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INSIDE

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Bringing fleet operations back in-house

Movement to EVs continues



Driving EV Adoption through Fleet Automation

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The transition toward sustainable transportation has gained significant momentum in recent years, and electric vehicles (EVs) stand at the forefront of this shift. Organizations across the globe are recognizing the long-term environmental and economic benefits of EVs, and many are now exclusively adopting EVs for their fleets. The transition to EVs is not without its challenges, however. As with any forward-looking change in the industry, the adoption of EVs in fleet operations can lead to pushback, and fleet managers must have a nuanced understanding of both the barriers to adoption and the innovative solutions that fleet automation can provide.

Leading the charge: Organizations embracing EVs

A growing number of government entities across the nation are spearheading the transition to EVs, exemplifying their commitment to environmental stewardship and innovation. For example, the city of Los Angeles has

set an ambitious goal to convert its entire municipal fleet to EVs by 2028, a move that underscores the city's dedication to reducing emissions and promoting sustainable urban development. Similarly, the city of New York has plans to transition to an all-electric municipal fleet by 2040. These examples from

ABOVE: A lagging charging network infrastructure and a lack of standardization in charging systems can add to resistance when adopting EVs; however, guided policy adoptions can ease this challenge. (Photo provided)

municipal governments not only set a powerful example for other cities but also highlight the practical, long-term economic and environmental advantages of incorporating EVs into public sector operations. This shift demonstrates how government institutions can play a crucial role in fostering sustainable transportation solutions.

Understanding the barriers to EV adoption

Despite the growing enthusiasm for electric vehicles, several roadblocks have historically hindered their widespread adoption in fleet operations. Opposition to EV adoption often revolves around a few key issues:

driver unfamiliarity with EV technology and "range anxiety," that is, the fear of insufficient EV battery life and the perception that the nation's battery-charging infrastructure is lacking (especially in rural areas). These technical and logistical concerns often breed resistance among drivers and other fleet staff, and thus hinder the full-scale adoption of EVs.

Adding to these challenges is a lagging charging network infrastructure and a lack of standardization in charging systems. This disparity in charging connectors and power requirements not only causes confusion among potential EV users but also limits the interoperability between different EV models and charging stations. Such inconsistencies can lead to situations where drivers find themselves without a place to plug in or at incompatible charging stations, a reality that exacerbates both range anxiety and overall driver resistance to full EV adoption. These obstacles highlight the complexity of the transition to electric vehicles, making fleet managers' understanding of these issues as imperative as the EVs themselves.

Fleet automation as a solution

As with any management decision, plans for your organization's EV rollout should be made leveraging information rather than instinct. A Fleet Management Information System (FMIS) platform should provide fleet managers with many of the data points needed to make the rollout of EVs a success. For example, charging infrastructure and charging stations should intuitively be placed in areas with the greatest vehicle demand. However, this demand must be considered in conjunction with requested vehicle types and trips that can be sustained by available EVs. With the right reporting from your FMIS, fleet leaders can determine which dispatch locations see the most short-mileage trips for light-duty vehicles and choose to aggregate EV assets and charging resources in these locations.

Another way that organizations can utilize automation to encourage EV use is through automated electric vehicle assignment. Advanced fleet management information systems, such as Agile Fleet's FleetCommander, can help fleet managers identify and allocate EVs for appropriate trips, such as short-distance urban

Utilization by Asset Report

Day of Month	19	20	21	22	23	24	25	26	
	T	W	R	F	S	S	М	Т	Average
Hybrid	100	100	100	67	67	67	100	100	87.5
Subcompact	64	50	36	43	43	43	57	64	50
Midsize/Standard	67	68	64	64	57	55	67	68	63.73
7 person Mini Van	59	59	59	54	51	51	49	51	53.96
8 Person Pass Van	22	28	39	39	33	28	22	22	29.17
12 Person Pass Van	30	40	10	70	60	10	20	30	33.75
Pickup Truck	63	63	63	63	63	63	67	67	63.54
SUV	100	100	100	100	100	100	100	100	100
Average	59	59	56	58	54	50	56	58	56.22

FleetCommander's report engine allows fleet managers to slice data by usage type, pool location, asset classes, trip type and more. These reports help with planning charging infrastructure, placing vehicle assets and understanding barriers to driver adoption. (Photo provided)

trips, where their efficiency is maximized. Moreover, fleet managers can adopt and implement policies that mandate the use of EVs for specific types of trips, a strategy that would undoubtedly have a positive impact on the adoption of EVs. This approach can particularly be effective in government fleets, where adherence to policy is closely monitored and enforced. Platforms like FleetCommander build in policy communication and enforcement, ensuring drivers agree to current policies before getting behind the wheel.

Another integral component of successful EV integration is in driver preparedness and acceptance. Fleet automation tools like FleetCommander address this need by providing built-in communication tools to share training and resources, especially when drivers are assigned an EV for the first time. This proactive educational approach helps mitigate driver apprehension and enhances overall fleet efficiency. Additionally, systems like FleetCommander utilize data analytics to identify instances where EVs are suitable but not selected, data that can guide both real-time policy adjustments and future vehicle procurement decisions.

The role of data collection and analysis in the transition to EV adoption cannot be overstated. Automated systems like Fleet-Commander can generate customizable reports that aid in determining EVs' utility in helping an organization comply with

various regulations and standards related to emissions and fuel usage. This feature is crucial for maintaining transparency and accountability in both government and private operations.

The road ahead: Realizing the potential of EVs in fleets

Looking ahead, experts in the field anticipate a continued increase in EV adoption, with commitments from municipalities throughout the U.S. to fully transition to fully electric fleets by 2035 (or sooner). Innovations in battery technology, along with recharging infrastructure development, government incentives, and growing environmental awareness, are expected to continue driving this trend. Organizations that adopt EVs in their fleets are not only contributing to a greener planet but are also likely to see long-term economic benefits due to lower operating costs.

The journey toward widespread EV adoption in fleet operations is filled with both promise and challenges. However, through the strategic application of fleet automation, these challenges can be effectively overcome. By integrating innovative technology, such as FleetCommander, with thoughtful policies and focused driver training, organizations can make significant strides toward a more sustainable and efficient future. The future of fleet management is electric, and with the right tools and strategies, it is well within reach.