



Partners for Cleaner Fuels and Vehicles

Steering Committee Meeting
14-15 November 2002

Fifty members of the Partners for Cleaner Fuels and Vehicles met at the United Nations Headquarters in New York on 14-15 November 2002 to discuss the development of a preliminary work program for the Partnership. Participants included government officials and representatives of non-governmental organizations, industry, and international organizations.

The meeting was opened by a statement from JoAnne Disano, Director of the Division for Sustainable Development at the UN Department of Economic and Social Affairs (UN DESA). Ms. DiSano stressed the importance of partnerships in the implementation of Agenda 21 and the Johannesburg Plan of Action, and congratulated the group for being among the first partnerships to organize and begin planning a concrete work program. She further stated that the topic of cleaner fuels has been discussed in the Commission for Sustainable Development (CSD) a number of times and various commitments have been made to the phase-out of lead, giving this group a strong mandate for work. She expressed her confidence in the ability of the group to help further this goal.

Mr. Gerry Clifford of the United States Environmental Protection Agency stated that the idea of partnerships not only among governments but with participation and input of the private sector and civil society was a new way of approaching important problems. He urged the group to focus on results and progress rather than on process. Mr. Clifford stressed the importance of harnessing the energy of the various partners and leveraging access in order to build on this historic method of accomplishing environmental and public health goals.

Mr. Bakary Kante, Director of the Division of Environmental Policy Development and Law at the UN Environment Program (UNEP) expressed his great confidence in this group to help build capacity and encourage technological transfer to developing countries seeking to use cleaner fuels. Mr. Kante stated that the Partnerships are one of the most exciting outcomes of the World Summit on Sustainable Development and having such disparate actors working together for a common goal was a source of great enthusiasm. He further stressed the importance of this work in Africa, especially in light of the great political will for change expressed in the creation of the New Partnership for Africa's Development (NEPAD).

Mr. Klaus Toepfer, Executive Director of the United Nations Environment Program, stopped into the meeting to express his great support for this initiative and the importance UNEP places on the work of the partnership. He stated that when working with developing countries, it is important to avoid being swept away by new technologies that are often beyond the means of these countries but focus on the realistic possibilities for improving life. Using clearer fuels is one way in which this can be done. He expressed his great confidence in the ability of the group to make a real change.

Mr. Micheal Walsh, an independent consultant, acted as moderator for the meeting. He stated that the partnership provides a tremendous opportunity to effect an improvement in public health and environmental protection and expressed his pleasure at being involved in this process.

Mission Statement

The partners began the discussions with a review of the Mission Statement. It was stated that the intention of the partnership is to work closely with individual countries with a political will for change in order to assist them in eliminating the use of lead in gasoline and reducing the level of sulphur in gasoline and diesel in the context of reducing vehicle emissions to improve urban air quality. The approach to achieving this goal will be different in each case depending on the relevant local circumstances and will involve consideration of both fuel and vehicle standards. It was further agreed that when undertaking country-specific activities partners should ensure that changing fuel composition did not unintentionally worsen air quality. Although the topic of alternative fuels was discussed, it was agreed that it would be most prudent for the partnership to first focus on conventional fuels and then expand efforts to include other cleaner fuels at a later date.

Although most partners agreed not to re-open the Statement for debate since consensus was reached prior to the World Summit on Sustainable Development, several partners stated their disagreement with parts of the Statement. One partner did not agree with the use of the term 'cleaner vehicle requirements' in the second point and asked that alternative wording be created. Another participant raised the possibility that promoting reduction of sulphur as the next best step after eliminating lead may not be the most effective step in improving air quality.

Partnership Coordination

The partners also discussed the need for a central focal point for information sharing and organization of work of the partnership. Partners agreed that a new institution or bureaucratic body should not be created, but rather a Partnership clearinghouse be set up within UNEP and one or more facilitators be hired to keep all partners informed of activities, progress, and potential for further collaboration. An agreed terms of reference for this role is attached as an annex to this report. The Government of Netherlands, the US EPA, Environment Canada, UNEP, the International Fuel Quality Center (IFQC), and the International Petroleum Industry Environment Conservation Association (IPIECA) were among those that pledged to provide financial support for the partnership facilitator position.

Africa

The first region to be discussed was Africa. Countries in Africa either use fuel refined domestically, import 100% of their fuel, or had a mix of domestic use and imports. Although it is relatively easy for those countries that import all of their fuel to switch to unleaded gasoline and low sulphur diesel by simply switching their import source, many importing countries are landlocked and transportation costs inhibit importing from a refinery other than that of a neighboring country. Thus, if several major refineries are updated to create unleaded fuel, it would have a positive effect on a number of countries. Further, there is not such a clear divide

between government and industry in this region because a number of refineries are owned by the government. With so many other social problems to deal with, one challenge is to convince governments of the importance of spending scarce resources on the upgrading refineries. Another major problem is the lack of public awareness of the harmful effects of using leaded gasoline and the prevalence of the perception that leaded fuel is of a higher quality.

There have been a number of recent developments that provide a source of encouragement. A series of sub-regional meetings have been conducted to discuss harmonization of fuel standards and the elimination of lead and reduction of sulphur from fuels. Twenty five countries have developed country strategies with this end in mind while others are in the process of doing so.

During the discussion of potential problems and solutions the following commitments were made.

1. IPIECA has developed a CD-rom for developing countries on information sources readily available to them as well as an analysis of additives that could be used to replace lead. This will be available in the coming weeks. Partners could review this material to decide whether it can be promoted and used by the Partnership.

2. There is a lack of public awareness about cars being imported from abroad and how to maintain them (ie - imported Japanese cars often have catalytic converters that would perform better with unleaded fuel) as well as a lack of public awareness of benefits of lead phase out. Misconceptions about leaded fuel being superior are also prevalent. In line with lead phase out, a corollary program of public education is needed for diesel. The Partnership should work to educate the public by developing materials that can be used both for technical and non-technical audiences. Partners interested in working toward this goal include:

a. EPA will work to develop public awareness materials and campaign in South Africa that can then be used in other parts of the region.

b. EPA and IPIECA will begin to work with civil society.

c. Natural Resource Defense Council (NRDC) will take a leadership role in organizing NGOs to have input in creation of campaigns and implementation. Also would like to work on education of gas station attendants and owners as well as mechanics and others who have a direct effect on providing information to the public.

d. The Manufacturers of Emission Controls Association (MECA) will work on putting together information regarding the benefits of eliminating lead and reducing sulphur for both technical and non-technical audience.

3. In addition to raising awareness among the public (or perhaps as a pre-condition) decision makers should be targeted to dispel misconceptions. The Alliance to End Childhood Lead Poisoning began work on this and would like to continue, if resources permit.

4. The question of required octane level and probability of valve seat recession tends to be region specific and dependant on the vehicle fleet. A comprehensive analysis of these two questions is missing. Two working groups were established to consider these issues in depth.

5. There is a need to engage parties in the sulphur debate in order to anticipate future problems and needs. The NRDC is interested in working with refineries and other stakeholders towards this end.

6. Nairobi Conference was recognized as being greatly successful in catalyzing efforts in that area to create strategies to eliminate lead. UNEP and IPEICA would like to follow up on progress of this meeting. UNEP will create a 5 year work programme to continue such workshops at the sub-regional level. MECA could provide speakers with expertise for these meetings.

The following issues were discussed, but commitment to spearhead activity remains open.

1. There is a lack of sufficient global data on lead phase-out and fuel quality specification.
2. The financial requirements of upgrading refineries is often a large barrier.
3. Emission inventory analyses are often lacking as well as the capacity to carry them out.
4. Assessment of decrease in blood lead level in children is missing.

Asia-Pacific

The Asia-Pacific region is unique in that it has a very large population of two and three wheelers that dominate the emission inventory in most major cities. Most countries face severe air pollution problems and have begun to adopt European standards for both fuel and automobile specifications and aim at being in parity with the Euro standards in the next decade. Hong Kong is an example of one city that used a creative taxing scheme to promote the use of unleaded fuel and was thus able to stop importing leaded fuel altogether.

India has adopted a two-tier approach to adopting increasingly stringent fuel and vehicle requirements with the eleven largest cities tightening their standards at a faster pace than the rest of the country. India is also introducing one of the most stringent set of requirements for its two and three wheelers and has thus significantly reduced the use of two-stroke engine motorcycles.

During the discussion, the following commitments for action were made.

1. India is committed to a tiered approach to lead elimination and sulphur reduction. The US EPA would like to work with India to assist in the implementation of this strategy with capacity building in terms of developing air quality strategies, completing emission inventories, etc. This work will also include creation of standards for refining. A vehicle emission inventory tool has been developed in conjunction with UC Riverside and could be used by the Partnership. A workshop will be held in mid-December in India to introduce this tool.

2. There is a great lack of data regarding exhaust from vehicles. One reason is a shortage of testing centers throughout the region. The Government of Italy will build such a center in China.
3. The Government of Italy will also work with China to develop case studies of the use of cleaner diesel and can make this information available for use by the Partnership.
4. A conference or workshop on refinery technologies available for reducing sulphur would be useful. The US EPA agreed to organise such a meeting sometime in January, to coincide with the WRI World Diesel Day meeting. The IFQC has many technical suppliers and will help with this.
5. JAMA has been active in promoting the adoption of the World Wide Fuel Charter across Asia and will continue this effort. They have also begun discussions in the ASEAN region regarding improvement of fuel and lubricants. This effort will be continued.
6. The NRDC stated that they already have a number of initiatives relating to energy and transport underway in China and will continue these efforts and find a way to link them with the Partnership.
7. Environment Australia expressed an interest in working in Asia.

A number of further issues were discussed but no action has been committed as of yet. These include the following.

1. The importance of education about proper vehicle maintenance was stressed.
2. The need for compliance and enforcement programs was repeatedly mentioned.
3. The importance of examining trends in fuel use was discussed.
4. China requires a great deal of technical expertise on updating their refineries as well as how to decide on alternative additives.
5. The importance of emission factors was repeated several times.
6. At launching of the Partnership, China discussed need to address externalities to lead use. For example, programs are needed to train doctors in treating children with blood lead poisoning.

Central and Eastern Europe / Russia

Regarding the status of fuels in Central and Eastern Europe and Russia, although many countries in the region have adopted stringent standards in preparation for accession into the European Union, one of the problems remains ensuring compliance with the requirements. Economic barriers seem to be the main obstacle. Standards for on and off road vehicles differ at the moment, but the European Union is striving to harmonize all vehicle and fuel standards. There is

also an observed disparity between quality of fuel in available on the highly used tourist and goods transport corridors as opposed to the less frequented areas of the affected countries. The lack of compliance with requirements is also causing a great deal of difficulty for countries that border the region as their drivers purchase lower quality fuel and then drive across the border, hampering efforts to gain an accurate emission inventory. It is also important to note that the catalyst poisoning caused when using high sulphur fuels is often irreversible, thus driving in the region has caused problems with those coming with western European vehicles. When discussing individual countries, it was stated that Russia no longer produces leaded gasoline in their refineries yet they have a large store of leaded fuel that is still being sold on the market. It is unclear when this inventory will finish.

During the discussions, the following commitments were made.

1. A lead phase-out strategy was put together by the UN Economic Commission on Europe (UN ECE) with goals in line with directive 98/70. Implementation of the strategy is mandatory, though some countries may ask for derogation. There exists a task force led by the Danish Environmental Protection Agency set up to determine if members are complying with the strategy. A recent report of the task force showed that it is impossible to determine the level of compliance as different sources provide vastly different data. The first action required is thus to clarify the situation and collect reliable data. There will be a meeting in Budapest to discuss next steps.
2. There are a number of oil and automobile industry associations that do comprehensive studies regarding at the pump fuel quality. The Alliance of Automobile Manufacturers provides such a report for purchase at [http:// store.autoalliance.org](http://store.autoalliance.org). It may be possible for them to provide overview data such as means, averages, and highs and lows at no cost. CONCAWE, a European oil industry consortium, also does comprehensive reports and may be approached by IPIECA for use of their data by the partnership.

The following are issues that were discussed with no commitments made.

1. It was stated that the German Automobile Association used to make maps indicating fueling stations where non-leaded gasoline was available for drivers entering the Eastern European countries. It was suggested that the partnership consider making such maps to indicate low sulphur fueling stations.
2. The need for greater monitoring and more stringent enforcement was discussed. A workshop on this topic was suggested.
3. The new fuel and vehicle requirements are mandated by governments and little time is spent preparing the public for the changes. A public education campaign may be a useful tool for raising awareness of the importance of stricter standards and the benefits of compliance.
4. As Russia discontinues its production of leaded gasoline, a great number of refineries are simply being abandoned because of the high cost in upgrading. This is creating a staggering environmental hazard and should be addressed.

Latin America and the Caribbean

Chile has made great strides in improving air quality. They have completely banned the use of lead in gasoline and are striving to reduce sulphur in diesel. Several air quality studies have been undertaken in the capital city of Santiago to determine emission source ratios that can be replicated in other cities. In terms of lead phase out in the rest of the region, all countries have plans to eliminate the use of lead by 2005 except for Uruguay, Peru, Venezuela, Cuba, and Suriname. Venezuela has given a phase out date of 2008 yet it is unclear whether or not they will abide by this goal. Neither Cuba nor Suriname have a clear plan. The case of Cuba is quite unique in that it currently has about three or four refineries but current economic conditions necessitate only one to function. This one refinery is the most modern and only produces unleaded gasoline and provides for 90-95% of demand. Cuba buys a small percentage of its fuel on the spot market and thus occasionally has some lead in its fuel. This situation may become a problem once the economic situation improves and the less modern refineries are used without being upgraded.

A related issue raised is that of the manner in which ambient air standards are adopted in many Latin American countries. The US EPA maintains standards adopted in the 1970s that are no longer relevant because of the advancements in emission controls while the WHO has created guidelines that include much more stringent specifications. Yet, many countries look to the US standard as the benchmark and thus adopt lower standards than otherwise would be desirable.

The Clean Air Initiative has created a strong presence in the region and involves membership of seven cities and 16 organizations. The aim is to assist cities in reducing emissions and have a number of projects including the promotion and improvement of public transport systems. There are a number of areas in which the CAI could work with the partnership.

In most of the region there exists government commitment to adoption of cleaner fuel standards and that the first step of gathering data and analysis has been completed in most countries. What remains is refining sector development. One major obstacle is the high demand for diesel. Diesel is not only used in agriculture but also to heat homes and in public transportation, creating high social costs for associated with taxation. There is an unfortunate decline in the use of public transport that many cities are attempting to address. The Mercosur region is working toward harmonizing fuel and vehicle standards and is using US standards for its light vehicles and Euro standards for its heavy vehicles.

During the discussions, the following commitments were made.

1. It was stated that the city of Lima, Peru has created a lead phase-out strategy but requires assistance in upgrading its refineries. The US EPA stated that they would look into ways of providing assistance.

The following issues were discussed but no action has yet been committed.

1. The CAI LAC has an extensive network for knowledge sharing among cities and detailed website that includes a clean technology information pool and a transport and air quality tool-kit. The partnership could work with the CAI to enhance these features.
2. The need for provision of clear and accurate information for decision making was discussed.

Closing Commitments

The meeting ended with a summation of major issues and next steps for the Partnership. It was again recognized that there is not very much consistency from region to region and a specialized, country specific approach will be required. Furthermore, there is a great deal of overlap between technical and political issues and partners will have to be sensitive to this complexity when working with individual countries.

As a first step toward assessing gaps, it was suggested that a list of organizations working in this field in each region be compiled. Partners were asked to create a list of short descriptions of activities they are aware of and send them to Mr. Terry Thiele of the Lubrizol Corporation for compilation.

It was further suggested that those countries or cities that seemed most committed and already have action plans in place be approached and that the partnership focus on working with a few cases at a time. This may prove most beneficial for gaining experience and garnering support. Partners were asked to work with their networks to identify such cities and countries.

Additionally, three technical working groups were organized to resolve disputes over valve seat recession, importance of sulphur in emission reduction, and octane levels. It was agreed that John Mooney of the Environment and Energy Technology and Policy Institute would lead the Working Group on Valve Seat Recession, Fred Potter of the International Fuel Quality Center would lead the Working Group on Octane Levels, and Bruce Bertelsen of the Manufacturers of Emission Controls Association would lead the Working Group on Technical Issues Surrounding Sulphur.

Terms of Reference for a Clearing House

The Clean Fuels and Vehicles Partnership was launched at the World Summit on Sustainable Development (WSSD) in August/September, 2002. Partners met in New York, 14-15 November and agreed that UNEP will carry out a clearing house function for the Partnership. The clearing house will provide support in the following way:

- Share and disseminate information to the partners on relevant issues;
- Operate and maintain a website to provide easy access to information, partner activities, and resources;
- Provide logistics for partnership activities and events: workshops, technical assistance activities, etc;
- Provide administrative help to partners;
- Maintain contacts in developing countries;
- Help to gather appropriate information for countries;
- Liaise with the other existing groups working on related activities;
- Help to bring in new partners or participants in partnership activities;
- Develop and disseminate public outreach materials about the partnership, along with technical materials for the developing countries;
- Help to bring developing country NGOs, universities, and governments into the partnership or its activities; and
- Support partners, at their request, in addressing these issues.

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