

Natural Gas Storage: A Critical Pillar of the U.S. Energy System



Natural gas storage provides flexibility that helps ensure reliable and affordable energy delivery year-round to homes, businesses and power generators. The storage network includes underground storage, aquifers and salt caverns, and liquefied natural gas (LNG) and compressed natural gas (CNG) storage.

Storage Matters Now More Than Ever

As electricity demand rises, particularly with the growth of data centers, industrial facilities, and new residential development, natural gas storage ensures flexibility and energy availability where needed most.

- **Balancing Seasonal Demand:** Storage lets producers and utilities inject gas during low demand and withdraw it during peak periods.
- **Tempering Price Volatility:** Storage provides a key physical and financial asset that reduces the potential for volatile prices and supports a robust and liquid natural gas market.
- **Providing Emergency Support:** Storage enhances system reliability and resilience during extreme events, like storms and outages.
- **Enabling Grid Flexibility and Renewable Integration:** As variable renewable electricity generation grows, natural gas storage ensures on-demand fuel for reliable grid support.

Capacity Constraints, Delivery Challenges, and Planning Gaps

While storage facilities have proven their value during high-impact events, several structural and regulatory barriers continue to limit their effectiveness:



Capacity constraints.



Limited withdrawal rates.



Long project development timelines.



Inconsistent market signals.

Policy Considerations and Strategic Action

To support energy reliability, affordability and security, natural gas storage must be prioritized with supportive planning, regulation and long-term investment.

Key Considerations:

- **Targeted Expansion:** Strategic investments in new underground and LNG facilities will be essential. These investments should match rising residential, industrial, and power demands.
- **Faster, Clearer Project Approvals:** Regulatory clarity and streamlined permitting can remove bottlenecks and speed up projects.
- **Improved Integration with Energy Planning:** Including natural gas storage in state and regional energy plans helps ensure availability, especially as grid flexibility grows in importance.
- **Recognition of Storage's Full Value:** Storage offers economic, reliability, resilience, emergency preparedness and consumer protection benefits that should be reflected in policy, regulation and energy markets.
- **Storage enables low-carbon pathways:** Natural gas storage supports lower emissions and greater energy flexibility, enabling renewable energy growth.

Advancing natural gas storage capacity is crucial for reliability, renewable integration, and consumer protection, shaping both commercial strategy and energy policy