



Memorandum

TO: TRANSPORTATION &
ENVIRONMENT COMMITTEE

FROM: Peter Jensen
John Stufflebean

SUBJECT: SEE BELOW

DATE: May 10, 2007

Approved

Date

5/10/07

SUBJECT: STATUS REPORT ON ENVIRONMENTALLY RESPONSIBLE FLEET REPLACEMENT POLICY

RECOMMENDATIONS

1. Accept staff report regarding the Green Fleet Status Update.
2. Recommend to the Council approval of City membership in the Plug-in Partners National Campaign.

BACKGROUND

The City of San Jose's alternative or "Green" fuel fleet currently includes over 900 vehicles/equipment types which comprise approximately 34% of the City's overall fleet. The City has also integrated alternative fuels and related emission reduction technology into its diverse fleet complement since the late 1970s. Some specific examples include electric-powered utility vehicles, methanol-powered sedans, flex-fuel sedans, hybrid-electric sedans, and compressed natural gas (CNG) sedans, pick-ups, and heavy equipment.

The current Green composition of the fleet is shown in the chart below:

Equipment Type	Bi-Fuel	CNG	Hybrid	Electric	LPG	Biodiesel	Total
Transport	40	11	5	0	0	0	56
Metered/Heavy	5	24	0	112	5	502	648
Stationary Equipment	0	0	0	20	12	69	101
Airport Transit	0	20	0	0	0	0	20
Fire Apparatus	0	0	0	0	0	102	102
Total	45	55	5	132	17	673	927

Each of these alternative fuel vehicles significantly reduces vehicle emissions into the environment. For instance, a CNG vehicle emits 80 percent less carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions than its conventionally fueled counterpart. These vehicles and alternative fuel sources improve local air quality and reduce greenhouse gas (GHG) emissions, protecting public health and enhancing the quality of life for the residents of the City of San José and surrounding areas.

In October 2006, the City Council received an update on fleet use of alternative fuels from General Services – Fleet Management. Since that time, Fleet Management staff has been directed within the Mayor's March 2007 budget message to develop a fleet management policy that further positions the City as a national leader in fleet management and that minimizes the City's fleet's carbon dioxide (CO₂) contribution to global warming.

From fiscal years 1990-1991 to 2005-2006, it is estimated that there was an increase in carbon emissions of approximately 20% which resulted from the City's fleet operations. In fiscal year 1990-1991, a total of approximately 14,426 tons of CO₂ was emitted into the environment. And in fiscal year 2005-2006, a total of 17,363 tons of CO₂ was emitted. This increase in emissions is proportional to the growth rate of the City's overall fleet; and, while a greater alternative fuel mix has been added to the fleet's portfolio, the effect on emissions has been counter-balanced by an increasingly older average vehicle age which is a direct result of the vehicle purchasing freeze.

Fleet Management has successfully focused on replacing vehicles that have reached the end of their efficient service life and on working with departments to right-size the fleet, but these results indicate that more can be done to reduce the fleet's contribution to the City's carbon footprint.

Plug-in Partners National Campaign

The Plug-in Partners National Campaign was started by the City of Austin, Texas to persuade automakers to manufacture plug-in electric hybrid vehicles. The campaign's goal is to reduce the country's reliance on foreign oil, decrease air pollution and GHG emissions, and address rising fuel costs. The campaign has been joined by many major cities across the country and is supported locally by the Silicon Valley Leadership Group.

In April 2007, the Mayor requested that the Transportation and Environment Committee study and provide a recommendation on whether the City of San José should join this campaign.

The City of San Jose, with a fleet of over 2,700 vehicles and equipment, of which 2,400 produce emissions, recognizes that transportation emissions threaten public health and the global climate. Accordingly, the City is working to develop baseline data and a "Green Fleet" policy that would help to address these problems directly at the local level.

ANALYSIS

Several existing City programs already contribute to the concept and goals of a Green Fleet policy. On October 20, 1997, the City became a member of the Cities for Climate Protection program, a coalition of over 500 local governments worldwide that promote community-based initiatives to reduce global warming emissions. In 1994, the City of San Jose, along with a coalition of local fleets and fuel providers, became a designated member of the US Department of Energy's Clean Cities Program. Clean Cities membership provides advance notice on the distribution of federal funds for the purchase of alternative fuel vehicles and the establishment of alternate fuel infrastructure.

A Green Fleet policy also aligns with and supports existing City policy and city-wide greenhouse gas reduction goals currently being developed. The recently revised Environmentally Preferable Procurement Policy (EP3) directs staff to purchase vehicles that provide the best available net reduction in fleet emissions and to consider costs over the full life cycle of each vehicle. Alternate fuel vehicles typically have a slightly higher up-front cost that should be recovered through decreased fuel and maintenance costs over the life of the vehicle. Emission reductions accomplished through a Green Fleet policy would also support the GHG reduction goals developed for the Urban Environmental Accords, the California Climate Solutions Act, and the US Mayors Climate Protection Agreement.

Fleet Management staff will return to the Transportation & Environment Committee in August of 2007 in order to deliver a recommended Green Fleet policy. The policy will set specific emissions reduction targets, support the GHG reduction goals mentioned above, and provide detailed information on how the City will achieve those targets.

Plug-in Partners

Plug-in electric hybrid vehicles (PHEVs) have more powerful batteries than current hybrid vehicles and are able to be charged in a standard electric socket. These vehicles can be driven between 20 and 60 miles without using their gasoline engine. Once the battery charge is depleted, the vehicle seamlessly switches to gasoline.

The Plug-In Partners National Campaign will track vehicle commitments made by all member agencies. This will allow the national campaign organizers to present automakers with an aggregate "soft" order for sedans, vans, SUVs and other vehicles by specific governmental and business entities. Presenting these soft orders in aggregate better illustrates the potential national market for these vehicles to manufacturers than by presenting smaller individual organization orders. By making a fleet order, the City agrees to strongly consider purchasing flexible fuel plug-in hybrids if they are manufactured. There is no financial commitment involved for the City in making a "soft" fleet order.

POLICY ALTERNATIVES

Not applicable.

PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

Although this memorandum does not meet any of the above criteria, it will be posted on the City's website for the May 21, 2007 Transportation and Environment Committee meeting.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office.

FISCAL/POLICY ALIGNMENT

This memorandum aligns with the Council Policy titled "Environmentally Preferable Procurement Policy", revised March 27, 2007.

COST SUMMARY/IMPLICATIONS

Not applicable.

BUDGET REFERENCE

Not applicable.

CEQA

Not a project.



PETER JENSEN
Director, General Services



JOHN STUFFLEBEAN
Director, Environmental Services

For questions please contact Don Beams, Fleet Division Manager, at (408) 938-2019.

Attachment:

Plug-in Partners Support Letter

[Date, 2007]

Roger Duncan
Deputy General Manager
Austin Energy
721 Barton Springs Rd.
Austin, Texas 78704

Dear Mr. Duncan:

I write today on behalf of the City Council of San José, California to express our support for the National Plug-in Partner Campaign. The campaign will demonstrate to automobile manufacturers that there is a market for flexible-fuel Plug-in Hybrid vehicles (PHEVs). The growing problems of air pollution and dependence on foreign oil associated with our current vehicle technology demands that we seek a better alternative. Plug-in hybrid vehicles can be that technology. In further support of your campaign, the City of San José will also be submitting a “soft” order for ten (10) PHEVs through your website.

Utilizing electricity instead of gasoline for most trips under 35 miles will help our nation reduce its dependency on imported oil, improve air quality, and increase overall vehicle fuel economy while reducing fuel costs to the vehicle owner.

Using domestic energy sources such as electricity for our transportation is a needed step that we hope the automakers will rapidly develop for the mass market. Since PHEVs will be charged mostly at night, during off peak hours, millions of PHEVs could be added to the electric grid without requiring an increase in capacity. Concurrently, having utilities increase the use of clean, renewable energy sources, such as wind power, will provide even better air quality results. We look forward to encouraging utilities and policymakers to provide incentives, such as rebates, to assist with future PHEV purchases and working with business for them to consider PHEVs as part of their future purchasing plans.

We also support your efforts to modernize the automobile industry by utilizing plug-in technology as an alternative option to reduce vehicle emissions.

Sincerely,

Chuck Reed
Mayor
San José, California

To return document, fax to 512-322-6037, or mail Daryl Slusher Austin Energy 721 Barton Springs Road Austin, TX 78704
