

# Comparative Cost Savings: Diesel-only vs. eNow Zero-Emission Trailer Options



## DATA SUMMARY

|  | Diesel Only     | 53' Trailer Refrigerated: Diesel with Electric Standby with Battery + Shorepower |                  | 53' Trailer Refrigerated: All Electric System with Solar (5.5kW) + Battery + Shorepower |                  | 53' Trailer Refrigerated: All Electric System with eAxle + Battery + Shorepower |                  |
|--|-----------------|--|------------------|---|------------------|---|------------------|
| <b>Total Gross Equipment Cost</b>                          | <b>\$91,311</b> | <b>\$140,811</b>   |                  | <b>\$185,811</b>  |                  | <b>\$160,811</b>  |                  |
| <b>Potential Grants</b>                                    | <b>0</b>        | <b>NO DERA</b>   |                  | <b>WITH DERA</b>  |                  | <b>NO DERA</b>  |                  |
| <b>Total Grant Incentives</b>                              | <b>0</b>        | <b>0</b>   | <b>38,202</b>    | <b>0</b>  | <b>86,614</b>    | <b>0</b>  | <b>75,364</b>    |
| <b>Net Equipment Cost</b>                                  | <b>91,311</b>   | <b>140,811</b>   | <b>102,608</b>   | <b>185,811</b>  | <b>99,196</b>    | <b>160,811</b>  | <b>85,446</b>    |
| <b>Total Monthly Cost</b>                                  | <b>3,030</b>    | <b>2,950</b>   | <b>2,445</b>     | <b>2,871</b>  | <b>1,727</b>     | <b>2,433</b>  | <b>1,437</b>     |
| <b>Total Annual Savings</b>                                | <b>0</b>        | <b>5,754</b>   | <b>11,812</b>    | <b>9,099</b>  | <b>22,835</b>    | <b>15,150</b>   | <b>27,102</b>    |
| <b>Est Customer Savings Over Contract</b>                  | <b>0</b>        | <b>\$57,540</b>  | <b>\$118,122</b> | <b>\$90,999</b>   | <b>\$228,354</b> | <b>\$151,506</b>  | <b>\$271,020</b> |
| <b>Savings as Percentage of Total Gross Equipment Cost</b> | <b>0</b>        | <b>41%</b>   | <b>84%</b>       | <b>49%</b>  | <b>123%</b>      | <b>94%</b>  | <b>169%</b>      |

## DETAILS

| 53' Trailer Refrigerated Diesel Only              |                     |             | 53' Trailer Refrigerated Diesel with Electric Standby with Battery + Shorepower |                      |                      | 53' Trailer Refrigerated All Electric System with Solar (5.5 kW) + Battery + Shorepower |   |                     | 53' Trailer Refrigerated All Electric System with eAxle + Battery + Shorepower |                      |   |           |                      |                      |
|---|---------------------|-------------|---|----------------------|----------------------|---|---|---------------------|--|----------------------|---|-----------|----------------------|----------------------|
| Route Hours Operation per Day                     | 10.0                | Hrs.        | Route Hours Operation per Day   | 10.0                 | Hrs.                 | Route Hours Operation per Day   | 10.0  | Hrs.                | Route Hours Operation per Day  | 10.0                 | Hrs.  |           |                      |                      |
| TRU Fuel Consumption - Average Per Hour           | 1.00                | Gal/Hr.     | TRU Fuel Consumption - Average Per Hour Hybrid                                  | 0.50                 | Gal/Hr.              | TRU Electric Usage - Per Hour   | 6.65  | kW                  | TRU Electric Usage - Per Hour  | 6.65                 | kW  |           |                      |                      |
| TRU Fuel Consumption - Total                      | 10.00               | Gallons     | TRU Fuel Consumption - Total  | 5.00                 | Gallons              | TRU Electric Consumption - Total  | 66.50   | kWh                 | TRU Electric Consumption - Total   | 66.50                | kWh   |           |                      |                      |
| Fuel Cost per Usage Unit                          | \$ 3.28             | Per Gal     | Fuel Cost per Usage Unit  | \$ 3.28              | Per Gal              | Solar Generation per Daily Route  | (24.00)   | kWh                 | E-Axle Average Generation per Hour   | 5                    | kWh/h   |           |                      |                      |
| Fuel Cost - Route                                 | \$ 32.80            | Fuel Cost   | TRU Electric Usage  | \$ 32.25             | kWh                  | Electric Cost per Usage Unit  | \$ 0.14   | kWh - CA            | E-Axle Generation per Daily Route  | (50.00)              | kWh   |           |                      |                      |
|   |                     |             | Electric Cost per Usage Unit  | \$ 0.14              | kWh - CA             | Electric Cost - Route   | \$ 5.87   | Kw Cost             | Electric power from Battery Shore Power  | 16.00                | kWh   |           |                      |                      |
|   |                     |             | Fuel Cost - Route   | \$ 16.40             | Fuel Cost            |   |   |                     | Electric Cost per Usage Unit   | \$ 0.14              | kWh - CA  |           |                      |                      |
|   |                     |             | Electric Cost - Route   | \$ 4.66              | Kw Cost              |   |   |                     | Electric Cost - Route  | \$ 2.31              | Kw Cost   |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| <b>Maintenance cost per Hour</b>                  | <b>\$ 1.50</b>      |             | <b>Maintenance cost per Hour</b>  | <b>\$ 1.00</b>       |                      | <b>Maintenance cost per Hour</b>  | <b>\$ 0.50</b>                                  |                     | <b>Maintenance cost per Hour</b>   | <b>\$ 0.50</b>       |   |           |                      |                      |
| Total Maintenance Cost - (Route Hours)            | \$ 15.00            | Maintenance | Total Maintenance Cost - (Route Hours)  | \$ 10.00             | Maintenance          | Total Maintenance Cost - (Route Hours)  | \$ 5.00   | Maintenance         | Total Maintenance Cost - (Route Hours)   | \$ 5.00              | Maintenance                                     |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| In-Yard or Dock Hours Operation                   | 2                   | Hrs.        | In-Yard or Dock Hours Operation   | 2                    | Hrs.                 | In-Yard or Dock Hours Operation   | 2   | Hrs.                | In-Yard or Dock Hours Operation  | 2                    | Hrs.  |           |                      |                      |
| Fuel Consumption - Average Per Hour               | 1.00                | Gal/Hr.     | Electric Usage - Per Hour   | 6.65                 | kW                   | Electric Usage - Per Hour   | 6.65  | kW                  | Electric Usage - Per Hour  | 6.65                 | kW  |           |                      |                      |
| Fuel Consumption - Total                          | 2.00                | Gallons     | Electric Consumption - Total  | 13.30                | kWh                  | Electric Consumption - Total  | 13.30   | kWh                 | Electric Consumption - Total   | 13.30                | kWh   |           |                      |                      |
| Fuel Cost per Usage Unit                          | \$ 3.28             | Per Gal     | Electric Cost per Usage Unit  | \$ 0.14              | kWh - CA             | Electric Cost per Usage Unit  | \$ 0.14   | kWh - CA            | Electric Cost per Usage Unit   | \$ 0.14              | kWh - CA  |           |                      |                      |
| Fuel Cost - Dock                                  | \$ 6.56             | Fuel Cost   | Electric Cost - Dock  | \$ 1.86              | Kw Cost              | Electric Cost - Dock  | \$ 1.86   | Kw Cost             | Electric Cost - Dock   | \$ 1.86              | Kw Cost   |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| Maintenance cost per Hour                         | \$ 1.50             | Included    | Maintenance cost per Hour   | \$ 1.50              | Included             | Maintenance cost per Hour   | \$ 0.50   | Included            | Maintenance cost per Hour  | \$ 0.50              | Included  |           |                      |                      |
| Total Maintenance Cost (Dock Hours)               | \$ 3.00             | Maintenance | Total Maintenance Cost (Dock Hours)   | \$ 3.00              | Maintenance          | Total Maintenance Cost (Dock Hours)   | \$ 1.00   | Maintenance         | Total Maintenance Cost (Dock Hours)  | \$ 1.00              | Maintenance                                     |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| Total Fuel Cost per Day (Route + Dock)            | \$ 39.36            | Fuel Cost   | Total Electric Cost per Day (Route + Dock)                                      | \$ 6.52              | Kw cost              | Total Electric Cost per Day (Route + Dock)  | \$ 7.73   | Kw cost             | Total Electric Cost per Day (Route + Dock)                                     | \$ 4.17              | Kw cost   |           |                      |                      |
| Total Cost per Day (Fuel + Maintenance)           | \$ 57.36            |             | Total Cost per Day (Fuel + Electric + Maintenance)                              | \$ 35.92             |                      | Total Cost per Day (Electric + Maintenance)   | \$ 13.73  |                     | Total Cost per Day (Electric + Maintenance)                                    | \$ 10.17             |   |           |                      |                      |
| Operational Days per Week                         | 7                   |             | Operational Days per Week   | 7                    |                      | Operational Days per Week   | 7   |                     | Operational Days per Week  | 7                    |   |           |                      |                      |
| Total Cost per Week                               | \$ 401.52           |             | Total Cost per Week   | \$ 251.42            |                      | Total Cost per Week   | \$ 96.10  |                     | Total Cost per Week  | \$ 71.20             |   |           |                      |                      |
| <b>Total Operating Cost per Month</b>             | <b>\$ 1,739.92</b>  |             | <b>Total Operating Cost per Month</b>   | <b>\$ 1,089.48</b>   |                      | <b>Total Operating Cost per Month</b>   | <b>\$ 416.42</b>                                |                     | <b>Total Operating Cost per Month</b>  | <b>\$ 306.55</b>     |   |           |                      |                      |
| Cost per Year                                     | \$ 20,879.04        |             | Cost per Year   | \$ 13,073.79         |                      | Cost per Year   | \$ 4,999.99                                     |                     | Cost per Year  | \$ 3,702.61          |   |           |                      |                      |
| Diesel Fuel Gallons Used per Year                 | 4,380               | Gallons     | Diesel Fuel Gallons Used per Year   | 1,825                | Gallons              | kWh of Shore Power Electricity Used per Year  | 20.148  | kWh                 | kWh of Shore Power Electricity Used per Year                                   | 10.877               | kWh   |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| Insulated Trailer Cost                            | \$ 64,311.00        |             | Refrigerated Trailer Cost   | \$ 64,311.00         |                      | Refrigerated Trailer Cost   | \$ 64,311.00                                    |                     | Refrigerated Trailer Cost  | \$ 64,311.00         |   |           |                      |                      |
| TRU Cost - Diesel Only                            | \$ 27,000.00        |             | TRU Cost - Diesel w/Electric Standby  | \$ 32,500.00         |                      | TRU Cost - All Electric   | \$ 24,500.00                                    |                     | TRU Cost - All Electric  | \$ 24,500.00         |   |           |                      |                      |
| eNow System Cost                                  | NA                  |             | eNow System Cost (40 kWh Battery)   | \$ 37,000.00         |                      | eNow System Cost (Solar + 80 kWh Battery)   | \$ 90,000.00                                    |                     | eNow System Cost (40 kWh Battery + eAxle)                                      | \$ 65,000.00         |   |           |                      |                      |
| Installation Costs                                | Included            |             | Installation Costs  | Included             |                      | Installation Costs  | Included  |                     | Installation Costs   | Included             |   |           |                      |                      |
| Charging System Cost per Unit                     | NA                  |             | Charging System Cost per Unit   | \$ 7,000.00          |                      | Charging System Cost per Unit   | \$ 7,000.00                                     |                     | Charging System Cost per Unit  | \$ 7,000.00          |   |           |                      |                      |
| <b>Total Gross Equipment Cost</b>                 | <b>\$ 91,311.00</b> |             | <b>Total Gross Equipment Cost</b>   | <b>\$ 140,811.00</b> |                      | <b>Total Gross Equipment Cost</b>   | <b>\$ 185,811.00</b>                            |                     | <b>Total Gross Equipment Cost</b>  | <b>\$ 160,811.00</b> |   |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| <b>Potential Grants</b>                           |                     |             | <b>Potential Grants</b>   |                      |                      | <b>Potential Grants</b>   |   |                     | <b>Potential Grants</b>  |                      |   |           |                      |                      |
| TRU Grants  | NA                  |             | DERA TRU Grants   | 25%                  | \$ 35,202.78         | DERA TRU Grants   | 45%   | \$ 83,614.95        | DERA TRU Grants  | 45%                  | \$ 72,364.95                                    |           |                      |                      |
| Pedestal Grants                                   | NA                  |             | Pedestal Grants   | \$ -                 | \$ 3,000.00          | Pedestal Grants   | \$ -  | \$ 3,000.00         | Pedestal Grants  | \$ -                 | \$ 3,000.00                                     |           |                      |                      |
| <b>Total Incentives</b>                           | <b>NA</b>           |             | <b>Total Incentives</b>   | <b>\$ -</b>          | <b>\$ 38,202.78</b>  | <b>Total Incentives</b>   | <b>\$ -</b>                                     | <b>\$ 86,614.95</b> | <b>Total Incentives</b>  | <b>\$ -</b>          | <b>\$ 75,364.95</b>                             |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| <b>Net Equipment Cost</b>                         | <b>\$ 91,311.00</b> |             | <b>Net Equipment Cost</b>   | <b>\$ 140,811.00</b> | <b>\$ 102,609.22</b> | <b>Net Equipment Cost</b>   | <b>\$ 185,811.00</b>                            | <b>\$ 99,196.05</b> | <b>Net Equipment Cost</b>  | <b>\$ 160,811.00</b> | <b>\$ 85,446.05</b>                             |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| <b>Estimated Monthly Payment (7 Year Term)</b>    | <b>\$1,290.58</b>   |             | <b>Estimated Monthly Payment (10 Year Term)</b>                                 | <b>\$1,860.83</b>    | <b>\$1,355.98</b>    | <b>Estimated Monthly Payment (10 Year Term)</b>   | <b>\$2,455.51</b>                               | <b>\$1,310.88</b>   | <b>Estimated Monthly Payment (10 Year Term)</b>                                | <b>\$2,125.13</b>    | <b>\$1,129.18</b>                               |           |                      |                      |
| Total Monthly Operating Cost (Fuel + Maintenance) | \$ 1,739.92         |             | Total Monthly Operating Cost (Fuel + Electric + Maintenance)                    | \$ 1,089.48          | \$ 1,089.48          | Total Monthly Operating Cost (Electric + Maintenance)                                   | \$ 416.42                                       | \$ 416.42           | Total Monthly Operating Cost (Electric + Maintenance)                          | \$ 306.55            | \$ 306.55                                       |           |                      |                      |
| <b>Total Monthly Cost</b>                         | <b>\$ 3,030.50</b>  |             | <b>Total Monthly Cost</b>   | <b>\$ 2,990.31</b>   | <b>\$ 2,445.46</b>   | <b>Total Monthly Cost</b>   | <b>\$ 2,871.92</b>                              | <b>\$ 1,727.30</b>  | <b>Total Monthly Cost</b>  | <b>\$ 2,433.66</b>   | <b>\$ 1,437.73</b>                              |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| <b>Customer Monthly Savings</b>                   | <b>NA</b>           |             | <b>Estimated Customer Monthly Savings</b>                                       | <b>\$ 80.19</b>      | <b>\$ 585.04</b>     | <b>Estimated Customer Monthly Savings</b>   | <b>\$ 158.58</b>                                | <b>\$ 1,303.20</b>  | <b>Estimated Customer Monthly Savings</b>                                      | <b>\$ 596.82</b>     | <b>\$ 1,992.77</b>                              |           |                      |                      |
| <b>Estimated Customer Annual Savings</b>          | <b>NA</b>           |             | <b>Estimated Customer Annual Savings</b>  | <b>\$ 962.30</b>     | <b>\$ 7,020.52</b>   | <b>Estimated Customer Annual Savings</b>  | <b>\$ 1,902.95</b>                              | <b>\$ 15,638.43</b> | <b>Estimated Customer Annual Savings</b>                                       | <b>\$ 7,161.86</b>   | <b>\$ 19,113.30</b>                             |           |                      |                      |
| <b>LCFS Credits (Low Carbon Fuel Standards)</b>   | <b>NA</b>           |             | <b>LCFS Credits (Low Carbon Fuel Standards)</b>                                 | <b>\$ 4,791.77</b>   | <b>\$ 4,791.77</b>   | <b>LCFS Credits (Low Carbon Fuel Standards)</b>   | <b>\$ 7,197.04</b>                              | <b>\$ 7,197.04</b>  | <b>LCFS Credits (Low Carbon Fuel Standards)</b>                                | <b>\$ 7,988.78</b>   | <b>\$ 7,988.78</b>                              |           |                      |                      |
| <b>Total Annual Savings</b>                       | <b>NA</b>           |             | <b>Total Annual Savings</b>   | <b>\$ 5,754.07</b>   | <b>\$ 11,812.29</b>  | <b>Total Annual Savings</b>   | <b>\$ 9,099.99</b>                              | <b>\$ 22,835.47</b> | <b>Total Annual Savings</b>  | <b>\$ 15,150.64</b>  | <b>\$ 27,102.08</b>                             |           |                      |                      |
|   |                     |             |   |                      |                      |   |   |                     |  |                      |   |           |                      |                      |
| <b>Customer Savings Over Contract</b>             | <b>8</b>            | <b>NA</b>   | <b>Estimated Customer Savings Over Contract</b>                                 | <b>10</b>            | <b>\$ 57,540.65</b>  | <b>\$ 118,122.91</b>  | <b>Estimated Customer Savings Over Contract</b> | <b>10</b>           | <b>\$ 90,999.93</b>  | <b>\$ 228,354.68</b> | <b>Estimated Customer Savings Over Contract</b> | <b>10</b> | <b>\$ 151,506.42</b> | <b>\$ 271,020.82</b> |
| Annual Carbon Footprint (MT CO2)                  | 45                  |             | Annual Carbon Footprint Savings (MT CO2)  | 24                   | 24                   | Annual Carbon Footprint Savings (MT CO2)  | 36  | 36                  | Annual Carbon Footprint Savings (MT CO2)                                       | 40                   | 40  |           |                      |                      |