EIA Short-Term and Winter Fuels Outlook

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**U.S. average fuel expenditures are expected to be higher for all fuels this winter (October – March).**

Percent Change from Last Winter

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Base Case</th>
<th>If 10% Warmer Than Forecast</th>
<th>If 10% Colder Than Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating Oil</td>
<td>23.1</td>
<td>9.7</td>
<td>35.5</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>18.1</td>
<td>3.4</td>
<td>29.3</td>
</tr>
<tr>
<td>Propane</td>
<td>11.3</td>
<td>0.6</td>
<td>24.6</td>
</tr>
<tr>
<td>Electricity</td>
<td>10.4</td>
<td>4.8</td>
<td>13.9</td>
</tr>
<tr>
<td>Average All Fuels</td>
<td>15.3</td>
<td>4.0</td>
<td>24.5</td>
</tr>
</tbody>
</table>

Winter = October 1 through March 31.
Expenditures are based on typical per household consumption adjusted for weather. Warmer and colder cases represent 10-percent decrease or 10-percent increase in heating degree-days, respectively.
Winter 2008-09 is expected to be 2% colder than 2007-08, but still 2% warmer than 30-year average.

U.S. Heating Degree-Days Population-Weighted
Natural gas prices are expected to be higher than last winter.

Henry Hub Winter Average Spot Price
10% Colder = $10.55/ mcf
Base Case = $8.96/ mcf
10% Warmer = $7.66/ mcf

Residential Winter Average Price
10% Colder = $15.22/ mcf
Base Case = $14.82/ mcf
10% Warmer = $14.17 mcf
U.S. natural gas in storage is projected to remain above historical averages.

Deviation from 2003-2007 Average, Billion Cubic Feet

Forecast

Base Case  10% Colder  10% Warmer

Short-Term Energy Outlook, October 2008
Natural gas heating bills are projected to be higher for all regions this winter.

### Households using natural gas as primary heating fuel
- West: 63%
- South: 33%
- Midwest: 72%
- Northeast: 53%
- U.S.: 52%

### Percent Change from Last Winter (Projected)

<table>
<thead>
<tr>
<th>Region</th>
<th>Consumption</th>
<th>Average Price</th>
<th>Total Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>-2%</td>
<td>+15%</td>
<td>+13%</td>
</tr>
<tr>
<td>South</td>
<td>+7%</td>
<td>+18%</td>
<td>+26%</td>
</tr>
<tr>
<td>Midwest</td>
<td>-2%</td>
<td>+19%</td>
<td>+17%</td>
</tr>
<tr>
<td>Northeast</td>
<td>+6%</td>
<td>+12%</td>
<td>+19%</td>
</tr>
<tr>
<td>U.S. Average</td>
<td>+1%</td>
<td>+17%</td>
<td>+18%</td>
</tr>
</tbody>
</table>
Crude oil prices are expected to remain high.
The balance between global consumption and non-OPEC supply growth drives oil prices.
Multiple and hard-to-predict uncertainties drive the oil market forecast.
**Gasoline inventories are low.**

- **PADD 1 (East Coast) Gasoline Stocks**
  - Sep. 26: 9.2 million barrels below previous 5-year average

- **PADD 2 (Midwest) Gasoline Stocks**
  - Sep. 26: 3.3 million barrels below previous 5-year average

- **PADD 3 (Southwest) Gasoline Stocks**
  - Sep. 26: 5.2 million barrels below previous 5-year average

- **PADD 1C (Southeast) Gasoline Stocks**
  - Sep. 26: 3.5 million barrels below previous 5-year average
Retail heating oil prices are projected to average about 50 cents per gallon higher than last winter.

October 2008 – March 2009 Average
- 10% Colder = $3.98/ gallon
- Base Case = $3.89/ gallon
- 10% Warmer = $3.82/ gallon
Distillate inventories are low.

U.S. winter heating oil expenditures projected to increase for all regions.

<table>
<thead>
<tr>
<th>Households using heating oil as primary heating fuel</th>
<th>Consumption</th>
<th>Average Price</th>
<th>Total Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>-4%</td>
<td>+15%</td>
<td>+10%</td>
</tr>
<tr>
<td>South</td>
<td>+13%</td>
<td>+16%</td>
<td>+31%</td>
</tr>
<tr>
<td>Midwest</td>
<td>-2%</td>
<td>+14%</td>
<td>+12%</td>
</tr>
<tr>
<td>Northeast</td>
<td>+5%</td>
<td>+18%</td>
<td>+24%</td>
</tr>
<tr>
<td>U.S. Average</td>
<td>+5%</td>
<td>+17%</td>
<td>+23%</td>
</tr>
</tbody>
</table>
Residential propane prices are expected to average about 23 cents per gallon higher than last winter.

**October 2008 – March 2009 Average**
- 10% Colder = $2.81/gallon
- Base Case = $2.68/gallon
- 10% Warmer = $2.65/gallon

Forecast

Dollars per Gallon

Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10
Propane inventories are low.

Propane expenditures are projected to increase in all regions.

### Percent Change from Last Winter (Projected)

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</thead>
<tbody>
<tr>
<td>West</td>
<td>-2%</td>
<td>+8%</td>
<td>+5%</td>
</tr>
<tr>
<td>South</td>
<td>+8%</td>
<td>+7%</td>
<td>+15%</td>
</tr>
<tr>
<td>Midwest</td>
<td>-2%</td>
<td>+13%</td>
<td>+10%</td>
</tr>
<tr>
<td>Northeast</td>
<td>+5%</td>
<td>+6%</td>
<td>+12%</td>
</tr>
<tr>
<td>U.S. Average</td>
<td>+2%</td>
<td>+9%</td>
<td>+11%</td>
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Winter electricity expenditure increases are expected to be smaller than other fuels.

### Percent Change from Last Winter (Projected)

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<tbody>
<tr>
<td>West</td>
<td>-2%</td>
<td>+9%</td>
<td>+7%</td>
</tr>
<tr>
<td>South</td>
<td>+4%</td>
<td>+8%</td>
<td>+12%</td>
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<td>+5%</td>
</tr>
<tr>
<td>Northeast</td>
<td>+4%</td>
<td>+10%</td>
<td>+14%</td>
</tr>
<tr>
<td>U.S. Average</td>
<td>+2%</td>
<td>+9%</td>
<td>+10%</td>
</tr>
</tbody>
</table>

Households using electricity as primary heating fuel:
- **West**: 31%
- **South**: 59%
- **Midwest**: 17%
- **Northeast**: 12%
- **U.S.**: 35%
Summary:

- On average, U.S. households will pay about $150 (15%) more for heating this winter.

- Higher expenditures are driven by higher fuel prices and weather-related increases in consumption.

- Under the baseline forecast, natural gas expenditures could be about $155 (18%) higher for the average U.S. household this winter.

- Household heating oil and propane expenditures are projected to be about $450 (23%) and $190 (11%) higher this winter, respectively.

- Electricity expenditures are forecasted to be $90 (10%) higher for the average U.S. household this winter.

- A weaker economy, with a significant downturn in U.S. and/or global economic activity, or warmer weather would reduce estimated expenditures. A colder winter could raise estimated expenditures somewhat from those of the base case weather scenario.