



## Partnerships for Tackling Climate Change

**Pierre Liautaud**, Vice-President, Western Europe Region, Microsoft EMEA

Ladies and Gentlemen,

Thanks to the OECD for organising this important debate. As the 2008 OECD Environmental Outlook says, "business-as-usual" is not an option on climate change. Instead, we need to create a "climate for change" based on collaboration and innovation:

- To raise awareness and reduce energy consumption,
- To drive forward with policies to promote technological breakthroughs,
- And to create competitiveness and growth as we do it.

### IT Industry

Already in the past few years, climate change, energy efficiency and environmental sustainability have moved into the mainstream of business strategy. In the IT industry, this shift is well underway and there is a strong emphasis on partnership - within the industry, with the scientific community, with customers and governments -to reduce energy consumption and drive innovation.

We believe the IT industry can contribute to tackling climate change in three important ways:

Firstly, for society to manage its resources more effectively there needs to be a significant improvement in our understanding of what and how the resources we have are being used. Only with reliable and timely information, can we hope to drive behaviour and derive policies that will have impact at both a local and global scale. Once citizens, companies, and governments have information they can take direction action that will help significantly reduce our current consumption patterns.

- For example, in North Rhine Westphalia Germany, Yellow Strom a subsidiary of EnBW, the energy company, provides home owners with real time information on their energy consumption. Just the act of creating awareness had the immediate impact of driving down energy consumption by more than 10%.
- Very recently Microsoft and the European Environmental Agency (EEA) announced a plan to establish a two-way communication Observatory on environment issues. This first of its kind partnership will give 500 million citizens in the EU and beyond, easy, real time access to data about the environment in which

they live and work, enabling them to make better informed decisions and choices. It will also allow local observers/organisations that have members regularly on the ground, like ornithological and wildlife societies, for example-to share their observations with others.

- I'd also like to mention our scientific and academic partnerships to help find the best ways to use IT innovation to combine environmental data and to feed it into models of the climate. Microsoft Research Cambridge, for example, is contributing to two major global projects, the Environmental Scenario Search Engine (ESSE) and Climate Prediction.net.

Secondly, through product innovation and design. The ICT sector uses 2% of global energy consumption and we want to reduce that by leveraging the power of software to produce better, faster, lighter devices that use less and less energy.

The IT industry has made good progress. Today, new laptops use as little as 20 watts-the equivalent of two compact fluorescent light bulbs. In desktops, a machine with a monitor can be purchased that will consume only 60-70 watts. Only a few years ago the average configurations were consuming over 150-200 watts per hour. These improvements in energy efficiency are the result of the integration of new hardware and software technology and we are committed to driving further improvements through industry collaboration.

- Example -The Climate Savers Computing Initiative brings together industry leaders-Microsoft, Intel, HP, IBM, Lenovo and Google -and over 100 other companies, with consumers, government, The World Wildlife Fund and conservation organizations, to deliver significantly increased PC and server energy-efficiency through the design of more efficient computing systems and the use of advanced power management settings on computing platforms. By 2010, our goal is to reduce global computer CO2 emissions by 54 million tons per year, equivalent to the annual output of 11 million cars or 10-20 coal-fired power plants.
- Another example - the Green Grid industry partnership aims to develop platform neutral standards and measurement methods for more energy-efficient data centres. By consolidating existing and future workloads on servers-so-called virtualization-server load utilization can be increased to as much as 80% instead of the previous 5-15%. This reduces the number of physical servers required, thereby reducing floor-space, cooling, and energy consumption.

We are putting this in practice ourselves-Microsoft's new data center in Dublin, which will open in 2009, makes the most of Ireland's cool, damp climate, using outside air to the cool the facility. This will help it to be around 50% more efficient than similarly sized facilities.

Thirdly, there is huge potential for the intelligent use of digital technology by consumers, business, and public authorities to reduce the remaining 98% of energy consumption. Software makes everything we use and do more energy-intelligent, thereby enabling

businesses everywhere to redesign products and processes to use less energy and fewer natural resources.

- We made Windows Vista our most energy efficient operating system to date, through significant changes to power management infrastructure, functionality, and default settings that can reduce PC energy consumption down to 3 watts. A senior scientist in the U.S. estimated that if the majority of U.S. computer owners use the enhanced energy saving features in Windows Vista, it could prevent 3 million tons of emissions from electric power plants.
- Travel, especially, is an area where IT can make it possible for businesses to substantially reduce their carbon emissions through collaborative and videoconferencing technology. Volvo, which is actively using Microsoft Office Live Meeting and Roundtable-a web camera that captures images in 360 degrees around a table and costs around €2,000 estimates that the Microsoft collaboration products alone save enough travel to eliminate 900 tons of carbon-dioxide emissions per month.
- We are working with our business customers and platform partners on creative consumer solutions. For example, our "EcoDrive" collaboration with Fiat, which is an in-car USB stick tool, analyzes the users' driving style and provides recommendations on more energy efficient driving.

### **Partnership with Government**

To make most of the potential of software and information technology to tackle climate change requires an innovation economy focused on sustainability - and to make that a reality we need a deep and broad partnership for eco-innovation between industry, science and governments.

Here, we concur with OECD's own analysis: business and industry must have a central role in driving eco-innovation, but governments have an important responsibility to set the appropriate policy frameworks for eco-innovative companies to succeed. Otherwise, the big, bold ideas of scientists and entrepreneurs will not come to market at the speed and scale necessary to beat global warming.

There are three vital ways that sound public policy can contribute:

1. Deep clusters of R&D: regional and local policy plays a key role in encouraging academic/ private sector R&D partnerships and innovation clusters, particularly in providing funding and incentives for academia.
2. Regulatory regimes that encourage entrepreneurs to form new eco-innovative companies and that encourage venture capital and other financial backing for them, to turn innovations into commercially viable products and services.
3. A robust Intellectual Property Rights framework: an innovative industry must be able to realize a return on its investments in research and product development.

## **Conclusion**

In closing, I would like to stress the historic economic opportunity we have to lead the way towards a greener economy.

Globally, these new green technologies will be disruptive. As they come out of the labs there will be a need to get the products to market as soon as possible. This means having the right regulatory frameworks and for the private sector with governments offering the right incentives and financial stimulus. There will be substantial competition from US, Europe, and China. Those countries that get clean technologies in place will be ahead of the game.

Ambitious action is possible-I think we can be excited by what the future can bring, *if, together*, we unleash its potential.

Thank you.