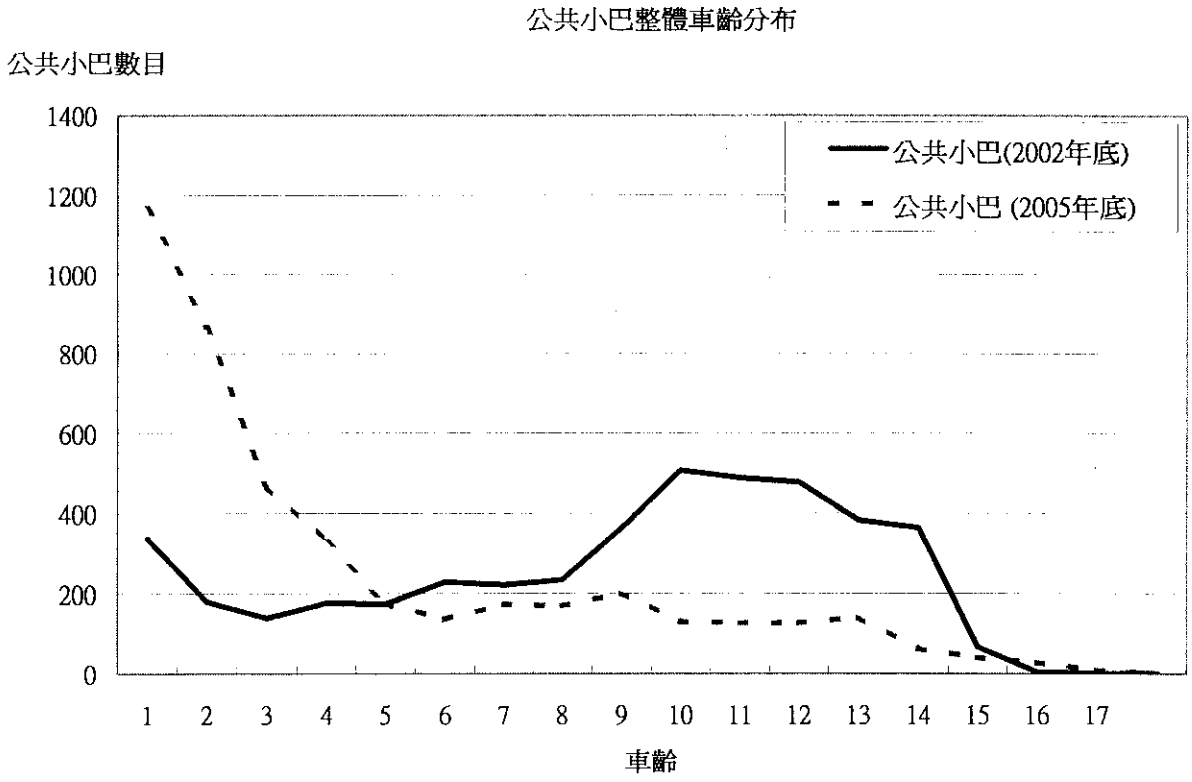
透過提供一筆過資助鼓勵車主盡早更換歐盟前期及歐盟 I 期柴油商業車輛

當局就爭氣行動意見的回應

問題一：本港小巴車隊是否因為轉用石油氣小巴而提早更換了？

政府推出的資助計劃明顯達至鼓勵車主提早更換柴油公共小巴的作用。當開展資助計劃前，綠色及紅色公共小巴的平均車齡分別是八年及十年。當完成資助計劃時，綠色及紅色公共小巴的平均車齡已大幅下降至四年。

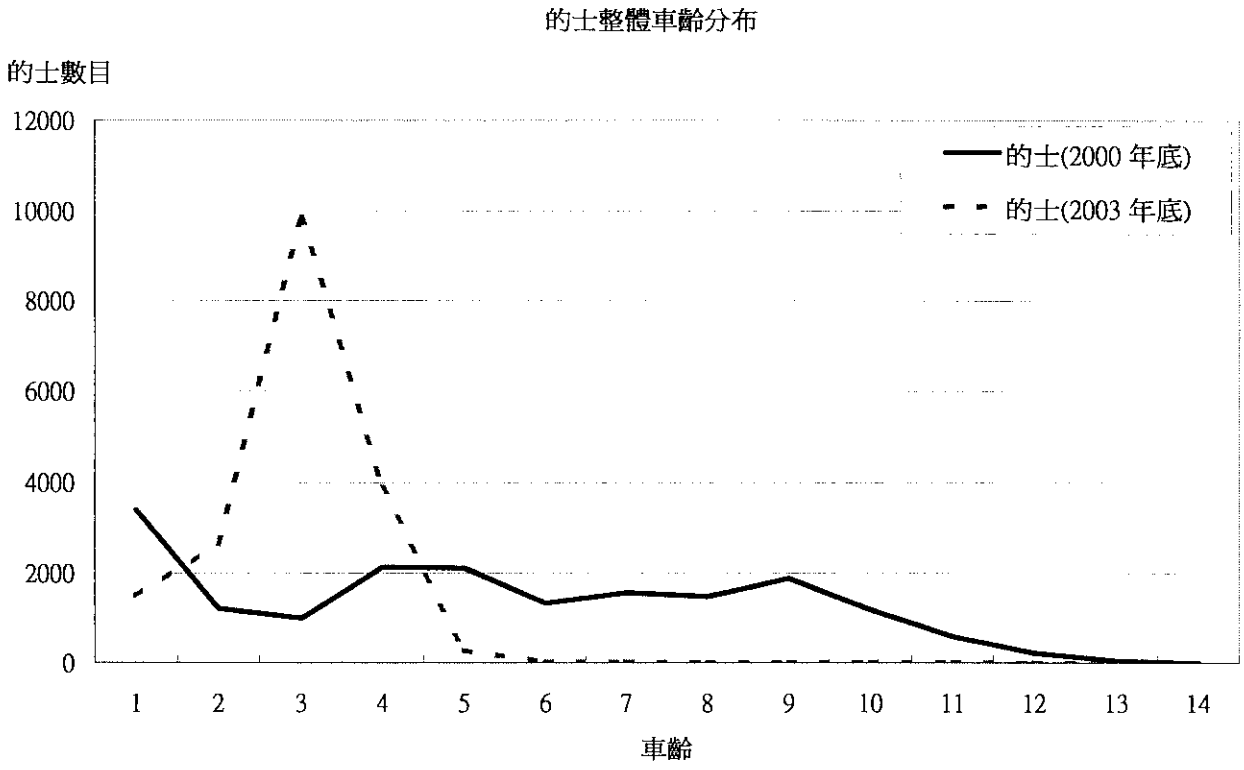
以下圖表比較資助計劃開展前及完成時的公共小巴車齡分布，清楚顯示實施資助計劃有效地令公共小巴的整體車齡顯著下降。



問題二：其他國家曾否成功執行跟本建議計劃相似的自願(換車)計劃？

關於其他國家執行類似計劃的成效，我們沒有詳細資料。然而，政府完成的石油氣的士和石油氣公共小巴資助計劃，已成功地鼓勵車主提早放棄較污染的車輛。

跟第一項回應關於石油氣公共小巴資助計劃一樣，以下圖表比較石油氣的士資助計劃開展前及完成時的的士車齡分布，清楚顯示實施資助計劃有效地令的士的整體車齡顯著下降。



問題三： 如實施本資助計劃，納稅人為減少每公噸污染物排放付出的成本是多少？跟外地減排計劃和近日廣東省的排污交易計劃(的減排成本)比較，這計劃的減排成本又如何？

實施建議資助計劃，氮氧化物和懸浮粒子的減排成本平均分別爲每公噸$340,000 及$2,000,000。

本建議資助計劃和排污交易計的減排成本不能相提並論，原因是這兩個計劃針對的污染問題並不相同，前者旨在改善路邊空氣質素，後者則針對主要由發電廠引起的區域性空氣污染，而減少發電廠污染物排放對改善路邊空氣質素並無效用。

政府於 2000 年推出多項管制車輛廢氣排放的措施，已見成效。和 1999 年比較，2006 年路邊氮氧化物和懸浮粒子平均含量分別減少 19%及

13%。爲進一步減少路邊空氣污染，新措施的減排成本可能較舊措施爲高。不過，政府有決心採取任何可行措施務求進一步改善空氣質素，本建議計劃是將會採取的措施之一。

問題四：政府曾就本建議詢爭氣行動。長春社亦曾向立法會環境事務委員會呈交意見書。

爭氣行動和長春社的意見書載於附件一及附件二。兩份意見書的內容和爭氣行動於 2 月 6 日提交的文件的觀點相若。

問題五至七和審計署 2005 年 1 月刊出的審計報告有關

問題五: 過去一年內，共有多少合資格申請資助車輛在最嚴格的方法下測試？

運輸署對柴油車進行年檢，以確保適合在馬路行駛及排放的煙霧符合香港法例第 374A 章道路交通(車輛構造及保養)規例的法定要求。現時的法定要求是最高煙霧不能超過六十個哈特里奇煙霧單位。運輸署現正修訂有關法例，把標準收緊至五十個哈特里奇煙霧單位，與環保署採用的標準相同，並計劃將修例建議於今年年中提交立法會審批。

由於地方限制，運輸署未有足夠底盤功率機測試所有柴油車輛，現時只能隨機抽樣進行底盤功率機測試，其餘車輛則以自由加速測試進行測試煙霧。在 2006 年, 共用 4560 輛柴油車輛使用底盤功率機進行測試，其中 1700 輛屬歐盟前期，1100 輛爲歐盟 I 期。運輸署現正增設一部底盤功率機，預期今年第二季開始運作。

底盤功率機是環保署爲測試被檢舉黑煙車輛，採用的標準煙霧測試方法。在 2006 年，環保署的黑煙車輛管制計劃下共測試了 3321 輛歐盟前期及及 1777 輛歐盟 I 期車輛。

問題六: 有關運輸署承諾嚴格執行監察系統

運輸署已經加強監察在宜於道路上使用的車輛檢驗的煙霧測試，不論該車輛是屬於歐盟前期、歐盟 I 期或其他更嚴格的排放標準類型。措施包括－

(甲) 把抽煙樣本喉插入排氣喉的工序，現已安排由運輸署的車輛測試員而非由車輛司機執行。

(乙) 運輸署已經加強監察司機在進行空檔加速法時的動作，以確保測試是在正確的情況下進行。現時標準做法是運輸署測試員會站在司機門旁邊，監察加速器的速度。

(丙) 運輸署已訓示檢查線的主管(汽車檢驗主任)加強對車輛檢查員的工作的監察。較高級的汽車檢驗主任會對檢驗車輛素質進行突擊檢查，以確保員工依足檢查程序工作。

(丁) 再者，運輸署在 2005 年底在柴油驗車線上增加了五部轉數表，以在自由加速測試程序進行時，量度引擎速度以防干擾引擎運作。

上述新監察措施運作良好，並沒有發現任何異常情況。

問題七：黑煙檢驗

根據審計報告，香港現時採用的 60 哈特里奇煙霧標準比巴基斯坦採用的標準更低，運輸署表示會在 2008 年收緊煙霧標準。

煙霧標準並不是唯一也不是可靠的指標，以判斷減少柴油車輛廢氣排放的成效，更重要是如何落實各種管制措施。透過環境保護署(環保署)的黑煙車輛管制計劃、運輸署的車輛年檢、警察的執法行動和引進底盤功率機測試，本港在 1999 年和 2006 年期間的黑煙車輛數字已下降約 80%。

國際組織如世界銀行、亞洲發展銀行和亞洲城市清潔空氣行動都認同我們的成功經驗。其他城市如新加坡和韓國亦參考我們的計劃，推出類似的計劃。

政府會鞏固上述跨部門工作的成果，繼續從多方面處理車輛排放黑煙的問題，以保證所有在用車輛(不論是否納入建議中受資助的車輛)，都

必須符合法定的黑煙排放要求。

正如上文所述，運輸署正準備收緊黑煙排放的法定標準，目標是在 2008 年初達至與環保署同一水平。

環境保護署
二零零七年二月

附件一
爭氣行動於2006年12月31日呈交的意見書

31 Dec, 2006

LegCo Panel on Environmental Affairs
Special meeting - 5 January 2007

Re: Pre-Euro and Euro I diesel commercial vehicles "grants"

Honorable members,

Have the "incentive" grants for taxis and minibuses actually reduced air pollution more quickly than if the subsidy had not been established?

If they did reduce air pollution more quickly, how much did the taxpayer spend per unit of pollution that was not created?

This submission reviews the minibus and taxi incentive grants, calculates how much money was spent, where it was spent and shows if that money cost effectively reduced pollution.

We try to give an accounting of the money spent and offer an evaluation of the success or failure of the "grant" concept to successfully reduce pollution faster than existing laws normally would without any financial incentives.

Regards,

Annelise Connell
Chairperson
Clear The Air

Executive Summary:

The money spent on "incentive" grants for taxis and minibuses was a failure of environmental economics. Pollution was not reduced faster than would have happened under existing law and natural business practice. However it did cost the Hong Kong taxpayer millions of dollars. The "incentives" failed for several reasons.

1. The money was given toward the purchase of new vehicles instead of being spent on the market value of the old vehicle. This means that the Government paid far more than the actual market value of the old vehicle being replaced, guaranteed payment of an abnormally high market value (established by the subsidy) even if the vehicle was left on the road for several years after the subsidy was introduced. The actual "incentive" was now to leave the polluting vehicle on the road as long as possible because the "purchase" price was the same whenever it was retired and it could even be left on the road after the subsidy had ended – with perhaps a new subsidy offered.

2. There was no calculation of how many months or years worth of pollution was actually reduced because of the payment. The numbers suggest that natural attrition and, in the case of taxis, the change in law, achieve the results. The subsidy did not contribute at all.

Note: Members should require this calculation be presented to them before considering any further "polluter profits" proposals.

3. These policies, initiated under a weak government, established a precedent that polluters, rather than being responsible members of society, may instead extort large amounts of money from the government in exchange for supporting government policies that costs the polluter nothing to implement and do not reduce pollution more quickly than normal business practice under existing laws.

There is a more economically sound and more cost effective way to use taxpayer money to reduce diesel pollution more quickly without needing the support of any industry.

Government must first declare that all vehicles on the road must be of a certain standard, for example Euro II by 2008. Then the true market value of the oldest and most polluting vehicles should be calculated based on existing transactions. This protects the government from claims by vehicle owners that they are being deprived of their property rights. Government can then offer to purchase those vehicles outright – and scrap them – at or even slightly above their true competitive market price. This economic model guarantees fair compensation under true market conditions to owners of old vehicles.

In this way, Government pays the fair price for an asset that is causing significant health problems to the Hong Kong people and makes sure society is protected. Vehicle owners get the fair market value for their property and so special interest groups do not need be paid off to gain their political support.

Clear The Air - Hong Kong

Tel: (852) 2886 2655 Fax: (852) 2565 9537 email: contactus@ClearTheAir.hk

CLEAR THE AIR

Why previous subsidies failed to reduce pollution faster

The Industry - Taxis

Taxi owners buy a new car every two years because they are driven 24 hours a day and they wear out quickly. The new law required that new taxis be LPG – and the industry fought against it. The money paid was to purchase support of the new law, not from taxi license holders (who got no money), but by those who owned the taxis. No vehicles were taken off the road early because of the subsidy – but the law was passed and now all taxis, by law and through natural attrition are LPG.

The Industry - Minibuses

The Government grants a license, called a Public Service License (PSL), to a company or person giving permission to operate one or more vehicles on a particular route for a particular purpose. What are commonly called green and red minibuses in Hong Kong are officially called Public Light Buses. Green minibuses operate on a fixed schedule with fixed prices and are under the control of the government while Red minibuses do not operate on a fixed schedule and their fares are not regulated by the Government.

The stated purpose of the minibus incentive was to encourage the holders of PSLs to use LPG minibuses instead of diesel ones to reduce the pollution that is blown directly into people's faces on our streets.

Little public accountability

The Grant "incentives", were paid to the vehicle owner to buy a new minibus, not the holder of the Public Service License or the person or company renting or leasing the vehicle. The true market value of the old minibus is unknown. Therefore, there was no "incentive" to convert early – but only replace on the original schedule, or even delay replacement until the very last minute of the incentive. We note that almost 10% of the minibuses were replaced only 4 months before the deadline of the "incentive".

Of the 152 companies that received grant money, only 50 actually run Green Minibus routes.

The number of individuals and how much money each received were NOT listed, and no information regarding Red minibuses was provided even though it was specifically requested.

Clear The Air - Hong Kong

Tel: (852) 2886 2655 Fax: (852) 2565 9537 email: contactus@ClearTheAir.hk

CLEAR THE AIR
淨氣行動

Bad result

Taxpayers paid out $142.2 million on the minibus subsidy.

As of September 2005, 42% of the minibuses still had NOT converted to LPG, and 10% had replaced their minibuses with new diesels. Yet, according to the Environmental Protection Department 98% of minibus routes have an LPG station available.

As of Sep 2005, owners of 886 polluting old Red minibuses (over 40% of the total cash paid out) had received the grant money, but the Transport Department has provided no accountability for those Red minibus owners. In fact, EPD replied to us that

> "Transport Department has not kept the information regarding the "type" of vehicles (i.e. red/green minibus)"

Only 14% of vehicles were retired before their natural end of life of 10 years. An unknown number were much older than 10 years.

This means that if you look at the money spent to replace minibuses that are under 10 years old, the "incentive" actually cost $433,000 per minibus – 120% of their total replacement cost. Also, the EPD has no proof that these buses were scrapped – only that they were de-registered and that export licenses have not been obtained.

So, 86% of the subsidy, or $122 million was paid to companies who did nothing to reduce pollution, yet still were paid the "incentive".

Conclusion

"Incentives" without laws to require compliance of all vehicles by a certain date does not reduce air pollution faster. Paying the market value of the old vehicle may be cost effective, but subsidizing a new vehicle is not.

Clear The Air - Hong Kong

Tel: (852) 2886 2855 Fax: (852) 2565 9537 email: contactus@ClearTheAir.hk

附件二
長春社於2007年1月3日呈交的意見書

Submission on Government's Proposed Subsidy Scheme to Encourage Replacing Pre-Euro and Euro-I Diesel Vehicles to Euro IV Vehicles

5 January 2007

Understanding of Government Scheme

1. Government proposes to spend HK$3.176 billion to subsidize owners of diesel vehicles of pre-Euro and Euro-I standards to change their vehicles to Euro-VI standard. The main justification is that these vehicles are very dirty and emit a lot more air pollutants than the rest of the vehicle fleet in Hong Kong and the owners are not willing to replace their vehicles without a subsidy.
2. The amount of subsidy varies according to the scrap value of the vehicles. Subsequently, the older and smaller the vehicle, the lesser is the subsidy. Therefore, the smallest pre-Euro diesel vehicle gets the least money and the largest Euro-I vehicle gets the largest amount.
3. For light buses, as there are more options for replacement, i.e., Euro IV diesel, LPG and electric, the subsidy varies according to the cleanliness of the vehicle type. Subsequently, electric vehicle gets the largest subsidy and diesel vehicle gets the least.

Justifications of the Scheme

4. Government's logic of the scheme is that if we can replace the 49161 pre-Euro and 25206 Euro-I diesel vehicles with cleaner vehicles (Mainly Euro IV, partly LPG and Electric), there will be 74% and 38% less vehicle emissions of particulates and nitrogen oxides, implying cleaner air.
5. Majority of the 49161 pre-Euro diesel vehicles are very old (12 to 15 years) and have exceeded their normal operating life span. The Euro-I vehicles are close to the end of their operating life span (10 to 12 years). The pre-Euro vehicles should have been scraped and the Euro-I vehicles should be retired very soon. Government's subsidy (average HK$38377 for each pre-Euro vehicle and HK$51160 for each Euro-I vehicle) is to expedite the phasing out of these vehicles.
6. There are some fundamental flaws of this logic: (a) this is totally against the principles of polluter pays which we persistently and Government occasionally uphold; (b) subsidizing the Euro-I vehicles is not effective at all compared to the case of pre-Euro vehicles – Government pays HK$ 1.87 billion for 1044 tons of particulate and 4950 tons nitrogen oxides reduction (aggregate HK$314,752 per ton) to pre-Euro vehicles but HK$1.29 billion for 299 and 953 tons of these two pollutants (aggregate HK$1,029,982 per ton) to Euro-I vehicles and (c) the subsidy to the light buses passes a very wrong message to these owners, i.e., there would be more rewards for not joining the LPG scheme before 2005 – remaining to use the diesel vehicle can still have a subsidy of HK$40,000. This is unfair to those operators/ owners who listened to Government to switch their diesel vehicles to LPG version.

Dilemma

7. These flaws as said above develop "naturally" from the contradictions of Government's environmental policy and industrial/ commercial support policy. It is Government's long standing policy to support SMEs and that is why the tax on diesel is still lower than that on petrol although diesel in many aspects is more polluted than petrol.
8. The need to support these SMEs (including many diesel vehicle operators) is well understood as they provide many job opportunities. However, this support has a limit. SMEs cannot pose danger to public health and safety. Government and legislators have full responsibility to ensure public health and safety. There must not be any compromise.
9. The policy makers (Government and Legislative Council) must be very clear that public health is an uncompromised objectives and survival of SMEs is only one of the many constraints. We cannot put the carts in front of the horse. Otherwise, our community will be the same as triad society ruled by force and balance of benefits.

Our Counter-proposal

10. The citizens of Hong Kong certainly are not willing to see the money spent but the dirty air problem persists. The main problem of the Government's proposed subsidized scheme is that it is solely voluntary; the polluters have a freedom of not joining the scheme. They may even have a "reasonable expectation" of a better scheme for them if they do not join this time, same as the LPG scheme for light buses.
11. If these pre-Euro and Euro-I diesel vehicles produce 30 and 15 times more particulates and 2 and 1.5 times more nitrogen oxides than the current Euro-IV versions, it is highly likely that these vehicles do not pass a proper emission test. And, by tightening the law enforcement, not to mention the vehicle emission laws, most of these vehicles shall be forced out of the road. So, one of the logical options is to step up the law enforcement. As such, these vehicles have to undergo an annual emission test (at least for particulate and NOx emissions) for re-issuing of road license and more roadside emission tests should be performed.
12. Another tidier option is that the Transport Department will stop re-issuing the road license for these vehicles when this subsidy scheme expires.