For producers, cleaner equipment means longer-lasting equipment. As this new report proves, the emissions reductions of propane are significant for irrigation engines. So, the fuel farmers have relied on for over a century is a better solution than ever.

**METHODOLOGY**

From August 2016 through January 2017, the Propane Education & Research Council contracted the Gas Technology Institute (GTI) to execute a comparative emissions analysis study of targeted applications in key propane markets, including agriculture. The report studied three emissions types: full-fuel-cycle energy consumption, greenhouse gas emissions, and criteria pollutant emissions (NOx, SOx).

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**KEY**

- **SOx**: Sulfur Oxide
- **NOx**: Nitrogen Oxide
- **GHG**: Greenhouse Gases

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**IRRIGATION ENGINES**

Fewer deposits on engine components can extend engine life and reduce maintenance issues. With propane irrigation engines, producers can also be confident that they’re keeping up with environmental regulations.

<table>
<thead>
<tr>
<th></th>
<th>SOx</th>
<th>NOx</th>
<th>GHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTRIC</td>
<td>73%</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>GASOLINE</td>
<td>17%</td>
<td>9%</td>
<td>18%</td>
</tr>
<tr>
<td>DIESEL</td>
<td>20%</td>
<td>8%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Assumed 5.7L engines, 100 horsepower operating 1,039 hours/year.

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**FOR MORE INFORMATION**

For more information on propane irrigation engines, visit [propane.com](http://propane.com).

The Propane Education & Research Council was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.