

Commented [COMMENT1]:
NOAM

20 March 1997

A4-0099/97

REPORT

on the communication from the Commission to the European Parliament and the Council on a future strategy for the control of atmospheric emissions from road transport taking into account the results from the Auto/Oil Programme (COM(96)0248 - C4-0492/96)

Committee on the Environment, Public Health and Consumer Protection

Rapporteur: Doeke Eisma

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By letter of 29 August 1996 the Commission forwarded to Parliament its communication to the European Parliament and the Council on a future strategy for the control of atmospheric emissions from road transport taking into account the results from the Auto/Oil Programme.

At the sitting of 20 September 1996 the President of Parliament announced that he had referred this communication to the Committee on the Environment, Public Health and Consumer Protection as the committee responsible and the Committee on Budgets, the Committee on Economic and Monetary Affairs and Industrial Policy, the Committee on Research, Technological Development and Energy and the Committee on Transport and Tourism for their opinions.

At its meeting of 7 May 1996 the Committee on the Environment, Public Health and Consumer Protection had appointed Doeke Eisma rapporteur.

It considered the draft report at its meetings of 4 February 1997 and 19 March 1997.

At the latter meeting it adopted the motion for a resolution unanimously with 1 abstention.

The following took part in the vote: Collins, chairman; Poggiolini and Lannoye, vice-chairmen; Eisma, rapporteur; d'Aboville, Aparicio Sanchez, (for Diez de Rivera Icaza), Bowe, Estevan Boléa (for Bébéar), Flemming, Garosci (for Leopardi), Gonzalez Alvarez, Graenitz, Hautala (for Breyer), Holm (for McKenna), Hulthén, Jackson, Kock (for Florenz), Kokkola, Kuhn, Lange (for van Putten), Liese (for Schnellhardt), Mamère (for Tamino), Marinucci, Myller (for Apolinario), Needle, Olsson, Oomen-Ruijten, Pollack, Roth-Behrendt, Schleicher, Valverde Lopez, Virgin and White.

The opinions of the Committee on Budgets, the Committee on Economic and Monetary Affairs and Industrial Policy, the Committee on Research, Technological Development and Energy and the Committee on Transport and Tourism are attached.

The report was tabled on 20 March 1997.

The deadline for tabling amendments will be indicated in the draft agenda for the relevant part-session.

A
MOTION FOR A RESOLUTION

Resolution on the communication from the Commission to the European Parliament and the Council on a future strategy for the control of atmospheric emissions from road transport taking into account the results from the Auto/Oil Programme (COM(96)0248 - C4-0492/96)

The European Parliament,

- having regard to the communication from the Commission to the European Parliament and the Council on a future strategy for the control of atmospheric emissions from road transport taking into account the results from the Auto/Oil Programme (COM(96)0248 - C4-0492/96),
 - having regard to the countless resolutions of the European Parliament on air pollution, sustainable transport and sustainable energy consumption,
 - having regard to the report of the Committee on the Environment, Public Health and Consumer Protection and the opinions of the Committee on Budgets, the Committee on Economic and Monetary Affairs and Industrial Policy, the Committee on Research, Technological Development and Energy and the Committee on Transport and Tourism (A4-0099/97),
- A. whereas the approach adopted by the Commission in the Auto/Oil Programme of drawing up, in cooperation with the automotive and oil industries, a programme to achieve radical cuts in emissions from motor vehicles, was the right one, even though the Commission should have involved in the programme other organizations and experts from the Member States,
- B. whereas road transport in the Community is responsible for 25% of all CO₂ emissions and 50% of all NO_x emissions,
- C. whereas the Commission's approach of defining air quality targets in urban areas on the basis of a mean value in an area of 4 km² is not in accordance with the approach using measurements as set out in Annex III of Directive 85/203/EEC(), which pays particular attention to 'canyon' streets carrying heavy traffic and major intersections,
- D. whereas the Commission claims to take as its basis the precautionary principle, so that it may be assumed that the air quality targets are obtained throughout the entire Union, while on the other hand it admits that the proposed standards are not sufficiently stringent to achieve these objectives throughout the Union,

(), which pays particular attention to 'canyon' streets carrying heavy traffic and major intersections,)

Council Directive of 7 March 1985 on air quality standards for nitrogen dioxide

- E. whereas the precautionary principle, combined with the scientific uncertainties concerning long-term effects of simultaneous exposure to a mixture of many different substances, is such that broad safety margins need to be used,
- F. whereas, in drawing up the proposals, the Commission has been guided exclusively by the consequences of air pollution for human health, although air pollution also causes considerable damage to agricultural crops, ecosystems and the environment in the broad sense, and consequently more stringent quality objectives are often justifiable,
- G. whereas the actual costs of motoring must be passed on to the consumer and alternative forms of transport must be improved in order to reduce the use of motor vehicles,
- H. whereas in its Green Paper 'Towards fair and efficient pricing in transport' (COM(95)0691), the Commission estimates the cost of air pollution caused by the transport sector throughout the Union at ECU 86 bn in 1991,
- I. whereas the Commission only provides figures for the financial consequences for the automotive and oil industry, but not the financial advantages of cleaner air for society as a whole (the environment, public health, agriculture and ecosystems, etc.),
- J. whereas the communication is concerned only with one aspect of the problems caused by road traffic, namely air pollution, and factors such as noise nuisance, soil and water pollution, the consumption of natural raw materials and the high social costs are ignored,
- K. whereas a reduction in emissions per vehicle must not be the justification for an increase in the car population, since in many places in Europe a further increase in transport will push the costs of congestion up to a point where they will have an adverse effect on economic development,
- L. whereas more rapid development of clean technology for European industry is necessary in order to cope with competition in the world, and whereas the imposition of strict environmental standards can form an incentive in this respect,
- M. whereas cleaner fuel has a direct effect on air pollution by vehicles since it has an immediate effect on the exhaust emissions of vehicles in circulation, and whereas some emission-reducing vehicle technologies can only be used if sufficiently high-grade fuels are marketed,
- N. whereas both the automotive and the oil industry can better respond to environmental requirements if the latter are defined well in advance,
- O. whereas the Commission proposals are concerned with environmental objectives for the year 2010 and whereas a number of studies (OECD, STOA) show that vehicle emissions will continue to increase after 2010 as a result of the growth in transport unless new radical measures are taken,
- P. whereas an Auto/Oil II Programme is desirable, but cannot be used to defer a decision on the present proposals for the year 2005,

- Q. whereas the Commission itself has already indicated that the proposed efforts to combat ozone will not be sufficient to satisfy the quality target of 180 $\mu\text{g}/\text{m}^3$ (99 percentile value - one hour)(
) , and whereas the limit value for human health recommended in Directive 92/72/EC of 110 $\mu\text{g}/\text{m}^3$ (99 percentile value - eight hours) is quite unattainable and whereas the limit value given in the directive for ecosystems of 65 $\mu\text{g}/\text{m}^3$ (99 percentile value - 24 hours) has been completely ignored,
- R. whereas for benzene the Commission is using a quality target of 10 $\mu\text{g}/\text{m}^3$, which according to the WHO comes close to 1 death per 20 000 people in the event of lifelong exposure, and whereas a much more stringent standard is used in most of the Member States,
1. Welcomes the Commission communication and the proposals made in it as an essential and absolutely necessary contribution to the fight against air pollution by motor vehicles;
 2. Recognises that the Auto/Oil programme is a valuable contribution and starting point to determine the best way to limit pollution from motor vehicles and fuel from the year 2000 and beyond; is, however, of the opinion that it is necessary to further control motor vehicle emission limits to ensure that European Union air quality targets are achieved;
 3. Takes the view that noise pollution, which has serious effects on health, should also form part of the future strategy of integrated, global control of emissions caused by road transport, and that there is therefore no reason not to treat it as another form of pollution in this programme;
 4. Regrets the Commission's working method which did not involve in the programme experts from the Member States or other organizations;
 5. Regrets that the Commission has not discussed CO₂ emissions from cars and fuel efficiency in the Auto/Oil Programme I but has left this to a separate communication (COM(95)0689);
 6. Calls for further research into the consequences of the emission of particulate matter on public health, given the increasing concern in scientific circles about the effect on health, and is of the opinion that, in view of the scientific uncertainty which currently prevails in respect of the harmful nature of these substances, priority should be given to prevention;
 7. Is of the opinion that Member States should market higher grade fuels not simply because of poor air quality, but also because of more general environmental objectives, such as criteria for deposition causing acidification or eutrophication;
 8. Calls on the Member States to enforce emissions standards in the existing vehicle fleet by regular and random test procedures;
 9. Requests the Commission to complete its study by including the statistical data of the three new Member States;

(), and whereas the limit value for human health recommended in Directive 92/72/EC of 110 $\mu\text{g}/\text{m}^3$
value for an area of 22 500 km²

Mean

10. Reiterates its position that cost-effectiveness, although a principle to be applied in many areas, cannot be the guiding principle where environmental protection and public health are concerned, especially as most of the costs of quality-enhancing measures are ultimately passed to the consumers;
11. Stresses that vehicle control standards based on cost effectiveness must not inhibit the encouragement of best available technologies which may lead to new industrial processes and designs which European manufactures can exploit in world markets;
12. Takes the view that the Commission should have used more stringent quality targets, particularly for ozone and benzene, in the light of the latest scientific findings;
13. Insists on the need to finance projects for sustainable transport from the resources of the structural funds;

Costs and financial support measures

14. Is of the opinion that the Commission has overestimated the costs of the measures to be taken since the basic data come from the industry itself, which has a vested interest in high estimates, and that the Commission has taken no account of the fact that new technology usually becomes cheaper in the course of its application;
15. Regrets that the Commission has mistakenly based its approach on the principle of cost-effectiveness, and has not started by making a cost-benefit analysis;
16. Calls on the Member States to make greater use of fiscal and economic measures to encourage the use of environment-friendly motor vehicles and fuels and calls on the Commission to carry out studies into the effectiveness of selective fiscal measures to encourage the use of smaller, lighter vehicles, and cleaner fuels such as natural or liquid petroleum gas, re-formulated petrol and biofuels;
17. Calls on the Commission to encourage Member States to develop a system of fiscal incentives for cleaner fuels and low emission vehicles that ensure the more rapid modernisation of the vehicle fleet; such fiscal incentives should be targeted at vehicles applying best available technologies and should also including scrappage schemes to remove older, gross-polluting vehicles;
18. Is of the opinion that European emission legislation must contain no obstacles of any sort to fiscal incentives for cleaner or more economical vehicles and cleaner fuels;

Motor vehicles

19. Calls on the Commission to review the testing cycle for emissions to obtain a more accurate indication of emissions, particularly to reflect warm-up times from cold-start, a lower ambient temperature and low speed driving in urban conditions;
20. Regrets that the Commission has failed to assess the opportunities of alternative propulsion technologies (in spite of the instruction to do so in Article 4 of Directive

94/12/EC) and has not carried out any serious assessment of the opportunities afforded by using alternative fuels such as bio-fuels, natural gas, LPG and hydrogen for certain sectors of the market (such as municipal buses and taxis);

21. Is of the opinion that technologies to reduce emissions, including OBD (on-board diagnostics) should function properly for the entire life of the vehicle and that the durability requirements for vehicle emissions and the OBD system must apply for 160 000 km;
22. Is of the opinion that on-board diagnostics should also be applied to diesel vehicles;
23. Calls on the Commission to include the task force on the *Car of Tomorrow* in the "strategic interventions" of the fifth framework programme for research and development to ensure adequate funding of this important project;

Fuels

24. Shares the Commission's view that a further reduction of sulphur in fuel is necessary to reduce emissions of particulate matter in diesel engines and to ensure the optimal functioning of catalysts in gasoline and diesel engines, and therefore agrees with the Commission that a sulphur limit value of 50 ppm will be required for both gasoline and diesel;
25. Is extremely surprised, therefore, that the Commission has proposed a sulphur limit value of 200 ppm for gasoline and 350 ppm for diesel fuel;
26. Calls on the Commission to amend the draft Directive on the quality of petrol and diesel fuels to require more stringent standards for the year 2000 of 14 % v/v olefins, 41 % v/v aromatics and 150 ppm sulphur for petrol engines and 300 ppm sulphur for diesel engines and to introduce a further stage at 2005 in parallel to that proposed for vehicle technologies which will again reduce the sulphur content of both petrol and diesel fuels substantially below the levels indicated for the year 2000, as indicated in Annexes III and IV of the opinion of the Committee on Economic and Monetary Affairs and Industrial Policy on the proposal for a European Parliament and Council Directive relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (COM(96)0248 - C4-0462/96 - PE 220.824/fin.);
27. Calls for research into better ways to store gas in vehicles for use as alternative fuel; and research into fuel cell technology as a longer term alternative propulsive power system for vehicles;
28. Is convinced that a second phase (2005) must be defined for fuel specifications;
29. Underlines the need for the rapid development of better/less polluting fuels to be integrated in the Auto-Oil programme as soon as possible; the second phase targets, should remain feasible objectives from the technological point of view, taking into account the results of a subsequent study (Auto-Oil II) with the participation of all interested parties.

30. Is of the opinion that an Auto/Oil II Programme should evaluate the Auto/Oil Programme I and that it should cover the following:
 - a recalculation of both costs and benefits,
 - a re-evaluation of the air quality targets on the basis of the most recent scientific findings,
 - an evaluation of air quality on the basis of Directive 85/203/EC,
 - an inventory of the state of the art,resulting in a modification of the reduction objectives which may possibly require the measures to be made more stringent;
31. Points out that much greater investment must be made by the automotive industry, by Member States, and by the Commission to develop further emission control technologies and the car of the future;
32. Calls on the Commission to give Parliament regular reports on implementation of the Auto/Oil Programme, the first to be provided two years after the programme enters into force, to enable a continuous assessment to be made;
33. Instructs its President to forward this resolution to the Commission, the Council and the governments and parliaments of the Member States.

B
EXPLANATORY STATEMENT

INTRODUCTION

Commented [COMMENT2]:
NOAM

Motorized road transport is a permanent feature of our society. In many respects it contributes to our prosperity and our well-being. It enables us to conduct trade on a large scale, to enjoy excursions, to go to work, to maintain contact with friends and it is an important stimulus for economic development.

Unfortunately, however, the arrival of the car has been a mixed blessing. The social costs involved in road transport are enormous. To give only a few examples, exhaust fumes lead (directly) to air pollution and (indirectly) to pollution of water and soil, traffic itself causes some 55 000 deaths in the Community every year and many times that number of injuries, the production and use of vehicles leads to enormous consumption of natural raw materials and the infrastructure required for the use of motor vehicles is a major drain on the space available.

The problem with air pollution is one of the most serious consequences of road transport. According to 'Europe's environment', published by the European Environmental Agency in Copenhagen, road transport is responsible for 80% of carbon dioxide emissions in the transport sector and 60% of NO₂ emissions. It causes damage to public health, to ecosystems, to buildings (in particular historical buildings) and it reduces the yield of agricultural crops. The main harmful substances emitted by road transport (into the air) are NO_x (NO, NO₂ and NO₃), PM (particulate matter) and HC (collective name for hydrocarbons). NO_x is harmful for the bronchial tubes, it is a contributory factor to tropospheric ozone and it is a major factor in the acidification and eutrophication of the environment. Finally, it is a contributory factor to the greenhouse effect.

PM, or particulate matter, is mainly emitted by diesel engines and its harmful effects went unrecognized for a long time. The particulates usually consist of soot to which hydrocarbons have become attached. There is increasing scientific evidence that the smallest particles, which cannot be removed by filtering, are carcinogenic and are responsible for thousands of deaths every year. The 'hydrocarbons' consist of a cocktail of substances, including polycyclic aromatic hydrocarbons, and the extremely harmful substances toluene, benzene and xylene. These substances are all carcinogenic. The tropospheric ozone caused by all these substances damages the bronchial tubes and harms ecosystems and agricultural crops.

Although the existing legislation on emissions from motor vehicles, including the latest amendment (Directive 94/12/EEC), have reduced emissions per vehicle by 90% compared with the 1970s, additional measures are needed

1. to comply with the requisite air quality targets,
2. because of the larger number of motor vehicles and
3. because of the increase in mileage per vehicle.

In 1992 the Commission decided to organize a conference on policy to be pursued after the year 2000. The conference showed that substantial improvements were possible, both with respect to fuels and with respect to vehicle technology. The conference resulted in policy proposals which were ultimately included in Article 4 of Directive 94/12/EEC.

THE COMMISSION COMMUNICATION AND THE RELEVANT PROPOSALS

In order to implement the provisions of Article 4, the Commission decided a number of years ago to investigate, in cooperation with the parties most directly affected - the automotive and oil industry - how the emission of exhaust gases could best be reduced.

This approach became known as the Auto/Oil Programme, its objective being to provide the scientific basis for policy on air pollution caused by road transport.

The Commission first looked at the effects of existing policy, with particular reference to existing emission standards. It then looked at what additional measures were needed to achieve the requisite air quality. It also looked at the optimal combination of possible policy measures: what fuel and/or vehicle measures could achieve the air quality targets at lowest cost.

The air quality targets were taken partially from the recommendations of the World Health Organization (WHO). In its communication, which is the subject of this report, the Commission sets out its approach, the strategy to be followed and at the same time the measures proposed. These measures are:

1. improving the quality of gasoline and diesel fuel by amending Directive 93/12/EC^(.). Standards for a large number of components of such fuels were appended to this directive;
2. measures relating to emissions from motor vehicles, by amending Directive 70/156/EEC and 70/220/EEC^(.).

These two proposals form the lion's share of the package of proposals. It is these proposals on which Parliament must now deliver an opinion.

The Commission also proposes the following measures at some future date:

- amending Directive 70/220/EEC to lay down more stringent standards for light commercial vehicles and other measures including some of those mentioned above;
- amending Directive 88/77/EEC in order to tighten up the emission standards for diesel engines of heavy commercial vehicles;
- the setting up of a taskforce on 'the car of tomorrow' which will be mainly concerned with alternative systems of propulsion and which will eventually have to submit proposals for zero-emission vehicles.

These measures are intended to ensure that the following air quality standards apply after the year 2000:

(.) Standards for a large number of components of such fuels were appended to this directive; Council Directive 93/12/EC of 23 March 1993 concerning the sulphur content of certain liquid fuels.

(¹) Council Directive 70/220/EEC of 20 March 1970 on the approximation of the laws of the Member States relating to measures to be taken against air pollution by gases from positive-ignition engines of motor vehicles.

Pollutant	Air quality targets
Urban NO ₂	200 µg/m ³ (maximum hourly value)
Urban carbon monoxide	10 µg/m ³ (maximum hourly value)
Urban benzene	10 µg/m ³ (as an annual mean)
Urban particulates	50 µg/m ³ (as a 24-hour rolling average)
Tropospheric ozone	180 µg/m ³ (as a one-hour 99% percentile value)

If these measures fail to meet the requisite air quality target in certain places, for example in cities with heavy traffic and adverse meteorological conditions, additional measures will have to be taken locally, which may include measures relating to other sources of air pollution (energy power stations, industry and consumers).

As far as the approach to these additional measures is concerned, the Commission has already given an indication in its Green Paper on 'Towards fair and efficient pricing in transport' and in numerous energy-efficiency programmes.

In its communication the Commission states that its proposals are based on a precautionary approach, that it regards them as an integrated package and that it has taken account of technological feasibility. It also says that it has taken account of the integrity of the internal market, coherence in legislative policy and the expectations of the Member States and Parliament.

With regard to passenger cars the Commission proposes:

- more stringent, compulsory emission standards to come into force in 2000 and even more stringent values, of an indicative nature, to come into force in 2005,
- the compulsory introduction of on-board diagnostics for gasoline vehicles
- arrangements for the eventual recall of vehicle models after they have been placed on the market,
- regulations for a more rigorous test procedure for evaporative losses, and
- a tightening up of Directive 92/55/EEC() on requirements concerning technical approval and maintenance.

With regard to gasoline and diesel fuel quality requirements, the Commission proposes a framework directive setting out standards for a number of components (sulphur, acid, benzene and aromatics etc.). The framework directive can be modified at some point in the future and extended to take account of the use of natural gas (CNG), LPG, biofuels and other alternative

() on requirements concerning technical approval and maintenance.)

OJ L 225, 10.8.1992, p. 68

fuels. These measures are intended to bring about the most stringent emission standards in the world in the year 2005.

The Commission intends to submit a broad evaluation no later than the end of 1998. In this evaluation it will also look at the role that fiscal measures might play and the extent to which non-technical and local measures are effective.

CRITICAL ANALYSIS OF THE COMMISSION PROPOSAL

Commented [COMMENT3]:
NOAM

During the Auto-Oil programme the Commission neglected to **allow experts from Member States and other organizations** to participate. It was on its own with the experts from industry. Unfortunately, the proposals show that this approach enabled the industry to have a disproportionate influence on the policy proposed.

In defining the air quality targets, the Commission has been concerned exclusively with the critical values for public health. It has ignored the air quality needed to maintain **ecosystems**. There are sensitive ecosystems for which more stringent quality targets are required than for humans. If the Commission is seeking sustainability in its policy, it should define the targets in such a way that sensitive ecosystems, too, are protected.

The **way in which the Commission measures air quality in urban areas** is a matter of fundamental criticism. Taking the mean value within an area of 4 km² cuts out all the peak values. Pollution is at its greatest in 'canyon' streets and at major intersections, which is where most people breathe in the air. In accordance with Directive 85/203/EEC, air quality should be measured in narrow streets with tall buildings and at busy intersections. It is precisely because public health is the Commission's main concern that the peak values should satisfy the targets.

This criticism is all the more important in that the Commission has calculated the reduction required on the basis of existing pollution. Given that the existing pollution figures are far too low because of the 4 km² calculation, the requisite reduction is also too low.

One major problem in assessing air pollution is the question of **particulate matter**. As the Commission indicates, there is still very little scientific knowledge of this. What is clear, however, is that the particulates are carcinogenic. Another fact is that whenever new research is carried out the particulates prove to be more dangerous than was previously thought. Studies are currently being carried out in the United States and results already indicate that long-term exposure to particulates is very harmful for health. Hence, very strict standards are therefore justifiable on the grounds of precaution.

The Commission's guiding motive in defining the measures is cost-effectiveness. As a result, the estimates of the **costs to industry** were of considerable importance, given that measures deemed to be too costly were dropped at an early stage. The estimated costs are in general too high. On the one hand this is because to a large extent the figures come from the industry itself, which has a vested interest in high estimates, and on the other hand because no account was taken of the fact that technology usually becomes cheaper over time. The time difference between the cost studies (1994) and the time when the costs are actually incurred (2000) is a good six years.

In addition, the Commission's calculations take no account of the **social costs of air pollution by road transport**. In its Green Paper ("Towards fair and efficient pricing in

transport')(

) the Commission estimated these costs in 1991 at ECU 86 billion. Measures which have now been discounted because of the high costs might possibly

The Commission does not go far enough with the **fuel specifications**. Not only should it have established a second phase in 2005 for fuels, but it should also have devoted more attention to the sulphur content in both diesel and gasoline. The excess sulphur content is the most important obstacle to the marketing of new emission reduction systems (e.g. the NO_x catalyst). The Commission itself states that the research data currently available show that a sulphur content of 50 ppm is necessary for the optimal functioning of the emission reduction systems. However, the Commission's proposals refer to values which are far above this.

The best results in the short term are expected from improvements in fuel. Existing vehicles will also be using the cleaner fuels and hence emitting fewer dangerous substances. By contrast, applying new reduction technologies to new vehicles means that there is a relatively long replacement time for the existing car population.

The Commission concludes that the **cold start test procedure** (for example at - 7°C) does not need to be introduced because the target values for carbon monoxide (CO) are already being met. The Commission ignores the fact that in a cold start for gasoline vehicles hydrocarbons (HC) increase very considerably at temperatures below circa 15°C. This, then, is reason enough to introduce the cold start test procedure as part of the type approval requirements.

What is very important is that the emission reduction systems should continue to function adequately throughout the entire life of a vehicle. The Commission therefore concludes in its communication that emissions from a vehicle can be cut substantially if the manufacturer's liability limit for the proper functioning of such systems is set at **160.000 km**. Strangely enough, this recommendation does not appear in the Commission's own proposal on motor vehicles.

On-board diagnostics (OBD) can play an important role in reducing emissions. Consequently, diesel cars, too, should be fitted with OBD. From a technical point of view OBD systems are possible on electrically controlled components of diesel engines.

Fiscal measures are effective means of encouraging consumers to buy clean cars and clean fuels. Consumers will only decide to buy cleaner cars if they have to pay no more than for the less clean alternative. The clean alternative should preferably be cheaper. The Commission makes use of these instruments difficult by formulating a number of additional criteria. Your rapporteur believes that the Treaty on European Union already contains enough obstacles to the use of these instruments and that consequently no further obstacles should exist in the present proposals. In addition, Member States should have the opportunity of encouraging, via fiscal measures, the sale of vehicles running on fuels which satisfy more stringent requirements than the limit values that have been established.

With regard to **ozone pollution** the Commission's proposals are woefully inadequate. The Commission itself states that if a reduction of 80% in ozone precursors is achieved compared

() the Commission estimated these costs in 1991 at ECU 86 billion. Measures which have now been discounted because of the high costs might possibly have prevailed if the social benefits had been taken into account.

) COM(95)0691

with 1990, 90% of the EU land area will satisfy the standard of 180 µg/m³ (99 percentile, 1 hour). This is a minimum standard, because if it is exceeded then the population has to be alerted. Yet the Commission has decided, without further ado, that the reduction target should be only 70%.

With a 70% reduction compared with 1990, only 37% of the EU land area will satisfy the WHO target value (120 µg/m³, 99 percentile, 8 hours) (table 5 of the communication). This means that all the heavily populated areas, such as the Po plain, the Benelux countries and the Ruhr, will fail to satisfy the WHO standard. Furthermore, the Commission completely ignores the standard for ecosystems laid down by the Union (65 µg/m³, 99 percentile, 24 hours).

The Commission proposes setting up a **second Auto/Oil Programme** so that before the end of 1998 it can submit an evaluation as the basis for its future policy. It is obvious that an Auto/Oil II Programme is needed, but the danger is that there will be confusion between two programmes. The second Auto/Oil Programme must not be allowed to put off for several years defining standards for the year 2005. To avoid this, it is important to specify precisely what has to be done in the Auto/Oil II Programme.

The programme should include the following:

- A.1 monitoring of emission standards and other technical provisions on the basis of the state of the art; the present proposals are based on the state of the art in 1994.
 - 2 A recalculation of costs and, if possible, a quantification of the social benefits of the measures.
- B.1 A more accurate measurement of air quality, taking more account of peak values than has been the case hitherto.
 - 2 A review of the air quality targets.
 - 3 Monitoring and fine-tuning of the reduction objectives on the basis of 1 and 2.
 - 4 Attention to other forms of pollution, e.g. water and soil pollution, and not just air pollution.

FINAL REMARKS

With the proposals from the Auto-Oil Programme the Commission is taking a major step towards reducing air pollution caused by road transport.

Although the Commission's approach is correct per se, it is regrettable that the Commission felt that experts from Member States and other organizations need not take part in the process. The proposals would have been enhanced if the Commission had involved them in the programme.

Nevertheless, the measures proposed represent a major step towards improved air quality in the European Union. However, the proposals need to be tightened up by the European Parliament to give even better protection of the health of the people of Europe.

Nor should it be forgotten that the current proposals (and any ones still to come) relate only to one aspect of the environmental and health problems caused by road transport. Even with these proposals, there will still be cities and regions where additional local measures, in some cases relating to the volume of traffic, will be needed in order to satisfy the air quality targets.

Finally, there are a number of factors which need to be looked at in future and which, unfortunately, the Auto-Oil I Programme did not go into. To sum up, this is an important step towards improving the quality of air in Europe for the first few years of the next century.

OPINION

(Rule 147)

for the Committee on the Environment, Public Health and Consumer Protection

on the Communication from the Commission to the European Parliament and the Council on a future strategy for the control of atmospheric emissions from road transport taking into account the results from the Auto/Oil Programme, (COM(96)0248 - C4-0492/96) (Eisma report)

Committee on Budgets

Letter from the chairman of the committee to Mr Collins, chairman of the Committee on the Environment, Public Health and Consumer Protection

Brussels, 29 October 1996

Dear Mr Collins,

At its meeting of 28 and 29 October 1996 the Committee on Budgets() considered the above matter and adopted the following conclusions:

It noted that the general objective of the communication was the adoption of a new programme for reducing air pollution by motor vehicle emissions as part of the harmonization of the internal market (Article 100a of the Treaty), 'second step 2005'. These measures basically consist of a further tightening of emission standards. It points out that Parliament's position on the principles underlying the programme of new measures is a qualified one; it does in fact consider that some interested parties such as the NGOs have not been properly consulted and it reserved its position on the basis of the specific proposals to be forwarded to it by the Commission.

The Committee on Budgets notes that as what is involved here is essentially a technical assessment of the technology that might be considered for the vehicles of the future, and the holding of a review conference in 1999, the expenditure to be charged to the Community budget amounts to ECU 0.6 m which will be charged to Item B5-3000 to the amount of ECU 0.2m in 1997, 0.1 in 1998 and 0.3 in 1999, broken down as follows: ECU 0.4m for technical work and ECU 0.2m for the 1999 review conference.

Detlev Samland

() considered the above matter) The following were present for the vote: Tillich, acting chairman; Brinkhorst, Christodoulou (for Bardong), Dankert, Elles, Fabra Vallés, Fabre-Aubrespy, Ghilardotti, Giansily, Haug, Jöns (for Bösch), Kellett-Bowman (for Bébéar), McCartin, Miranda, Mulder (for Gredler), Müller, Rehn, Tappin, Theato, Waidelich and Wynn.

OPINION

(Rule 147)

for the Committee on the Environment, Public Health and Consumer Protection

on the Communication from the Commission to the European Parliament and the Council on a future strategy for the control of atmospheric emissions from road transport taking into account the results from the Auto/Oil Programme (COM(96)0248 - C4-0492/96) (report by Mr Doeke Eisma)

Committee on Economic and Monetary Affairs and Industrial Policy

Draftsman: Mrs Angela Billingham

PROCEDURE

At its meeting of 24.9.96 the Committee on Economic and Monetary Affairs and Industrial Policy appointed Mrs Billingham draftsman.

It considered the draft opinion at its meetings of 26.11.96, 5.2.97, 17.2.97 and 26.2.97.

At the last meeting it adopted the following conclusions unanimously.

The following were present for the vote: von Wogau, chairman, Garosci, Katiforis and Secchi, vice-chairmen; Billingham, draftsman, Areitio Toledo, Arroni, Barton (for Beres), Cassidy (for Carlsson), Caudron, Christodoulou, Cox, de Bremond d'Ars, Donnelly, Ewing, Fayot, Filippi (for Fourçans) Funk (for Friedrich), García Arias, García-Margallo, Gasoliba I Böhm, Glante, Harrison, Hautala, Herman, Ilaskivi, Imbeni, Kestelijn-Sierens, Kuckelkorn, Langen, Lindqvist (for Riis-Jørgensen), Lulling, Malerba (for Mezzaroma), Mann (for Hoppenstedt), Mather, Metten, Miller, Murphy, Paasilinna, Pérez Royo, Pomes Ruiz (for Konrad), Porto (for Peijs), Randzio-Plath, Rapkay, Read, Ribeiro, Tappin (for Hendrick), Thyssen, Torres Marques, van Velzen (for Rübig), Wibe and Wolf (for Soltwedel-Schäfer).

BACKGROUND/GENERAL COMMENTS

The European Commission describes the Auto/Oil programme as a "ground breaking initiative". In many ways this is true. For the first time the automobile and oil industries worked together to prepare a range of measures to meet air quality targets. It was no mean achievement to bring these industries together and to invest considerable resources into such an important subject. The results are the basis of the Commission's two draft Directives on vehicle emissions and fuel quality - which set standards to be applied from 1st January 2000 and are a welcome starting point to define the emission requirements for vehicles in the twenty first century. However, both the results of the Programme and the two draft Directives have attracted some criticism. Many independent experts and some Member States believe them to be unsatisfactory and want to see them significantly strengthened in a number of respects. It is important, therefore, to examine the Auto/Oil programme and to see how these weaknesses arose, and how the process can be

improved upon. There are four main criticisms of the Auto/Oil Programme that it suffered from. These are discussed below.

Conflicting Objectives

The tension underlying the Auto/Oil programme is whether the legislative path to choose should be based on so-called cost-effectiveness or rather "best available technologies". Those advocating the former say there is no point in applying technology that is more costly than required to meet agreed air quality targets. The latter argue that there can be no fixed certainty about both the stringency of the air quality targets required, or the true costs of meeting them.

In Directive 94/12 (the previous emissions legislation which set up the Auto/Oil programme) an assessment of cost effectiveness was required. However, that implies only that it should be a tool for policy analysis rather than a policy objective itself. The political reality is that Member States and much informed opinion is sharply divided between cost effectiveness vs best available technology.

The Auto/Oil programme has been unable to cope with this tension. The result is that the car makers are complaining that the oil industry is not doing enough, and vice versa. Both claim that what they propose is fully "cost effective". Outside experts dispute both industries' conclusions. Meanwhile, the Commission has been forced to compromise by proposing two different solutions: a moderate "cost-effective" package of year 2000 measures and a more stringent set of "best available technology" 2005 proposals. The truth is that the Commission couldn't decide between cost effectiveness and best available technology.

Air Quality Targets

A major difficulty with the programme is that the air quality targets chosen were provisional and incomplete. The Auto/Oil programme was based on provisional WHO air quality targets. It is not yet clear whether these will be consistent with the targets being adopted for the EU within the Directive on Ambient Air Quality. Over the next few years this framework Directive will spell out approved limits for a range of key pollutants. These may be more stringent than those used in the Auto/Oil programme.

A further serious problem is that the Auto/Oil programme did not include targets for particulates (fine black smoke especially from diesel engines). Yet these are probably the most serious pollutants - associated with a wide range of respiratory and cardiac illnesses - and a precursor of ground level ozone. The WHO is not certain whether any level of particulates emissions can be considered to be safe. This omission seriously undermines the claims of an objective "cost effective" study. The science is simply incomplete and so is an understanding of the true costs. Given the significance of the particulate problem and its implications for diesel engines, there is a strong argument for applying the precautionary principle. This would imply that everything possible should be done to limit particulate emissions on the basis of best available technology.

Transparency

In any programme involving two major industries there is bound to be some concern about the objectivity with which such sensitive policy proposals have been drawn up. It is like asking the poachers to advise the game keepers. It is, therefore, not surprising that there has been complaint that the Auto/Oil programme has been insufficiently transparent. There is much dispute, for example, between the car and oil industries over the stringency of the draft Fuel Directive. It is virtually impossible to gain any insight into how the Commission eventually opted for a rather weak fuel proposal - especially as regards sulphur. Given that low sulphur fuels will immediately

lower emissions from all cars - even those currently on the road - it is odd that it was not quickly identified as a highly cost effective measure.

Similarly in December 1995 a draft set of exhaust limit values was widely circulated only to be withdrawn again. When the draft Directive eventually appeared the diesel limit values were more lenient than those proposed last year. This change of heart when it is clear that diesels are a major part of the pollution problems has not been explained.

Expert Input

Related to the lack of transparency has been the absence from the Auto/Oil programme of other informed sources. Member States were left out of the process - despite their significant role in environmental legislation. Given that some Member States already apply best practice standards and have valuable experience their exclusion is odd. Similarly independent environment agencies, consumer groups etc. were not fully involved. Finally, although some attempt has been made to inform the Parliament about its progress, there has been little real consultation with Members until now.

The view of your draftsman

There does seem to be some real substance in these criticisms of the Auto/Oil process. It is, therefore highly likely that the Parliament will want to significantly amend both draft Directives in a number of key respects such as the diesel limit values and the sulphur level of fuel. But we also need to think about the future. The Commission is already preparing an Auto/Oil II to decide key elements of a strategy for 2005 and beyond. For this next stage, therefore, it would be wise for the Commission to modify its approach. The following points should be borne in mind.

A sensible compromise is required between cost-effectiveness and best available technology. They do not always conflict and sometimes you can do both. There is always a danger that what is described as "cost effective" is in reality just the lowest common denominator that industry is capable of. This would be unacceptable. We cannot afford to leave our industry trailing behind world best practice.

Where there is real scientific uncertainty it is better to admit it. Where there are real industrial constraints it is better to admit that too. No one is convinced if an attempt is made to cloak the proposal's as a fully "objective" assessment of what needs to be done. The Auto/Oil programme has not succeeded in doing that. It clearly involves delicate political judgement - balancing environmental and industrial policy concerns.

High emission standards can not only give us clean air. They can also put Europe at the leading edge of environmental technologies. This will be good for European businesses. Furthermore, if we harmonise at high environmental standards that are similar to the standards required world-wide the costs to industry will be lower. Our companies can sell into all the major international markets.

Finally the policy-making process must be made more open and transparent. The more that all interest groups are involved at the beginning, the more likely their support will be there at the end. The more open the debate, the more likely that a consensus of what is practical and achievable will be reached. The Parliament should also be more involved in this successor programme of key environmental legislation. These new approaches should be incorporated within the Auto/Oil II proposal.

CONCLUSIONS

The Committee on Economic and Monetary Affairs and Industrial Policy calls on the Committee on the Environment, Public Health and Consumer Protection, as the Committee responsible, to incorporate the following conclusions into its report:

1. Recognises that the Auto/Oil programme is a valuable contribution and starting point to determine the best way to limit pollution from motor vehicles and fuel from the year 2000 and beyond. Is, however, of the opinion that it is necessary to further control motor vehicle emission limits to ensure that European Union air quality targets are achieved;
2. Stresses that vehicle control standards based on cost effectiveness must not inhibit the encouragement of best available technologies which may lead to new industrial processes and designs which European manufactures can exploit in world markets;
3. Calls on the Commission to amend the draft Directive on emissions from motor vehicles to include a durability requirement of 160,000 kilometres, a -7° C cold start procedure, stricter limit values for diesel engines for the year 2000 with a NOx limit of 0.4 g/km and a Hydrocarbon limit of 0,07 g/km as well as a Hydrocarbon limit of 0,12 g/km for petrol engines, more stringent controls of fine particulate matter and mandatory limits for the year 2005;
4. Stresses that On Board Diagnostics will improve vehicle maintenance and ensure that emission standards are sustained throughout the life of the vehicle, provided that there is unlimited and standardized access to these systems and statutory provision for uniform connecting plugs and for the provision of all information required for purposes of repairs to maintain a competitive and open market for vehicle inspection and repair;
5. Points out that improved fuel quality will immediately reduce the level of pollutant emissions from all vehicles on the road. A substantially reduced sulphur content of fuel will also enable the introduction of new emission control technologies such as DeNox catalyst for diesel, and encourage development of direct injection petrol engines with higher fuel economy;
6. Calls on the Commission to amend the draft Directive on the quality of petrol and diesel fuels to require more stringent standards for the year 2000 of 14 % v/v olefins, 41 % v/v aromatics and 150 ppm sulphur for petrol engines and 300 ppm sulphur for diesel engines and to introduce a further stage at 2005 in parallel to that proposed for vehicle technologies which will again reduce the sulphur content of both petrol and diesel fuels substantially below the levels indicated for the year 2000, as indicated in Annexes III and IV of the opinion by Mr Cox on the quality of petrol and diesel fuels;()
7. Calls on the Commission to encourage Member States to develop a system of fiscal incentives for cleaner fuels and low emission vehicles that ensure the more rapid modernisation of the vehicle fleet. Such fiscal incentives should be targeted at vehicles

(¹) (PE 220.824)

applying best available technologies and should also including scrappage schemes to remove older gross polluting vehicles;

8. Points out that much greater investment must be made by the automotive industry, by Member States, and by the Commission to develop further emission control technologies and the car of the future;
9. Asks the Commission to widen the participation in the development of European Union policy on vehicle emissions to include experts from Member States, the European Parliament and other expert sources and stakeholders in future policy initiatives such as the proposed Auto/Oil II programme;
10. Strongly believes that there must be consistency between the air quality targets applied to the motor vehicle sector and those being developed within the framework of the Ambient Air Quality Directive, and that these should be integrated into the proposed Auto/Oil II programme;
11. Calls on the Commission to include the task force on the *Car of Tomorrow* in the "strategic interventions" of the Fifth Framework programme for research and Development to ensure adequate funding of this important project.

OPINION

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for the Committee on the Environment, Public Health and Consumer Protection

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COM(96)0248 - C4-0492/96; report by Mr Eisma

Committee on Transport and Tourism

Draftsman for opinion: Mr Alfonso Novo Belenguier

PROCEDURE

At its meeting of 1 October 1996 the Committee on Transport and Tourism appointed Mr Novo Belenguier draftsman for opinion.

It considered the draft opinion at its meetings of 20-22 January and 25-27 February 1997.

At the last meeting it adopted the following conclusions unanimously.

The following were present for the vote: Mr Bazin chairman; Mr Wijsenbeek, Mr Lüttge and Mr Sisó Cruellas, vice-chairmen; Mr Novo Belenguier, draftsman; Mr Aparício Sánchez, Mr Baldarelli, Mrs Bennasar Tous (for Mr Ferri), Mr Camisón Asensio, Mr Castricum, Mr Donnay, Mr Ferber (for Mr Cornelissen), Mr Grosch, Mr Jarzembowski, Mr Klironomos, Mr Koch, Mrs Langenhagen, Mrs McIntosh, Mr Megahy, Mr Morris (for Mrs Schmidbauer), Mr Piecyk; Mr Rehder (for Mr Swoboda), Mr Scarbonchi (for Mr Dary), Mrs Schierhuber (for Mr Sarlis), Mr Schlechter, Mr Seal, Mr Simpson, Mr Sindal, Mr Stenmarck, Mr Tamino (for Mrs van Dijk), Mr van der Waal and Mr Watts.

I. INTRODUCTION

The Communication issued by the Commission is one of the three proposals for action in the field of protection of the environment and concerns the future strategy which could be established for the management of air emissions from road transport, i.e. the acceptability of emission standards for the year 2000 and beyond.

These emission standards should be based on an integrated approach and aim at air quality standards. It has been proved that, despite some progress made with regard to reduction of emissions from vehicles, the overall emissions level has not been reduced, mainly because of the increase of the number and use of individual vehicles. This tendency is expected to develop even further, as the 24-hour economy, the globalization of the economy and the economic growth in general could lead to increased demand for transport.

II. THE COMMISSION'S PROPOSAL

The programme for improving air quality by limiting and improving vehicle emissions (Auto-Oil programme) proposed by the Commission concerns only passenger cars. Emissions from light commercial vehicles and heavy duty vehicles will be presented at a later stage.

Great emphasis is placed on the emission performance of vehicles; it has been proved that good vehicle maintenance is a highly cost effective means of reducing pollutant emissions. In this context, the Commission will propose a strengthened and revised Directive 92/55/EEC, which lays down the basic requirements for vehicle inspection and maintenance. However, the major burden seems to fall on the individual vehicle owner by placing a stronger emphasis on their responsibility to keep their vehicles well maintained.

The Commission proposes two sets of emission limits. The first to apply as from the year 2000 and the second, considerably more ambitious, to come into force in 2005. The implementation of both sets of emission limits will depend, however, on their industrial feasibility, taking into account the availability of improved fuels.

Finally, fiscal incentives are foreseen in order to encourage the marketing of vehicles respecting both the first and second set of emission standards.

A number of related measures and their impact on the quality of air will be also taken into account on the basis of several studies to be undertaken by the Commission. These studies will concern, inter alia, alternative types of fuel, alternative propulsion systems, refinery technology, vehicle scrappage schemes and other fields closely related to energy sources.

III. **OBSERVATIONS**

The study presented by the Commission in its Auto-Oil Programme is far from complete and satisfactory on a number of points:

- it does not completely incorporate the Scandinavian countries (as new members of the EU) and thus it does not take fully into account the higher standards prevailing in these countries, as well as the cleaner or less polluted air;
- the analyses and data used were supplied by the industries themselves and were not verified by the Commission through a third, independent agent;
- it does not take into account the more economical and energy-efficient Japanese cars, which are excluded from the study;
- while it aims to give an analysis of the measures needed for enhancing air quality in the future, particularly in urban areas, in reality these measures represent the extent to which the car and oil industries are prepared to proceed in technical innovation and new production schemes;
- it does not take into account the views of environmental Non-Governmental Organisations.

It could be observed that the proposed programme seems to be far more favourable to the oil industry than it is to the car industry, which will have to undertake serious efforts in order to adapt its technology for the production of more efficient engines and less polluting cars. In addition, tax incentives seem to aim at facilitating the ownership of better (less polluting) cars,

by making these cars cheaper, rather than discouraging the use of car in favour of public transport.

There are grave doubts concerning the efficiency of this approach, as proposed in the Auto/Oil Programme. It can be stressed that the best method to achieve a better quality of air does not depend as much on the car industry producing a car which can neutralise the noxious and polluting fuel but on the oil industry producing a less noxious and polluting fuel.

IV. CONCLUSIONS

The Committee on Transport and Tourism calls on the Committee on the Environment, Public Health and Consumer Protection, as the committee responsible, to incorporate the following conclusions in its report:

The Committee on Transport and Tourism,

1. Requests the Commission to complete its study by including the statistical data of the three new Member States.
2. Stresses the need for wider consultations in the matter of quality of air in which the opinions of the environmental NGOs would be included.
3. Re-iterates its position that cost-effectiveness, although a principle to be applied in many areas, cannot be the guiding principle where environmental protection and public health are concerned, especially as most of the costs of quality enhancing measures are ultimately passed to the consumers.
4. Urges the Commission to present alternative solutions for the improvement of the quality of air, mainly in urban areas, by providing financial support for research into alternative car engines (i.e. hybrid electric vehicles with batteries charged by a supporting internal combustion engine) and other measures applying to traffic (i.e. stricter access to city centres during peak periods, providing efficient bus/tram/metro routes to substitute car use, etc).
5. Underlines the need for the rapid development of better/less polluting fuels to be integrated in the Auto-Oil programme as soon as possible; the second phase targets, should remain feasible objectives from the technological point of view, taking into account the results of a subsequent study (Auto-Oil II) with the participation of all interested parties.
6. Asks for fiscal measures to apply to the better quality/less noxious fuels as well as to better/more efficient car engines, in line with the fiscal exemption granted by the German government to certain vehicles meeting these high emission standards.

OPINION

(Rule 147)

for the Committee on the Environment, Public Health and Consumer Protection

on the strategy for controlling atmospheric emissions from road transport, taking account of Auto/Oil programme results (COM(96)0248 - C4-0492/96) (Eisma report)

Committee on Research, Technological Development and Energy

Draftsman: Mr Giles Chichester

PROCEDURE

At its meeting of 2 October 1996 the Committee on Research, Technological Development and Energy appointed Mr Giles Chichester draftsman.

It considered the draft opinion at its meetings of 17 December 1996, 6 February 1997, 26 February 1997 and 27 February 1997.

At the last meeting it adopted the following conclusions unanimously.

The following were present for the vote: Scapagnini, chairman; Quisthoudt-Rowohl, Adam, and Lange, vice-chairmen; Chichester, draftsman; Ahern, Bloch von Blottnitz, de Gaulle, Desama, Estevan Bolea, Ferber, Gomolka (for Mombaur), Herman (for Roving pursuant to Rule 138(2)), Izquierdo Collado, Linkohr, Malerba, Marset Campos, Matikainen-Kallström, McNally, Pompidou, Rothe, Soulier, Stockmann, Tannert, W.G. van Velzen, Weber, West

INTRODUCTION

The Commission is to be commended on seeking an integrated and comprehensive approach to future Community policy on the control of vehicle emissions. There is an impressive record of measures laying down ever tighter limits on emissions since Directive 70/22/EC. However, there is also strong evidence that much more action must be taken if air quality standards in Europe are to be improved, in particular in urban areas, to meet Community clean air targets. The arguments for action to be focused on fuel and vehicles are strongly made in table 1 of its Report "Towards Zero Emissions for Road Transport" by the House of Lords Select Committee on Science and Technology published November 1996.(

) This table gives emissions for black smoke (or particulates), oxides of nitrogen, carbon monoxide and carbon dioxide in the UK in 1970 and 1993 in the

() This table gives emissions for black smoke (or particulates), oxides of nitrogen, carbon monoxide and carbon dioxide in the UK in 1970 and 1993 in the road transport, domestic, and industry sectors. In each case the
) HL Paper 13, London, The Stationery Office, November 1996

The Auto Oil programme is to be welcomed as a key part in the overall strategy, not least because it has involved the fuel and vehicle industries in the process on a co-operative basis. It is very important to have both a scientific basis for the programme and a technical, industrial input to ensure that targets are rational and attainable. It is clear that the industry have reservations about the cost/benefit ratio of the second, indicative step of the proposals, and their view should be taken into consideration when the Commission embarks on its review in 1998. However, it must be the authorities who determine whether standards are to be advisory or mandatory, not the industry.

The technical measures to achieve the new emission standards for 2000 are set out in the proposals for fuel and motor vehicles which are attached to the Communication on strategy, and do not require much specific comment in the context of this Opinion, as each set of proposals is the subject of separate Opinions. However, it should be noted that while the main thrust of these proposals is for action within the existing fuel and vehicle sectors, because that is where the greatest current potential for reduction in emission lies, the strategy covers other areas not included in the Auto Oil programme. These areas must form part of the overall strategy particularly for the medium and longer term future, yet it is possible that the existing industries could view them as a potential competitive threat. New technologies can render existing investment obsolete and valueless long before the cost of that investment has been amortised or written off in accounting terms.

For the Committee on Research, Technological Development and Energy the most important aspects of this strategy communication must be the list of considerations for the future review process and the brief section on research and development for the car of tomorrow. In this context, it seems regrettable that the Commission's ambitions extend only to taking note of technical developments rather than seeking to encourage them in the field of vehicle technologies, new propulsion technologies and alternative fuels. We welcome the reference to improved test procedures in particular for low temperature conditions.

The potential of other policy measures such as traffic management, enhanced urban transport and vehicle scrappage schemes should be evaluated, as the Commission says, yet a note of caution needs to be entered. The USA has long applied low speed limits which should have resulted in increased fuel efficiency and reduced consumption, yet because fuel is not taxed as heavily as in most European countries there has not been enough incentive to design lighter, more efficient vehicles and engines. It is also interesting to note the House of Lords Select Committee Report view that scrappage schemes do not appear to be a practical means of reducing air pollution, by comparison with enforcement of standards on existing vehicles through annual tests and random roadside checks.

Technical measures at a Europe wide level in setting emission limits, and at national and local level, are two important parts of the strategy. Another mechanism which the Commission rightly identifies is selected and differentiated fiscal measures, provided they do not impact negatively on the functioning of the internal market. This process is already taking place at member state level, and that is the appropriate level, particularly as it allows comparison between differing approaches within the Community. This seems important so as to establish the most effective measures which are also appropriate for national and local conditions. There are differences of opinion and experience as to what will work, and the intention to explore a more flexible approach to the use of fiscal incentives is to be welcomed. On the other hand, blunt instruments such as the flawed carbon/energy tax proposal or the promised new proposals for taxing energy products must be viewed with extreme caution, particularly if they fail to be

sufficiently targeted measures for emissions reduction and, at the same time, damage Member States' competitiveness with third countries.

The present strategy is heavily weighted toward the Auto Oil programme measures aimed at setting even tougher standards of emission control, but the other measures are likely to become more important as the fuel and vehicle industries reach close to the technical limits, so that other means of improving fuel efficiency, reducing consumption and eliminating toxic emissions will have to become more significant. Selective fiscal measures are one promising route, as was demonstrated in a way by the OPEC oil price shocks of 1974 and 1978 which forced greater efficiency through the price mechanism. Enhanced research into new propulsive technologies such as the fuel cell, into alternative fuels such as biodiesel, into new materials technology for making cars lighter and therefore more fuel efficient, is an appropriate longer term route toward the objective of cleaner air.

In the short term, the priority must be to agree upon the standards for step one and to give as clear an indication possible what those for step two will be so as to give both industries a clear framework and timetable within which to carry out the measures that promise very substantial reductions in road transport emissions.

The Committee on Research, Technological Development and Energy asks the Committee on Environment, Public Health and Consumer Protection to include the following paragraphs in its Resolution.

1) Calls on the Commission to review the testing cycle for emissions to obtain a more accurate indication of emissions, particularly to reflect warm-up times from cold-start, a lower ambient temperature and low speed driving in urban conditions.

2) Calls on the Member States to enforce emissions standards in the existing vehicle fleet by regular and random test procedures.

3) Calls on the Commission to carry out studies into the effectiveness of selective fiscal measures to encourage the use of smaller, lighter vehicles, and cleaner fuels such as natural or liquid petroleum gas, re-formulated petrol and biofuels.

4) Calls for research into better ways to store gas in vehicles for use as alternative fuel; and research into fuel cell technology as a longer term alternative propulsive power system for vehicles.

5) Calls on the Commission to review the Auto/Oil programme to take account of the following measures and future situations, and their impact on improving air quality:

- teleworking
- traffic planning in urban areas
- extension of pedestrian areas and increased public transport
- deployment of hybrid vehicles using both electricity and petrol, the former in towns and the latter on the open road
- extending underground train networks

- increasing local rail services
- reducing the speed limit on roads and motorways to no more than 120 km/hour
- replacing vehicles more than 10 years old
- effective requirements for the maintenance of road vehicles, particular a properly regulated fuel injection system of diesel vehicles
- 'effective' technical controls to ensure that vehicles are working properly.