EIA’s winter energy disruptions resources

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The nation’s source of energy information

EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment.

By law, EIA’s data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government.
EIA’s data collection and analytical products cover all energy sectors

- Reserves, production, & trade
  - Crude oil
  - Natural gas
  - Natural gas liquids
  - Coal
  - Uranium

- Transformation, distribution, & storage
  - Petroleum & biofuel refiners & terminals
  - Natural gas storage & distribution
  - Electricity generation & distribution

- End-use consumption
  - Commercial
  - Residential
  - Industrial
  - Transportation
EIA’s tools provide information about winter energy disruptions

- Energy Disruptions page
- U.S. Energy Mapping System
- Winter Fuels Outlook
- This Week in Petroleum
- State Heating Oil and Propane Program
  - Winter Heating Fuels
- New England Dashboard
- Natural Gas Storage Dashboard
- Hourly Electric Grid Monitor
- State Energy Portal
- Southern California Daily Energy Report
EIA’s mapping layers can assess disruptions and energy infrastructure

- The disruption layers of EIA’s U.S. Energy Mapping System provide real-time updates on many conditions
  - Extreme cold notices
  - Wildfires
  - Active storms, including projected paths
  - Wind force probability and wind speed
  - U.S. Geological Survey seismic data
  - Flooding
  - Warnings, watches, and advisories
EIA’s *Winter Fuels Outlook* forecasts the average consumer prices and expenditures for heating fuels during the winter.

### Table: Average Consumer Prices and Expenditures for Heating Fuels During the Winter

<table>
<thead>
<tr>
<th>Fuel / Region</th>
<th>Winter of</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12-13</td>
<td>13-14</td>
</tr>
<tr>
<td>Natural Gas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (Mcf)**</td>
<td>64.7</td>
<td>71.7</td>
</tr>
<tr>
<td>Price ($/mcf)</td>
<td>11.71</td>
<td>11.52</td>
</tr>
<tr>
<td>Expenditures ($)</td>
<td>757</td>
<td>826</td>
</tr>
<tr>
<td>Midwest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (Mcf)</td>
<td>73.5</td>
<td>84.2</td>
</tr>
<tr>
<td>Price ($/mcf)</td>
<td>8.34</td>
<td>8.86</td>
</tr>
<tr>
<td>Expenditures ($)</td>
<td>614</td>
<td>731</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (Mcf)</td>
<td>46.8</td>
<td>52.7</td>
</tr>
<tr>
<td>Price ($/mch)</td>
<td>10.67</td>
<td>10.71</td>
</tr>
<tr>
<td>Expenditures ($)</td>
<td>497</td>
<td>564</td>
</tr>
<tr>
<td>West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (Mcf)</td>
<td>47.4</td>
<td>45.2</td>
</tr>
<tr>
<td>Expenditures ($)</td>
<td>433</td>
<td>450</td>
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<tr>
<td>U.S. Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (Mcf)</td>
<td>58.4</td>
<td>63.9</td>
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<tr>
<td>Price ($/mch)</td>
<td>9.71</td>
<td>9.95</td>
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<tr>
<td>Expenditures ($)</td>
<td>567</td>
<td>656</td>
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<tr>
<td>Heating Oil</td>
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<tr>
<td>U.S. Average</td>
<td></td>
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<tr>
<td>Consumption (gallons)</td>
<td>493.0</td>
<td>547.5</td>
</tr>
<tr>
<td>Price ($/gallon)</td>
<td>3.87</td>
<td>3.87</td>
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<tr>
<td>Expenditures ($)</td>
<td>1,910</td>
<td>2,121</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
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<tr>
<td>Northeast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (kWh)**</td>
<td>8,299</td>
<td>8,879</td>
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<tr>
<td>Price ($/kwh)</td>
<td>0.152</td>
<td>0.163</td>
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<tr>
<td>Expenditures ($)</td>
<td>1,264</td>
<td>1,448</td>
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<tr>
<td>Midwest</td>
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<tr>
<td>Consumption (kWh)</td>
<td>10,344</td>
<td>11,363</td>
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<tr>
<td>Price ($/kwh)</td>
<td>0.111</td>
<td>0.112</td>
</tr>
</tbody>
</table>

### EIA’s Winter Fuels Outlook highlights:

- Availability and pricing for the four principals heating fuels
  1. Propane
  2. Heating oil
  3. Natural gas
  4. Electricity
- Data relevant to each region available through an interactive map
- Links to resources for each state
- Current week and three-month weather forecasts from NOAA
- Every graph can be downloaded as an image or as a spreadsheet
- Updated estimates of key energy processes such as demand, production, and storage based on Short-Term Energy Outlook data
EIA’s petroleum analysis can highlight market adjustments following supply disruptions

- This Week in Petroleum analyses focus on many types of disruptions:
  - Refinery outages
  - Crude and petroleum product pipeline leaks
  - Chokepoints
  - Shipping/transit issues
  - Petroleum by rail incidents
  - Supply chain issues
  - Quality/grade mismatches
  - Geopolitical incidents
The State Heating Oil and Propane Program (SHOPP) offers weekly status reports during the heating season

- SHOPP is a joint effort between state energy offices and EIA to collect and publish weekly residential heating oil and propane prices each winter

- As part of the weekly Winter Propane Market Update, EIA publishes detailed propane inventories each week along with SHOPP price data and other information relevant to propane market

- In addition to helping consumers, these data help federal and state agencies respond quickly to shortages or other supply disruptions
The New England Dashboard provides information about winter natural gas and electricity peak constraints

- The New England Dashboard
  - Integrates electricity, natural gas, and petroleum information
  - Helps identify constraints such as the market response to the peak demand periods during the 2017–18 bomb-cyclone event
  - Covers prices, stocks, demand, imports, fuel mix, weather, transportation and operations
  - Draws upon multiple sources of information, including some real-time data
The Natural Gas Storage Dashboard shows Lower 48 states and regional storage activity and key market fundamentals

- The dashboard is built around data provided in the *Weekly Natural Gas Storage Report*, EIA’s only Principal Federal Economic Indicator.

- The dashboard summarizes how changes in weather, consumption, and other market data affect national and regional inventory levels.

- The dashboard combines interactive visualizations, one-click access to data downloads, and context-setting commentary.
EIA’s Hourly Electric Grid Monitor can help analyze hurricane effects on regional load

- The Hourly Electric Grid Monitor provides daily and near real-time electricity information and visualizations for 67 balancing authorities.

- Key Hourly Electric Grid Monitor data includes actual/forecast load, net generation by energy source, and net interchange between balancing authorities.

- EIA’s Hourly Electric Grid Monitor data is helpful in examining disruptions that affect electricity supply and demand such as cold snaps, storms, fires, and outages.
EIA’s Southern California Daily Energy Report can assess interrelated energy market fundamentals in Southern California

- EIA’s Southern California Daily Energy Report highlights how changes in temperatures can influence
  - Natural gas demand relative to supplies
  - Natural gas storage activity and stocks
  - Regional natural gas and electricity imports
  - Wholesale natural gas and electricity prices
  - Electricity loads
EIA’s State Energy Portal provides the overall energy context for your state

Use the State Energy Portal to

• Access more than 1,700 state- and regional-level data series

• Create-your-own interactive dashboards from more than 150 customizable charts and maps

• Review data applicable to energy disruptions on a pre-curated resiliency and reliability dashboard

• Embed charts that update automatically to your own website

Note: This map reflects 2017 data. State Energy Portal data will update automatically when more current series becomes available.
Source: U.S. Energy Information Administration, State Energy Portal (beta)
For more information

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A complete set of links to recently introduced EIA tools can also be found at https://www.eia.gov/tools/
Contact Us

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• Map questions, comments and suggestions: mapping@eia.gov