

## **OECD FORUM 2005**

### **FUELLING THE FUTURE: Security, Stability, Development**

#### **Climate Change and Energy**

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Total global emissions of greenhouse gases in 2000 amounted to 37 billion tonnes<sup>1</sup> of carbon dioxide equivalents. The trend is towards a dramatic increase, especially in countries that are experiencing rapid growth such as China and India. Carbon dioxide from combustion dominates. Studies show that an acceptable temperature increase and long-term temperature stability could be achieved at a concentration of 550 ppm of carbon dioxide equivalents in the atmosphere. But, we have to respect that this is the current wisdom, it may very well be necessary to revise this target downwards<sup>2</sup>. If, in 100 hundred years time, the per capita emissions including the developing countries should be equalized at the same time as temperature stability is achieved, then a dramatic reduction in emissions from fossil fuels is required. Calculated on the basis of current levels in the industrialised world, they must be reduced by something in the range of 80 to 90 per cent! Therefore, it is obvious that we have a huge long-term problem on our hands.

#### *What must be done?*

*First*, we all have to accept climate change as a result of human activities as a proven reality. *Second*, we all have to realize that there is no such thing as a handful of simple solutions. *Third*, we all have to take on responsibility.

#### *What must be done to really get things going?*

*In general, I think that there are two issues of outstanding importance in the effort to get things going.*

*First of all*, we must do all we can to set the correct price on emissions and the pricing must be as global as possible. The only way possible is to make use of market forces, i.e. a global system for emissions trading must develop.

#### *Why?*

- If the measures taken are to be effective from a resource allocation point of view, we must make use of markets and market mechanisms as extensively as possible.
- Pricing something is usually seen as a cost. But pricing also creates financial resources for taking action. If emissions are priced properly and the price formation process is trustworthy, i.e. it mirrors market fundamentals, it will be much easier to motivate as well as finance what each single actor out there can do.

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1. The data in this paragraph has been checked with Professor Christian Azar of the Institute for Physical Resource Theory at the Chalmers University of Technology.

2. In the latest material even lower levels, 450 or less, are indicated as more realistic stability levels.

- Why does the price have to be global? Otherwise, we will see a lot of second-best solutions and the comparative advantages will not be exploited.

The emissions trading system that the EU introduced on 1 January this year utilises market forces but a limited European solution cannot solve the basic issue

Getting the rest of the world to participate in an emissions trading system is therefore vital. The USA, above all, must be convinced of the benefits of such a system. The disputes surrounding the Kyoto Protocol must become a thing of the past. Prestige must be laid aside. The USA and the EU have a responsibility as the regions that release most emissions of carbon dioxide to show joint leadership. China and India, and of course all the other countries of the world, for example Brazil and South Africa, must be persuaded to take part. The developing countries should, however, be given a relatively long period of time to comply, say 10 to 15 years, so that development can proceed without being restricted by the demands of the system. What we need here is a reasonable and generous compromise between the developing countries' demand for fair development conditions and the industrialised countries' demand that competition throughout the world must not be distorted. It is much more important to get everyone to take part than to focus on short-term emission limits.

The emissions trading system will not be sufficient on its own to solve the problem. Costs will be limited by the technology available for reducing emissions to the desired level. Greater investments in R&D will accelerate technological development. This is obviously a joint responsibility on the part of the political and industrial spheres. We must be open to the use of all available technology in this process. The most important technological development of the next few decades will probably be to achieve sequestration, i.e. to separate and store the carbon dioxide produced in connection with the combustion of fossil fuels. Nuclear power, present and future, will also be a part of the solution. Of course, all the various forms of renewable energy must be used. The transport sector will gradually complete the transition to emission-free engines, probably via hybrid vehicles to fuel cells that use various fuels.

*The second issue* of outstanding importance is that the business community (generally and globally) must play a central and very active role in setting up the basic rules and regulations.

#### *Why?*

- First of all, there is an ethical dimension, if we say that climate change is a challenge to humanity, and it really is, we have to take part very actively.
- If we move from an economy in which emitting is free to an economy where the costs for emissions are integrated, the majority of the relevant decisions will be taken by managers in companies. It is in the interests of managers and directors throughout the world that sensible and pragmatic solutions emerge.

- The business community has a unique knowledge that must be taken into account already when the rules and regulations are established. Business and industry can contribute important experience and know-how.
- Handling climate change purely or mainly in terms of “red tape” will be extremely expensive – high costs and poor results are to be expected.

Up to now, I think that we as business leaders have made a strategic mistake (of course there are some striking exceptions) by letting politicians and NGOs handle the challenge mainly on their own and by seeing limits on emissions only in terms of their adding extra costs to our products and services. It is high time for us to rethink the entire climate change issue!

Today, the climate change issue is driven by politicians, public officials and NGOs that are trying to pull business into a low-emissions future. Looking forward, my conclusion is that we as representatives of business and industry have to show leadership by *pushing* society and in a positive way integrate climate issues into the world of markets and trade on a global scale.