and that it would have to declare force majeure on some long-term contracts. The damaged trains made up about 17% of Ras Laffan's 77 million tonnes a year of capacity.
- On March 19, European TTF futures opened at about **€72/MWh**, more than 30% higher than the day before and the highest level since January 2023. Spot LNG prices in Northeast Asia hit a three-year high.

The shock also showed how connected gas markets have become through LNG. Europe and Asia had to compete for cargoes from the US and elsewhere, and prices rose far beyond the region where the damage happened.

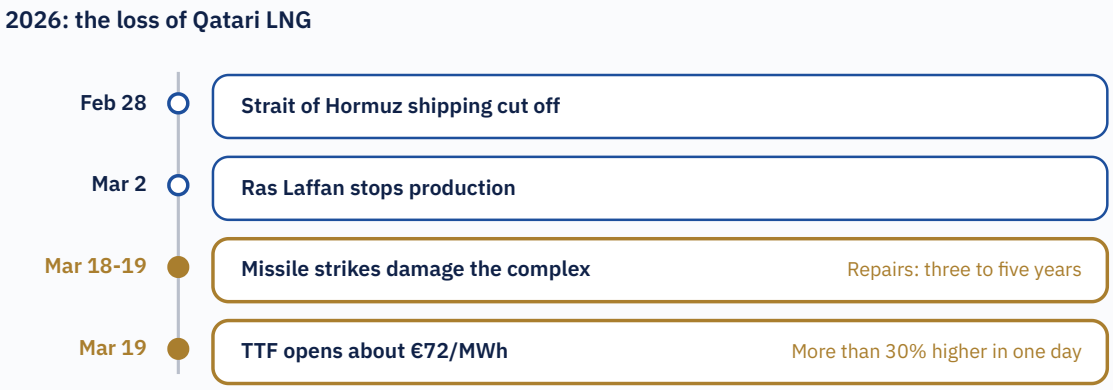


Figure 4. How the loss of Qatari LNG unfolded in early 2026.

The Henry Hub futures contract

The main gas contract for traders is the **Henry Hub Natural Gas futures** contract at CME Group, code **NG**. Using what you learned in Lesson 6:

- **Contract size:** 10,000 MMBtu.
- **Tick size:** $0.001 per MMBtu.
- **Tick value:** 10,000 × $0.001 = **$10**.
- **Settlement:** physical delivery at Henry Hub, Louisiana. Contracts are listed for every month.

At a price of $3.00, one contract is worth 10,000 × $3.00 = **$30,000**. A move of just 10 cents, from $3.00 to $3.10, is 100 ticks, or **$1,000** per contract. Gas can move 10 cents in minutes after a storage report, so position sizes should allow for this.

Why this matters for traders

- **Watch the weather forecast.** Forecasts for the next two weeks often move gas more than today's weather.
- **Thursday at 10:30 a.m. New York time.** The EIA storage report regularly causes sharp moves. Know the expected number before it is released.
- **Know which gas you trade.** Henry Hub, TTF and JKM can move very differently. A crisis in Europe or Asia may move TTF or JKM far more than Henry Hub.
- **Size positions for volatility.** Gas can rise or fall by half in days. Use smaller positions than you would in less volatile markets.

Key terms

Natural gas	A fuel made mostly of methane, used for power generation, heating and industry.
MMBtu	Million British thermal units: the unit of energy used to price gas in the US and in LNG markets.
LNG	Liquefied natural gas: gas cooled to about -162°C so it becomes liquid and can be shipped by tanker.
Henry Hub	A pipeline hub in Louisiana and the US natural gas benchmark price; the delivery point for NYMEX NG futures.
TTF	Title Transfer Facility: the Dutch gas hub whose price is the main European benchmark, quoted in euros per MWh.
JKM	Japan-Korea Marker: the benchmark price for LNG delivered to Northeast Asia.
Injection season	The months, roughly April to October in the US, when gas is put into storage.
Withdrawal season	The months, roughly November to March in the US, when gas is taken out of storage.
Force majeure	A contract clause that excuses a supplier from delivering when events beyond its control make delivery impossible.

Key takeaways

1. Natural gas is used for power, heating and industry. It is priced in US dollars per MMBtu, or in euros per MWh in Europe.
2. Gas moves by pipeline or as LNG. The US became the largest LNG exporter, with 15.1 billion cubic feet per day in 2025.
3. There are three main world prices: Henry Hub (US), TTF (Europe) and JKM (Northeast Asia). Henry Hub is usually much cheaper.
4. Demand follows the seasons; storage fills the gap. The EIA storage report every Thursday at 10:30 a.m. New York time often moves prices.
5. Gas is very volatile. In 2026, Henry Hub halved within a week in winter, and the loss of Qatari LNG sent TTF and Asian LNG prices sharply higher.

Test yourself

Circle one answer for each question. The answer key with explanations is on the next page. You can also take this quiz online at markettalks.info and see your score instantly.

1. Why is natural gas harder to trade around the world than crude oil?

A. Because gas has no value
B. Because gas takes up a lot of space and must move by pipeline or be liquefied and shipped as LNG
C. Because gas is illegal to export
D. Because gas can only be used for cooking

2. What happens to natural gas when it is turned into LNG?

A. It is cooled to about -162°C and takes up around 600 times less space
B. It is mixed with crude oil
C. It is turned into electricity
D. It is heated until it becomes solid

3. Which country was the world's largest LNG exporter in 2025, according to the EIA?

A. Qatar
B. Australia
C. The United States
D. Russia

4. What does JKM stand for?

A. Joint Kilowatt Market
B. Japan-Korea Marker
C. June-July Month
D. Japanese Kerosene Measure

5. Why is Henry Hub usually much cheaper than TTF and JKM?

A. Because US gas is lower quality
B. Because the US produces more gas than it uses, while Europe and Northeast Asia rely on imports
C. Because Henry Hub is priced in euros
D. Because Henry Hub trades only in summer

6. In the US, roughly when is the injection season, when gas is put into storage?

A. November to March
B. April to October
C. Only in December
D. There is no storage season

7. When does the EIA publish its Weekly Natural Gas Storage Report?

A. Monday at 8:00 a.m.
B. Wednesday at 10:30 a.m.
C. Thursday at 10:30 a.m. New York time
D. Once a month

8. A Henry Hub futures contract covers 10,000 MMBtu with a tick of $0.001. The price rises from $3.00 to $3.10. What is the gain on one long contract?

A. $10
B. $100
C. $1,000
D. $10,000

Answer key

1 B

Because gas takes up a lot of space and must move by pipeline or be liquefied and shipped as LNG

Gas is bulky. It needs pipelines, or it must be cooled into LNG, shipped and turned back into gas. That limits how freely it moves between regions.

2 A

It is cooled to about -162°C and takes up around 600 times less space

Cooling gas to about -162°C turns it into a liquid with roughly 600 times less volume, which makes shipping by tanker possible.

3 C

The United States

US LNG exports rose 26% to 15.1 billion cubic feet per day in 2025, about 26% of world LNG exports.

4 B

Japan-Korea Marker

JKM is the Japan-Korea Marker, the benchmark price for LNG cargoes delivered to Northeast Asia.

5 B

Because the US produces more gas than it uses, while Europe and Northeast Asia rely on imports

The US has plenty of gas of its own. Europe and Northeast Asia import much of theirs, so they pay more, including the cost of liquefying and shipping LNG.

6 B

April to October

Gas is usually injected into storage from about April to October and withdrawn from about November to March, when heating demand is high.

7 C

Thursday at 10:30 a.m. New York time

The gas storage report is released every Thursday at 10:30 a.m. New York time. The oil inventory report is usually on Wednesday.

8 C

$1,000

$0.10 ÷ $0.001 = 100 ticks. 100 × $10 per tick = $1,000.

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