



Staff Report

DISCUSSION AND DIRECTION ON THE GREEN VEHICLE INITIATIVE

Honorable Mayor and Council Members:

Summary

City Council indicated they wanted to develop a program to encourage Belmont residents to purchase vehicles that have low emission to improve the air quality within the City of Belmont and the region as a whole.

City staff seeks direction on various policy questions so that a “Green Vehicle Initiative” can be drafted and adopted by the City Council.

Background

Councilmember Warden took note to a citizen’s concern expressed during the discussion on the proposed Smoking Ordinance that the City is not doing anything about reducing the impact of motor vehicles on the air quality within the City of Belmont. He raised the issue with the City Council and received concurrence for City staff to explore an incentive program for residents to purchase hybrid vehicles. However, hybrids are not the only type of vehicle that may have a minimal impact on the environment. Therefore, City staff has expanded the incentive program to address all vehicles with minimal emission impacts.

Discussion

Exhaust emission standards limit the amounts of key pollutants coming from a vehicle’s tailpipe and leaks in its fuel system. All new vehicles for sale in the United States are certified to meet either the Federal emission standards, set by the U.S. Environmental Protection Agency (EPA), or California standards, set by the California Air Resources Board (CARB). The California emission standards are stricter than the Federal standards and are proposed to be the guidelines used for the City’s program.

California has a new set of Phase II low-emission vehicle standards. These standards are generally cleaner than the Phase I low-emission standards. They are as follows:

LEV II: Low-Emission Vehicle, the least stringent of the new, Phase II LEV standards. NOx emissions are one-quarter the level of a LEV I-certified vehicle.

ULEV II: Ultra-Low-Emission Vehicle, a mid-level Phase II LEV standard. Hydrocarbon and carbon monoxide emission levels are nearly 50% lower than those of a LEV-II vehicle.

SULEV II: Super-Ultra-Low-Emission Vehicle, a California standard even tighter than the ULEV II, including significantly lower NOx emissions and more durable control systems.

PZEV: Partial Zero-Emission Vehicle, complaint with the SULEV standard: additionally has near-zero emissions and a 15-year/150,000 mile warranty on its emission control equipment. Bio-diesel vehicles are considered PZEV vehicles.

ZEV: Zero-Emission Vehicle, a California standard prohibiting any tailpipe emissions. Zero emission cars are CNG and electric cars.

Automakers also rate their vehicles for fuel economy according to standard EPA tests of simulated city and highway driving. Fuel economy standards apply to manufacturers, rather than to individual vehicles. A manufacturer can sell models of varying fuel economy so long as their average fuel economy meets the standard.

Higher fuel economy means lower fuel consumption, savings on fuel costs, and reduced global warming emissions. However, even in new vehicles, tailpipe standards don't fully reflect pollution in real-world driving conditions or the pollution associated with the fuel consumed. Among models meeting a given tailpipe standards, higher fuel economy means lower total emissions of other pollutants as well.

When the public thinks for low emission vehicles they typically think of the Toyota Prius Hybrid (60 mpg in City) and the Honda Civic Hybrid (49 mpg in the City). Both of these vehicles are PZEV. The following tables indicate other vehicle models that are PZEV and their respective City MPG rating:

Vehicle Model	Specifications	MPG: City
Subcompacts		
Volkswagen New Beetle	2.5L 5, auto stk	23
Chevrolet Cobalt	2.2L 4, manual	25
Pontiac G5	2.2L 4, manual	25
Compact Cars		
Honda Civic GX	1.8L 4, auto CNG	28
Honda Civic Hybrid	1.3L 4, auto CVT	49
Mazda 3	2.0L 4, manual	28
Ford Focus	2.0L 4, manual	27

Vehicle Model	Specifications	MPG: City
Midsized Cars		
Toyota Prius Hybrid	1.5L 4 , auto CVT	60
Nissan Altima Hybrid	2.5L 4, auto CVT	42
Toyota Camry Hybrid	2.4L 4, auto CVT	40
Hyundai Elantra	2.0L 4, auto	28
Nissan Altima	2.4L 4, manual	26
Midsized Wagons		
Ford Focus Wagon	2.0L 4, auto	27
Ford Focus Wagon	2.0L 4, manual	27
Subaru Legacy 2.5i/ 2.5i SE Wagon	2.5L 4, auto stk Awd	23
Subaru Legacy 2.5i/ 2.5i SE Wagon	2.5L 4, manual Awd	22
Subaru Legacy 2.5i Limited Wagon	2.5L 4, auto stk Awd	23
Large Cars		
Chevrolet Impala	3.5L 6, auto	21
Buick Lucerne	3.8L 6, auto	19
Compact SUVs		
Ford Escape Hybrid	2.3L 4, auto CVT	36
Mercury Mariner Hybrid	2.3L 4, auto CVT 4wd	32
Subaru Forester 2.5 X/ Sports 2.5X	2.5L 4, manual, Awd	22

There are two vehicles that are SULEV II rated. They are:

Vehicle Type	Specifications	MPG: City
Midsized SUVs		
Toyota Highlander Hybrid	3.3L 6, auto CVT	32
Lexus RX 400h	3.3L 6, auto CVT	32

There are a number of vehicle models that are ULEV II rated and have City Mpg that exceed many of the PVEZ vehicles. Therefore, a policy based upon fuel economy alone may not be desirable.

Vehicle Incentive Program

There are two ways to provide incentives for the Green Vehicle Initiative. One is to provide a direct cash incentive. The other is to establish a voucher program to the Belmont residents who purchase eligible Green Vehicle Initiative vehicles. The voucher may be used by the resident within a specified time period for any Park and Recreation program and/or City fees.

The voucher program may be considered a mechanism to attracting new users of the City's programs. However, it should be noted, the use of voucher for any program will reduce the actual revenue generated by a particular program or service provided by the City. A mechanism needs to be established to insure that any program or fee will be made whole as part of the voucher program.

Discussion and Direction

The following policy questions need to be answered to provide City staff with direction to prepare the Green Vehicle Initiative:

1. Do we just consider ZEV and PZEV vehicles?
2. Should there be a minimum city mpg with PZEV vehicles?
3. Is this program solely for vehicles purchased after the Green Vehicle Initiative is adopted?
4. If the Green Vehicle Initiative is retro-active, how many years back do we establish for eligible vehicles?
5. Want to provide cash incentive or a voucher program?
6. What should be the dollar value for each party eligible for the Green Vehicle Initiative?
7. What should be the total amount allocated to the Green Vehicle Initiative for the first year?
8. Is City staff authorized to apply for any grants that may potentially fund the Green Vehicle Initiative?
9. Will the City's General Fund offset any vouchers used for Parks and Recreation programs or services?

Will the City's General Fund offset any vouchers used to pay for any City related fees?

General Plan/Vision Statement

No impact.

Fiscal Impact

No Fiscal Impact.

Public Contact

Posting of City Council agenda.

Recommendation

Staff is requesting Council to answer the policy questions that need to be answered to provide City staff with direction to prepare the Green Vehicle Initiative

Alternatives

1. Take No Action.
2. Refer back to staff for further information.
3. Deny the request.

Attachments

- A. None

Respectfully submitted,

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