Using propane appliances, you can significantly lower a home’s energy consumption, making it easier to achieve Zero Net Energy (ZNE) goals and deliver premium performance to homeowners. It’s why propane should be a part of every builder’s ZNE strategy.

**THE ZNE HOME**
Produces as much energy as it uses. Builders achieve this by increasing a home’s energy efficiency, then adding renewable energy sources such as solar.

**THE ZNE READY HOME**
Is incredibly energy efficient, and can reach Zero Net Energy status by using propane appliances and adding renewable energy.

**SOURCE ENERGY RATIOS**

<table>
<thead>
<tr>
<th></th>
<th>Units of Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane</td>
<td>1.01</td>
</tr>
<tr>
<td>Electric</td>
<td>2.61</td>
</tr>
</tbody>
</table>

It takes 2.61 units of electricity to produce and deliver one unit of energy to a home, versus just 1.01 for propane. Propane wins hands down.

*This data is based on national averages, it may be different in your area.

**3 WAYS TO LOWER YOUR HERS SCORE**
Focus on the building’s envelope:
1. Insulation quality
2. Insulation quantity
3. Air sealing
4. Window performance
5. House orientation

Include high-efficiency propane appliances:
6. Propane furnace
7. Propane water heating
8. Propane cooking
9. Propane fireplace
10. Propane clothes dryer

Trim other energy use:
11. Energy Star appliances
12. LED lighting
13. Energy monitoring devices

**MEASURING ENERGY USES: SITE VS. SOURCE**

- **Site: LESS ACCURATE**
  Measures only energy used at the house. Doesn’t account for upstream losses or energy production.

- **Source: MORE ACCURATE**
  Measures energy use starting at the source, including the energy required to extract and process fuel.

**PROVEN RESULTS**
Using propane and other strategies including solar cells, this home earns $343 annually selling excess energy.
- 1,912 square feet
- Super insulated
- R-5 triple-pane windows
- 96% efficient propane tankless water heater
- HERS without solar: 94
- HERS with solar: ~21

**OTHER PROPANE BENEFITS**
Propane is not only energy efficient, it lowers first costs and emissions. It is also highly effective in any area of the country for a variety of temperatures.

**FIRST COSTS**
Of high-performance systems:
- Propane Furnace & AC: $11k
- Ground Source Heat Pump (GSHP) Closed Loop: ~$34k

**67% FEWER EMISSIONS**
With a propane tankless water heater compared with electric storage tank models.

**LEARN MORE ABOUT ZNE BUILDING AND PROPANE**
Find out how to achieve your Zero Net Energy goals, and how to lower a home’s HERS score with propane appliances at [Propane.com](http://Propane.com).