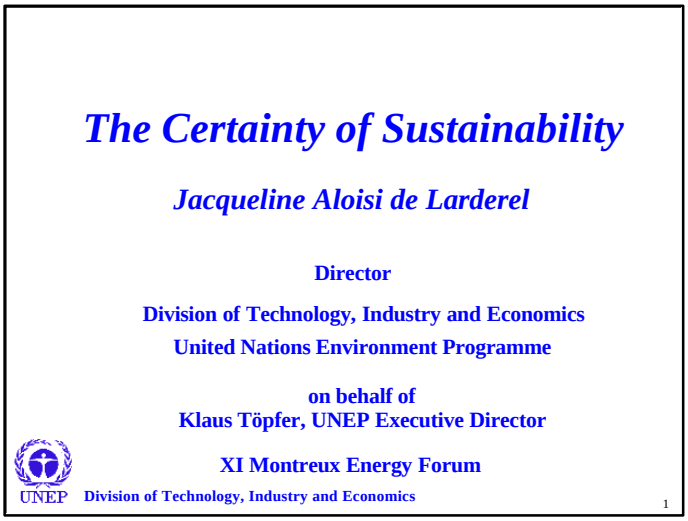
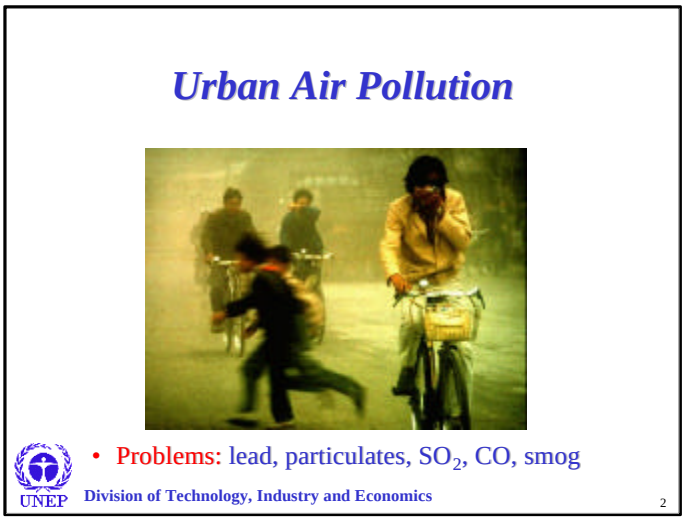


Mr. Chairman, distinguished guests, ladies and gentlemen:

I know that you are disappointed not to see the Executive Director of the United Nations Environment Programme, Klaus Töpfer, on this platform today.

Unfortunately an illness has prevented him to come, but he has asked me to represent UNEP and I am pleased to bring to you his greetings and wishes for a successful 11th Montreux Energy Forum. I hope you will be able to cope with a French accent instead of a German one.

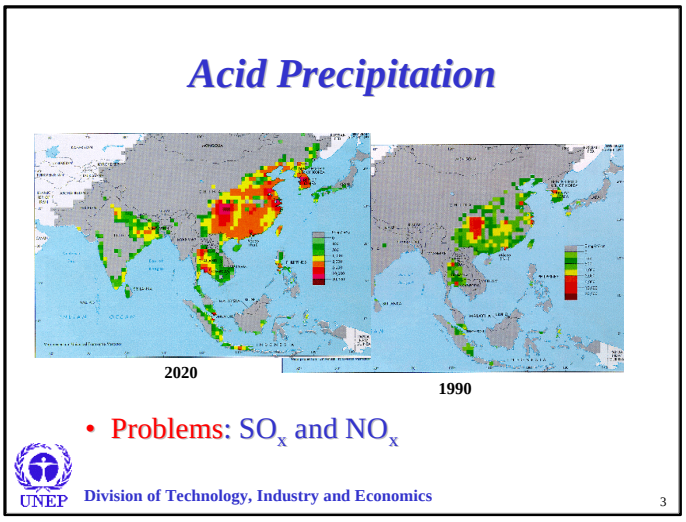
It is clear to all in this audience that our modern economy relies heavily on fossil fuels. It is also clear to all that the use of those fossil fuels, and in particular oil and coal, which are represented 60% of world energy supply has large environmental consequences. At the same time, about half the world's human population suffers from an energy poverty that retards development and, as Klaus Töpfer often says, poverty is the worst source of environmental degradation. This state of affairs must change if we are to move on to a sustainable path. For energy companies, as for all those using energy, the environmental and social dimensions of choices will become as important as the financial dimension. Environment and social sustainability are becoming the drivers of change. In turn, they will spur technological innovation. Those new challenges should not be seen as threats, but as business opportunities that all can seize.



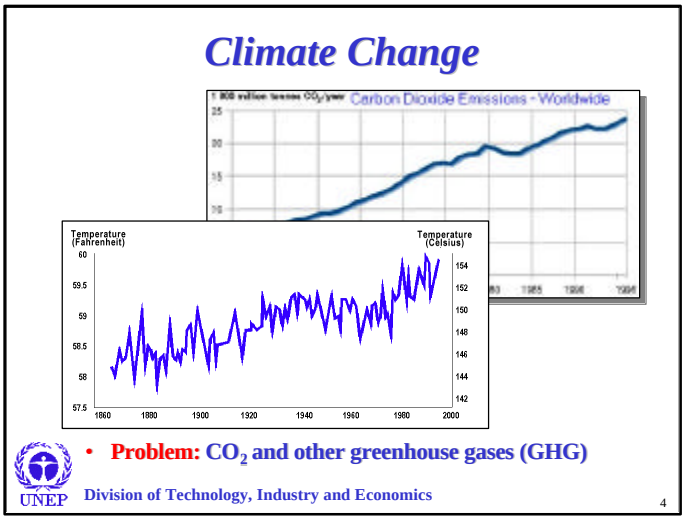
Environmental and Social Drivers of Change

Let us look first at some of the environmental drivers. The dimension of the crisis in air pollution can be seen in the fact that so many of our cities continue to suffer from poor air quality. In developed countries the problems are now mostly related to transportation and have proved harder to solve. In developing countries the

causes are both stationary and mobile sources. Globally, an estimated two million people die prematurely from exposure to air pollution each year. Some estimates of the economic burden are as high as 2.5 percent of global GDP, or 750 billion US dollars each year.



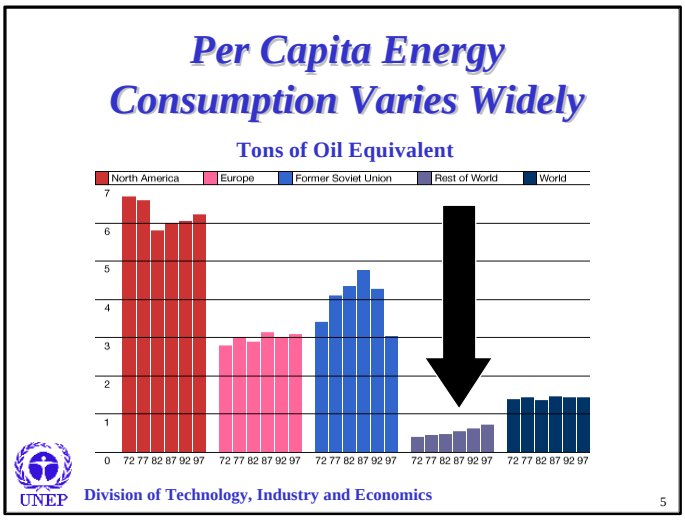
Asia has replaced Central Europe as the region most affected by emission of acid precursors, largely because of the increasing use of high sulfur, low quality coal. Projections show that with rising demand for electricity and increased industrial production, emission of sulfur dioxide in Asia could triple by 2020 relative to a 1990 baseline. When predicted deposition is mapped onto the ecological sensitivity of land and soil, an alarming picture emerges. Large parts of China, for example, would experience acid loadings greater than the worst cases we saw in Central Europe 20 years ago.



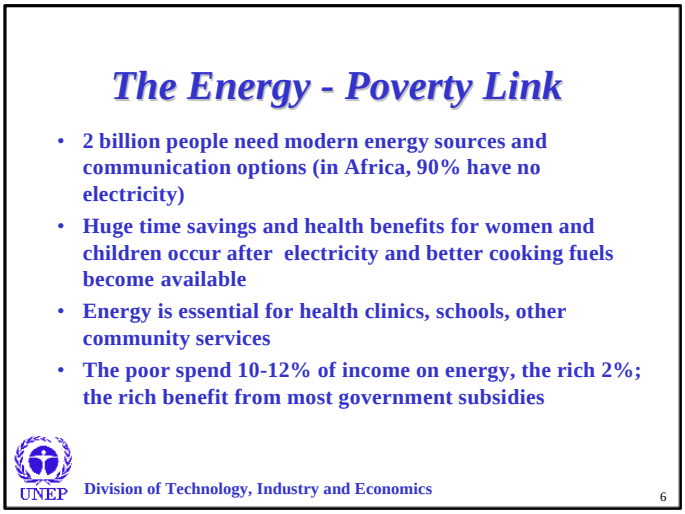
At the global level, climate scientists overwhelmingly agree that the buildup of carbon dioxide and other heat-trapping greenhouse gases from human sources – mainly from the combustion of fossil fuels – *will* change the Earth's climate. We cannot yet make specific predictions about changes at the regional or local level but changes in the magnitude, spatial variability, and consequences of extreme weather events are already being seen. Indeed, there has been an increase in average temperature recently. Increase in the average temperature over the last 30 years has been 1° compared to the 20th century average. Forecast is that the increase for the next 50 years will be 2 degrees.

There is no statistical evidence of the correlation between recent storms or floods, the increase in temperature and CO2 concentration. However, there is one clear indice: carbon dioxide level is today the highest since 450.000 years.

Concern over the environmental consequences of fossil fuel use has led to a number of international responses, most notably the UN Framework Convention on Climate Change and its Kyoto Protocol. As you know, when it will enter into force, the Protocol will require developed countries to reduce their net emissions of carbon dioxide -targets have been agreed upon and there are already voices to say that those targets are not ambitious enough. Many details must be worked out but this much we do know: the pressure on governments to respond to climate change has in turn changed the operating rules for business. But the Kyoto Protocol offers opportunities as well, such as Emissions Trading, the Clean Developing Mechanisms and Joint Implementation. And it is interesting to see the changes in a number of companies policies and strategies. For example, it is no secret that General Motors has recently left a coalition of US industries lobbying against the Climate Change Convention. The insurance industry, working with UNEP has called for a prompt implementation of the convention, and it is easy to understand why. The amount of losses they have to cover is dramatically increasing!



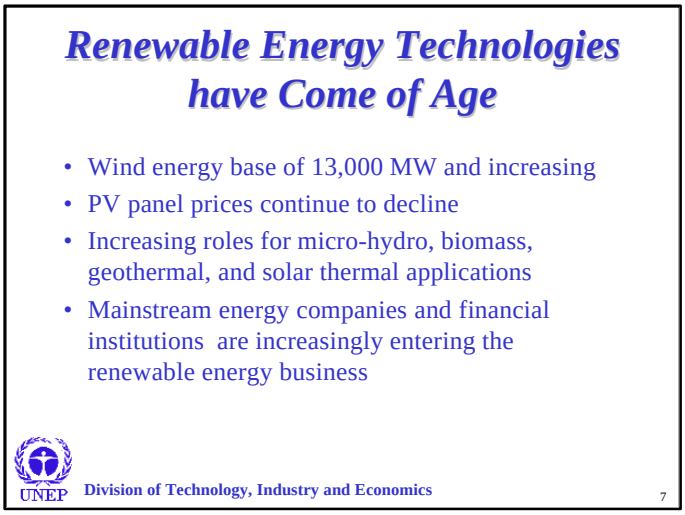
Let me now elaborate a bit on the link between energy, 'poverty', and development. 80% of the world's population live in developing countries, however, they consume about 20 percent of the world's commercial energy. More than half the world's men, women and children - some 2.8 billion people - still have no access to modern energy services, including nine of ten Africans. You already heard Eskom's speaker this morning.



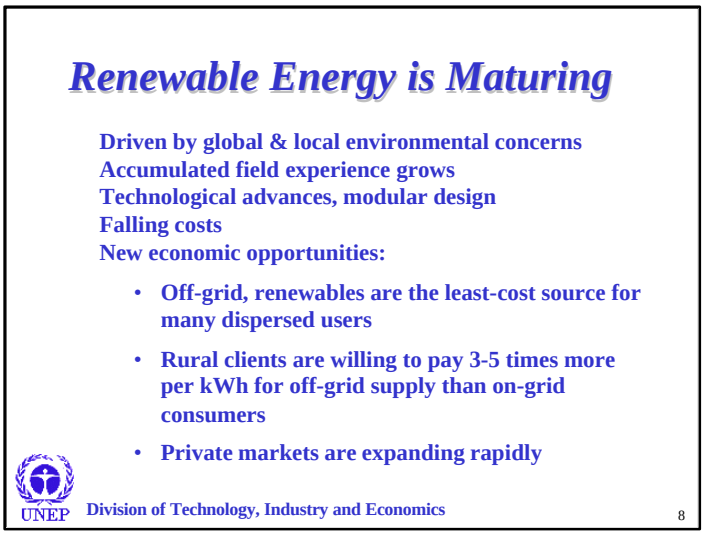
Lack of energy helps keep the poor locked in a state of poverty. Without energy, enterprises and corresponding jobs are not created, schools remain unlit, communication is impossible, and health care remains primitive at best. This social disparity – the belief that modernization and, more lately, globalization has left so many people behind – has in part prompted the demonstrations in Seattle last December and this week in this week in Washington. Looked at another

way, though, the unmet energy needs of developing countries suggests a business opportunity in providing affordable energy services. I will return to this thought.

Technological Innovation will Occur



The environmental and social drivers I have only briefly touched upon will change the energy industry as we enter the 21st century. By continuing to spur technological innovation, they will have an increasing impact on the way energy is generated, used, and even conceived. Photovoltaic, wind, mini- and micro-hydro, biomass, geothermal, and other renewable energy technologies in many ways have come of age. For the forward looking company, there is an unparalleled opportunity for their expansion, particularly in developing countries.

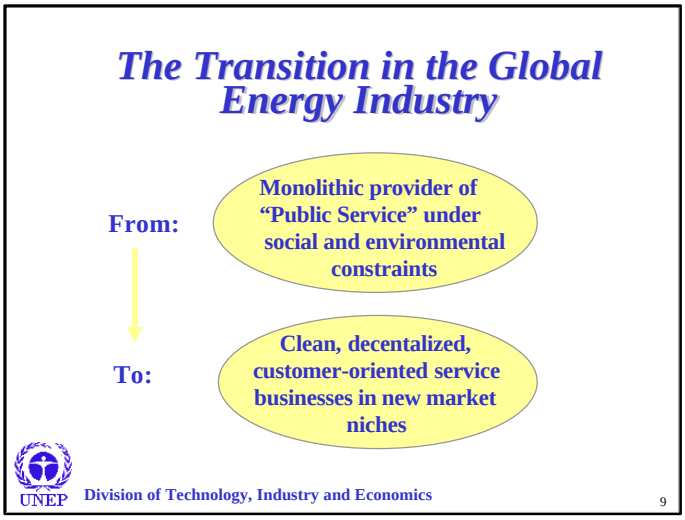


Let me provide a striking sign of these changes - the rapid market demand for new electricity product called 'greenpower', or electricity derived from renewable energy sources. To cite the experience of California, in 1999 the market for electricity from renewable energy grew by 15 percent each quarter, with a 25 percent increase in the final quarter of the year. Government policies, such as the UK's Non-fossil fuel obligation, have created challenges and yet left it to the private sector to determine how best these can be met. Other European countries, such as Denmark, Netherlands, Germany, have taken steps to give a greater share for renewable energy in the overall energy mix, and France is now following the same path.

There are no technical, financial or economic reasons why developed countries cannot enjoy the benefits of both a high level of energy services and a better environment. Renewable energy is part of this transition. At the beginning of this year, 13,000 megawatts of wind derived energy were being fed into utility grids in

over 50 countries, and the industry is growing at more than 30 percent per annum. This far exceeds even optimistic projections made a few years ago.

Another example of technology innovation is the fuel cell. The current billion dollar research and development program by utilities and auto makers will most likely make fuel cells a commercial reality in just a few years. The implications of a cheap, mass produced fuel cell on an electricity industry already struggling with competition and other changes, are potentially large.



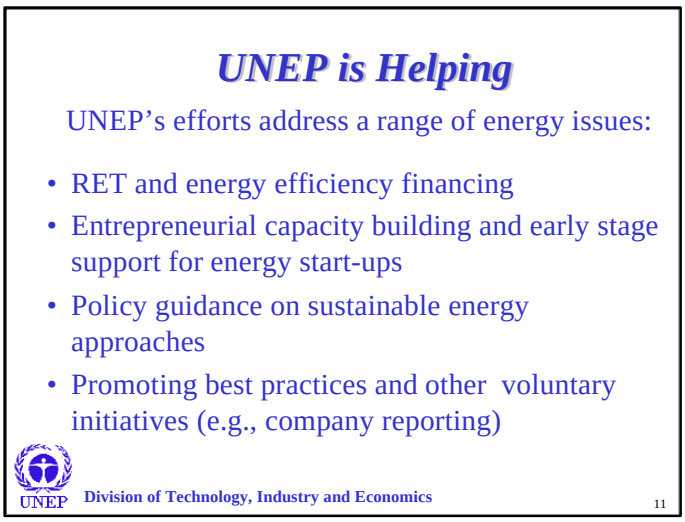
Similarly, the key to supplying energy services to developing countries lies in a shift of thinking away from large, centralized power grids and towards smaller, de-centralized systems – again based partly on renewable energy. In many cases these provide an adequate level of energy services at much lower cost than extending the grid. It is here that the greatest markets and the greatest business opportunities exist.

Ladies and gentlemen, after lunch and 10 minutes of my presentation, are you still awake? The world is changing, it has always been changing and experience tells us that the companies which will be on the scene tomorrow are those who are adapting, not those who are resisting.

Indeed Governments clearly set the context in which the Private Sector has to operate; the removal of perverse subsidies and adequate pricing are key to let market forces operate adequately -- and here again we see sign of changes. But it is up to the private sector to take a proactive role. Over the last twenty-five years, there has been a gradual conceptual shift in the way private sector approaches society's environmental concerns, from the reactive, end-of-pipe compliance approach of the 1970s, to a more public relations approach of the eighties, to the preventive, cleaner production, eco-efficiency approach of the 1990s. Business and industry are the sources of most technology innovation and it is from the energy industry that solutions to our current problems will come.

As I mentioned earlier, it is the role of the private sector to develop 'cleaner' energy technologies. It is also up to the private sector to finance the deployment of new technologies using innovative business models and innovative approaches to providing energy services. In doing so, it is important that industry involve wider communities of stakeholders in energy decisions. Accountability, earning the right to operate, will be key words in the 21st. century and companies will be requested to report about their environmental and social performance. This is why, together with a number of NGOs and industry associations, UNEP is promoting the Global Reporting Initiative which has benefited from an important grant of the UN Foundation.

It is critical that outdated, polluting, and inefficient technologies are not dumped on developing countries. It is in these countries that the greatest investments in new infrastructure and technology will occur during the coming years, and given the long lives of most energy systems today's poor will choices bear consequences for decades into the future. We all must ensure that environmentally sound energy systems are transferred from developed to developing countries, along with the capabilities to adapt and use them. Done correctly, however, we can all benefit from this transfer. The Intergovernmental Panel on Climate Change will soon publish a special report on Technology transfer to which UNEP has importantly distributed.



This brings me to a short commercial about UNEP, the world environment authority. We are small - 600 staff, a budget of 60 million US$ - but we play a catalytic role. The Energy Programme has grown considerably, with activities also supported by the Global Environmental Facility, and again the UN Foundation. We welcome new partners for our efforts and for those who are interested I can send documentation.

In closing, I want to emphasize that the pressure to achieve sustainability will not go away. UN Secretary General Kofi Annan's *Global Compact* recognizes this fact. The Global Compact brings the UN and private sector together to promote adherence to international norms in the areas of labor, environment, and human rights, and has been embraced by leading businesses that agree with the inevitably of sustainability.

How soon we achieve the goal of a sustainable energy future, though, depends critically on what actions we take now. If a majority of the estimated $15 trillion of new investment in power sector infrastructure in the next two decades is directed towards clean energy technologies, the countries of the world will enjoy a global economy that is more secure, more robust, and much cleaner than that we had during the 20th Century. The challenge is there for all of you. I urge you to accept it in order to make sustainability a certainty.