OECD

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

CONFERENCE ON ENVIRONMENTAL FISCAL REFORM

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Summary and Main Conclusions

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Introduction

Over the past ten to fifteen years, significant progress has been achieved in the introduction of environmentally related taxes and – to a lesser degree – in the abolition of environmentally harmful government subsidies.

The authors of the recent OECD report on *Environmentally Related Taxes in OECD Countries* (Paris, 2001) recognise that further progress in this area is hindered by two main obstacles:

1. the fear of reduced international competitiveness and the associated loss of jobs;
2. the possibly regressive income distribution impacts of environmentally related taxes.

Purpose of the Conference

The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and OECD organised a conference on this issue 27 June 2002 in Berlin, Germany. The purpose of the conference was to examine the mentioned obstacles and to discuss ways of overcoming them, so that the benefits of 'green' taxes and of cutting harmful subsidies, in terms of environmental improvement and economic efficiency, can be more fully realised.

Organisation of the Conference

A paper reviewing the main issues had been prepared by professor Flip de Kam of Groningen University, The Netherlands. During the morning session, participants in the Conference discussed competitiveness concerns. During the afternoon session, the group reviewed the impact of environmentally related taxes on household income and looked at ways in which policymakers might address income distribution concerns. During each session, several experts gave invited responses to professor De Kam's paper. These presentations were then followed by an open discussion. All prepared responses and the presentations made at the conference can be found at http://www.oecd.org/EN/document/0,,EN-document-471-nodirectorate-no-20-31320-8,00.html.

The Conference was attended by about a hundred participants. They included representatives from several governments of OECD countries, from academia and major industrial sectors, environmental NGOs and from private think tanks. The meeting was chaired by Ken Ruffing, Acting Director of the OECD Environment Directorate.

Opening speech by Minister Trittin

Mr. **Jürgen Trittin**, the German Federal Minister for Environment, opened the Conference. In his speech the Minister stressed the need that taxes and government subsidies reflect ecological realities. He outlined the 'ecological modernisation' of the German economy in recent years and pointed out that over 1 million people are now employed in the environment sector, 130,000 of which in the field of renewable energies. Minister Trittin reminded the audience that nowadays over one-third of the world's wind-generated energy is produced in Germany and over 5 million square meters of solar collectors will be installed by the end of 2002. He also stressed the first environmentally positive impacts of the Ecological Tax Reform in Germany, introduced in 1999. Hence, the Ecological Tax Reform should be continued and further developed into an Environmental Fiscal Reform as fiscal incentives proof to be a very effective instrument. The Minister also reviewed various other policies with significant environmental impact, including investment in the national railway system. He concluded by identifying areas where future policy initiatives are wanted, notably a reassessment of ecologically counter-productive subsidies in Germany, currently amounting to over 20 billion € per year. He announced that the bi-annual reporting system of the German Government on subsidies should be used to make those transparent and include environmental evaluations.

Presentation by Mr. Nils-Axel Braathen

By way of introduction, Mr. **Nils-Axel Braathen** of the OECD Environment Directorate gave an overview of environmental fiscal reforms in OECD countries. While there are very few examples of a systematic removal of environmentally harmful subsidies, all OECD countries have some form of environmentally related taxes, and a number of countries have recently engaged in revenue-neutral green tax reform. Available estimates indicate that the price elasticities for environmentally relevant tax-bases are significantly different from zero – but generally lower than 1 in absolute value – meaning that a tax increase *will* normally lead to clear environmental improvements. No significant negative competitiveness impacts of existing environmental taxes have been found for any sector – but this is largely due to a long list of exemptions and refund mechanisms currently in place. Due to these exemptions, etc., the costs of other sectors increase, if a given target is to be met. Recent economic theory indicates that a "double dividend" (both an environmental improvement and a reduction in unemployment) is not likely to result from a green tax reform.

International competitiveness concerns

Four invited responses to Professor De Kam's paper focused mostly on the competitiveness issue.

Andrew Field of HM Treasury explained the particulars of the Climate Change Levy, introduced in the United Kingdom in April 2001. This levy applies to businesses only, not to households (in view of its distributional impacts), and its revenue is recycled largely through a cut in employers' social security contributions. Negative competitiveness effects are mitigated through a discount of 80 per cent for energy-intensive sectors, provided they enter into an agreement to reduce emissions. Mr. Field also spoke about the Aggregates levy, introduced in April 2002. This is a tax on rock, sand and gravel for aggregate use. Imports are taxed and exports exempted, effectively eliminating any competitiveness concerns. Mr Field concluded that the design of green taxes needs to take account of competitiveness (and other) issues. It is easier to tax products with little international trade. Revenue recycling is important, but national governments need to be aware of EU rules governing state aid.

To this Mr. Field added that the UK government believes that a common EU framework for the taxation of energy used by industry should take the form of minimum tax rates, rather then specifying the rates that Member states should use. The UK government also remains opposed to new taxes on energy used by households, given the importance it attaches to addressing 'fuel poverty' in the UK. He thought that greater formal co-operation in these areas would be difficult. But informal co-operation through sharing of experiences and building on the example set by leading countries may help.

The discussion clarified that the UK government is indeed concerned about significant adverse effects of green taxes on the competitive position of the country, but that it does not overestimate the fears of losses of competitiveness and that adequate design can take into account these fears. Mr. Field stated that no significant negative impacts on the competitiveness of businesses had been observed to date. Concerns about ‘fuel poverty’ are explained because in the UK 4-5 million households spend over 10% of their disposable income on fuel and power. Both Mr. Field and Mr. Larsen from Denmark confirmed that the European Commission allows the imposition of environmentally related taxes on imports (from other Member States) if applied in a non-discriminatory way.

It was also suggested that the World Trade Organisation has a role to play regarding the issue of sectoral competitiveness. Is not failure to internalise the costs of environmental damage a trade-distorting measure?

Alberto Cornejo Perez, of the Spanish Ministry of Finance, explained that his government is opposed to introducing environmentally related taxes on energy. The demand for energy products is thought to be so inelastic to price changes that taxes would not significantly reduce energy use. The government is intent on granting positive incentives in the form of lower taxes, to stimulate investments aimed at protecting the environment, but these have little impact in budgetary terms.

The discussion made it clear that the introduction of ‘green’ taxes is politically unpopular in Spain, because they raise the costs of firms and households and because the public is not interested in changing the tax mix.

Some participants raised the ‘double dividend’ issue. As yet, the empirical evidence on its existence is inconclusive. If workers demand higher wages after the introduction of environmentally related taxes, wage costs will not fall, even if – for example – employer social security contributions have at the same time been reduced. Also, ‘green’ taxes play as yet a minor role and thus have a limited impact on the revenue mix and wage costs.

Klaus Bräunig from the Bundesverbandes der Deutschen Industrie (the Federal Organisation of German Industry) launched three propositions.

1. Effective protection of the natural environment requires economic growth; it follows that policies aimed to protect the environment should not harm the economic development of highly industrialised countries. Progress in technology allows more fuel-efficient production to expand.
2. Not energy use as such, but only environmentally harmful waste of energy, should be tackled. Firms employing state of the art energy-saving technology and/or confronted with prices set in world markets can only reduce their energy use further by cutting back existing production levels. This is counterproductive; see the first proposition.
3. The example of Germany shows that the environmental goals embodied in the Kyoto Protocol can be realised through voluntary agreements concluded between government and representatives of industry. Between 1990 and 2012 emissions of six greenhouse gases from German industry will be reduced by 35%. In its report on environmental tax reform, the OECD should have paid attention to the potential of this instrument.

During the discussion several participants stressed that taxes, given the associated price signal, are a more efficient and effective instrument than voluntary agreements. Taxes would thus be more tailor-cut and effective in a market economy. For example, relative prices (reflecting different tax rates) trigger fuel substitution effects that need not arise within the setting of voluntary agreements. Also, inefficiencies will result if marginal abatement costs vary across firms. Other participants identified a serious ‘free rider’ problem: once a sector or branch of industry has committed itself to a reduction in energy use or emissions, it is very attractive for individual firms not to join the common effort because they will enjoy a significant cost advantage.

Comments on Mr. Bräunig's first proposition included the observation that economic growth also creates environmental problems. Pollution per produced unit may go down, but absolute pollution levels might increase, given higher production levels. Mr. Bräunig replied that, generally speaking, policymakers should not aim for less economic growth because of environmental targets.

Xavier Delache from the French Ministry for Ecology and Sustainable Development presented the context and particulars – and the eventual failure – of the 1998-2000 Carbon tax project of the former French government. The effect of carbon taxes on the relative competitive position of industry sectors is determined by the energy intensity of the production process and openness to international markets. The government proposed tax reductions for industry, with the reduction varying with the energy input relative to value-added for each individual firm. Tax rebates were linked to an obligation to negotiate voluntary agreements with the administration. In the end, however, the Carbon tax as adopted by the Parliament was found unconstitutional by the Constitutional Council.

Income distribution concerns

There were three invited responses to prof. De Kam's paper addressing income distribution concerns.

Sylvain Chevassus presented comments on behalf of the European Environment Bureau (EEB). For equity reasons and to increase environmental effectiveness, the EEB deems it important that business contributes proportionately. Mr. Chevassus stressed that environmental tax reforms constitute a shift in the tax base and that business benefits directly from cuts in other taxes, while acknowledging that individual firms in energy-intensive sectors may lose. Extending qualified majority voting in the EU Council to include environmental and energy taxation would greatly facilitate policy co-ordination. The EEB also advocates the removal or re-direction of subsidies with a direct negative impact on the environment, whether they are in the form of direct expenditures or tax expenditures.

The EEB very much welcomes the exchange of information and activities of the OECD and asks that economic and taxation committees of the organisation spend more time on these.

The EEB pushes for cuts in social security contributions on a 50-50 basis, and suggests compensating households for instance by increasing housing benefits. It was pointed out that in many countries employers and employees currently pay different shares of aggregate social contributions and also that in most countries not all poor households receive housing benefits. All this points to a country-specific design of compensation measures.

Susan Scott of the Economic and Social Research Institute, Dublin, flagged that the abolition of domestic water charges in Ireland in 1996 as a prime example where income concerns overtook sensible environmental policymaking. The solid waste charge ('bin tax') is also in the line of fire. She agreed that, generally, compensation is to be preferred to mitigation, in order to encourage technological innovation and foster behavioural change. Lump-sum non-wastable tax credits have the potential to redress any regressive impacts of 'green' taxes, but in Ireland, at the moment, tax credits can only benefit those households that are paying tax.

During the discussion it became clear that, at this moment, the personal income tax system of most OECD countries has no non-wastable tax credits. In these cases, households not paying income tax cannot be (fully) compensated through the personal income tax, and it may be necessary to opt (at least in the shorter run) for a combination of compensation (by lowering other taxes, or increasing transfer payments) and mitigation measures (reductions of the environmentally related tax itself).

Hans Larsen of the Danish Ministry of Finance introduced the Danish tax reforms implemented during the 1990s, with environmentally related taxes being levied on both households and businesses. Under the Tax Reform of 1993, existing green taxes for households were increased sharply and new environmentally related taxes were introduced. They were broadly offset by a gradual reduction in the tax on personal income. Additional compensation was offered to low-income individuals who could not be sufficiently compensated by the tax reduction. Similarly, the Tax Reform of 1998 concerned mainly households. Energy taxes and the tax on petrol were increased by 15-25%, the personal income tax was reduced for medium and lower income groups with added compensation being paid to pensioners and other recipients of transfer incomes. The total effect of the adjustments in the tax and benefit systems was a considerable redistribution in favour of households with lower incomes.

In Denmark, a committee has studied the viability of mitigation measures in water and electricity taxes. The committee found that it was impossible to design measures which redistributed the tax burden from low-consumption to high-consumption households. Furthermore, it found that the compliance costs were considerable. The Danish experience thus confirms the conclusion in professor De Kam's paper that lump sum compensation through the tax and benefit system is to be preferred over mitigation measures.

During the discussion participants noted that the case of Denmark clearly illustrates how effective an instrument environmentally related taxes can be. For example, revenue from the sulphur tax fell from 500 to 100 million, as a result of the shrinking tax base.

The position of labour unions was discussed. Unions advocate a just transition to greener tax systems, asking for accompanying measures to facilitate unavoidable industrial restructuring. The position of some particular regions may require temporary exceptions being made, for example if no alternative to car use is available. Generally, unions are in favour of a decrease of labour costs to be achieved through lower social security contributions.

Main conclusions of the Conference

The role of tax instruments

A range of policy instruments is available to governments to achieve various environmental policy goals. Several OECD countries have successfully introduced 'green' taxes. Participants reviewed examples set by Denmark, Germany and the UK. However, the role of such taxes often remains limited, as is illustrated by recent experiences in France, Ireland and Spain. The context of the Conference was to explore why 'green' taxes are not more often used to limit emissions and reduce energy consumption.

During the Conference, nobody questioned the theoretical argument that taxes are the most effective instrument to internalise social costs in the form of environmental degradation and excessive energy use. Similarly, nobody disputed that taxes foster dynamic efficiency, in the sense that polluters and energy users have an enduring incentive to limit emissions and reduce further their energy consumption. That said, politicians in most OECD countries share worries of the business community that 'green' taxes may have potentially large impacts on the competitive position of certain sectors of industry. These competitiveness concerns have been addressed in the UK by all five measures identified in Section 4.3 of the OECD Report on *Environmentally Related Taxes in OECD Countries*. Contrary to arguments often put forward, no significant negative impacts on sectoral competitiveness had yet been observed.

Representatives of the business community felt that the approach in the OECD Report was too narrow, because the instrument of voluntary agreements between the government and industry organisations is hardly mentioned. Such agreements play a role in Germany and the UK. From the discussions it emerged that many participants were doubtful that voluntary agreements can be a major instrument in environmental policymaking, because the price signal is not used, and given problems of asymmetrical information and enforcement, including 'free riding'.

Experience from OECD countries suggests that, at the time of their introduction, environmentally related taxes should be part of well-designed policy packages, including measures addressing competitiveness and equity concerns.

The prospects for active international policy co-ordination in this area are not uniformly good. Progress is often slow, as many countries are opposed to what is perceived as restrictions to national sovereignty in tax matters. Within the European Union, the current 'unanimity rule' (co-ordination in tax matters requires support from all Member States) often functions as a major obstacle. Possibly, this rule will not survive the coming enlargement of the EU. Participants agreed that, even if steps forward are often at a snail's pace, countries should keep learning from each other's experiences.

There was a broad consensus that incomes of especially the lower-paid can be protected with marginal incentives kept to change behaviour. The general opinion among participants seemed to be that compensation measures are to be preferred over mitigation measures. But the use of non-wastable tax credits requires that a sufficiently sophisticated personal income tax system be in place. In practice, the way income distribution concerns are addressed is largely a pragmatic question, where national circumstances should be taken into account.

Lessons for national policymakers

Proponents of enlarging the tax basket to include green taxes should consider the following strategies:

1. Increase public awareness of environmental challenges. Sometimes voters and a majority among policymakers are insufficiently aware of existing problems; see the case of the water charge in Ireland.
2. Stress the environmental impacts of the 'green' tax.
3. Stress the advantage of using the tax instrument in terms of lower overall costs to society. This may mobilise the political will needed for change.
4. Include new environmentally related taxes into much broader reform packages, to demonstrate that additional revenues are fully or partly re-cycled through reductions of other taxes, and introduce 'green' taxes gradually. Popular acceptance of 'green' taxes will increase if they can be presented as a tax "one can avoid" (by changing one's behaviour).
5. The example of the Climate Change Levy in United Kingdom demonstrates that also businesses can be taxed without significant negative impacts on sectoral competitiveness.
6. The failure of the French Carbon tax does however underscore how important it is that the taxes are designed with great care.
7. Underline favourable experiences with the tax instrument in other OECD Countries. This requires a well-structured international exchange of information.

The role of the OECD

Participants agreed that the OECD should continue its work on environmentally related taxes that is currently being carried out under the aegis of the Committee on Fiscal Affairs and the Environmental Policy Committee. The OECD can play a vital role in the international exchange of information on environmentally related taxes. The Organisation is also a natural forum to report on good country practices. Through the OECD, Member countries can apply peer pressure where appropriate.

It seems useful that the OECD devote some resources to further analysis of the pros and cons of voluntary agreements between government and industry to reduce emissions and energy consumption, as an alternative or as a complement to the imposition of environmentally related taxes.

Participants requested that tax experts at the OECD collect relevant information on the practice of non-wastable tax credits in those Member countries that have introduced these in their personal income tax systems. Countries which have adopted such tax credits are clearly in a better position to target compensation for environmentally related taxes.