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## **Electric Vehicle (EV) Group Buy: Applying a Bulk Purchase Model to EV Sales**

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### **Summary**

In 2015, Drive Electric Northern Colorado (DENC), an initiative led by the Electrification Coalition (EC) designed to accelerate the adoption of plug-in electric vehicles (EVs), launched the first EV group purchase program. DENC is the EC's first EV accelerator community located in the cities of Fort Collins and Loveland, Colorado. The EC is a nonpartisan, not-for-profit group committed to promoting policies and actions that facilitate the adoption of EVs on a mass scale in order to combat the economic, environmental, and national security dangers caused by America's dependence on oil. Coalition member companies represent the entire electrified transportation supply chain, positioning the organization as a dedicated rallying point for an array of electrification allies (More information on the EC in concluding section).

Bulk purchase pricing models are a proven success in delivering affordable goods to consumers. In 2015, DENC's bulk purchase model for selling electric vehicles (EVs) achieved up to 67% off manufacturers' suggested retail price of EVs for consumers and fleets. Under this model, the participating regions have achieved EV sales eight times higher than the normal EV sales rate. This pre-negotiated discount is negotiated and organized through a third-party entity such as a local government or a non-profit organization with the intent of achieving substantially lower upfront purchase prices of EVs for community members and fleets. DENC's group buy model has now been implemented three times in Northern Colorado and has been replicated in more than 10 cities across the U.S. after proving to be a successful mechanism to accelerate the adoption of EVs.

*Keywords: Plug-In Electric Vehicles, Transportation, Battery Electric Vehicles, Plug-In Hybrid Electric Vehicles, Bulk Purchase, Electric Vehicle Sales*

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### **1 Introduction**

The group buy program was implemented in the cities of Fort Collins and Loveland, Colorado with the cooperation and support of these local governments. After the first program achieved EV sales eight times higher than normal EV sales rates in Northern Colorado, DENC continued to develop the model for effective group purchasing programs. The DENC group buy has since become a model for communities across the U.S. and has already been replicated in more than 10 U.S. cities as a method to increase adoption of EVs. The group buy concept was designed based on a bulk purchase model, where substantially lower prices are negotiated with dealerships and vehicle original equipment manufacturers (OEMs) based on the ability to achieve bulk EV sales in a specified region. Through DENC's program, community members had the opportunity to purchase a new EV for as low as \$10,000 in 2015 and \$11,840 in 2016.

This paper will leave conference attendees with an understanding of the elements required to implement a successful group buy program. The presentation will review the successes of the program, program implementation practices, and the impacts that this initiative has had on the EV market.

## **1.1 Program Successes**

In order to be successful, a group buy program needs a dedicated group of stakeholders such as local governments, businesses, and non-profits that are invested in leveraging a bulk purchase strategy to deploy EVs. The requirements for staff time to organize a group buy are not unreasonable—DENC estimates that their leadership role in the project averages about 40 hours total per group buy event. Some of the outcomes exhibited from DENC group buy programs include:

- 9 times higher EV sales rate than rest of U.S. during group buy
- 35-50 EV sales per month per dealership
- Overall regional sales 3 times higher than the national average after the group buy programs

Group buy programs organized by DENC have typically had a high level of success with exceptional sales volumes, leading these efforts to be replicated in other parts of Colorado by a wide variety of stakeholders. The state of Colorado offers some of the most generous EV tax credits in the U.S. with its \$5,000 EV tax credit that is available to the consumer at the point of sale, as well as a \$2,500 tax credit offered to those who are leasing. This is in addition to the federal tax credit of up to \$7,500. This creates up to \$12,500 in additional tax credits toward the purchase price of EVs.

## **1.2 Program Implementation Practices**

It is important to understand the perspective of dealerships in the U.S. and how they function so that assistance and group buy support can be offered in ways that align with their business interests. EV customers at dealerships often report lower levels of satisfaction with their salespeople than those purchasing conventional vehicles. One reason for this is that an EV is a relatively newer product/technology offering for many dealerships, and their salespeople may not yet be as knowledgeable about them. It is also possible that the salesperson is not as motivated to sell EVs, as the vehicles may have smaller profit margins and EVs require less ongoing maintenance—areas in which dealerships have traditionally made most of their profits. Thus DENC has helped dealerships understand that EVs can bring in customers from other brands that may not have otherwise considered their brand.

One solution DENC has implemented to circumvent this issue is to encourage the dealership to either hire a salesperson that is interested in EVs, or find an existing salesperson who would be a good fit for this role. DENC has found that once there is one highly successful EV sales person at a dealership, the other salespeople will see the financial value of selling EVs at high volumes, along with other incentives. As the program now enters its fourth year, each of DENC's dealership partners has hired EV-dedicated salespeople and sees this role as an important priority at the dealership. DENC also offers EV sales training for dealership staff and provides educational material to customers on site, which helps to increase the group buy's validity by providing third party expertise to the dealership.

Because consumers are desensitized to pricing programs that originate from the dealerships, their marketing power could be lost in the group buy without the validation and support of partners, so a large suite of project partners is needed for the program to be successful. Often, a local government will run an RFP process to organize the dealerships and determine which are eligible to participate based on the volume of EVs that are available to the dealership during the program period, pricing models/financing deals, willingness to support marketing of the program, along with other benefits that could be made available to purchasers, such as discounted home charging equipment and/or complimentary access to charging station networks locally.

While group buys can vary in how they are organized, there are three crucial tenets to every group buy program. These include (1) pre-negotiated, discounted prices on electric vehicles, (2) a limited-time offering, and (3) community-based outreach and marketing that is validated by a third party. These elements, when combined, create both a sense of urgency and satisfaction in saving money while

supporting an initiative that is relevant to the community. It is also helpful to maintain an ongoing list of contacts that the organization can build upon, comprised of business contacts and Ride and Drive participants. This allows the organization to circulate the group buy advertisement to a large group of consumers very quickly. Additional components that contribute to success include the development of marketing and outreach collateral, identifying opportunities to leverage in-kind support, and developing and utilizing a tracking process for ongoing sales.

### **1.2.1 Program Components**

There is a menu of options that an organizing entity should consider when implementing a group buy program in their community. As a first step, it is important to cultivate long-term relationships with both dealerships and OEMs before looking to begin a program. First, establishing a history of trust and support with the dealerships will ensure that a higher number of RFP responses are received by the issuing agency. It can take a great deal of time to help auto dealers understand the business case and value proposition. If the dealerships are treated like the valuable community partners they are, they will take more ownership of the EV program and have a higher likelihood of offering the group buy discounts to their customers.

Additionally, an RFP process should be developed if a third-party agency, such as a local government or utility, is going to be championing the effort. Furthermore, the program must be heavily marketed in order to facilitate uptake and make sure that the customer base is activated and ready to purchase EVs.

### **1.2.2 Dealership Partnerships**

DENC has found that an effective way to engage dealerships is to provide a value proposition that explains how the organization helps increase EV sales. This has enabled DENC to establish partnerships with a wide variety of dealerships so that consumers have a diverse selection of EV models to choose from in their area. Partnerships have also been developed with dealerships that do not yet stock EVs so that these relationships are in place when the vehicles arrive. Some partnerships move faster than others, so DENC promotes the successes of dealerships already in the program to encourage others to participate.

If a dealership's OEM has not already required it to have charging infrastructure as a precondition for selling EVs, DENC will encourage the dealership to install a station as a means to regularly interact with EV owners about their cars and to take a leadership role in the community. DENC also leverages dealerships for introductions to local business leaders and reciprocates where possible through inviting dealerships to stakeholder meetings.

EVs are still a relatively small portion of inventory at most dealerships, so salespeople are often focused on selling non-EV models. The more EVs a dealership sells, the more inventory space will be allocated to them and the higher priority staff will place on selling them.

One way that DENC is helping to drive this virtuous circle is by creating materials about EVs that the dealerships can provide to customers. DENC has developed several pieces of collateral for this purpose, including information on EV tax credits, maps of regional charging stations, information about EV Enthusiast groups and general DENC program brochures. Information on tax credits is especially important because dealerships are often hesitant to provide tax details themselves for liability reasons, and a third party provides an easy way to give this data to potential customers. Because these materials have the DENC brand and logo, they also provide outside validation of the dealer's sales pitch.

Developing these dealership partnerships is a good way to advance EV sales in the region. When coordinating with multiple cities in a region, it is important to be aware of the marketing boundaries or Primary Marketing Areas (PMAs) that are assigned to each dealership. DENC has learned to speak with dealerships about their PMAs in order to minimize potential conflict with other dealerships. Once DENC understood the specific PMA boundaries, it started becoming very careful not to invite external dealerships into neighboring PMAs.

### **1.2.3 Third-Party Validation**

The key to selecting a lead agency for a group buy program is finding an organization that is well-trusted by the community. This adds a sense of credibility and legitimacy to the dealership that is offering the group buy. The stakeholder that serves as the lead planner can vary, and nonprofit organizations, local

governments, universities, economic development agencies, and utilities as well as air quality planning organizations can fill this role [1]. Even if they are not the primary implementer, all of the aforementioned representatives can contribute by conducting outreach and disseminating marketing collateral to consumers. The lead organization will be responsible for identifying dealerships and managing their inclusion through a competitive RFP process, in addition to creating marketing collateral that can be used by all partners in the project. It is important that many partners participate in marketing the group buy such that there is consistent branding and messaging throughout the program.

#### 1.2.4 RFP Process

The optimal way to manage the group buy RFP process is to find the companies that will offer the best combination of discounted pricing, good financing options, superior customer service, and largest availability of inventory. For any individual program, the contracting organization will need to decide which aspects are most important when choosing the contractors. Both local dealerships and original equipment manufacturers (OEMs) should receive the bids in order to cover all bases with community and national contacts that are contributing to the region’s effort.

While customer service is a challenge to assess, it can make or break the entire dealership experience for the customer. Since DENC’s group buys have seen significant success through word-of-mouth referrals, it is important to ensure that the dealership experience for the customer is of top quality. Importantly, 90% of those who purchased an EV through DENC’s group buys had an “excellent” or “very good” experience at the participating dealerships.

In the limited number of programs offered to date, the ones that have been most successful have featured dealerships where there is a salesperson who is an “EV evangelist” who focuses on making the program work for EV customers. The least successful program was one where customers would read about the program, sign up online, and then go to the dealer only to find salespeople who did not even know there was an EV group purchase program in the first place [2]. The RFP can seek input on such important questions as to which plans the dealership has for staff training, which will ensure that there are enough salespeople with knowledge about EVs to respond to customer demand. The RFP should also include information in the form of a narrative, qualifications of the project team, and a schedule.

#### 1.2.5 Table 1: Group Buy Math Calculation

Table 1: An example of how the group buy math was calculated.

\$32,130	Vehicle Market Rate Price
\$ 9,007	Group Buy Discount
(up to) \$7,500	Federal Tax Credit
\$ 5,000	Colorado Tax credit
\$21,507	Total Savings
\$10,623	Total Cost after Potential Savings

#### 1.2.6 Innovative Marketing Opportunities

A consistent communications strategy is important for organizations like DENC to achieve public awareness of group buy programs. Salient messages that show how EVs save money, are fun to drive, reduce oil dependence, and lessen environmental impacts should be amplified and reflected in all marketing materials and activities. Organizations like DENC should actively seek out new opportunities to project positive themes about EV use and ownership. For dealerships, a group buy program is an example of a

unique marketing opportunity that can recruit a whole new audience. One of the keys to success is a vigorous community-based outreach effort. After all, an individual car dealer could simply offer a deep discount on its own, but what makes these programs unique is the ability of trusted messengers—such as local governments, environmental groups, utilities, community-based nonprofits, or employers—to reach their constituents [3].

Some of the types of marketing that DENC and other partners pursue are not typical communications channels for dealerships. Nonprofit organizations and advocacy groups often have regular newsletters that are distributed to their stakeholders. With wide readership and high engagement numbers, this type of publicity is not easily accessed by dealerships without a group buy to showcase.

Group buys can also capitalize on word-of-mouth sales that are a result of EV Enthusiasts. Dealerships in the DENC territory have offered referral bonuses to customers who recruit other buyers into the dealership and end up completing the transaction. DENC utilized this asset by organizing an “EV Owner Challenge” (See appendix for example poster), which incentivized EV owners in the community to refer others to the program. If any of the EV owner’s referrals purchased an EV through the program, the EV owner received \$200 cash from the dealership and \$750 of incentives donated from a local solar company toward the installation of solar panels on the EV owner’s home.

In several programs, multiple agencies or individual employers were communicating directly with their own employees about the program using strategies such as staff leads sharing information, email (department, personal, or organization wide), internal newsletters, internal workshops highlighting the program and educating employees, internal organizations’ websites, and employee ambassadors or champions [4]. DENC also encouraged this employer participation by securing a donated charging station from the OEM, which was marketed throughout the program and donated to the employer that had the most employee or fleet EV purchases through the program.

### **1.3 Benefits to Participation**

The two main benefits for a dealership to participate in a group buy program are the profit that the entity will receive from the vehicle sales, as well as the press and media attention that they will receive. According to the dedicated EV salesman in Fort Collins, Colorado, “It was easier and faster to sell LEAFs through the group purchase program. Customers came in the door ready to buy.” In 2015 alone, the DENC group buy received seven national media hits from technical publications such as Green Car Reports, Clean Technica, Autoworld News, and Green Car Congress, amongst others. Locally in Colorado, press coverage included stories from Colorado Public Radio. A Nissan dealership in Northern Colorado was the first to offer the group buy, and a BMW dealership saw the benefits in participating in the effort to the degree that they lined up a program for their business. Chevrolet and Ford soon followed.

#### **1.3.4 Mass Market Reach**

Previous group buys have seen huge success in reaching large amounts of people. In the most recent program conducted by DENC, reach was determined to be upwards of 70,000. For future group buys, DENC looks to increase that number with a goal of 90,000 reached via various marketing efforts detailed in the table below. Any organization or business that participates in a DENC group buy can piggyback off of this mass market reach and leverage that exposure to their benefit. There is proof that the EV group buy programs are attracting new customers who were not likely to buy before the discounts became available. According to the online Utility Dive magazine, only 28% of consumers who bought an EV through the program had planned to buy an EV prior to the program, while 42% had not intended to buy a new car prior to the program [5].

#### **1.3.5 Free Advertising**

For each individual group buy, DENC implemented a coordinated and comprehensive marketing plan to reach audiences, and that included a wide variety of promotional tactics (see table below). Tynan’s Nissan dedicated 2,900 of their recurring radio spots towards promoting this group buy, effectively donating those spots to DENC for promotion. In addition, DENC has a large network of influential partners who promoted the group buy on behalf of the organization. These and the other tactics presented in Table 1 effectively offer free advertising to any collaborator or supporter whose name is associated with the group buy.

### 1.3.6 Table 2 Summary of Group Buy Advertising Details

Table 2: Summary of group buy advertising details

<b>Effort</b>	<b>Details</b>
<b>Online promotion</b>	
Facebook	2-5 posts per week on DENC page, aimed for 1-3 posts from partners each week
Twitter	2-5 posts per week on DENC page, aimed for 2-5 retweets or direct tweets from partners each week
Website	Created highlighted webpage for Group Buy, promoted on front page with banner image; blog post posted and featured on the front page 5 days prior to launch
Email	Leveraged newsletter to inform audience segments via bi-weekly newsletter; aimed for 50% partner compliance in distribution via employer email channels
<b>Print promotion</b>	
Posters	11x17 large posters distributed on bulletin boards and in businesses around town; aimed to have 50% partner compliance in distribution
Flyers	8.5x11 and ¼ page flyers distributed at a larger scale in the proposed locations: <ul style="list-style-type: none"> <li>• In partner establishments and other businesses</li> <li>• On charging stations</li> <li>• At STEM schools</li> <li>• In utility bill newsletter</li> </ul>
<b>Word of mouth promotion</b>	
EV Enthusiasts	Competition among EV Enthusiasts community, whoever refers the most sales towards the Group Buy won a prize
Workplace Charging (WPC) Partners	Individual meetings took place between DENC and WPC partners to encourage promotion to employees, members, etc.
Churches	DENC developed working relationships with local church communities, some of which have pastors who drive EVS; word-of-mouth promotion to the congregation
<b>Traditional Media promotion</b>	
Radio	Launched 2,900 radio advertisements in cooperation with Tynan's Nissan
Newspapers and other print news outlets	Press release sent to Coloradoan, Loveland Reporter-Herald, among other print news outlets; aimed for 3-5 print media hits
TV	Press release sent to local and regional TV outlets; aimed for 1-3 broadcast media hits

### 1.3.7 Relationship Management

In participating in a DENC group buy, one can build profitable and promising business and organizational relationships through a network of partners. This also reflects positively on the community. Dealerships have also created group buy programs for subsets of the population. For example, group buys may be offered to employees of a local company that is investing in charging stations for their organization. Local utilities are also making group buys available to their customer base. This is an opportunity for these dealerships to connect here and make new relationships.

Furthermore, many dealerships have been owned by multiple generations of the same family- making them rooted in civic improvement efforts with a genuine interest in the betterment of their community. With

support of EV programs in general, and with contributing to a group buy in particular, dealerships have the ability to both support a local nonprofit partner and expand their business bottom line.

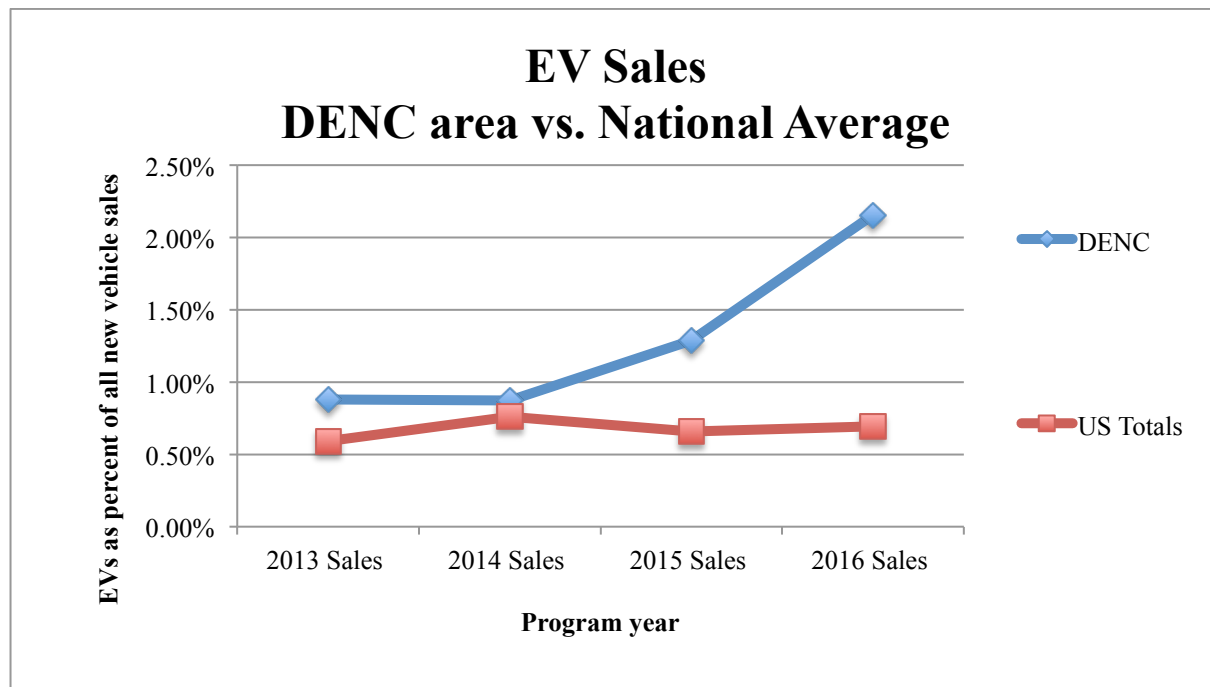
## 2 Concluding Remarks

The group buy created lasting impacts in the Northern Colorado community by not only increasing EV sales substantially but also creating a network of partners and collaborators working together toward the common goal of revolutionizing the transportation sector.

All of the program elements within DENC contributed to sales that outpaced the national average by a multiple of three. This is illustrated below in Exhibit 3. In addition to the sales increase, DENC built long-term impacts in the region that will encourage EV sales into the future. These include the strengthening of relationships with dealerships, the positive change in perception of EVs at the dealerships, the partnership networks built to promote the group buy, and many other similar impacts.

### 2.1. Table 3: Comparison of EV sales in Northern Colorado to United States

Comparison of EV sales in Northern Colorado to United States



The EC’s primary goal is to accelerate transportation electrification through a combination of public policy and market research, policy advocacy, and innovative partnerships. The EC’s signature accomplishment has been the establishment of accelerator communities like DENC—cities and regions where all of the necessary public and private stakeholder partnerships are combined with appropriate policy, regulatory support, and consumer education in order to make owning and operating an electric vehicle a seamless and attractive experience. In the past five years, in conjunction with and beyond these unique projects that have helped position the EC as a leader in the field, the EC has engaged leaders from across the political spectrum around the issue of vehicle electrification and advanced public policy with comprehensive roadmaps and models for vehicle and fleet electrification.

The EC has unique direct experience in working with cities across the country on multi-year engagements that will allow for the best and most likely program success. This includes the launch of multiple projects from square one (Drive Electric Northern Colorado, Drive Electric Orlando, Energy Secure Cities Coalition) and work as the lead implementation partner for Vulcan during the Smart City Challenge. The EC’s ability has been rewarded with government and private grants to support all three of these projects as well as the creation of a new accelerator community in Rochester, NY that launched in June 2017.

The EC has also successfully secured and administered outreach and training programs from several local and national sources to support capacity development, technical training, and other thought leadership. The EC has seasoned programmatic staff, along with technical and administrative capabilities and strong relationships with the EV supply chain, fleets, technical contacts, and government.

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## Author



Ben Prochazka, Vice President, joined the Electrification Coalition (EC) in 2013 to lead the EC's Outside the Beltway Initiatives and has helped develop and implement innovative EV accelerator programs and engaged in advocacy and policy development at the local, state, and national level. His works includes Drive Electric Northern Colorado, Drive Electric Orlando, Rochester EV Accelerator, Fleets for the Future, Energy Secure Cities Coalition, and leading the EC's work as the lead implementation partner for the Vulcan's Smart City Challenge. Prior to joining the EC, Ben has spent more than a decade working on environmental, human rights, and voter engagements efforts. His experience includes leadership roles as the Campaign Director for the Save Darfur Coalition, the Legislative Director for the Colorado Environmental Coalition, the Colorado State Director for the New Voters Project, and numerous public interest campaign efforts as the Western States Field Organizer for U.S.PIRG.