TOWARDS A EUROPEAN SYSTEM OF TRADABLE POLLUTION PERMITS?

1. INTRODUCTION

In general, market-based instruments for environmental policy are advocated because they encourage emission reductions by those who can achieve them at the lowest costs. Market-based instruments like taxes or a system of tradable pollution rights use a financial incentive to steer the polluting behavior of citizens and their organizations. This is an important difference with the classical command and control regulation. The traditional command and control intervention of the government lays down detailed directives that prescribe precisely what polluting behavior is legal or not (this can be called direct regulation). Technological criteria are often used for the formulation of the directives. Examples can be found in EEC-rules for the environmental sector, e.g. the criterion known as the "best available technique.”

Market-based instruments, which are an example of indirect regulation, leave more freedom of choice to citizens and firms than the command and control method. A market-based policy starts from the idea that a firm can decide itself which amount of pollution it will produce. This freedom will be influenced by a financial incentive. In the case of the permit market (which is a system of tradable pollution rights) the financial incentive is construed by means of the condition that a polluting activity can only be done legally if it is covered by a tradable pollution permit.

Freedom of choice can only be seen as an important advantage if the desired environmental quality is guaranteed. In this light it is necessary to

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2 This article was discussed at the Anglo Dutch Conference on the European Single Market at Wiston House, Sussex (GB), October 7-8 1992. Some thoughts in this article are also published in a Dutch article, De markt en het milieu: het instrument van verhandelbare vervuilingenrechten. Enkele gedachten over een communautaire vergunningenmarkt, in TIJDSSCHRIFT VOOR MILIEU EN RECHT, Zwolle, January 1993.

3 See for example the Council Directive of 28 June 1984 on the combating of air pollution from industrial plants (84/360/EEC) art. 4.1 and art. 12. It is also present in a draft version of an integrated pollution prevention and control directive (draft no. 4 of 15 June 1992), in article 2.13.
recognize that the permit market guarantees that amount of a specific kind of environmental pollution in a certain area, if it is implemented and enforced correctly. This is an important difference with the environmental tax.

In spite of the economic arguments favoring the introduction of market-based instruments, these instruments have hardly been used in the environmental policy of the EEC, its Member States and in other legal systems. The limited use concerns a pre-eminently market-based instrument: the permit market. Until now hardly real attention has been paid on the EEC-level and in the Netherlands to the permit market, while e.g. the possible contribution of taxes to an adequate environmental policy tax has been discussed. The Fifth Environmental Program of the EEC states that the Community and its Member States are much more engaged in a pricing approach (e.g. taxes) than an approach related to the quantity of pollution (e.g. the permit market). But in the Fifth Program it is also stressed that it will be important to study the extent to which options as tradable permits can be utilized to control or reduce the amount of environmental pollution.

From a legal point of view the question arises under which conditions market-based instruments are acceptable instruments of environmental law. This article means to show some of these conditions for the permit market. Especially the possibility to apply the permit market on the level of the European Economic Community will be considered.

First, we have to explain the idea of the permit market: in §2 the concept of a system of marketable pollution permits will be described. Secondly, some applications of the permit market in the United States of America will be discussed (§3). In paragraph 4 the possibility of a European permit market will be considered. As an example will be taken the already existing permit market for chemicals that deplete the ozone layer. Paragraph 5 concludes the article. In this section some attention will be paid to the characteristics of EEC environmental policy.

2. THE CONCEPT OF THE PERMIT MARKET

The theoretical model of a market for pollution permits can basically be characterized as follows.

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6 See for a first examination of the concept of the permit market J.H. Dales, Pollution, Property and Prices, (Toronto 1968).
For a specific kind of environmental pollution the government fixes the maximum of acceptable pollution in a certain area for a certain time. This acceptable pollution is divided into quota, which can be called pollution permits or pollution rights. The government then stipulates that it is forbidden to cause the specific kind of pollution in the appointed area, unless the polluter possesses a valid and sufficient pollution permit. So the government fixes the limit to the environmental pollution in a certain area: it is forbidden to cause more pollution than is acceptable according to the entire number of quota or permits. The pollution right, tradable permit, quorum or allowance has to be seen as a limited authorization to cause a certain amount of environmental degradation. In this respect the classical permits and the permits that are distributed in a permit market are not legally qualified in different ways.

The government must start up the market by distributing the pollution permits. This can be done in two different ways. The government can sell the pollution permits to the polluters or it can distribute them according to established administrative criteria. Combinations of these two ways are possible as well. The polluters are entitled to trade the pollution rights amongst them, which leads to a permit market. The government can establish certain conditions for the transfer of pollution permits between polluters. Pollution rights also can be reserved to be used or sold at a later date, if legislation allows this.

In theory the price stimulus, which is linked to the price of a transferable pollution right on the permit market, leads to certain advantages that are lacking in case of command and control regulation. Under specific conditions the desired environmental quality could be reached in an efficient way because of the price stimulus. The price of the pollution right also may stimulate technological development.

Moreover, the instrument of the permit market in theory fits well in a modern idea about the execution of policies of the government. Basically this idea means that the government is required to interact with society 'at a distance' by means of less detailed policies than has been customary. For example, market-based instruments rely for a great part on private sector initiatives, while command and control approaches do not stimulate private action. A permit market leaves room to citizens, firms and institutions to balance their interests within the limits fixed by statute. The price of the pollution permit is a stimulus for (potential) polluters to look for ways to limit environmental damage. Polluters may be activated in this way to feel responsible for the preservation of the environment. The success of the limitation of environmental damage does not depend on the influence of the price stimulus on the behavior of polluters, because a limit has been fixed already by means of the maximum number of quota of pollution rights.

Considering these advantages, there is enough reason to investigate whether this instrument is opportune from a legal viewpoint.
3. EXPERIENCES IN THE UNITED STATES

Some examples of the permit market

In order to get a better understanding of the possibilities of the permit market, we can pay attention to the environmental law of the USA. This is the only legal system on earth in which some real permit markets are, or have been in operation. Some important examples are:

* emissions trading: a permit market for stationary sources of air pollution with location specific effects. It concerns the air pollution by, amongst others, sulfur dioxide, carbon monoxide and lead. This permit market has been established in a regulatory system that aims at a certain air quality in a certain region. The EPA’s emissions trading policy has several different elements, namely offset, netting, bubble and banking. Each of these elements involves the creation of extra reductions at one source and their compensatory use at another. A baseline is used to determine whether an emission reduction is extra.

The emissions trading program has been the first permit market in the environmental policy of the USA. Actually, it entered this legal system through the back-door. This could happen because it was hard to achieve the established air quality standards in the mid-seventies. The concept of emissions trading has been introduced to give more flexibility to states in order to reach these quality standards. For example, the offset concept allows new firms to enter an area where an air quality standard is not met, if they obtain decreases in emissions from existing sources in the same area.

The transfer of emission reduction credits, which are the tradable permits in the emissions trading program, can occur internally in a source (e.g. between smoke-stacks of one firm) or externally between different sources. The netting concept only involves internal transfers; the bubble and offset concepts both allow for internal and external transfers. Banking means the possibility for firms to store emission reduction credits for future use.

In practice, many more internal than external transfers have occurred in the emissions trading program. The possibility to bank emission reduction credits has hardly been used.

* lead trading: a permit market for the quality of fuel for mobile sources of air pollution (also called the lead phase down program). This program was established in 1982 and ended in 1987. Under this program,

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7 This description is derived from my Ph.D. thesis MARKTCONFORM MILIEURECHT? EEN RECHTSPROEGERIJENDE STUDIE NAAR DE VERHANDELBAARHEID VAN VERVUILINGSCREDIETEN, (Zwolle, 1992), with a summary in English.

8 EPA means the U.S. Environmental Protection Agency.
refineries and importers could transfer the right to put a certain amount of lead into a gallon of gasoline. Banking these rights was allowed from 1985. The amount of lead in gasoline has been phased down during the program.

*CFC-trading*: a permit market for the production, import and export of substances that cause depletion of the ozone layer. It means that for production or import of ozone depleting chemicals a tradable permit is required. This permit market exists for less than thirty producers/importers. Each producer/importer gets freely an amount of tradable permits, which will be phased down during the program. The chemicals that are subject to the international agreement will be phased out at the end of this century, except for methyl chloroform which will be phased out on January 1, 2002. According to Lee, over the past several years there have been many trades among companies.9

*acid rain allowance trading*: a permit market for stationary sources of air pollution (acid rain), where location specific effects do not have to be taken into account. These effects will be regulated by other measures. This permit market combats acid rain caused by electric utilities. It is instituted by the Clean Air Act 1990, but will come into force in 1995. The expected compliance savings are $0.7 to 1.0 billion per year. 10 Meanwhile the Chicago Board of Trade has provided for the trade in future allowances.11

These four permit markets all concern air quality policy. In the field of water quality policy there are some limited experiences with the permit market. This year some initiatives have been taken by the U.S. Environmental Protection Agency to reconsider the possibility to trade water-pollution rights.12 It can further be mentioned that a system of tradable pollution permits has been established for the particulate and nitrogen oxides emissions of heavy truck engines.13 A remarkable plan is the so-called "cash-for-clunkers

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11 News from the Chicago Board of Trade, June 1, 1992.


program.” This new EPA plan allows for earning air pollution emissions credits through scrapping older (more polluting) automobiles. This means that a smoke-stack industry can buy old cars from the public and scrap them. For every destroyed car the industry receives an emissions credit. The amount and duration of the credit depend on the age of the car. Buying and scrapping older cars may be cheaper for industry than taking actions in their own production process.¹⁴

Can these examples be followed?

The American experience offers a lot of information about the way a permit market can be set up and which effects it can have in practice. Two essential aspects of the permit market will now be discussed. These are: (a) the type of pollution, and (b) the distribution of the pollution permits.

A The type of pollution

Three of the four permit markets outlined above concern the national effects of a certain polluting behavior. This means that the scope of the effect of these pollution problems is the United States in its entirety. Only the emissions trading program deals with a pollution problem with a local impact, i.e. an impact on the environment in the vicinity of the source or in a certain area. In this case, the government needs to have the power to test the acceptability of the transfer of a pollution right. By means of such a test the government can guarantee that the environment will not be influenced in an undesirable way. For example in cases where the location of particular emissions matters, the government has the task to ensure that there will not occur so-called 'hot-spots'. Criteria for the decision making of the administrative authority on a transfer must be laid down in the statute which constitutes the permit market. The authority can then judge the circumstances of a case with the aid of those general criteria. The requirement of an administrative test of the acceptability of a transfer of course limits the flexibility of the permit market, which can be seen for example in the case of the emissions trading program.

Moreover, in the case of a pollution problem with a local impact, attention has to be paid to the legal position of third persons. Their position will be influenced by transfers of pollution rights. If a transfer has to be approved by the government because it concerns local impacts, the third persons must be able to influence that particular decision through participation and judicial review. By means of these provisions, especially the provision for judicial review, persons intending to transfer will be left in uncertainty about the approval of the transfer for some time. It is obvious that this impedes a smoothly functioning permit market.

In the case of a pollution problem without local effects, an administra-

tive test is not strictly necessary. The position of third persons will not be influenced by a particular transfer, so it is not necessary to provide for possibilities for them to influence a particular transfer. Therefore, it can be argued that in general the permit market seems especially useful for pollution problems for which counts not so much the location of particular emissions, but the overall emission reduction. Examples are acid rain, the depletion of the ozone layer, and the greenhouse effect. This thesis can be illustrated by the ‘lead trading’ program, which did not concern local impacts but the national impact of leaded gasoline. The conditions for trading a pollution permit in this program have been relatively simple. The firms only had the duty to report after a control period how much they polluted, and how many pollution rights they possessed. There was no ‘ ecological’ need for an administrative test for each transfer, nor for a possibility for third persons to question a particular transfer. The program, which has ended in 1987, appears to have worked well. A substantial part of the rights have been traded or banked. According to Hahn and Hester, the savings for refiners flowing from the trading program can be estimated for hundreds of millions of dollars. Also in the CFC-trading program and in the acid rain program, an administrative test of the environmental acceptability of a particular transfer has not been provided for. This is acceptable because of the type of problem these programs concern.

B The distribution of the pollution permits

When we consider the use of the permit market, we can distinguish two situations: first, an environmental problem has not been regulated yet, and second, a problem has already been regulated. In the first situation, one may think of the transformation of existing non-transferable pollution rights into transferable pollution rights, the so-called method of ‘grandfathering’. In the second situation, one may think of the historical actual emissions as the basis for distributing the pollution permits. This method also can be qualified as ‘grandfathering’. The grandfathering approach can be seen as a very pragmatic approach because a radical turnover does not have to occur. But although it seems to be wise to work pragmatically, it has to be investigated if the method of grandfathering is just. Therefore, we will look at the principle ‘the polluter pays’. This principle implies that the actors who cause most pollution, should not be in a financially more advantageous position than the actors who took more consideration with the environment. A distribution of the marketable permits according to the historical emissions—which were possibly laid down in the previous legislation—leads to such a disadvantageous position of firms


that took more consideration with the environment. Besides that, classical permits have to be up to date if they are to be taken as the basis for an administrative distribution of the permits. Experiences with Dutch environmental policies show that in some sectors the execution of the classical permit systems lags behind.

In the emissions trading program the concept of grandfathering has been followed. Not only the classical permit has been used as point of reference, but also—in certain situations—the actual emission of the firms. This approach clearly conflicts with the polluter pay principle.\textsuperscript{17} Besides that, the method of grandfathering also does not stimulate firms to search for alternatives for polluting behavior. The experiences with emission trading illustrate that grandfathering is in fact contrary to the advantages that indirect regulation by means of financial stimuli is considered to have. This will especially count if polluters expect that the grandfathering method will be used in the future to start up a permit market for their polluting activity. For these reasons it can be said that in principle the distribution of pollution permits by the administration should not disfavor (historical) activities that show consideration with the environment. The grandfathering method has to be judged upon this thesis.

Does the experience with the other American permit markets provide acceptable alternatives for the grandfathering method?

In the case of the CFC-trading, where the grandfathering method has been followed as well (this system simply grandfathered past market shares),\textsuperscript{18} a tax has been laid down.\textsuperscript{19} The function of this tax is to correct the advantages that the grandfathering method has for the greater polluters. This method can only be contemplated if the tax is considered to be effective. This depends on the amount of tax and the way in which the tax will influence the price of the pollution rights. The effectiveness can be questioned, because it seems likely that a tax in combination with grandfathering will still imply an advantage for the greatest polluters in the past. They will still have the largest amount of pollution rights.

Besides that it has to be kept in mind, that the financial burden of a tax will be politically unattractive. Therefore, it can be expected that because of a strong industrial opposition this measure will not be taken by the government unless an international agreement for implementing such a financial burden will be completed.

The distribution in the lead trading program looks fair because as a general rule all refineries get the same quontum per produced gallon. The

\textsuperscript{17} See for instance art. 130R, par. 2, EC-Treaty.

\textsuperscript{18} 53 Fed. Reg. 30586.

\textsuperscript{19} Excise tax on the sale of chemicals which deplete the ozone layer and of products containing such chemicals, established by section 7506 of the Omnibus Budget Reconciliation Act, (1989). See also 55 Fed. Reg. 36612 and 56 Fed. Reg. 49551.
historical activities are not taken as the basis for distributing the tradable permits.\textsuperscript{20} Another objection arises with regard to the method used in the lead trading program, however; no ceiling is established for the amount of pollution throughout the United States. This leads to the conclusion that the method for distributing the rights used in the lead trading program can only be recommended when the lack of a ceiling can be accepted.

In the \textit{acid rain program} the distribution of the pollution permits is mainly based upon the historical emissions of the firms. The allowances are allotted to existing firms according to a formula that multiplies each plant's historic energy capacity by a target average sulfur dioxide emissions rate.\textsuperscript{21} In general this rate is lower than the current actual average emissions rate. Because the historical emissions are used, this method is in reality the method of grandfathering. But there are some exceptions to the grandfathering method in the acid rain program. For example, extra pollution permits are granted to states with a relatively low emission level. This method of pure administrative distribution, in which corrections are made to the grandfathering method, can be seen as an acceptable method in the light of the polluter pays principle.

Besides a distribution without costs to the polluters, selling the permits also can be considered. Eventually, it seems likely that this method will encounter political and economic opposition. The arguments are the same as in the case of the opposition against the environmental levy. The financial distribution leads to costs for industries, and this leads to a disadvantageous competitive position with firms in other countries or, in case of a EEC-permit market with firms outside the EEC that have not established a permit market or have not taken other financial measures in their environmental policy.

4. Some Thoughts About a European Permit Market

4.1 Introduction

Given the conclusion that the permit market seems especially useful for pollution problems for which not so much the location of particular emissions counts, but the overall emission reductions, there are good reasons to investigate whether the permit market is suitable in the European Economic Community. Some attention has already been paid to this possibility in the literature. According to Dudek et al., for example, the sulfur dioxide allowance trading system that has been implemented in the United States can serve as an example for a permit market in Europe, including Eastern Europe. Common action taken by Eastern and Western Europe seems necessary for an effective approach to the acid rain problem, in which case a permit market may be

\textsuperscript{20} See for an exception to this rule 47 Fed. Reg. 49323-324.

\textsuperscript{21} See infra note 13, at 29.
considered. The possibilities for a multinational permit market increase as the European economy becomes more integrated.\textsuperscript{22}

Besides the acid rain problem other environmental problems, like climate change, can be considered as well. The concept of joint implementation can be found in the United Nations Convention on Climate Change. This means that the mitigation of climate change may be implemented \textit{jointly with other parties to the treaty}. The criteria for joint implementation have yet to be developed,\textsuperscript{23} but it looks as if the concept of joint implementation creates a possibility for a permit market between two or more parties. A German study already investigated a European permit market for carbon dioxide. A recommendation for a European carbon dioxide permit market can be found in Dutch literature as well.\textsuperscript{24} The Dutch government has ordered an investigation into the option of a carbon dioxide permit market.\textsuperscript{25}

In developing a European permit market, the general conclusions drawn in the preceding paragraph have to be borne in mind. Besides that it is clear that the EEC-treaty has to be respected. Policy instruments that are used in another legal system, in this case the permit market in the USA, cannot be transferred easily into another legal system. It has to be investigated under which conditions the permit market can be fitted into the European legal system. Some general points will be studied in the following pages. This general discussion will be illustrated by the European permit market for stratospheric ozone depleting chemicals. The outlines of this permit market will be described in §4.2. Secondly, some aspects of the European legal system will be considered in §4.3.

\textbf{4.2 The EEC permit market for stratospheric ozone depleting chemicals.}

This permit market was introduced by Regulation 3322/88, implementing the international Protocol of Montreal in the EEC.\textsuperscript{26} This international agreement signed by the EEC and all its Member States includes production and consumption limits of ozone depleting chemicals. In certain circumstances these quota can be transferred between parties to the Protocol (In reality the Montreal Protocol instituted a limited international permit market).

EEC Regulation 3322/88 came into force on January 1, 1989. As the

\begin{footnotesize}
\textsuperscript{22} \textit{Id.} at 29-31.

\textsuperscript{23} Art. 4, par. 2, sub d, of the convention.


\textsuperscript{26} Pb. Nr. L. 297/1.
\end{footnotesize}
international agreement was tightened in 1990 a new EEC Regulation was introduced in 1991, to know Regulation 594/91.\textsuperscript{27} Meanwhile the European Commission has proposed to alter this Regulation anticipating the revision of the Protocol of Montreal in November 1992.\textsuperscript{28}

Art. 10 of the EEC Regulation 594/91 limits the production and consumption of the ozone depleting chemicals in a certain control period. The quota are calculated with the use of a reference year, which is 1986 for CFCs and halons, and 1989 for other chemicals.

Both EEC Regulations allow for transfer of quota if it serves industrial rationalization. This concept means the transfer either between parties to the Protocol or within a Member State of all or a portion of the calculated level of production of one producer to another, for the purpose of achieving economic efficiencies or responding to anticipated shortfalls in supply as a result of plant closures. Art. 10, par. 8, of Regulation 594/91 states that within the conditions of the Protocol of Montreal the transfer of production quota between producers of different Member States is allowed, and art. 10, par. 7, sanctions a transfer between producers within a Member State.\textsuperscript{29} The transfer within a Member State needs authorization by a competent administrative governmental body. Consent of the European Commission is a condition for a transfer between Member States. The transfer of consumption quota has been regulated in art. 11 of Regulation 594/91. This article also allows for a transfer of quota between Member States within the EEC.

It can be concluded that in principle the EEC Regulation on ozone depleting chemicals includes the establishment of a permit market. The reason for allowing the transfers lies in the concept of industrial rationalization, which can be seen as an economic motive.

4.3 Some legal aspects related to the possibility of a European permit market

A The principle of subsidiarity

The Single European Act of 1987 introduced the principle of subsidiarity in the environmental sector. This means that there is only cause for an action on the EEC-level, if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States.

The Treaty of Maastricht pays special attention to the principle of subsidiarity. It states that decisions shall be taken as closely as possible to the

\textsuperscript{27} Regulation 594/91 of March 4 1991, Pb. Nr. L. 67/1. By this new Regulation Regulation 3322/88 has been repealed from July 1, 1991.

\textsuperscript{28} A.M.E. Veldkamp, Verordening 594/91/EEG betreffende stoffen die de ozonlaag afgrenzen, enkele Europeesrechtelijke en nationaalrechtelijke aspecten, in, TIJDSCHRIFT VOOR MILIEU EN RECHT p. 450 (1992). She points at COM (92) 106 final.

\textsuperscript{29} An example of a transfer between Member States is announced in CHEMICAL WEEK from February 26, 1992.
citizens. According to Art. B of this Treaty the EC shall only act when the targets can better be reached on the EC-level. This principle only applies to decisions that do not fall within the exclusive competence of the Community.

Especially for environmental problems that have an effect on the environment in the EEC as a whole, the subsidiarity principle does not seem to impede the power of the Council of Ministers to lay down targets in the environmental sector. It is not entirely beyond doubt, however, whether the Council also has the power to dictate Member States the way in which these targets should be reached. With regard to the principle of subsidiarity it can be argued that EC-rules should give a maximum of freedom to the Member States for implementing the targets. On the other hand, it seems likely that the efficiency gains that can be reached through a permit market will be higher when this instrument is applied in the Community as a whole and is not limited to one or a few Member States. It seems likely from the point of view of efficiency that a European permit market is not contrary to the principle of subsidiarity, especially when pollution with effects throughout the EC is at stake. For example, in the case of CFC-trading a permit market has been used for an environmental problem that has effects for the whole of the EEC (in fact the entire world) because it concerns the depletion of the ozone layer.

B The distribution of the permits

There are several options to start up a European permit market. A choice has to be made between a free distribution on the base of administrative criteria and a financial distribution by means of a sale by the government. A combination of these two modalities can be discussed as well.

It is clear that a financial distribution is more in line with the polluter pays principle than a free distribution. It has already been mentioned, however, that this way of setting up the market may encounter political objections. For pragmatic reasons only the modality of a free distribution will be discussed next. To a financial distribution more attention must be paid when the political objections decrease, however. Until then a financial distribution can only play a marginal role.

For a distribution without costs for the polluters the following distinction has to be considered: (1) the permits can be allotted to the Member States, after which they can distribute them to firms and/or to citizens, (2) the permits can be distributed by an EEC-authority directly to the firms and/or to the citizens throughout the whole EEC. In the European CFC-trading program the latter method has been followed: distribution was made by the Regulation itself.

Considering the possibility of a free distribution, it seems likely that there will be a struggle in the Council of Ministers (and other EEC-institutions) about the formula for distributing the tradable permits in the Community. This is due to the fact that the permits represent a certain capital. Especially when the permits are transferable throughout the Community, the individual Member States will have an economical reason to get as many permits as
possible. This can happen to both ways for a free distribution in the EEC, which have just been mentioned.

In the light of this struggle it is good to look at the procedure for the decision about the establishment of the EEC-permit market, and thus the distribution of the permits. The EEC-Treaty gives to the Council of Ministers several legal bases for environmental decision-making. Important powers are given by art. 130S and art. 100A.

Art. 130S is especially meant for environmental Regulations or Directives, while art. 100A functions as the legal bases for measures meant for the establishment of the internal market. These measures also can affect environmental behavior. It is clear that both bases cannot be used together, because of the differences in the prescribed procedures. The relationship between these two legal bases (and the relationship with other legal bases, e.g. art. 113 EEC-Treaty) will not be discussed extensively in this article. Here, I only refer to the Titaniumdioxide decision, which tells that the legal basis for legislation has to be art. 100A if the main aim is the establishment of the internal market and not the protection of the environment. Because many product, process and emission standards can influence the internal market many environmental measures must be based on art. 100A. In earlier decisions it was already pointed out that the choice of the legal bases not only depends on the meaning of the Council with the legislation, but also on the objective facts that can be reviewed by the Court of Justice.

With regard to the institution of a European permit market the procedure for decision-making is important. Regulations or Directives for the environmental sector must be made by unanimous consent (art. 130S), unless the possibility of art. 130S, par. 2, for a qualified majority vote has been used. Up till now this provision has hardly been used. Art. 100A empowers the Council to adopt environmental rules by a qualified majority vote.

The unanimity required by art. 130S implies that the Council has to reach a common opinion about the (initial) distribution of the permits. Because of the economic impact of this distribution, difficulties can be expected. The grandfathering method does not always seem to be practicable, as it strengthens the position of the economically mighty Member States when more pollution was caused in these states than in the economically weaker states. It can be expected that in this case a free administrative distribution with a correction for past pollution levels has politically a better chance.

When art. 100A has to be used as the legal base, a decision in the Council can earlier be reached because of the requirement of a qualified majority vote instead of unanimity. In this case, however, the involvement of the European Parliament is stronger, which is important for the general

30 Court of Justice of the EC, June 11, 1991, C-300/89.
31 I.J. Koppen, De Europese Akte als Grondwet van het millebeleid van de Europese Gemeenschappen, in SEW, nr. 10, 1988, p. 634.
32 See infra note 28 at 452.
acception of the permit market. The same considerations can be made with regard to the changes of the Maastricht Treaty to art. 130S. These lead to a stronger position for the European Parliament, especially for art. 130S. The European Parliament gets the right to defeat a provisional decision of the Council. The Council then can only take the decision with unanimity. Thereby the EP gets the power to propose changes to the provisional decision of the Council. Furthermore the new art. 130S prescribes a unanimous decision only for a number of subjects. In the procedure for decision-making on the basis of art. 100A, the position of the European Parliament is also strengthened by the Maastricht Treaty.

Although some struggle about the free distribution of tradable permits can be expected, the European CFC-trading program shows that a unanimous agreement in this field can be reached (the legal basis for this regulation is art. 130S EEC-Treaty). In this case a pure grandfathering method has been followed, which finds its source in the international agreement. The future will show us if this method will be taken as the basis for other permit markets.

C Control and enforcement

The requirement of a unanimous decision (and an essential role for the European Parliament) is important for a general acceptance of the permit market throughout the European Economic Community. This is not only important for the establishment of the instrument, but also for the enforcement of the rules by the Member States.

In the case of a European permit market it has to be kept in mind that there are incentives for Member States to be reluctant with applying sanctions to their industry when it acts against EEC-legislation in which a permit-market has been established. The reason for this lies in the attractiveness for a Member State to act less stringently than the EEC-legislation demands because this may lead to an economic advantage for a firm of that State (i.e. the price that has to be paid by a firm for a tradable pollution right). Enforcement by the Member States is important because the permit market creates incentives for firms to act against the rules, especially when the price of a tradable permit is high. For these reasons it has to be investigated whether the powers on the EEC-level to enforce EEC-legislation are adequate.

It is well-known that the EEC-Treaty contains limited possibilities to ensure that Member States fulfil their obligations under the Treaty. The Maastricht Treaty introduces one improvement: the European Court of Justice will get the power to impose lump sums and penalty payments on a Member State. A condition for such a penalty is that the Member State does not obey a decision of the Court. The Commission can notify this Member State and can state a time-limit for compliance. If the Member State does not comply after this time-limit, the Commission can go to the Court of Justice again to propose

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35 Art. 171 of the new EC-Treaty.
a fee that it considers appropriate in the circumstances. The Court then has the power to impose the lump sum or the penalty payment.\textsuperscript{34}

Before sanctions can be imposed, it has to be clear that the EC-legislation was not complied within a Member State. In general, the Commission has very limited powers to supervise the actions of Member States and their citizens. No formal competencies to supervise the environmental actions of firms or citizens in Member States have been attributed to the Commission.\textsuperscript{35} As a first step towards these competencies Jans points at art. 14 of the CFC Regulation 594/91. This article empowers the Commission to ask all necessary information from the governments and competent authorities of the Member States and from the firms. The Member State has to assist the Commission to gather the information from the firms.\textsuperscript{36}

In the case of an infringement on the CFC Regulation by a firm only the Member State in which the firm is settled has enforcement powers towards that firm. The Regulation states in art. 15 that Member States have to take appropriate legal or administrative action in the case of infringement of the provisions of the Regulation.

Besides the formal competencies of the Commission to supervise the compliance with EEC-legislation, the harmonisation of the national measures for supervision and punishment of an infringement by a citizen or firm can be discussed.\textsuperscript{37} In case of the permit market certain sanctions that must be taken by a Member State can, in theory, be inserted in EEC-legislation, for example the withdrawal of rights when a firm does not give the required information or when it produces more than its pollution rights allow. It looks as if, however, the Member States are not inclined to such a harmonisation. This can be illustrated by the CFC-Regulation. Art. 15 of the CFC-Regulation is a very open norm. The proposal by the Commission for Regulation 594/1991 contained in art. 15 clearly sanctions for certain infringements on the Regulation.\textsuperscript{38} In the deliberations about the Regulation in the Council of Ministers some Member States stated that they did not want to transfer parts of their sovereignty in the field of law enforcement. For this reason art. 15 only lays down the duty for Member States to take adequate action when an infringement is noticed.

\textsuperscript{34} This fee may be an effective sanction as it can be settled with payments which the Commission has to make to the Member State, according to H.G. Schermers, P.J. Slot, Maastricht, NEDERLANDS JURISTEN BLAD, p. 1037.


\textsuperscript{36} The Regulation 3322/88 contained a similar provision in art. 12.


\textsuperscript{38} See infra note 28 at 452.
It has to be recognized that there also may be possibilities for private persons in the Member States to counter breaches of Community law when private parties can appeal to a national judge if they think that the application of national law in their case implies an infringement on the EEC-Treaty or on EEC-rules. This (important) incentive for making member states to obey their EEC-duties will not be discussed here.

5. CONCLUSION

The Dutch expression 'Onbekend maakt onbemind' seems to be applicable to judge the possible contribution of the permit market for a sound environmental policy. This proverb can be translated with "You cannot miss what you never had." But for several reasons mentioned in this article, it can be agreed with the Fifth Environmental Action Program of the Community that this instrument has to get more attention. This has mainly to be done for environmental problems without location-specific effects.

It is wrong to think that the permit market will be the definitive solution for the declining quality of the environment caused by human activities. For each case the applicability of the permit market has to be investigated carefully, and has to be weighed against other possible instruments for environmental regulation. In §4 some aspects of the legal system of the EEC have been discussed to see whether there are general obstacles to the introduction of the permit market for environmental problems without location-specific effects. On the basis of this paragraph it can be concluded that there are possibilities for the instrument, provided that it will be carefully designed (especially with respect to the enforcement of the duties) and that compromise about the distribution of the pollution rights will be found.

Besides looking at the general aspects of the legal system of the EEC, it has to be investigated if the permit market fits in the environmental policy on the EEC-level. We can for example think about (a) the use of technological standards and (b) the internal integration in the environmental sector.

A Technological standards

Up till now the environmental rules on the EEC-level are not market oriented. The application of the permit market implies a totally new way of influencing the behavior of polluters. It differs from the classical method in which technological criteria are used. The question arises if these two methods can be used together. In my opinion a simultaneous use of these two methods is difficult. The permit market presupposes a real amount of freedom for the firms. They must be left the freedom to choose between polluting, and thus buying a pollution right, and not-polluting. In the case of technological criteria, this freedom cannot be given to firms, because every firm has, for example, to apply the best practicable technology. Besides that, it will not always be attractive for industries to react on the financial incentive of the market-based instrument like the permit market in searching for cleaner
technologies, because this could lead to stricter technological criteria. Therefore, firms may be reluctant to apply new technologies.

B An integral approach by means of the permit market?

An integrated approach to pollution control is aimed at the solution of environmental problems rather than transferring them from one environmental sector to another. The Commission has already been working on this concept, which has resulted in a draft version of a Regulation titled: Integrated Pollution Prevention Control.

A permit market can be instituted in an integral environmental policy, according to Dudek et al., but how this should be done was not explained by them. Up till now, the permit market has only been used for a specific sector of environmental policy, but perhaps it will be possible to find criteria by which different kinds of pollutants can be exchanged with each other. It would be wise to investigate this possibility, because it is clear that an integral approach has its advantages.

Finally

It seems to take a long way before we can speak of a European permit market. It is clear that more research has to be done into its possible applications.

It is of primary interest to get costumed to the idea of the permit market, because it deviates to a large extent from the instruments we are familiar with. This can be illustrated by the remarks made above about the technological criteria. In the case of environmental policy it is important, however, to investigate the different ways that can lead to a better quality of the environment. In this light attention has to be paid to the concept of tradable pollution permits.