

Agenda: Item 6

Consideration of a Clean Air Taxi Policy [ACTION]

From the Mayor



Climate change presents serious threats to the quality of life in San Francisco. The impacts of rising sea levels could be potentially devastating. Low lying areas such as San Francisco International Airport, Treasure Island, Mission Bay, SBC and Candlestick Parks, roads, railroad tracks, sewage treatment plants, and our marina and harbor facilities could be threatened. We must act now to significantly reduce greenhouse gas emissions or we will quickly reach a point at which global warming cannot be reversed.

That is why San Francisco holds itself accountable for its contributions to global warming, and is committed to dramatically reducing overall greenhouse gas emissions to 20% below 1990 levels by 2012. The *Climate Action Plan*, prepared by San Francisco's Department of Environment and Public Utilities Commission staff, quantifies the emissions we are responsible for and identifies actions required to achieve emissions rollbacks.

The good news is that we can reduce the pollution that causes global warming by using currently available technologies that also enhance economic development. We can promote energy efficiency, renewable energy, alternatives to automobile transportation, and recycling to help save money and create jobs that strengthen the local economy, and increase the livability of our neighborhoods.

Our actions can be an example to others. As cities across the nation make similar commitments we can work in concert to make an environmental u-turn. It is up to municipal governments to take ownership of this critical issue when there is scant leadership coming from Washington, D.C.

We need to act now if we are going to keep San Francisco and the Bay Area a viable place to live for future generations. It is our responsibility as citizens of the world.

A handwritten signature in black ink, appearing to read "Gavin Newsom". The signature is stylized and fluid, with a long horizontal line extending to the right.

Gavin Newsom

CITY AND COUNTY OF
SAN FRANCISCO



TAXI COMMISSION
MAYOR GAVIN C. NEWSOM

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HEIDI MACHEN, EXECUTIVE DIRECTOR

June 12, 2007

At the meeting of the Taxicab Commission on Tuesday, June 12, 2007 the following resolutions and findings were adopted:

Resolution to Reduce, Offset, and Eliminate Greenhouse Gases in the San Francisco Taxi Industry

RESOLUTION NO. 2007-21

WHEREAS, the San Francisco Taxi Industry is a major user of fossil fuels and producer of greenhouse gases ("GHG") with a normal taxi traveling 75,00 miles per year and emitting 50 tons of GHG and the number of taxis in San Francisco increasing from 821 in 1990 to 1431 today with total GHG going from over 40,000 tons to over 70,000 tons per year; and

WHEREAS, the *Stern Review: The Economics of Climate Change*, a 2006 study commissioned by the British Finance Minister to assess the economic impact of climate change, states that "the scientific evidence is now overwhelming; climate change presents very serious global risks and it demands an urgent global response" and "the benefits of strong early action on climate change outweigh the costs;" and

WHEREAS, the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, a United Nations-sponsored assessment group founded in 1988, has stated that "there is substantial economic potential for the mitigation of global greenhouse gas emissions over the coming decades, that could offset the projected growth of global emissions or reduce emissions below current levels," and specifically cited hybrid and alternative fuel vehicles as technology that had the greatest economic potential for mitigation in the short and medium term; and

WHEREAS, the CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006 (AB-32) finds that "global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California," and caps California's GHG emissions at 1990 levels by 2020; and

WHEREAS, in 2002 the San Francisco Board of Supervisors passed, and Mayor Willie Brown signed, Resolution 158-02 which called for a 20% reduction in overall GHG emissions in San Francisco from 1990 levels by 2012; and

WHEREAS, Mayor Gavin Newsom has been a strong advocate of clean taxis since 1998 and in 2004 issued the first city Climate Action Plan and welcomed the first hybrid taxis into an American fleet, and in his 2006 State of the City address called for 100% of San Francisco taxis to be hybrid or alternative fuel by 2011; and

WHEREAS, the San Francisco Taxi Commission has supported innovation in the San Francisco taxi

industry such as the introduction of the Ford Escape and Toyota Prius hybrids and the Ford Crown Victoria and Honda Civic compressed natural gas vehicles into the fleet; and

WHEREAS, hybrid vehicles save drivers thousands of dollars a year in fuel costs and reduce GHG emissions by half and more but are often more expensive to purchase initially; and

WHEREAS, even with a 20% reduction of greenhouse gases from 1990 levels, the San Francisco taxi fleet will still produce over 30,000 tons per year of GHG, but by investing in renewable energy or efficiency, the taxi industry can offset its GHG emissions; and

WHEREAS, vehicles using technologies like hydrogen fuel cells, biofuel electric hybrids, or electric motor drive-by-wire that would emit little or no GHG at the tailpipe are viable and on the near horizon; and

NOW THEREFORE BE IT RESOLVED, the San Francisco Taxi Commission shall adopt the necessary rules and regulations to require that the San Francisco taxi industry reduce its total GHG emissions by 50% from current levels and 20% from 1990 levels by 2011; and

BE IT FURTHER RESOLVED, that by 2015, the San Francisco Taxi Commission shall work to achieve zero net carbon emissions by offsetting the total amount of GHG produced by the San Francisco taxi fleet with an equal amount of renewable energy or energy efficiency; and

BE IT FURTHER RESOLVED, that by 2020, the San Francisco Taxi Commission shall work to achieve zero gross GHG emissions by permitting only zero emission vehicles; and

BE IT FURTHER RESOLVED, that the Taxi Commission urges the San Francisco Board of Supervisors to enact legislation to raise the per-shift gate fee to subsidize the purchase of high-efficiency vehicles; and

BE IT FURTHER RESOLVED, that the San Francisco Taxi Commission shall create a working group not later than September 1, 2007 to research and develop a green taxi vehicle guide listing the cleanest available gasoline and alternative fuel vehicles available on the market today that are suitable for use as taxis and to evaluate and suggest policies to implement this policy; and

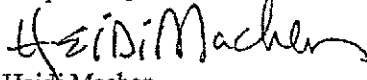
BE IT FURTHER RESOLVED, that the working group will report its findings and present its "Green Taxi Vehicle Guide" to the Taxi Commission at the Taxi Commission's October 23, 2007 meeting; and

BE IT FURTHER RESOLVED, that the Taxi Commission asks that copies of this resolution be sent to all color schemes, permit holders, the San Francisco Board of Supervisors, the Municipal Transportation Authority, the Department of the Environment, and SFO's Ground Transportation Unit.

AYES: Gillespie, Breslin, Benjmain, Oka, Paek, Heinicke, Oneto
NOES: 0

ABSENT: 0
RECUSED: 0

Respectfully Submitted,


Heidi Machen



CITY AND COUNTY OF
SAN FRANCISCO

TAXI COMMISSION
MAYOR GAVIN NEWSOM

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HEIDI MACHEN, EXECUTIVE DIRECTOR

January 23, 2008

At its meeting of January 22, 2008, the Taxi Commission adopted the following resolution and findings, including the proposed rules set forth in the resolution:

RESOLUTION NO. 2008-XX

PROVIDING THAT THE TAXI COMMISSION SHALL NOT APPROVE PLACING A VEHICLE INTO SERVICE AS A SAN FRANCISCO TAXI AFTER JULY 1, 2008 IF THAT VEHICLE PRODUCES GREENHOUSE GAS (GHG) EMISSIONS IN EXCESS OF THE COMMISSION'S TARGET FOR GHG REDUCTIONS, WITH LIMITED EXEMPTIONS; REQUIRING REPORTING BY THE TAXI COMMISSION AND BY COLOR SCHEMES; AND, URGING THE SAN FRANCISCO BOARD OF SUPERVISORS TO INCREASE THE GATE FEE CAP FOR QUALIFYING CLEAN AIR VEHICLES.

WHEREAS, The San Francisco taxi industry is a major user of non-renewable fossil fuels and a major emitter of greenhouse gases (GHG), with 1,500 vehicles traveling 135 million miles per year and releasing roughly 75,000 tons of GHG into the atmosphere each year; and

WHEREAS, In 2002, the San Francisco Board of Supervisors passed and Mayor Willie Brown signed Resolution 158-02 which called for a 20 percent reduction of greenhouse gas emissions in the City from 1990 levels by the year 2012; and

WHEREAS, In 2004, Mayor Gavin Newsom issued the San Francisco Climate Action Plan outlining necessary steps to meet GHG reduction goals, and in his 2006 State of the City Address, called for all taxis to be either hybrid or alternative fuel vehicles by the year 2011; and

WHEREAS, On June 12, 2007, the San Francisco Taxi Commission passed Resolution 2007-21, which directed the Taxi Commission to adopt the necessary rules and regulations to reduce GHG emissions in the San Francisco taxi fleet by 20 percent from 1990 levels and 50 percent of current levels by 2011, and to work to achieve carbon offsets by 2015 and zero emission vehicles by 2020, and to appoint a working group to examine the issue and suggest rules to implement the policy; and

WHEREAS, Commissioners Paul Gillespie, Richard Benjamin and Tom Oneto, along with members of the taxi industry and the public, met as the Clean Taxi Working Group in a series of publicly-noticed meetings during September and October 2007 to evaluate the potential of the taxi fleet to meet this goal; and

WHEREAS, The Clean Taxi Working group made the following findings:

- The average taxi travels 90,000 miles per year and that 811 taxicabs in 1990 averaged 12.5 miles per gallon; and
- Analyzing only tank-to-wheels consumption and measuring only carbon dioxide (CO₂) at 19.6 pounds per gallon, the 811 taxicabs in 1990 emitted 57,224 tons of GHG per year, and a 20 percent reduction of this amount would be 45,779 tons; and
- In order to meet the overall fleet GHG reduction goal of 45,779 tons, each of today's 1,500 cabs must, on average, emit no more than 30.52 tons per year, or 307 grams per mile; and
- Possible sources of funding for reduced emission vehicles could include raising per shift gate fees by three to ten dollars which would raise \$6,500 to \$22,000 over three years, tax credits up to \$3,000 per qualifying vehicle, local air quality management district grants, and as-yet-untapped or unidentified funds; and,
- Wheelchair-accessible vehicles should be exempt from the proposed emission standard until such time as a clean and accessible vehicle is available.

Now therefore, be it

RESOLVED, That the Taxi Commission adopts the following regulations:

- Beginning July 1, 2008, the Taxi Commission shall not approve the use of any vehicle being placed into service as a San Francisco taxi that produces more than 30.52 tons of GHG per year per vehicle, or 307 grams per mile, averaged over all the vehicles in the color scheme's fleet;
- Wheelchair-accessible vehicles shall not be subject to the foregoing rule until the Taxi Commission determines that a qualifying accessible vehicle is available;
- Every year by April 1, the Taxi Commission, in consultation with the Department of the Environment, shall publish on its website information concerning qualifying vehicles, available funding incentives, and progress on implementing the goals of GHG reduction, offset and elimination, and any other relevant information as deemed necessary; and,
- Every year by June 1, each color scheme shall submit to the Taxi Commission information on vehicles to be replaced in the coming year and replacement plans.

And, be it

FURTHER RESOLVED, That the Taxi Commission urges the San Francisco Board of Supervisors to increase the average gate fee for vehicles that produce no more than 30.52 tons of GHG per year per vehicle, or 307 grams per mile, including those placed into service prior to adoption of this resolution; and, be it

FURTHER RESOLVED, That upon adoption by the California Air Resources Board of regulations regarding CO2 emissions reporting, the Taxi Commission shall reconsider and, if appropriate, amend the emission goals incorporated in this Resolution to reflect those regulations; and, be it

FURTHER RESOLVED, That the Taxi Commission directs that a copy of this resolution be transmitted to the Mayor, the Board of Supervisors, the Department of the Environment, the Municipal Transportation Agency, the Airport Commission, and to all color schemes.

AYES:
ABSENT:

NOES:
RECUSED:

Respectfully submitted,

Heidi Machen
Executive Director

MAKE	MODEL	YEAR	FUEL	COMB MPG	FUEL \$ PER YEAR	GRAMS PER MILE CO2 T-W	YEARLY CO2 TONS FOR 90,000 MILES	TOTAL FLEET CO2 TONS (1500)	CALIFORNIA EMISSIONS STANDARD
FORD	ESCAPE HYBRID FWD	2008	GAS	33	9,545	269.4	26.73	40,091	SULEV II AT-PZEV
HONDA	CIVIC HYBRID	2008	GAS	42	7,500	211.7	21.00	31,502	SULEV II AT-PZEV
HONDA	CIVIC CNG	2008	CNG	27	7,333				SULEV II AT-PZEV
MAZDA	TRIBUTE HYBRID FWD	2008	GAS	33	9,545	269.4	26.73	40,091	SULEV II AT-PZEV
MERCURY	MARINER HYBRID	2008	GAS	33	9,545	269.4	26.73	40,091	SULEV II AT-PZEV
NISSAN	ALTIMA HYBRID	2008	GAS	34	9,265	261.5	25.94	38,991	SULEV II AT-PZEV
TOYOTA	CAMRY HYBRID	2008	GAS	34	9,265	261.5	25.94	38,991	SULEV II AT-PZEV
TOYOTA	PRIUS HYBRID	2008	GAS	47	6,702	189.2	18.77	28,151	SULEV II AT-PZEV
FORD	CROWN VIC	2008	GAS	17	18,529	522.9	51.88	77,814	BIN 5
FORD/BAF	CROWN VIC	2007	CNG						SULEV

THIS VEHICLE IS AVAILABLE (U.S. DEPARTMENT OF ENERGY STATISTICS ARE NOT AVAILABLE)

MAKE	MODEL	YEAR	FUEL COMB MPG	FUEL \$ PER YEAR	GRAMS PER MILE CO2 T-W	YEARLY CO2 TONS PER 90,000 MILES	TOTAL FLEET CO2 TONS (811)	CALIFORNIA EMISSIONS STANDARD
FORD	CROWN VIC (PI)	1990	GAS 13	24,231	683.9	67.85	55,025	N/A
FORD	CROWN VIC (PI)	1988	GAS 12	26,250	740.9	73.50	59,611	N/A
DODGE	CARAVAN	2008	GAS 18	17,500	493.9	49.00	PER 100 4,900	N/A

THIS DATA WAS COMPILED FROM THE U.S. DEPARTMENT OF ENERGY WEBSITE, (WWW.FUELECONOMY.GOV) AND USES THE NEW EPA MPG RATINGS.

ONE GALLON OF GASOLINE PRODUCES 19.6 POUNDS OF CARBON DIOXIDE. GREEN HOUSE GASES INCLUDE CARBON DIOXIDE, NITROUS OXIDE AND METHANE. VEHICLES ARE ASSUMED TO TRAVEL 90,000 MILES PER YEAR, 70% CITY AND 30 % HIGHWAY. FUEL PRICE ASSUMPTIONS ARE \$3.50 FOR REGULAR GAS, \$2.20 FOR CNG GALLON EQUIVALENT AND \$4.50 FOR E-85. TOTAL FLEET IS CALCULATED FOR 1500 VEHICLES.

BASE CO2 AMOUNT FROM 1990 = $(\frac{1}{2} \cdot 1988 + \frac{1}{2} \cdot 1990) = 57,318$
 2012 TARGET GREEN HOUSE GAS AMOUNT (LESS 20%) = 45,854
 CO2 GAS AMOUNT PER VEHICLE = 30.57
 AMOUNT ADJUSTED FOR 100 RAMP TAXI'S = -1.36
 RAMP CALCULATION
 49.0 - 30.57 = 18.43 PER VEHICLE
 18.43 x 100 = 1843
 1843 ÷ 1400 =

2012 NET GREEN HOUSE GAS TARGET PER VEHICLE

29.21 TONS PER VEHICLE

POUNDS PER MILE EQUIVALENT
 GRAMS PER MILE EQUIVALENT

.6491
 294.43

SURCHARGE	SHIFTS PER DAY	NUMBER OF DAYS	TOTAL COLLECTED 1 YEAR	TOTAL COLLECTED 3 YEARS	TOTAL COLLECTED 3 1/2 YEARS
\$3	2	365	\$ 2,190	\$ 6,570	\$ 7,665
\$5	2	365	\$ 3,650	\$ 10,950	\$ 12,775
\$7	2	365	\$ 5,110	\$ 15,330	\$ 17,885
\$7.50	2	365	\$ 5,475	\$ 16,425	\$ 19,163
\$10.00	2	365	\$ 7,300	\$ 21,900	\$ 25,550