

Opening Meeting of International Energy Workshop Paris, 30 June

Introductory remarks by Jørgen Elmeskov, acting OECD Chief Economist

Thanks for inviting me to this event. The idea of having an exchange between the modelling community and those closer to the policy sphere seems like a very useful one. I look very much forward to our discussion here today.

The OECD has been involved in climate policy analysis for the past two decades. Less than 4 weeks ago, OECD Ministers of Finance and Economics at their annual OECD Council meeting confirmed their support for continued work in this field. They also provided us with an agenda for future work. The agenda is actually a very long one and in my remarks here I will be very selective and only pick out a few requests. And I will focus on those where I think improvements on the modelling side are crucial to enhance our understanding. I will mention five such issues.

An issue that is high on the political agenda is the leakage of emissions from countries and regions that take action to reduce their emissions towards countries and regions that do not. The extent of such leakage depends, not least, on how flexibly carbon-based fuels are supplied. At the limit, if supply of carbon-based fuel is totally inelastic, action by some countries to reduce emissions will be exactly matched by higher emissions from other countries – leakage will be 100 % because the price of carbon-based fuels will fall sufficiently far to ensure that world demand matches the unchanged world supply. Unfortunately, our knowledge on the supply of carbon-based fuels is fairly limited. This clearly is an area where further work is called for.

Another issue Ministers were keen on was emissions from deforestation and forest degradation. These are reckoned to account for 18 % of world

Greenhouse Gas emissions – more than from transportation. And some estimates suggest that there is a fairly large potential for low-cost emission cuts here. But such estimates typically do not take into account the opportunity costs of not using land for other purposes such as agriculture or housing. Some more coherent modelling in this area would be useful. It would probably call for integration of land use in general equilibrium models used to assess the costs of reducing emissions.

Ministers were also very keen for us to explore the role of technology. But this is obviously difficult. We know something about existing or emerging low-carbon technologies but we have little idea about the impact of *new* technologies. Yet, such new technologies will crucially affect the scope for and cost of alleviating climate change. How can the effect of research and technology creation best be incorporated into the models used to assess climate policies? And how do the cost estimates, and thereby the models used to produce them, best take into account so-called “backstop technologies”.

A first-best way to reduce Greenhouse Gas emissions is to get rid of current subsidisation of energy use. Though there can be some social issues involved, such action could in principle be both welfare-enhancing and good for the climate. Unfortunately, we do not have up-to-date estimates of current levels of subsidisation. Nor do we have an overview of the mechanisms for delivering the subsidies which will be important for their effects on energy use. Here, there is clearly also a role for the modelling community.

Our Ministers were also keen to see work on the incentives for various countries to join action against GHG emissions. One factor in this is the ancillary benefits or co-benefits that accompany reduced GHG emissions. To give an example, typically local air pollution is reduced at the same time as CO₂ emissions are reduced. There may also be effects on energy security. But we do not have a firm handle on the size of these effects, nor on their monetary value. And the incentives for action they provide are not clear either. For example, some countries may be better off

addressing local pollution directly, rather than indirectly by cutting CO2 emissions.

The final call for assistance which I have time to issue regards the plus-side of action against climate change. To the extent countries rely on economic instruments to reduce emissions, government revenues are likely to be boosted very significantly - either by the proceeds from auctioning permits or by taxes on emissions. How these proceeds are recycled will crucially affect the costs of taking action. Typically, the models assume this recycling to take place in the dumbest possible way - as a lump sum transfer. But if they are used to reduce distortive taxation there could be substantial benefits. And our estimates of the costs of reducing emissions could be correspondingly lower.

As I said at the outset, I have really only picked a few issues from a very long list provided by our Ministers. But I do hope that you will be taking up some of these. The policy advice that we can provide back to Ministers will be so much the better for it.

Thank you.