Report on a meeting of management experts held under the OECD Labour/Management Programme

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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TRADE AND ENVIRONMENT: ENVIRONMENTAL SUBSIDIES

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held under the OECD Labour/Management Programme

(Paris, 13 September 1994)

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Foreword

Under the OECD Labour/Management Programme for 1994, a meeting of management experts on "Trade and Environment: Environmental subsidies" was held in Paris on 13 September 1994. The meeting was prepared in collaboration with the Business and Industry Advisory Committee to the OECD (BIAC).

Below is an overall report of the discussions of the meeting of experts, prepared by Dr. Charles Pearson who was designated as General Rapporteur for this activity.

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INTRODUCTION

While the effects of financing environmental protection on international trade has been of concern for over two decades, recent developments have intensified interest in this issue. These developments include changes in relevant GATT subsidy regulations negotiated in the Uruguay Round and to be included in the new World Trade Organization, major new and prospective environmental legislation, the financing of which may be costly and have international competitive effects, and the evolution of the Polluter Pays Principle since its adoption by the OECD in 1972. These developments suggest that a fresh look at environmental subsidies and their effects on international trade is warranted. The meeting represents the start of a dialogue on these issues, and no attempt was made to reach a full set of definitive conclusions and recommendations.

The Chairman opened the meeting by asking participants to keep in mind the potentially pernicious effects of subsidies, giving examples of massive government aid in the areas of urban transport and waste disposal. Real costs do not disappear with subsidies, but are simply a burden on government budgets, the tax payers, and ultimately economic activity itself. With this introduction, the meeting turned its attention to the Agenda Items.

Agenda Item 1A: Definition and Categories of Environmental Subsidies

The first agenda item dealt with the problem of defining environmental subsidies and distinguishing among them on the basis of their trade-distortive potential. The purpose of definition and categorisation discussion was not to arrive at a legal definition, but rather to bring to light different aspects and interpretations of this environmental subsidies issue.

At an abstract level an environmental subsidy is a government policy or measure that directly or indirectly relieves or compensates the private sector for some amount of environmental protection costs. Participants in the meeting clarified this definition in three respects. First, as in all subsidy questions, the general vs. specific nature of the policy or measure is critical—measures that are specific to a firm or industry are more trade-distortive than general measures such as an industry-wide investment tax credit. Drawing the line between a general government policy, for example, education policy which affects competitive position, and measures with trade-distortive consequences, is as difficult in the environmental area as it is in other areas of government policy. Over many years, the GATT has refined the concept of subsidies. This work reinforces the view that specific subsidies are potentially more trade-distortive than general subsidies. Nevertheless, economic theory suggests that even a general subsidy such as an investment tax credit can distort the choice of capital and labour inputs in production, and will have a differential impact on different industries, depending on their capital intensity. Thus, ambiguities remain.
Second, in the natural resource area, the concept of "user cost," which purports to measure the cost imposed on future generations by use of nonrenewable resources today, remains controversial. It follows that the failure to insist on a "user cost" in current natural resource pricing does not necessarily constitute a subsidy. Before collecting data on environmental protection costs and subsidies in the natural resource area it would be sensible to clarify the conceptual basis. Moreover, some participants felt that the notion of "user cost" moves very close to administered prices. Attempts at establishing administered prices for internationally traded natural resources have a poor record.

Third, it was pointed out that increased use of process change rather than "end-of-pipe" treatment to meet environmental objectives makes the concepts of environmental protection costs and subsidies to cover these costs increasingly difficult to identify. This is because process change, unlike end-of-pipe treatment, frequently involves improved productivity and lower costs. Hence, identifying the environmental protection cost component and the degree of subsidy, and separating those from productivity enhancing investment, is problematic.

Participants in the meeting examined seven (overlapping) categories of environmental subsidies, and agreed that they were not all equally undesirable on efficiency and equity grounds. More specifically, participants agreed that

(1) **ex post cleanup subsidies** might well be desirable. It is neither efficient nor fair to burden current production with remedial environmental cleanup when the initial damage was done by much earlier activities, often by different firms, or in different regulatory environments. This is particularly relevant in the transition economies of Eastern Europe and the former Soviet Union, and in certain developing countries, but also as the U.S. Super Fund experience demonstrates, is relevant in OECD countries. Potential liability for past pollution has made foreign investors wary of buying and upgrading existing manufacturing facilities in Eastern Europe. Nevertheless, there is a danger when government assumes the burden of cleanup financing that a "gold plated" approach, without regard for cost effectiveness, might be followed.

(2) There was also support for the idea that **international subsidies**, either bilateral or through institutions such as the World Bank and the Global Environmental Facility, when given to developing and transition economies, should be considered part of foreign assistance and not as trade-distortive subsidies. International financial assistance for pollution abatement and environmental protection often has international benefits, and it makes sense to exempt such assistance from normal subsidy rules.

(3) There was also some sympathy for government subsidies for environmental research and development and the introduction of clean technology. The justification is that R&D has the character of a "public good" in which the full benefits are difficult to appropriate by the innovator, and spill over to the community at large. However, if the R&D results in proprietary technology, the case for government support collapses.

(4) There was no conclusion with regard to **upstream environmental subsidies**, or the provision of subsidised inputs to natural resource sectors (examples being subsidised fertiliser, pesticide, water and grazing rights in agriculture, and low stumpage fees in the forestry sector). There was, however, an acknowledgement that a large fraction of pollution arises from agriculture, as opposed to industry, in many countries. Thus subsidies and other government interventions in upstream industries may involve significant environmental and trade distortions.
(5) It can be argued that either artificially low environmental standards or the failure to enforce environmental standards can be construed as an implicit subsidy. This would not be a subsidy in the traditional GATT meaning, but the notion of "implicit environmental subsidies" or "ecodumping" is coming into popular usage, and it would be shortsighted to deny discussion simply because it fell outside the traditional GATT definition. There was general agreement that failure to enforce standards was prevalent. Nevertheless there was strong agreement in the meeting that such implicit subsidies, if present, should not be countervailed. Some differences among countries in environmental standards are a legitimate reflection of differences in income levels, assimilative capacity and preferences. As a practical matter it is not possible to distinguish between "artificially low" and "legitimately low" standards for the purpose of countervailing. This view was part of a broader consensus by the meeting that, in general, trade measures should not be used to accomplish environmental objectives except, perhaps, when the trade measures are an integral part of internationally negotiated environmental agreements such as the Montreal Protocol.

(6) A sixth type of environmental subsidy makes government financial assistance conditional on a firm's pollution abatement performance. In theory such a subsidy internalises pollution abatement costs in product prices, as continued pollution carries the opportunity cost of the subsidy forgone. A hypothetical example would be a government offer to firms of x dollars per ton for each ton of pollutant reduction from some initial base line level of discharge. The subsidy forgone by continuing pollution represents an opportunity cost to the firm and would be part of its marginal costs of production. While such a scheme could induce the firm to reduce pollution emissions, in the long run it reduces average production costs, and in a competitive industry could attract new firms to the industry, maintain industry output, and undercut the pollution abatement objective. Such schemes appear to be rare, and participants expressed no support for this form of subsidy.

(7) The final category of subsidy considered was use of financial assistance for pollution abatement. These include firm and industry specific measures such as favourable interest rate loans, accelerated depreciation, direct payments, etc. In general, participants were opposed to such subsidies. One participant argued, however, that a subsidised industry may generate large indirect benefits, and if such subsidies were analysed in a full benefit cost framework, they might be attractive.

**Agenda Item 1B: Measuring and Monitoring Environmental Subsidies**

The meeting then considered the evidence on environmental control costs and the measurement of environmental subsidies. There was some scepticism that the average figure for environmental costs that is widely quoted (1-3 % of total production cost) was valid in all industries, and examples where the environmental cost accounted for up to 15% of total cost, and in excess of 17% of investment costs, were cited. The difficulty in attributing costs in situations of process change was again brought up. Moreover, it was pointed out that there could be very high costs in complying with complex administrative requirements, and real costs arising from delays in the environmental permitting process. High levels of government regulations tend to discourage economic activity, and this cost is seldom measured.
The meeting heard a summary of OECD’s past efforts at collecting data on environmental subsidies (four surveys have been conducted: 1975, 1978-79; 1981-82, and 1987). The difficulties in drawing firm conclusion from these surveys include incomplete responses, lack of data at the industry level, no evidence on enforcement, and difficulty in separating assistance for environmental protection from, say, programs for employment or regional development. Recognising these limitations, the latest survey found that in 1986 financial assistance to the private sector for environmental protection as a percent of GDP ranged between 0.006 and 0.105 percent for these OECD countries that acknowledged some assistance, and for which the statistic could be calculated.

The meeting also heard a summary of the OECD’s Working Party on Subsidies and Structural Adjustment. The first two phases of that exercise did not collect specific information on environmental subsidies; the third phase, whose results are not yet collected and published, will report on central and state government financial contributions to manufacturing industries in the area of environmental protection support. Whether it will be possible to separate environmental subsidies from, say, R&D, labour or energy subsidies remains to be seen. There is no equivalent effort to collect subsidy information in the natural resource and agriculture sectors, nor to collect information on environmental subsidies offered in non-OECD countries. The latter would be useful if the Polluter Pays Principle is to be extended beyond the OECD. Nor is there systematic data collection on enforcement of environmental regulations.

**Agenda Item 2: The Polluter Pays Principle (PPP) and Exceptions Thereeto**

The rationale for the OECD’s PPP, adopted in 1972, was presented. The questions of who pays under the PPP, how much should they pay, and the consistency of types of regulations (i.e., command and control vs. market friendly measures) with the PPP were also introduced. Finally, the formalised exceptions to the PPP were noted. The rationale for the PPP was described as an effort to (a) to ensure that market prices of goods and services reflect their full social cost of production, including environmental protection costs, thus improving efficiency in the allocation of resources, and (b) to ensure that differences in the Financing of environmental protection measures did not create distortions in international trade. There is general agreement that although the polluter should bear the initial financial burden of environmental protection costs, these costs might well be passed on in prices to consumers if market conditions permit. The original interpretation of the PPP was that polluters would pay for abatement costs to the levels deemed appropriate by government regulation, but the PPP does not necessarily imply that protection standards are set such that marginal social benefits of protection equal marginal social costs, the theoretical optimal abatement level. Nor does the PPP necessarily imply that the polluter is responsible for residual environmental damage costs once the protection levels established by government regulation are met. Finally, both command and control type measures and so-called market-friendly measures (taxes, tradeable permits) are consistent with the PPP, although theory and practice suggests that the latter tend to be more cost effective.

A general discussion of the consistency of the PPP and the relevant provisions of the new Uruguay Round (UR) Agreement creating the World Trade Organization (WTO) followed. (See Annex 1 for the relevant provisions.) Both the PPP and the UR have a general presumption against subsidies, but the participants did not agree as to which of these two sets of rules establishes the stricter controls over the use of subsidies. If, as some contend, the UR
provisions are stricter than the PPP, the question is moot. The UR rules will be almost universal and will be binding under the WTO, and the OECD's PPP is superseded. Four specific points relating to this question were brought out. First, even the more advanced developing countries and transition economies may have difficulty with the full implementation of the PPP, and transitional assistance, both for remediation of environmental damage and upgrading current pollution abatement facilities, may be needed. The real costs of pollution abatement do not, of course, disappear with subsidies, but are shifted from individual firms and sectors to the government budget. Second, the PPP allows transitional assistance to existing and new plants (albeit with stricter criteria), whereas the UR appears to make non-actionable (that is noncountervailable) only assistance to existing facilities. Third, the PPP applies only to the OECD, whereas the UR regulations will apply to the much larger GATT membership. Fourth, the OECD's PPP can only provide for voluntary consultation when disputes arise, whereas the U.R. has a more formalised and hopefully effective dispute settlement procedure. The consultation procedures in the OECD's PPP have not been used in the past 22 years. At this point it was noted that the new European Union Guideline on State Aids for Environment appears to go even further than the UR in allowing environmental subsidies.

To summarise this discussion, there was a general concern that the UR text, which gives a "green light" for certain types of environmental protection subsidies, including government assistance in adapting existing facilities to new environmental requirements and limited support for environmental R&D expenditures, may be excessively permissive, and open an undesirable exemption from the general disciplines against the use of subsidies. Nevertheless, until the new WTO comes into being this remains speculative, and a wait-and-see approach should be taken. There was a practical suggestion that all subsidies authorised under the new text be notified to the WTO so that monitoring could be improved. Also support for the idea that subsidies be limited to end-of-pipe treatment and not be extended for process changes was repeated. The reasoning is that process changes often involve productivity increases and thus the incremental cost of environmental protection could not be easily separated from investment in cost-saving, investment enhancing measures. This last conclusion was accepted despite a recognition that process change is generally a more efficient way of reducing pollution than end-of-pipe treatment. Finally, it was agreed that subsidies for proprietary research were not desirable.

Agenda Item 3: Assistance to Non-OECD Countries

The final agenda item considered how to assist non-OECD countries in upgrading their environmental standards. Participants first entered into lengthy discussion of voluntary industry codes and standards. It was asserted that in their international investments and activities, firms often used "best industry practice" in pollution abatement, even when that exceeds the minimum standards of the host country. This is in part due to the firm's need to maintain a positive image with stockholders, host countries, etc., and in part due to the expectation that environmental standards in host countries are likely to become more strict, and initial investment is less costly than subsequent remedial pollution abatement. It follows that some international convergence of environmental protection standards is already underway and is market driven, rather than the result of government efforts at harmonising standards. Nevertheless, some counter-examples, where firms operate with lower standards in non-OECD countries, could be produced. One problem a firm faces with voluntarily undertaking strict controls is that the controls may be made mandatory, and the firm loses its flexibility if market conditions change.
The participants heard a report on environmental protection efforts in Eastern Europe, with an emphasis on Poland’s experience. The estimated cost of environmental cleanup in Eastern Europe is $200 billion, not to include costs associated with current production and anticipated growth. As one example, many of the military installations vacated by the former Soviet Union are highly polluted. Because of the very large cleanup and remedial needs, it is not possible to saddle current producers with the costs of past damage restoration. Government assistance will be needed. Subsidies for remediation should not be lumped with subsidies for ongoing abatement activities.

Polish environmental laws are reasonably strict, but enforcement is weak. Total environmental expenditures are a significant fraction of GDP. The Polish National Fund for Environmental Protection and Water Management is a major source of financing, accounting for about 25% of all environmental protection expenditures. The Fund derives its revenue from fees and fines for SO₂ and NOₓ emissions, mineral extraction fees, and water and waste water discharge fees collected from provinces. Foreign assistance accounts for only 4% of revenues. In turn, the Fund provides preferential loans and subsidies to firms for pollution abatement and environmental protection.

The participants learned that one avenue through which the OECD countries might help Polish efforts at environmental protection is through better management of existing foreign assistance. Problems with the existing system include conditional loans that are tied to high cost imports from donor countries, insistence on inappropriate technology, and technical assistance funds which in effect are recycled to high priced Western consultants rather than to cleanup. Also, the scrapping of dirty technology plants in the West, and the transfer of their operations to Poland, has occurred. From the Polish perspective, the OECD countries can help by correcting the abusive practices in current environmental foreign assistance, by the use of reasonably good and clean technologies by foreign firms in Poland, and by making a commitment to build or purchase a significant portion of environmental technology and services from Polish sources.

When questioned as to what else OECD countries might offer, participants suggested that they could share experience with Eastern European countries as to what legal measures seemed to work, what types of measures were most cost-effective, and where new and innovated sources of financing might be found. A final suggestion was that tradeable permit schemes might be appropriate and effective in the Polish context.

**Agenda Item 4: Conclusions**

The Rapporteur summed up the meeting, noting that its purpose was a preliminary inquiry rather than arrival at a definitive set of recommendations. The Chairman reiterated the point that subsidies were in no sense a free lunch, and ultimately were borne by taxpayers and in the form of reduced competitiveness. He then thanked the participants for a stimulating and thoughtful discussion.
ANNEX I

OECD and GATT Environmental Subsidies Provisions

1. Certain exceptions to the OECD’s PPP have been recognised and authorised since 1974. These exceptions reflect in part the equivocal aspects of environmental subsidies in certain circumstances. Specifically, establishing new environmental regulations might be accelerated if transitional assistance were available; assistance might be useful to ease industry, labour and regional adjustments; and the public-good character of R&D expenditure on pollution abatement might justify some assistance.

2. The relevant exceptions are:

   a) The granting of any such assistance for pollution control be strictly limited, and in particular comply with every one of the following conditions:

      . it should be selective and restricted to those parts of the economy, such as industries, areas or plants, where severe difficulties would otherwise occur;

      . it should be limited to well defined transitional periods, laid down in advance and adapted to the specific socio-economic problems associated with the implementation of a country’s environmental program;

      . it should not create significant distortions in international trade and investment.

   b) That if a Member country, in cases of exceptional difficulty, gives assistance to new plants, the conditions be even stricter than those applicable to existing plants, and that criteria on which to base this differentiation be developed.

   c) In accordance with appropriate procedures to be worked out, all systems to provide assistance be notified to Member countries through the OECD Secretariat. Wherever practicable, these notifications would occur prior to implementation of such systems.

3. The Uruguay Round Agreement establishes as non-actionable:

   a) assistance to promote adaptation of existing facilities to new environmental requirements imposed by law and/or regulations which result in greater constraints and financial burden on firms,

   b) provided that the assistance:

      . is a one-time non-recurring measure; and

      . is limited to 20 percent of the cost of adaptation; and

      . does not cover the cost of replacing and operating the assisted investment, which must be fully borne by firms; and
is directly linked to and proportionate to a firm’s planned reduction of nuisances and pollution, and does not cover any manufacturing cost savings which may be achieved; and

is available to all firms which can adopt the new equipment and/or production processes.

4. Moreover, the Agreement also establishes as non-actionable:

a) assistance for research activities conducted by firms or by higher education or research establishments on a contract basis with firms, if the assistance covers not more than 75 percent of the costs of industrial research or 50 percent of the costs of precompetitive development activity;

b) and provided that such assistance is limited exclusively to:

. personnel costs (researchers, technicians and other supporting staff employed exclusively in the research activity);

. costs of instruments, equipment, land and buildings used exclusively and permanently (except when disposed of on a commercial basis) for the research activity;

. costs of consultancy and equivalent services used exclusively for the research activity, including brought-in research, technical knowledge, patents, etc.;

. additional overhead costs incurred directly as a result of the research activity;

. other running costs (such as those of materials, supplies and the like), incurred directly as a result of the research activity.
# ANNEX II

## LIST OF PARTICIPANTS

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