Wisconsin Propane Autogas Answers

Wisconsin Clean Cities & Wisconsin Propane & Education Research Council

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David R. Hagopian
VP Operations
Advanced VTech
Advanced VTech
Advanced Vehicle Technology Services

- Advanced VTech (for short)
- We are a full service auto and truck maintenance organization specializing in:
  - General vehicle maintenance and repair
  - Commercial fleet maintenance services
  - Complete Alternative Fuel Services
    - CNG & LPG Installation
    - CNG & LPG Maintenance
    - Fuel System Inspections
Propane AutoGas

Liquified Petroleum Gas (Propane, LPG, or AutoGas)
Propane, LPG, or AutoGas

- Formula C3H8.
- Byproduct of petroleum refinement.
- Extensive distribution system, especially in rural areas.
- Lower emissions (20% less than Gasoline engines).
- On average $1 to $2 per gallon less in cost than Gasoline.
- Fueling tank and pump often provided by LPG supplier (for onsite fueling of vehicles).
Propane System
Quality and Skill of Installation
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Define Parameters for Successful Applications

1. Compliant with Safety & Environmental Regulations
2. Must not negatively impact vehicle performance
3. Lower operating or maintenance costs
4. Decrease emissions footprint
Compliant with Safety & Environmental Regulations

1. Department of Transportation (Tanks)
2. National Fire Protection Association (58)
3. US EPA / California Air Resources Board Certified
Vehicle Performance

1. Bi-Fuel Systems
2. Computer Controlled Systems or Performance Proven
3. Experience matters
Operating Savings
Operating Savings

- **Service Life:** 2014-2018 Schaumburg, IL Police Department
- **Driven:** 126,500 miles
- **Engine Idle Time:** 13,700 hours
- **Engine Drive Time:** 4,500 hours
- **Gasoline used at idle:** 5,100
- **Gasoline used while driving:** 7,900
Operating Savings (continued)

- USEIA Weekly 7-15-19: $2.82/gal for gasoline
- $2.99/gal is what currently the low price in the northern Chicagoland area.
- Northern Illinois propane suppliers offer LPG at about half the cost of gasoline.
- End of year tax credit is $0.37/gal for propane fuel use.
- 80% displacement of gasoline (energy content and warm up)
Operating Savings (continued)

10,400 gallons of gasoline displaced with **propane** at a savings of $1.87 per gallon, resulting in $19,450 savings over four years or $4,850 per year.
Why Propane?

• Propane fuel used since WWII.
• Propane fuels are being used by Police fleets across the nation.
• Fleets around the world have converted almost every vehicle platform.
• Cost savings are measurable and significant.
• Technology is currently being used in the Chicagoland Area.
Alternative Fuels Education

- Technician Internship
- University Outreach
Alternative Fuels Education
Alternative Fuels Education
• Thank you for your time!
• David Hagopian
• David@AdvancedVTech.com
• 847-777-5000