



Agenda Date: 4/3/2007
Agenda Placement: 8H
Set Time: 11:30 AM
Estimated Report Time: 15 Minutes

NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors
FROM: Michael Stoltz for Peterson, Robert - Director
Public Works
REPORT BY: Michael Stoltz, Deputy Director of Public Works, 299-1365
SUBJECT: Clean Air Vehicle Discussion

RECOMMENDATION

Director of Public Works requests discussion and possible direction regarding implementation of Resolution Number 04-05 to support the purchase of clean air vehicles for general services vehicles.

EXECUTIVE SUMMARY

On January 13, 2004 the Board of Supervisors adopted resolution number 04-5 which supported the use of low emission vehicles and gave preference in the County's vehicle procurement to the acquisition of the lowest emission general service fleet vehicles available, practical and reasonably cost competitive with other vehicles appropriate for that application. This action was based upon a staff report that indicated that the price of hybrid vehicles was approximately \$2,000 to \$4,000 more than that of a conventional model. It was also anticipated that the fuel and environmental savings would balance out this cost increase. Public Works is providing a report on the status of the program and anticipated future actions.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

The County presently has 199 fleet vehicles, of which 56 vehicles are assigned to the Sheriff. The composition by vehicle types of the remaining 143 vehicles is made up by 78 sedans, 39 trucks, 18 vans, and 9 four wheel drive utility vehicles. Since adoption of this resolution, the County has added 9 hybrid vehicles as part of the fleet.

As part of the development of the proposed fiscal year 2007-08 budget, staff has identified the need to replace 28 vehicles, and add 1 vehicle to the fleet. Replacement recommendations are based upon vehicles either being fully depreciated based upon mileage, or condition of vehicle.

Of these 29 vehicles, 15 will be proposed as hybrid vehicles. It has been determined that the remaining 14 vehicles cannot utilize this technology, at this point in time, given the vehicle specifications required by the departments to fulfill their programmatic responsibilities (9 vehicles are replacement vehicles for the Sheriff and 5 are replacement trucks or vans required by other departments).

The 15 proposed hybrid vehicles will include 8 subcompact sedans, 1 midsize sedan, and 6 four wheel drive utility vehicles. The four wheel drive utility vehicles are being recommended in lieu of four wheel drive small trucks.

While the initial cost to purchase hybrid vehicles is more than conventional vehicles, it is estimated that lifecycle costs are practically the same for hybrid and conventional vehicles. Lifecycle costs include the factors of depreciation, fuel costs, maintenance, repairs, and fees/taxes.

There is a clear benefit in anticipated reductions of greenhouse gases (that is, carbon dioxide) produced. It is estimated that fifteen conventional vehicles would have produced 517 tons of carbon dioxide over their anticipated lifetime while fifteen hybrid vehicles will produce 303.4 tons of carbon dioxide. This 41 percent reduction in carbon dioxide represents a planned reduction of 213.6 tons of carbon dioxide as a result of implementation of Resolution 04-05.

In summary the analysis provides the following comparison of lifecycle costs and emissions produced per vehicle class:

<u>Subcompact</u>	<u>Cost</u>	<u>Carbon Dioxide Emission</u>
Hybrid	\$24,285	17.6 tons (37% emission reduction)
Non-Hybrid	\$25,500	27.8 tons
<u>Midsize</u>	<u>Cost</u>	<u>Carbon Dioxide Emission</u>
Hybrid	\$27,354	19.8 tons (38% emission reduction)
Non-Hybrid	\$28,855	31.8 tons
<u>4X4</u>	<u>Cost</u>	<u>Carbon Dioxide Emission</u>
Hybrid Utility Vehicle	\$30,473	23.8 tons (54% emission reduction)
Non-Hybrid Truck	\$30,050	43.8 tons

While utilizing hybrid technology at this point in time as the means to "green the fleet", staff will continue to monitor available technology to determine what works best for our rural county. In addition to other technical resources used in determining vehicles selected to meet county needs, staff now also utilizes the United States Environmental Protection Agency Green Vehicle Guide as a reference document to compare air pollution and greenhouse gas scores when making vehicle selections.

SUPPORTING DOCUMENTS

None

CEO Recommendation: Approve

Reviewed By: Andrew Carey