20 September, 1999

OECD ROUND TABLE ON SUSTAINABLE DEVELOPMENT

Third Meeting

Oslo, 30 – 31 August 1999

Agenda Item 2

INVOLVING INTERNATIONAL BUSINESS: VOLUNTARY AGREEMENTS AND COMPETITIVENESS

Background paper

Introduction

The business community has promoted voluntary agreements to respond to concerns on international competitiveness.

1. The business community has a key role to play in responding to the threat of global climate change, both through domestic action in Annex I countries and through transfers of climate-friendly technology to less developed countries. In OECD countries, business concerns about the impact on international competitiveness of domestic mitigation policies are an important constraint on government policies. While empirical analysis has found little evidence of significant effects on competitiveness stemming from environmental measures (OECD, 1997b), several governments continue to provide special treatment to heavy emitters, fearing that domestic measures to respond to Kyoto targets may accelerate a shift of industrial capacity to non-OECD regions. In turn, such exemptions reduce the economic efficiency and environmental effectiveness of abatement measures and increase the burden on non-exempted firms if targets are to be met. Voluntary agreements are a part of the mix of measures to respond to climate, and are often promoted as capable to address competitiveness concerns and to accommodate companies' different situations. On this background, this note focuses on the advantages and disadvantages of voluntary agreements as a means to achieve least-cost reductions in emissions, and to mitigate concerns for competitiveness and leakage.

What are voluntary approaches?

Voluntary approaches cover a variety of schemes...

2. Voluntary approaches are commitments by firms to improve their environmental performance beyond legal requirements. Their use in environmental policy evolved as a response to changes in the nature of the environmental problems confronting governments — with attention shifting from local to global problems and from "end-of-pipe" to preventive measures — and to the increasing

administrative burden of regulatory instruments. They may be differentiated by whether commitments are set by industry, without any involvement of public authorities (*unilateral commitments*); by public authorities (*public voluntary programmes*), with firms agreeing to the standards developed by environmental agencies; and or by both (*negotiated agreements).* Common elements of these schemes are that a firm's decision to abate is not *de jure* required and that commitments do not apply to all firms (Carraro and Leveque, 1999). Thus, their effects are difficult to assess and monitor.

...with potential benefits and drawbacks.

3. The use of voluntary approaches in environmental policy is, however, controversial. In general, pollution abatement is costly and firms may be expected to "voluntarily" incur these expenditures only when these are offset by additional benefits, for example higher sales associated with improvements in the environmental reputation of firms, or to avoid more costly regulations or new environmental taxes. When the "threat" of alternative actions is credible, voluntary approaches may be more cost-effective that command-and-control instruments — as the choice of the abatement strategy is generally left to the firms[1]. They may also generate "soft effects" in terms of raising awareness, sharing of information and experience between firms, and sharpening incentives to innovation. Potential drawbacks include low environmental effectiveness, incentives to "free ride" by firms, distortions in competition and market entry, and "regulatory capture".

Voluntary approaches at the national level

There is evidence of pervasive use of voluntary agreements at the national level...

4. Voluntary approaches are extensively used in OECD countries. A recent survey (OECD, 1998) highlights distinct regional patterns, with a prevalence of negotiated agreements at the local level in Japan, of negotiated agreements between national governments and coalitions of firms in the European Union, and of unilateral commitments and public voluntary agreements in the United States. These cross-country differences also characterise voluntary approaches targeted to climate change. Around 350 voluntary approaches specifically related to CO_2 emissions were in operation in 1997 (OECD, 1997), with large differences across countries in the coverage of these agreements, the ambition of their targets, and the existence of enforcement threats. In some European countries, the introduction of voluntary approaches occurred against the threat of implementing carbon-energy taxes (e.g. Switzerland). In others, voluntary approaches were launched as complements to carbon-energy taxation, with taxes reduced for signatories of voluntary schemes (e.g. Denmark and the Netherlands).

...but their environmental effectiveness is generally low...

5. While relatively few evaluation studies of these schemes exist, the available information on the performance of voluntary agreements suggests that their environmental effectiveness is generally low (OECD, 1998). This generally reflects the central role of industry in target setting — leading to goals with low levels of ambition — uncertainty over the regulatory threats, and poor monitoring and

1. However, in the case of collective agreements, firms may be attributed identical targets (rather than concentrating abatement where costs are lowest), which reduces cost effectiveness relative to the use of economic instruments.

transparency[2]. Safeguards — such as the involvement of third parties in target setting, monitoring and reporting — and the existence of credible sanctions for non compliance can prevent these shortcomings but they add to the complexity of voluntary approaches bringing them closer to regulatory solutions. Performance in terms of administrative efficiency also varies, as savings in costs for monitoring and enforcing tend to be offset by the extra costs in providing technical assistance and information to participating firms. On the strength side, these schemes seem to have generated positive "soft effects" in a number of cases.

... and they do not address concerns on competitiveness.

6. Voluntary agreements at the national level do not appear to allay concerns about the competitiveness and leakage effects of unilateral actions needed to reach a given emission target. In general, instruments that are most cost-effective in achieving environmental targets will also minimise adverse consequences on international competitiveness. In this respect, economic instruments will generally outperform voluntary agreements. While it is sometimes argued that domestic actions on climate should not imply "significant disadvantage to any group of .. industries" (BP Amoco, 1999) this ignores that all abatement measures will have implications for the international competitiveness of specific firms and industries. In this respect, the fuel and energy-intensive sectors are those most exposed to some of the competitiveness-consequences of unilateral abatement measures, depending on their carbon intensity, the possibility of translating higher costs to higher prices, the price-elasticity of demand and the share of trade with non-Annex I countries (OECD, 1997). While temporary exemptions to heavy emitters may be introduced to ensure greater acceptance of these climate measures, these will generally reduce their economic efficiency and environmental effectiveness, putting less energy intensive industries at a comparative disadvantage.

International voluntary agreements

International voluntary agreements are relatively rare...

7. The promotion of voluntary approaches at the international level may allow extending abatement efforts beyond national borders. Few initiatives of this kind exist in OECD countries. The most common are "unilateral commitments" of multinational companies that span the range of their operations in different countries, without any collaboration or oversight by governments. These schemes generally include initiatives to diffuse information on "best abatement practices" to suppliers; to apply internally state-of-the-art technologies and process; to agree on commitments to reduce emissions by participating firms in the countries where they operate[3]; and to develop sequestration and carbon-free technologies[4]. In some cases,

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2. A comprehensive evaluation study of 18 European schemes found that lack of monitoring data, ambiguity in the formulation and lack of intermediate targets prevented evaluation in two thirds of cases (OECD, 1998).

3. Examples include targets for reducing own emissions of greenhouse gases by 10 per cent (from 1990 levels) by a number of energy companies (Amoco, 1999; Shell, 1999).

4. One example of an initiative including recommendations for action in a number of these areas is the "Safe Climate, Safe Business" project undertaken by British Petroleum, General Motors, Monsanto and the World Resources Institute.

participating firms have established pilot "trading schemes" between companies to achieve their own emission reduction targets (Shell, 1998).

8. One of the few examples of "negotiated agreement" between business and governments at the international level is that between the European Automobile Manufacturers Association (ACEA) and the European Commission, signed in July 1998 (ACEA/EU, 1998). With this agreement, ACEA commits itself to:

- Achieve a 25 per cent reduction in CO_2 emission from new cars sold in the EU market (140 g/km); and to

- Introduce car models with emissions of 120 g/km or less by 2000.

This agreement foresees intermediate targets (in 2003), a joint review of its implementation by the Commission and ACEA and an annual report to the European Parliament. These commitments are however conditional on a number of factors: *i*) equivalent efforts being made by non-EU producers; *ii*) availability of improved fuels in line with the new EU standards; and *iii*) policies that do not hamper the penetration of fuel efficient technologies.[5]

...but may have a role in extending abatement efforts to other countries.

9. By extending abatement efforts beyond national borders, these schemes may reduce the scope for leakage, although not concerns on competitiveness vis-à-vis non-participating firms[6]. Private initiatives with an international focus may increase business awareness and diffuse information on good practices. When they include targets for own emissions, it is however difficult to assess whether these represent additional achievements relative to a "business as usual scenario". To increase their environmental effectiveness, voluntary approaches at the national level are sometimes combined to other domestic measures (e.g. carbon-tax reductions for firms reaching voluntary targets). At the international level, limited experience exists on how to combine voluntary agreements with instruments such as international emission trading so as to provide an effective "threat" for non-compliance.

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5. According to the European Commission, the achievement of these targets for all new cars sold in the EU will contribute, in the event, to about 15 per cent to the total emission reductions required under the Kyoto Protocol.

6. More generally, this possible competitiveness effect is only one of the channels for carbon "leakage", and probably not the most important one. Carbon "leakage" can be generated through in two ways: *i)* the international non-energy market, reflecting losses in market shares and possible reallocation of foreign direct investment of energy-intensive industries away from countries undertaking unilateral abatement; and *ii)* the international energy market, reflecting increases in energy use in countries not undertaking abatement (the lower the supply elasticity of energy production, the higher the fall in energy prices, and the stronger the increase in energy demand from non-Annex I countries). OECD model analysis suggests that the second channel is very influential, and that when energy supply is relatively elastic, the rate of "leakage" will be fairly moderate for values of trade elasticities on non-energy markets in the usual ranges (OECD, 1999). Voluntary agreements as those discussed in the text will be ineffective to deal with "leakage" on energy markets.

Questions for discussion

10. On this background, questions for discussion may include:

- What is the experience with voluntary agreements at the national and international level in meeting Kyoto targets?
- Could voluntary agreements at the international level, including unilateral corporate- or sector-wide agreements, advance the attainment of Kyoto targets? What is the role of governments in their formulation and monitoring?
- Will they help to address business concerns about competitiveness and "leakage"?

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