



## White Paper on Green Fleets

The Municipal Fleet Managers Association is considering opportunities to expand the use of alternative fuels in public fleets. Our association held a forum in July 2017 to discuss objectives, opportunities, and barriers to more sustainable fleets. This white paper summarizes key points about public sector issues related to 'green fleets'.

There is overall strong interest in green fleets that are more sustainable than traditional petroleum-fueled fleets. Greening public fleets would entail switching to alternative fuels as well as efficiencies in the use of petroleum fuel. The desire to demonstrate a sustainable public fleet must be balanced with financial and operational constraints.

### Key issues

#### **Environmental Issues:**

Reducing emissions from cleaner fuels and reducing petroleum consumption are common sustainability goals for local governments. Municipalities have the greatest opportunity to address these goals by greening their own public fleets.

The environmental features of green fleets have considerable value to local governments.

#### **Operational Issues- Municipal**

Keeping public service vehicles operating on schedule and on task is of paramount importance. Public health and safety is dependent upon the reliable service of public fleets. Alternative fuel technologies must not compromise expectations of fleet performance.

Some alternate fuel vehicles require different service intervals; different service tools and equipment; process changes; and other logistical considerations. Training and support can help manage these needed adjustments for alternate fuel technologies.

Maintenance facilities may require adaptations for public and fire safety when servicing CNG or propane vehicles.

Fleet managers who adopt cleaner fuel technologies must be protected with sufficient after-market support and

warranties to ensure vehicle reliability and ‘up-time’.

### **Operational Issues - Regional**

Anticipated growth in the network of third party refueling stations would reduce range anxiety when public fleet vehicles are away from home base. Municipalities could collaborate with private-sector fleet operators to better cover regional alternative fueling infrastructure needs.

Public fleet operators are unlikely to invest in the costlier alternative fueling (i.e. CNG) stations for their own fleets. Collaborative CNG ventures anchored by large, private fleets that can achieve a favorable ROI are more likely to successfully grow public sector green fleets.

Bi-fuel vehicles that use either alternative fuels or gasoline and plug-in hybrid electric vehicles can also overcome current fueling infrastructure gaps.

### **Public Awareness:**

Because public fleets are branded, highly-visible and associated with essential public service, they present a unique opportunity to demonstrate sustainable alternate fuel solutions. Greening public fleets will have equitable and broad impacts across the region. Environmental benefits will be enjoyed within communities as well as regionally.

### **Financial Issues:**

Alternative fuel investments achieve a favorable return on investment (ROI) when fuel costs are lower than gasoline and fuel consumption is relatively high. Most municipal vehicles have relatively low annual mileage and fuel consumption, which makes achieving a favorable ROI challenging.

Alternative fuel vehicles are more expensive than traditional gasoline or diesel vehicles. The aim is to recover this incremental cost over time with savings in alternative fuels and fuel efficiency improvements.

Grants and incentives are critical to overcome these financial barriers to greener public fleets. Accessible, tailored programs that can close the incremental cost gap are essential.

Programs that offer point-of-sale financial assistance, such as vouchers, will be most successful.

### **Recommendations**

Many of these key issues are market-dependent and others are best addressed by local governments themselves. However regional study and planning would address many of these issues. The MFMA would support a comprehensive regional study that assesses opportunities and needs for a viable alternate fuel industry that would serve municipalities.

1. This proposed regional study should:
  - a. Analyze potential aggregate regional demand for alternate fuels by both private and public fleets;
  - b. Analyze and recommend best fuel choices for public sector fleets;
  - c. Analyze and identify alternative fuel infrastructure types and locations that will serve public and private fleets; and
  - d. Conduct municipal fleet assessments to guide public sector decision-making;
2. Beyond adding to regional knowledge, municipal fleet assessments would help municipal fleet managers evaluate green fleet opportunities and understand operational changes needed. Further technical assistance, education and case studies are also needed.

The MFMA also recommends these solutions to advance green fleets:

3. Communication networks that serve municipal leaders, municipal administrators, and municipal fleet managers should be connected to state and regional decision-makers to enable more sharing of data and green fleet information.
4. Councils of governments and other partners could offer collaborative programs to aggregate demand for alternate fuel and assist with procurement.
5. Aggregating fuel demands among public and private fleets will make regional fueling sites more viable. Fuel suppliers should consider aggregated demand when planning investments in fueling stations.

#### **About the Municipal Fleet Managers Association (MFMA)**

*The MFMA began as an informal network for municipal fleet managers to share information and learn from one another. In 1993 it was incorporated as a non-profit professional organization. MFMA's intent is to promote cost effective fleet management policies, procedures and techniques among members through technical and managerial education and training. Information on current products is exchanged through vendor contact. Specific problems concerning government fleet operations is shared by members at monthly meetings. MFMA membership is open to all qualified individuals who are involved in the management or maintenance of a government fleet.*

The Municipal Fleet Managers Association invites partners to assist and invest in greener municipal fleets. The MFMA Executive Director is Jack Gray [jackgray500@att.net](mailto:jackgray500@att.net)

#### **About the Metropolitan Mayors Caucus (MMC)**

*The Metropolitan Mayors Caucus is a membership organization of the Chicago region's 275 cities and villages. Founded in 1997 by then Chicago Mayor Richard M. Daley and leading mayors from nine suburban municipal groups, the Metropolitan Mayors Caucus pushes past geographical boundaries and local interests to work on public policy issues. The Caucus provides a forum for metropolitan Chicago's chief elected officials to collaborate on common problems and work toward a common goal of improving the quality of life for the millions of people who call the region home.*

The Mayors Caucus partners with MFMA on green fleet issues. Municipal members, common to both organizations, have formally adopted goals supporting green fleets through its [Greenest Region Compact](#). Contact Edith Makra, Director of Environmental Initiative, [emakra@mayorscaucus.org](mailto:emakra@mayorscaucus.org)