

**Presentation by Dr. Klaus Töpfer, Executive Director, Under-Secretary  
General, United Nations Environment Programme (UNEP)**

**Implementation of the WSSD: support to Sub-Saharan Africa on the  
improvement of urban air quality through the phase out of leaded  
gasoline**

***Nairobi, Kenya  
17 October 2003***

Dear Sir Watts, Chairman of the Committee of Managing Directors of Shell,  
Dear Ms. Van Gool, Ambassador of The Netherlands Government in Kenya,  
Members of the press,  
Ladies and Gentlemen,

**I. INTRODUCTION**

- we are happy that Sir Philip Watts can join us today to discuss how Shell and UNEP are cooperating to support the African continent;
- I also welcome Ms. Van Gool, as the Netherlands Government is a key supporter of UNEP in this work;
- of specific interest today is the work we are doing to improve the urban air quality in Africa's cities through improving the quality of fuels;
- it is a good example of UNEP playing a leading role in addressing a key environment issue in Sub-Saharan Africa;
- in this case UNEP is doing what it is best at: promoting and supporting an important environment issue through:
  - providing the necessary information;
  - bringing together the key partners;
  - and providing support, both substantive and financial, to African countries

**II. UNEP'S WORK IN AFRICA**

- Africa is a priority focus for UNEP's work
- chapter 8 of the Plan of Implementation of the WSSD spells out the priorities of Africa, including priority environmental issues;

- in compliance with United Nations General Assembly's decision on support to NEPAD, UNEP has facilitated, at the request of the African Governments, the development of the Environment Initiative of NEPAD;
- in addition to policy support (African Ministerial Conference on the Environment, African Ministerial Council on Water), UNEP is also providing major support in the following areas: environment assessment and early warning (for example the Africa Environment Outlook Report and Africa Environment Information Network), development of environmental law and legislation, water, trade and environment, poverty and environment, climate;
- our future work will also focus on the priorities of Africa as contained in the NEPAD Action Plan, especially dealing with urban issues such as air quality management and monitoring

### **III. UNEP'S COOPERATION WITH SHELL AND THE NETHERLANDS**

- Shell and The Netherlands are two key partners for UNEP;
  - Shell sees renewable energy sources providing 30 to 40 percent of total global energy by 2040;
  - and Shell is contributing to making this happen, for example through the promotion of solar panels;
  - Shell has invested 500 million dollars in renewable energy over the last four years and has committed itself to continuing this;
  - Shell is supporting UNEP through the Shell Foundation, for example, for a project in India to promote the use of solar energy;
  - and finally Shell sets an example in environmental and social reporting, addressing difficult and urgent issues and allowing a variety of views to be integrated.
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- The Netherlands Government is also a major partner of UNEP;
  - and has always shown a key interest in UNEP's work;
  - The Netherlands Government and UNEP developed a strategic Partnership last year that provides UNEP with additional funds to implement key environment activities in areas of common interest;
  - addressing the rapidly deteriorating urban air quality in many cities worldwide, and especially in Africa, is part of this strategic Partnership

### **IV. WSSD**

- the importance of promoting sustainable development in Africa was emphasized;
- and emphasis was put on the need for governments, the private sector, civil society and international organizations to work in partnership to address urgent issues in Africa;
- during the Summit, so-called Type-2 outcomes or Partnerships were launched. These are Partnerships where governments, civil society and the private sector work together on specific issues;
- one of the Partnerships that was launched was the Partnership for Clean Fuels and Vehicles

## **V. Partnership for Clean Fuels and Vehicles**

- UNEP is leading the implementation of this Partnership, as the Clearing House of the Partnerships is located in UNEP headquarters here in Nairobi
- the private sector, both the fuels and vehicles industry, is very well represented in the Partnership. In total, 60 organisations have joined the Partnership;
- and The Netherlands Government is also a member, and a key supporter of the Partnership;
- the Partnership is focusing on the phase out of leaded petrol and reduction of sulfur levels in fuels; concurrent with the introduction of cleaner vehicles;
- for example, after unleaded fuels are introduced, catalytic converters can be introduced. These are now standard technology in many developed and developing countries and will reduce vehicles emissions by over 90 percent. However, to do so, we need to first phase out lead from petrol;
- the Partnership is also promoting reduction of the levels of sulfur in fuels, especially in diesel;
- at the moment, sulfur levels in diesel in many African countries can be 50 or even 100 times higher than those in developed countries, resulting in significant health impacts

## **VI. Support to the phase out of leaded gasoline in Sub-Saharan Africa**

- UNEP is taking the lead, under the umbrella of the Partnership for Clean Fuels and Vehicles, in the phase out of leaded petrol in Africa;
- the Plan of Implementation of the WSSD calls for the immediate and global phase out of leaded petrol;

-and in 2001, in Dakar, Senegal, African Governments and their partners agreed to phase out leaded petrol by the end of 2005;  
-UNEP is working closely with the World Bank, the International Petroleum Industry Environmental Conservation Association –IPIECA- and the governments of the United States and The Netherlands to promote the implementation of the Dakar Declaration



## *Implementing the World Summit on Sustainable Development:*

*promoting urban air quality through the phase  
out of leaded gasoline in Sub-Saharan Africa*

Dr. Klaus Toepfer

Executive Director

United Nations Environment Programme (UNEP)

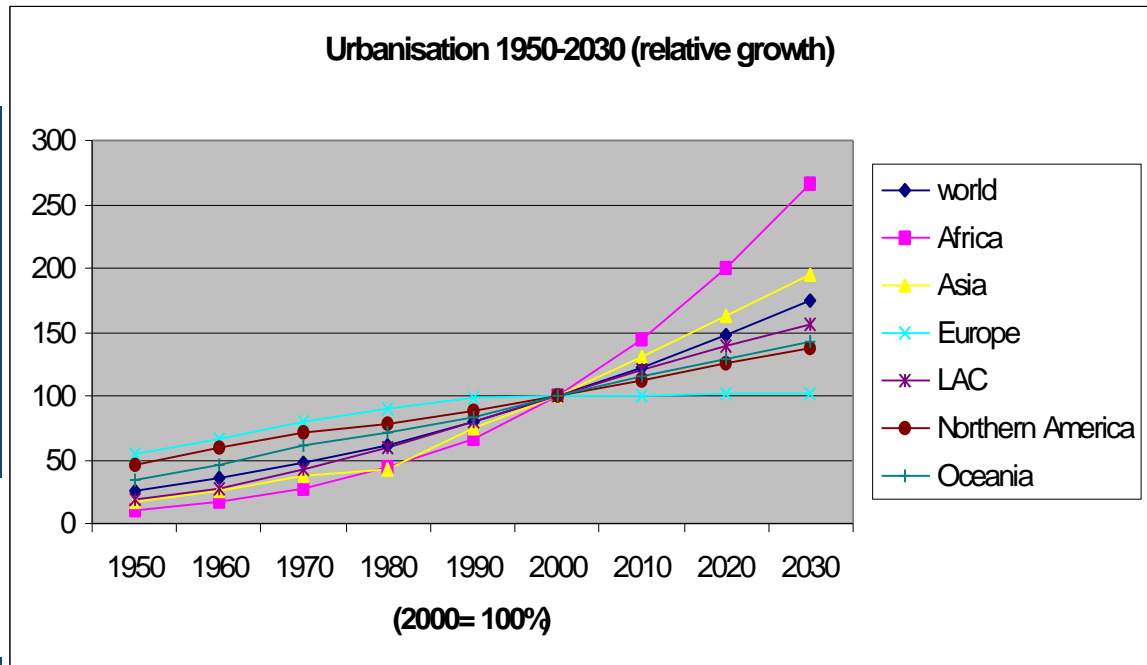
17 October 2003



Let me show you a few slides on the phase out of leaded gasoline in Sub-Saharan Africa



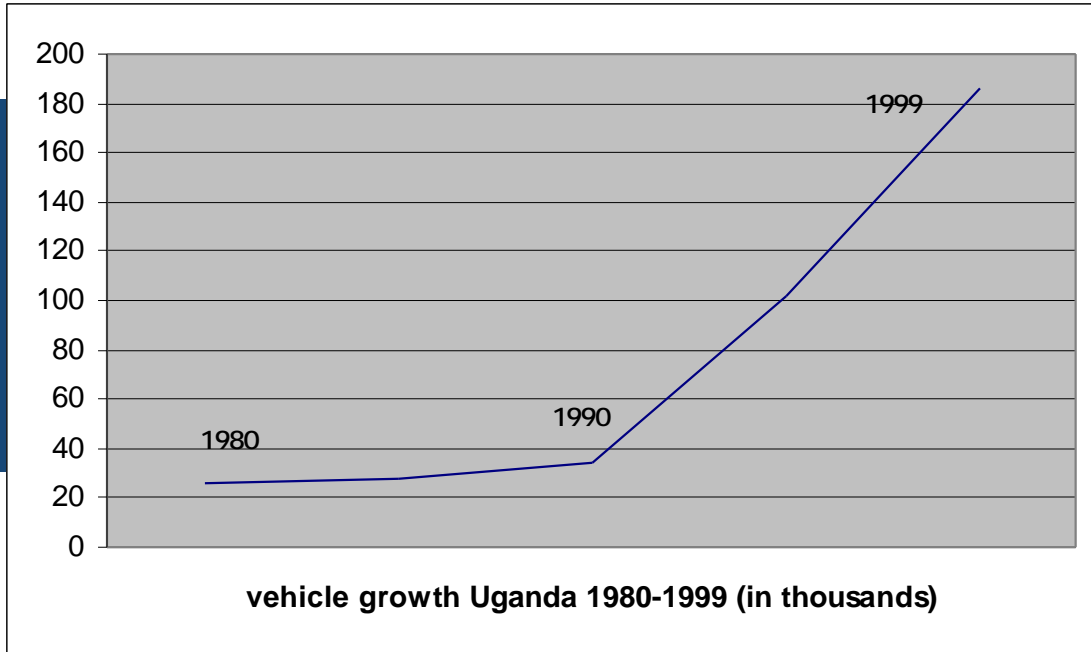
# Urbanisation



This slide shows that urbanisation is especially high in Africa. Although in absolute terms other continents have more urban residents, the pace of change is highest in Africa. This rapid growth poses severe environment problems to these countries. One of this is a rapidly deteriorating urban air quality.



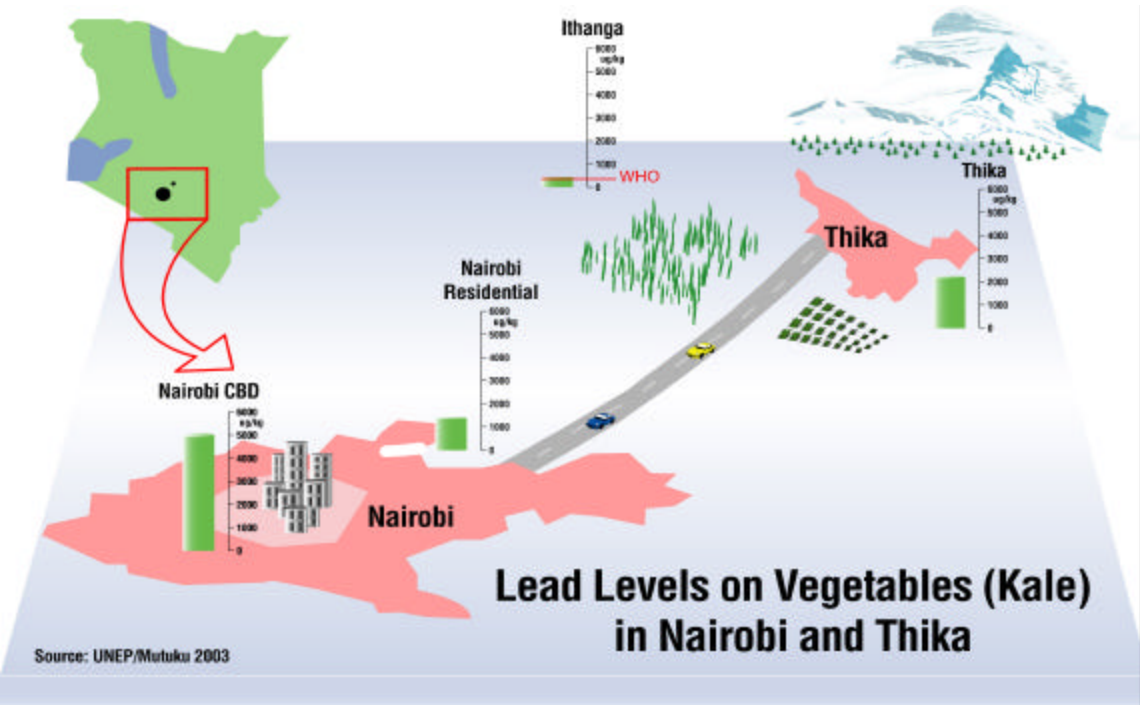
# Vehicle Growth: Uganda Example



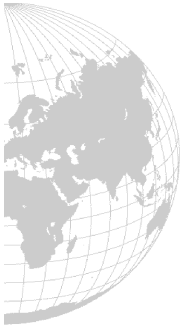
This slide shows the growing vehicle population in Uganda. And as we all know, these are often old second-hand vehicles that are not the cleanest.



## Lead Levels in and around Nairobi (UNEP/JKUAT study)



So what are the effects of this? Recently UNEP and the Jomo Kenyatta University for Agriculture and Technology in Nairobi did a study on the lead levels in and around Nairobi. This slide shows the lead levels found on Kale, also called Sukuma Wiki, a local vegetable. On top you can see the lead levels that were found in a rural village called Ithanga. The lead levels found there are close to the WHO standard. If we now compare this to the lead levels found in Nairobi and Thika we can see that those levels are much higher, in the case of the Nairobi Central Business District almost 100 times as high. This indicates that the levels of lead in the air are very high in and around Nairobi.

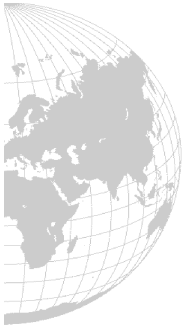


## Lead pollution: Example of Egypt

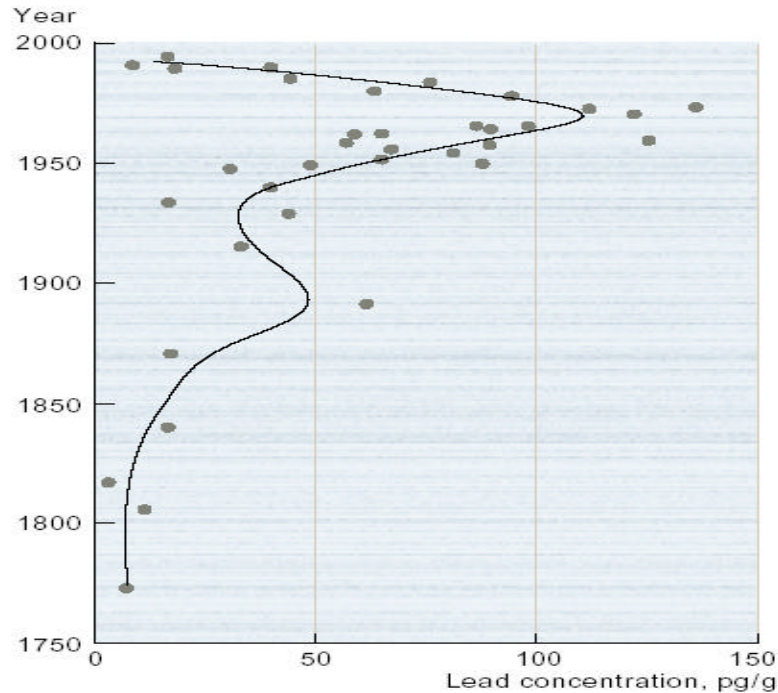
- Heart Attacks - 6,500 to 11,600
- Strokes - 800 to 1,400
- Premature Deaths (Adults) - 6,300 to 11,100
- Infant Deaths - ~820
- Average IQ Loss in Children - 4.25 Points
- Egypt went unleaded



What does this mean in health terms? A study was done to estimate the health effects of lead pollution in Egypt. Although lead pollution has several sources in Egypt, leaded petrol is the major contributor. Apart from the direct health effects listed, one key concern is that lead restricts the mental development of children – already at very low concentrations. As a result of the study, Egypt decided to go unleaded.



## Ice Core of Greenland

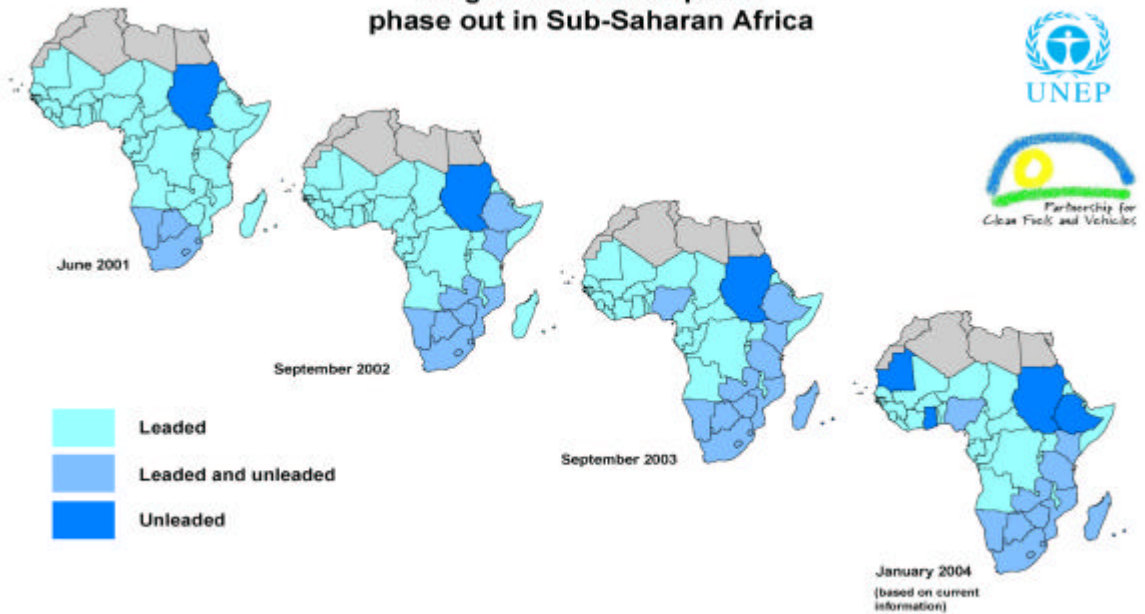


However, urban air pollution does not only affect the health of local residents, it also impacts on regional and global issues. For example, cities are a key contributor to the emissions of carbon dioxide, causing global warming. This slide shows the international dimension: lead from vehicle emissions is found in the ice in Greenland. It also shows that after the Western Hemisphere started phasing out leaded petrol, in the 70s and 80s, concentrations reduced rapidly.



# on Lead Phase Out in -Saharan Africa

**Progress of leaded petrol  
phase out in Sub-Saharan Africa**

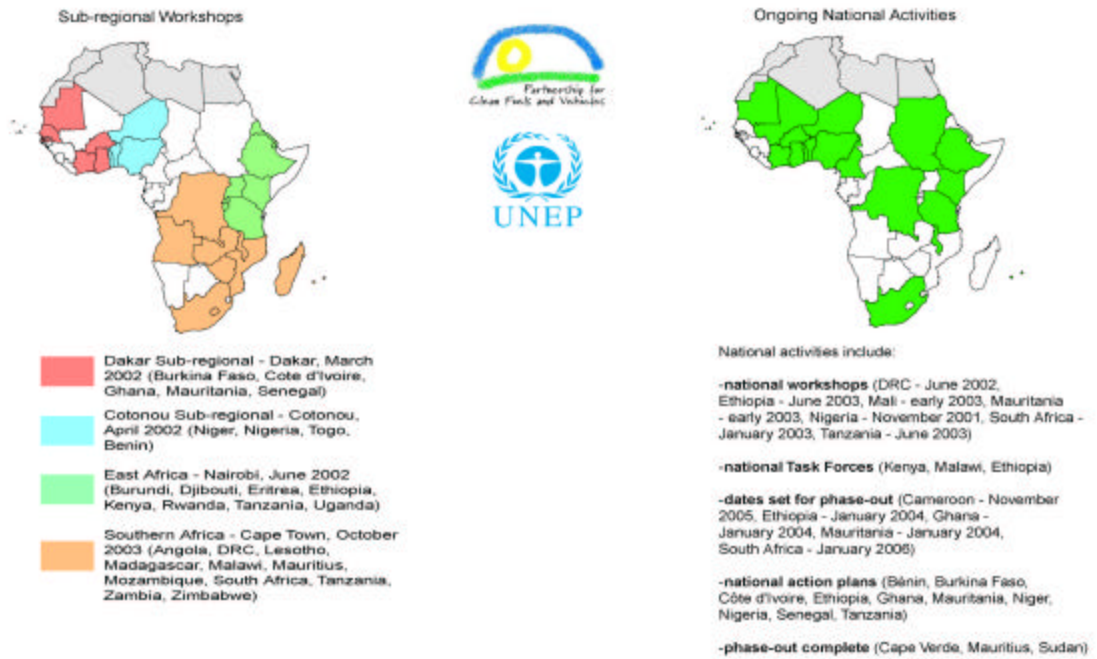


As mentioned, UNEP is working with partners to promote the phase out of leaded gasoline. This slide shows how far we have come in Sub-Saharan Africa since the Dakar Declaration was adopted. As you can see, significant progress has been made as many countries have introduced unleaded petrol.



# on Lead Phase Out in ran Africa - continued

## Phase-out of Leaded Gasoline in Sub-Saharan Africa



And this slide shows that where UNEP and its partners have come together to address this issue; on image on the left shows where workshops have taken place; the image on the right indicates where activities are underway. In West and East Africa where we organised workshops, countries are now moving to unleaded. We just, last week, held a workshop in South Africa for the SADC region. We are confident that this will also result in many countries developing and implementing action plans in the SADC region. A sub-regional workshop for Central Africa will be organized early next year.

### VII The Way Forward

- now that we have organised sub-regional workshops all over the continent, UNEP, with support from The Netherlands Government, together with the US Government and The World Bank, are now moving to phase 2;
- this involves supporting more national level activities to implement efforts to phase out leaded petrol;

- we are confident that most of the Sub-Saharan African countries can meet the deadline of the Dakar Declaration and phase out leaded gasoline by the end of 2005
- that would be a major achievement;
- but we can not sit still, we need to continue to promote other issues such as the need to lower sulfur levels in fuels and start introducing catalytic converters.
- experience has shown that the partnership formula, working with the private sector, is the right approach to address these issues.

Thank you for your attention.