Introduction

In the past decade, the electric vehicle (EV) market has seen double digit sales growth, solidified its status as a permanent presence in the automotive industry and has become a polarizing topic on a local, national and global level. Within the automotive remarketing industry, the EV market is driven by usual factors seen in the industry such as seasonality, oil prices and residual values. However, government regulations, tax incentives and population migration are other factors to be aware of when it is time to develop remarketing strategies around EV inventory. Understanding the trends and creating the appropriate wholesale selling strategy will become more important than ever as EV sales are estimated to become 25% of all sales by 20251.

Executive Summary

Key recommendations for electric vehicle wholesale strategy:
- Understand the effect of federal and state tax incentives. California, Washington and Colorado still have robust state programs that can dictate remarketing strategies.
- Recognize opportunities to release inventory pressure such as Norway and Ukraine, which have implemented government programs incentivizing the use of plug-in electric vehicles (PEV).

Recommendation 1: Understanding the Effect of Federal Tax Incentives

As an incentive to stimulate adoption of alternative energy, the American Clean Energy and Security Act of 2009 established tax credits for PEVs that can total $7,500 depending on battery size. This federal incentive will be available to all PEV vehicles until the manufacturer has produced 200,000 qualifying vehicles across all models in the United States. Using data provided by LMC Automotive, current sales numbers have Nissan leading with 83,000 sales of PEVs (Figure 1). However, Tesla Motors and General Motors will reach the 200,000 vehicle mark before Nissan (Figure 2) with their tax credits projected to expire in 2018 and their expanding models debuting in the next few years2.

Figure 1

![Sales Through 2015HY](chart.png)

While the federal tax credit helped create strong new car sales for the electric vehicle market, it did create issues further along the lifecycle of the unit. For instance, consumers that leased units were able to reap the benefits of the $7,500 tax credit because dealerships applied the credit to the lease price. This created a large gap between the

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2. According to US Automotive Sales Forecast provided by LMC Automotive
The large percentage of lease returns has been further exasperated due to state governments incentivizing PEV buyers. At its peak, all but 27 states offered some form of an incentive, including credits in some states as high as $6,000. By July 2015, most incentives expired or were eliminated by state assemblies. Only California, Washington and Colorado still have robust, evolving programs that provide large incentives to buyers.

As these state and federal incentives are phased out over the next five years, the wholesale market for electric vehicles will stabilize with more consistent pricing and behaviors. However, in the interim, there are still remarketing strategies that consignors can utilize to maximize their return on PEVs. While the majority of states have abandoned tax credit programs, California and Washington still offer programs to PEV buyers that either purchase a unit worth less than $35,000 (Washington) or have a salary less than $250,000 (California). The effects of these recently passed laws are not yet known, but it potentiallyopens up the used PEV market in those states for higher-end units such as the Tesla Model S, Cadillac ELR and Chevrolet Volt. These units will not qualify for tax credits due to their MSRP or the average salary of the buyer and could drive PEV buyers to find the best value in the used market.

Colorado is another state with great potential for used electric vehicles as it is the only state that defines a “new” unit as a vehicle that has not previously been registered in the state. That opens up opportunities for consignors to bring PEVs from other states to Colorado where buyers can still receive a $6,000 tax credit on a used unit. Any opportunity a consignor has to market their units as federal or state tax credit eligible will immediately boost the value of the unit at auction. However, monitoring demand will become imperative as flooding the market will only hurt the return consignors can realize.

**Recommendation 2: Recognize Opportunities to Release Inventory Pressure**

Federal and state tax incentives are one of the main reasons lease penetration for PEVs is much higher than traditional cars (75% vs. 28%), thus creating an inventory management issue for OEM or Captive Finance partners. With such a higher number of lease returns for PEVs creating a glut of inventory in the market, consignors must think globally when considering ways to release inventory pressure. The U.S. is not the only country that has incentivized the growth of the EV market and there are pockets of demand placed around the world. However, the factors driving the global demand are different than domestic drivers – primarily geo-political situations and population migration.

Many countries in Europe and Asia provide incentives in the form of lowered road, registration or fuel consumption taxes. Geo-political situations in Norway and Ukraine, both driven by oil independence, have spawned the creation of large incentives for electric vehicles. Lost in the military and political drama of Ukraine and Russia’s dispute over Crimea has been Ukraine’s initiative to become less dependent on Russian oil. A solution devised by Ukraine was to
eliminate all tariffs on electric vehicles coming into the country in order to drive adoption, thus lessening their
dependence on oil. Most European countries are unable to eliminate import tariffs because European Union (EU)
agreements set automotive import tariffs at 10%. However, because Ukraine is not a full member of the EU, they have
autonomy over their own tariffs for imports. This 10% reduction in cost to export PEVs to Ukraine has immediately
created a market where consignors can leverage Manheim GlobalTrader, a worldwide gateway to North American
vehicle auctions and international shipping, and enjoy greater profit margins than they would elsewhere. In fact, 20%
of PEVs exported in the last 18 months went through Odessa in the Ukraine4.

Recently it was announced that Tesla Motors’ Model S is the second most sold vehicle in Norway and that the tiny
country is in tough competition with China to become the U.S.-based company’s second largest market5. This is a
remarkable stat for a country with only five million citizens. In the late 1960s, oil was discovered off the coast of
Norway and quickly became their largest export. Realizing the benefit of exporting this valuable product versus
consuming it domestically, the Norwegian government socialized the industry and put in place measures to ensure they
maximized profits from their valuable export. It quickly implemented green programs that eventually grew Norway to
being primarily powered by hydro-electricity as well as its citizens being incentivized to drive electric vehicles. The
incentives for citizens to buy electric are so robust that PEV prices are competitive and sometimes cheaper than
traditional combustion engine cars. According to Gronn Bil, a project aimed at lowering the CO2 footprint of road
transportation, dedicated tax subsidies such as toll exemption, free parking and other benefits are worth nearly $3,500
annually to the buyer6. While these tax subsidies seem unsustainable and talk exists of step-wise lowering of the Value
Added Tax (VAT) benefit, Norway is one of the most socialized countries in the world, leading us to believe that the
benefits will always be available for consumers in some form. Considering Norway is the second wealthiest country in
the world and has a nearly $1 trillion Sovereign Wealth Fund, they also have the money to fund these subsidies.

Ukraine and Norway have not gone unnoticed by stateside exporters of electric vehicles. In the past 18 months, 20% of
EV exports had a destination port of Odessa, Ukraine while 57% of 2014 exports were destined for Norway4. While
Norwegian bound EVs have declined recently (down to 20% in 2015), exports destined for Eastern Europe continues
to be strong at 47% of all units in 20155. Knowing that the majority of PEV exports are European bound is valuable in
helping American consignors strategically place their sales and inventory. Since 2014, 74% of exports have left
through New York, but only nine percent of those units came from Manheim auctions within 200 miles of the New
York ports5. Offering transportation assistance or a greater commitment to placing their PEV units into online sales
will help consignors place their inventory in front of exporters more easily.

In addition to geo-political situations, population migration is another driver of electric vehicle adoption globally. It’s
expected that by 2025 there will be 40 megalopolis7 in the world (regions with a population over 10 million). The
impact of cities becoming more densely populated will drive adoption for cleaner vehicles as well as car sharing, both
of which will benefit PEV sales. Large cities in China already have outlawed combustion vehicles from entering city
centers, providing an immediate benefit to owning a PEV – the ability to go where traditional cars cannot. This shift in
population also will shrink the immediate area in which people live and could even make long-range combustion
engines unnecessary for the typical city dweller.

Conclusion

As the global electrified vehicle market looks to grow to 30 million new units produced in 2025, a greater emphasis
will be placed on adequately and strategically remarketing these units7. This will require separate domestic and global
strategies for PEVs. Consignors will need to quickly react to changes in state legislation that opens a pocket of demand
locally while also maintaining enough scale to proactively react to changes occurring in Europe, Asia and other
developed or developing parts of the world. While the new car market for electric vehicles has had a greater impact on
the remarketing industry for PEVs than it has for traditional cars, a significant market still exists and being able to
quickly capitalize on those factors will determine whether a consignor is successful or not with its PEV remarketing
strategy.

4 - According to 2014 and 2015 Port Import/Export Reporting Service (PIERS) data