1. Introduction

On the occasion of the launch of the Utrecht Centre for Water, Oceans and Sustainability Law we would like to use this opportunity to contribute to the development of a normative framework for sustainable water management. We regard the polluter pays principle as an important foundation underlying such a normative framework.

The core of the principle that ‘the polluter should pay’ is easy to understand: polluters are responsible for the pollution they have caused. Therefore, polluters should bear the cost of measures aimed at preventing and reducing pollution. Over the years, the polluter pays principle has developed into a basis for EU environmental policy. Nowadays, the polluter pays principle is referred to in many provisions of EU directives concerning cost recovery, liability or the obligation to take compensatory measures in cases of environmental damage. These provisions are meant to be an incentive for the polluter to prevent or reduce pollution. However, in practice, problems arise in the application of the polluter pays principle.

One of the current issues is the definition of ‘pollution’ or ‘polluter’. It is generally recognized that negative environmental impacts of the use of our resources consist of both pollution and depletion of natural resources. Therefore, sustainable water management should not only concern the prevention and remediation of pollution caused by emissions of pollutants, but also encourage a prudent use of scarce water resources. This raises the question whether ‘the use of natural resources’ might also be covered by the term ‘pollution’. In this article we will discuss the importance of the polluter pays principle for cost recovery, as an instrument to stimulate sustainable water use. The reason we address this question is that Article 9 of the Water Framework Directive (WFD) obliges European Union Member States to take account of the principle of recovery of the costs of water services in accordance with – in particular – the
polluter pays principle. The question arises what norms can be derived from the polluter pays principle for the application of this cost recovery provision.

The second issue we address is multi-party causation. Although the polluter pays principle seems to provide an easy answer to the question ‘who is responsible for the cost of environmental measures’, i.e. the polluter, this easy answer might not be enough in cases where pollution is caused by a multitude of polluters.\(^5\) Obviously, addressing complex (inter)national environmental issues such as water pollution or air pollution, requires a joint effort by all categories of polluters and all levels of government. An example of a situation where such a joint effort might be required, is the situation in areas where the level of pollutants in ambient air exceed the limit values set out in EU Directive 2008/50/EC. For these areas an air quality plan is to be established, in order to achieve the limit values. In situations where many categories of polluters are responsible, the establishment of such an air quality plan will inevitably raise questions regarding fair burden sharing.\(^6\)

The issues described might easily lead to the conclusion that the polluter pays principle is outdated and no longer appropriate to solve the current complex environmental problems. However, in this article we will show that modern interpretations of the polluter pays principle provide guidelines for cost recovery and burden sharing. To this end we will present a brief outline of the genesis and development of the polluter pays principle in Section 2. Because the European Court of Justice has contributed significantly to the development of these guidelines, we will analyse relevant case law of the European Court of Justice in Section 3. In Section 4 we will illustrate how the guidelines for cost recovery and burden sharing might be used to solve these two issues.

2. Genesis and development of the polluter pays principle

The Organisation for Economic Co-operation and Development (OECD) introduced the polluter pays principle in 1972 in a recommendation as one of the guiding principles concerning the international economic aspects of environmental policies.\(^7\) The polluter pays principle initially was a principle of economic policy stating that the polluter is responsible for the cost of pollution prevention and control measures.\(^8\) Thus, the polluter pays principle aimed at an internalization of the cost of pollution prevention and control measures: the cost of these measures should be reflected in the market price of products.

As Grossman extensively describes, the OECD broadened the principle from internalization of (only) pollution prevention and control costs to a higher level of internalization of environmental costs also covering for instance liability payments and including specific taxation possibilities.\(^9\) The first being an interpretation of the principle in a ‘strict sense’, the second interpretation being in a ‘broad sense’.\(^10\)

In effect, over the years the view on the polluter pays principle changed from being a ‘no subsidy/principle to a principle that entailed polluters being responsible for more than just costs of pollution prevention and control, now also taking into account other costs/measures like liability payments, green taxes and costs relating to non-compliance with permits et cetera.\(^11\)

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\(^5\) See also Boeve & Van den Broek, supra note 1, pp. 80-83.
\(^6\) Ibid.
\(^8\) Ibid.
\(^11\) It should be noted that the ‘broad sense’ interpretation of the polluter pays principle was more limited than for instance what the WATECO working group defined in its guidance document for implementation of the WFD. Also the ‘broad sense’ interpretation did not include (or at least did not mention) resource costs. WATECO Working Group 2.6, Common Implementation Strategy for the Water Framework Directive (2000/60/EC), Guidance Document No 1, Economics and the Environment, 2003: This document provides guidance for stakeholders and experts which needed to implement the WFD in their countries. The guidance document states with regard to environmental costs: ‘environmental costs represent the costs of damage that water uses impose on the environment and ecosystems and those who use the environment (for example, a reduction in the ecological quality of aquatic ecosystems or the salinization and degradation of productive soils).’ Resource costs are defined as follows: ‘represent the costs of foregone opportunities which other users suffer due to the depletion of the resource beyond its natural rate of recharge or recovery (e.g. linked to the over-abstraction of groundwater).’
Following the OECD, the (first) European Environmental Action Programme in 1973 formulated the polluter pays principle as follows:

‘Costs of preventing and eliminating nuisances must be borne by the polluter.’12

In 1975 a Council Recommendation (hereafter the ‘recommendation’) to the Member States provided more clarity on the scope of the principle and its application.13 The rational use of environmental resources is the ultimate goal of the application of the polluter pays principle. Since then, several Environmental Action Programmes have referred to the necessity of a prudent and effective use of natural resources. For instance, in the Third Environmental Action Programme in 1982 the polluter pays principle is linked to the use of resources outlining that the polluter pays principle is of ‘decisive importance’ in a strategy regarding the optimal use of resources.14

Furthermore, the Third Environmental Action Programme made it clear that the polluter pays principle is meant to be an incentive to reduce pollution and to promote innovative action to generate less polluting products and technologies. This incentive function was emphasized in the Fifth Environmental Action Programme: prices of products should include the costs of production, consumption and environmental costs.15 Charges and levies should be used to discourage pollution at source and to encourage clean production processes, which complies with the polluter pays principle.

In 1986, the polluter pays principle was recognized as a basis for environmental policies in the Single European Act.16 Article 130r(2) was inserted stating:

‘Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay. Environmental protection requirements shall be a component of the Community’s other policies.’

Due to this inclusion the Community was obliged to take into account the polluter pays principle in all environmental actions it initiated. Since the inclusion of the polluter pays principle in the Single European Act, the polluter pays principle has developed into a strong basis for policy making and is now referred to in many European Directives.

In the literature two fundamental interpretations of the polluter pays principle are identified: the efficiency interpretation and the equity interpretation. The efficiency interpretation is essentially economic in nature, pertaining to an internalization of environmental costs. The equity interpretation is considered to be an extension of the basic form of the principle. This equity interpretation pertains to a fair distribution of costs, between the polluter and the victim (or the victimized society).17 It is a fair and logical principle that polluters (and not their ‘victims’) are responsible for the pollution they cause. Bleeker states:

‘[T]he polluter pays principle is a manifestation of the principle of equity or “fairness” principle (...) as it holds the polluter accountable for the pollution he has created in order to avoid passing on costs to third parties who did not contribute to the creation of the pollution.’18

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15 OJ C 138, 17.05.1993, pp. 5-93.
18 See Bleeker, supra note 3, p. 291.
We believe that the equity interpretation, requiring a fair distribution of costs, could also be of significance for cost distribution and burden sharing among various categories of polluters. Thus, the scope of the polluter pays principle might be stretched even further.

3. The polluter pays principle in European case law

Case law of the European Court of Justice may shed some light on the content of the polluter pays principle. The European Court of Justice has contributed significantly to the development of the polluter pays principle. Case law has provided markers with regard to, for instance, the necessity of a causal connection between activities and pollution, who can be considered a polluter, and possibilities to differentiate contributions from categories of polluters. We will address the relevant markers below, contributing to a normative framework for burden sharing and cost recovery.

3.1. Polluters are only responsible for the pollution they cause; they do not have to pay for eliminating and preventing pollution to which they do not contribute

The European Court case that provides the first marker is the *Standley* case regarding the Nitrates Directive.20 The Nitrates Directive aims at reducing water pollution from nitrates discharged into water from agricultural sources. *Standley* argued that placing the burden of reducing the concentration of nitrates in the designated areas solely on the farmers would infringe the polluter pays principle because their activities are known to be only one of several sources of nitrates in the water. In the *Standley* case the Court considered:

‘As regards the polluter pays principle, suffice it to state that the Directive does not mean that farmers must take on burdens for the elimination of pollution to which they have not contributed. As has been pointed out in paragraphs 46 and 48 of this judgment, the Member States are to take account of the other sources of pollution when implementing the Directive and, having regard to the circumstances, are not to impose on farmers costs of eliminating pollution that are unnecessary. Viewed in that light, the polluter pays principle reflects the principle of proportionality on which the Court has already expressed its view (paragraphs 46 to 50 of this judgment). The same applies to breach of the principle that environmental damage should as a priority be rectified at source, since the arguments of the applicants in the main proceedings are indissociable from their arguments relating to breach of the principle of proportionality.’21

According to the Court’s considerations the polluter pays principle reflects the principle of proportionality. The Court provides that farmers do not have to pay for eliminating and preventing pollution to which they do not contribute. Member States should take into account both agricultural and other sources of nitrates when drawing up the action programmes.22

The *Standley* case is of significant importance in those situations where the aggregate pollution originates from different sources. The considerations of the Court and the opinion of the Advocate General make it clear that polluters are only responsible for pollution to which they have contributed.23 Furthermore, the considerations of the Court give rise to the conclusion that in cases where multiple sources have caused an aggregate amount of pollution, all categories of polluters are to be addressed. Thus, the *Standley* case provides two basic rules for sharing responsibilities in cases of multiple source pollution: (1) polluters are only responsible for the pollution they cause and (2) polluters do not have to pay for eliminating and preventing pollution to which they do not contribute.

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19 See Nash, supra note 17, p. 478; See also Boeve & Van den Broek, supra note 1, pp. 74-85.
22 See Bleeker, supra note 3, p. 293.
23 Opinion of the Advocate General, no. 61997C0293.
3.2. One who does not pollute or has not contributed to (the risk of) pollution is not to be burdened by application of the 'polluter pays' principle

In Pontina Ambiente one of the questions addressed was whether Directive 1999/31 on the landfill of waste,²⁴ which stated that the Member States need to take measures to ensure that the price charged for waste disposal in a landfill covers all the costs involved in the setting up and operation of the facility, prevented introduction of a levy to the operator of the landfill which levy initially has to be paid by the operator of the landfill and then is passed on (reimbursed by) the holder who deposits the waste.²⁵ The Court found such levy system allowable, however confirming that a non-polluter should not effectively be burdened by the levy due to this ‘reimbursement scheme’. The Court considered:

‘However (...) Article 10 of Directive 1999/31 requires the Member States to take measures to ensure that the price charged for waste disposal in a landfill covers all the costs involved in the setting up and operation of the facility. That requirement is an expression of the ‘polluter pays’ principle, which implies, as the Court has already held in regard to Directive 75/442 and Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste (OJ 2006 L 114, p. 9), that the costs of disposing the waste must be borne by the waste holders (...). Consequently, although a Member State can introduce a levy on waste to be paid by the landfill operator and reimbursed to the latter by the authorities depositing waste in the landfill, it can do so only on the condition that the fiscal provision in question is accompanied by measures to ensure that the levy is actually reimbursed within a short time so as not to impose excessive operating costs on the operator on account of late payment by those authorities, thereby undermining the ‘polluter pays’ principle. Causing the operator to bear such charges would amount to charging to him the costs arising from the disposal of waste which he did not generate but of which he merely disposes in the framework of his activities as a provider of services.’²⁶

In this case the Court provides a clear interpretation of the polluter pays principle by using the principle as a starting point in considerations. By first determining that the requirement in question is an expression of the polluter pays principle – thus taking the principle as starting point – the effective conclusion that a non-polluter or non-contributor to (the risk of) pollution must not be burdened, directly reflects boundaries of application of the principle and forms a third marker.²⁷

3.3. Use of presumptions in determining causation between activities and pollution/environmental damage is allowed

The above conclusion that a non-polluter or non-contributor to the risk of pollution is not to be burdened by the polluter pays principle, does not imply that Member States are forbidden (if European legislation does not do so otherwise) to use presumptions in determining causation between certain activities and

²⁵ Case C-172/08, PontinaAmbiente, [2010] ECR I-1175.
²⁷ See also C-188/07, Commune de Mesquer, [2007] ECR I-4233, where, regarding the question whether in the event of an oil tanker sinking a.o. the oil producer can be required to bear the costs of the waste disposal even if the actual substance spilling occurred during transport by a third party (carrier at sea), the Court considered (Paras. 79-80, 82): ‘As noted in paragraph 69 above, in circumstances such as those of the main proceedings, the second indent of Article 15 of Directive 75/442 provides, by using the conjunction “or”, that the cost of disposing of the waste is to be borne either by the “previous holders” or by the “producer of the product from which” the waste came. In this regard, in accordance with Article 249 EC, while the Member States as the addressees of Directive 75/442 have the choice of form and methods, they are bound as to the result to be achieved in terms of financial liability for the cost of disposing the waste. They are therefore obliged to ensure that their national law allows that cost to be allocated either to the previous holders or to the producer of the product from which the waste came. (...) However, if it happens that the cost of disposal of the waste produced by an accidental spillage of hydrocarbons at sea is not borne by that fund, or cannot be borne because the ceiling for compensation for that accident has been reached (...) even though they are to be regarded as “holders” within the meaning of Article 1 (c) of Directive 75/442, such a national law will then, in order to ensure that Article 15 of that directive is correctly transposed, have to make provision for that cost to be borne by the producer of the product from which the waste thus spread came. In accordance with the “polluter pays” principle, however, such a producer cannot be liable to bear that cost unless he has contributed by his conduct to the risk that the pollution caused by the shipwreck will occur.’ (emphasis added).
pollution/environmental damage. However, such presumptions must not be an empty shell. From the ERG and Others case it follows that the competent authority in question

‘must have plausible evidence capable of justifying its presumption, such as the fact that the operator’s installation is located close to the pollution found and that there is a correlation between the pollutants identified and the substances used by the operator in connection with his activities.’

Therefore, in adherence to the polluter pays principle the use of presumptions in determining causation between activities and pollution and/or environmental damage is allowed. This forms a fourth marker.

3.4. Differentiation in contributions from categories of polluters to cost recovery is allowed, unless the costs involved are manifestly disproportionate in relation to the pollution capacity

In the Standley case, as described above, the European Court of Justice clarified that polluters are only responsible for pollution to which they have contributed. The Court ruled in this context that the polluter pays principle reflects the principle of proportionality. This is confirmed by the Court’s considerations in Futura Immobiliare. This case concerned the allowance of a waste disposal charging system in relation to the correct application of the polluter pays principle. The matter focused on the question whether it was allowed to calculate charges based on estimates instead of actual waste generated. In principle the costs of disposing waste should be borne by the waste generator. The Court however acknowledges that it is difficult to determine the precise volume of waste generation and concludes that the directive in question (Directive 2006/12 on waste), more specifically its Article 15, does not preclude national laws regulating a waste charging system using a tax or charge calculated on the basis of an estimate of the volume of waste generated by service users. It found that Member States were, in this case, not obliged to charge on the basis of the quantity of waste actually produced. Also the system used, where criteria such as (a) waste production capacity based on property surface areas and the use thereof, or (b) the nature of the waste produced, was deemed allowable.

The polluter pays principle returns in the Court’s decision with regard to the question how the costs of the waste collection service are to be retrieved from amongst the service user groups. The consideration is directly related to the polluter pays principle itself and can be considered a fifth marker of the principle. The Court considers:

‘Second, the “polluter pays” principle does not preclude the Member States from varying, on the basis of categories of users determined in accordance with users’ respective capacities to produce urban waste, the contribution of each of those categories to the overall cost necessary to finance the system for the management and disposal of urban waste.’

However, this freedom of allocation is limited. The polluter is not to be burdened by costs which are ‘manifestly disproportionate to the volumes or nature of the waste that they are liable to produce.’ This consideration further crystallizes the boundaries of the polluter pays principle: cost retrieval amongst categories is allowed, but not if such allocation is not related, within reason, to the volumes or nature of the waste that a polluter is liable to produce. Allocation of costs to a specific group is not in line with the polluter pays principle if this allocation is manifestly disproportionate. This fifth marker of the polluter pays principle is represented by the proportionality that needs to be taken into account.

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28 Case C-378/08, ERG and Others, [2010] ECR I-0000.
29 Ibid.
31 Case C-254/08, Futura Immobiliare, [2009] ECR I-0000, nos. 52, 56.
33 Ibid., Para. 56.
3.5. Summary

In European Court of Justice case law we identified the following markers:

1. Polluters are only responsible for the pollution to which they contribute. Polluters do not have to pay for the elimination and prevention of pollution to which they do not contribute.
2. In cases where pollution originates from different sources, all categories of polluters must contribute to the abatement of the aggregate pollution and polluters can only be obliged to contribute to the abatement of pollution in proportion to their contribution to the aggregate problem.
3. Parties who do not pollute or have not contributed to (the risk of) pollution are not to be burdened by the application of the polluter pays principle.
4. Use of presumptions in determining causation between activities and pollution/environmental damage is allowed.
5. Differentiation in contributions to cost recovery from categories of polluters is allowed, unless the costs involved are manifestly disproportionate in relation to the pollution capacity.

The cases described above have provided the markers which may be used as guidelines for cost recovery and burden sharing. In Section 4 we will describe two situations in which these guidelines could be applied.

4. Situations in which the guidelines for cost recovery and burden sharing apply

4.1. The polluter pays principle as a legal basis for burden sharing and transboundary cooperation

In Section 3 we identified five guidelines for the application of the polluter pays principle. An example of a situation in which these guidelines may be useful, is the situation where different categories of polluters are responsible for an aggregate environmental problem, such as water pollution or air pollution. In situations where air quality standards or water quality standards are being exceeded, a joint effort of all polluters will be required in order to reduce emissions of the various pollutants and achieve the limit values. In these situations, fair burden sharing between the different categories of polluters will be required. The polluter pays principle provides guidelines for such fair burden sharing.

4.1.1. The programmatic approach as an instrument for burden sharing

Environmental quality standards determine the quality of the receiving environment as they set out allowable levels of pollution in water, air and soil. Environmental quality standards are used as a policy instrument to obtain environmental objectives and can be found in various EU directives. Examples are the limit values in the Air Quality Directive\(^\text{34}\) and the quality standards based on the Water Framework Directive\(^\text{35}\). Member States must ensure compliance with the limit values laid down in these Directives. In the event of exceedance of environmental quality standards, several EU directives require Member States to adopt a plan or programme defining measures for the reduction of the pollutants concerned. In cases of multi-party causation, such a plan might be used as an instrument for burden sharing, distributing the appropriate measures among the various categories of polluters.

Article 23 of the Air Quality Directive requires Member States to establish air quality plans for zones or agglomerations where levels of pollutants in ambient air exceed any limit value or target value. Article 11 of the WFD requires Member States to establish programmes of measures for each river basin district, or for the part of an international river basin district within its territory, aiming at the objective of achieving good water status. Another example is the NEC Directive, requiring Member States to draw up a programme defining the measures for the progressive reduction of certain pollutants.\(^\text{36}\)

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As to the content of these plans or programmes, Member States have great flexibility in selecting the specific policies and measures to be adopted. In European Court of Justice cases C-165/09 to C-167/09 concerning the NEC Directive the Court ruled that Member States should ‘adopt or envisage, within the framework of national programmes, appropriate and coherent policies and measures capable of reducing, as a whole, emissions of the pollutants covered so as to comply with the national ceilings laid down in Annex I to that directive by the end of 2010 at the latest’.37

Similar considerations are to be found in the European Court of Justice’s Janecek case, where the Court decided that with regard to the content of an action plan under Article 7(3) Directive 96/62, Member States had some discretion in the identification of measures. Member States were obliged to take adequate measures, taking into account the balance which must be maintained between the objective of reducing to a minimum the risk of the limit values and the duration of such an occurrence, and the various opposing public and private interests.38

Establishing a programme defining coherent and consistent policies and measures in order to achieve environmental objectives within a specified period is called a programmatic approach.39 Many EU directives provide for such programmatic approaches, which are generally considered to be appropriate instruments to achieve environmental objectives.40

Although Member States have a wide discretion with respect to the content of an action plan or programme, this discretion is not unlimited. The following conditions must be met.

The first condition is that the adopted measures and policies should be appropriate to attain the environmental objectives laid down in the directive concerned. The selected measures must be effective and the implementation of the measures must be guaranteed.41

Secondly, the directive itself might contain provisions on the contents of a plan or programme. The Air Quality Directive, for instance, contains provisions on the information to be included in an air quality plan. Such a plan should provide detailed information on the responsible authorities, the nature and origin of the pollution, and details of measures or projects adopted with a view to reducing pollution (Section A, Annex XV). Another example is in Article 11(3) WFD, specifying ‘basic measures’ which each programme of measures shall include and ‘supplementary’ measures which shall be included where necessary.42

Thirdly, the polluter pays principle makes certain demands on the content of a plan or programme. As stated in Section 2, the polluter pays principle puts the responsibility for combating pollution primarily on the polluter. Preferably, measures to reduce and control pollution should be taken at the source of the pollution. However, in many cases no clear causal link can be established between the activities of one specific, individual polluter and the pollution. In practice, water quality and ambient air quality are affected by multiple pollutants, originating from many different sources. We conclude from the ECJ case law described in Section 3 that in cases where environmental quality standards are exceeded due to pollution originating from a wide variety of sources, the polluter pays principle requires a fair distribution of burdens. This means that all categories of polluters contributing to the pollution should be held responsible for the costs of abatement measures. Thus, the polluter pays principle makes demands on the content of a programme which aims at reducing emissions of pollutants originating from a wide variety of sources. When establishing a programme of measures, the competent authority should consider the guidelines set out in the ECJ case law on the polluter pays principle. This also means that a differentiation in the contribution is allowed: all categories of polluters are to be addressed according to their contribution to the aggregate pollution. When identifying the sources of pollution, it is allowed to use presumptions in determining causation between activities and pollution. It is not

41 See Boeve & Van den Broek, supra note 1, pp. 74-85.
42 Measures deemed appropriate for the purposes of Article 9 WFD (cost recovery) should be included in the programme of measures as a basic measure.
necessary to actually calculate each polluter's contribution to the aggregate pollution. However, when multiple sources cause the aggregate pollution, the polluter pays principle requires a proportional and justified distribution of the burdens. We conclude that a programmatic approach might be used as an instrument for burden-sharing, such as the polluter pays principle requires.

A Dutch example of such an instrument for burden-sharing is the ‘National Co-operation Programme on Air Quality’ (Nationaal Samenwerkingsprogramma Luchtkwaliteit, NSL). The Dutch Government established this programme in 2009. The National Co-operation Programme on Air Quality is meant to be an air quality plan under Article 23(1) of the Air Quality Directive. It aims at both attaining limit values for several polluting substances and allowing new building and infrastructure projects. The National Co-operation Programme on Air Quality illustrates the function of an instrument for burden-sharing by addressing different sources of air pollution and allocating responsibilities to all levels of government.

A second example of such an instrument for burden-sharing are the Dutch reports on the emission ceilings concerning acidification and large-scale air pollution (Uitvoeringsnotities emissieplafonds verzuring en grootschalige luchtverontreiniging) which divide the national emission ceilings on a sectoral basis and include a set of measures, legal requirements and binding agreements.

A third example is the Dutch system of Water Plans, adopted at national and regional level (Article 4.1 Water Act) and Water Management Plans, drawn up by each water authority (Article 4.6 Water Act). The Water Plans and Management Plans include the programmes of measures necessary to attain the objectives set out in the Water Framework Directive (Article 4.6 Water Act). Since the measures are defined in various Water Plans, adopted at different levels of government, the Dutch Water Act provides for various obligations to consult other authorities in order to harmonize and coordinate the programmes of measures.

We conclude that in the Netherlands several plans or programmes are used as instruments for burden-sharing by addressing different sources of pollution. The polluter pays principle makes demands on the contents of such a plan or programme.

4.1.2. The polluter pays principle as a foundation for coordination and cooperation

A central element of the Dutch programmatic approach is the aim to coordinate programmes of measures at all levels of government. To make programmatic approaches successful, it is necessary for public authorities at all levels (local, regional and national) to cooperate. A lack of cooperation will be a barrier to the success of programmatic and integrated approaches. Achieving such close cooperation and coherence is a major challenge, although the Dutch Government has demonstrated that cooperation is possible in establishing the National Cooperation Programme on Air Quality.

Even in cases of transboundary pollution Member States are urged to cooperate. The Marine Strategy Framework Directive, for instance, requires an integrated approach for the sea. Where marine regions are shared with other Member States, the Directive urges Member States to cooperate in order to ensure the coordinated development of marine strategies for each marine region or sub region. Where urgent action is needed, Member States should endeavour to agree on a plan of action. The Water Framework Directive also urges Member States to cooperate in establishing a single international river basin management plan, for international river basin districts that entirely fall within the Community.

In creating (transboundary) cooperation, the five guidelines identified in Section 3 might be helpful. In cases of national or even transboundary pollution, where cooperation between all levels of government or even between Member States is necessary to achieve the environmental objectives laid down in EU directives, the polluter pays principle provides guidelines to achieve cooperation and burden sharing. Responsibility for the abatement of (transboundary) pollution should be shared. If local authorities or

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43 Uitvoeringsnotitie emissieplafonds verzuring en grootschalige luchtverontreiniging 2003 en Uitvoeringsnotitie emissieplafonds verzuring en grootschalige luchtverontreiniging (2006), drawn up by the State Secretary for Housing, Spatial Planning and the Environment (Staatssecretaris van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer).
Member States refuse to cooperate the polluter pays principle might be invoked. Thus, the polluter pays principle underpins and further defines the instruments of (transboundary) cooperation.

4.2. The polluter pays principle and cost recovery for water services

In the following section the effect of the polluter pays principle on cost recovery for water services is highlighted. What influence does the polluter pays principle have for the application of the cost recovery provision in the WFD? The five markers identified have a significant impact on the application of cost recovery for water services, as will be outlined in this paragraph. Cost recovery for water services is laid down in Article 9 WFD as an obligation for Member States to take into account.\footnote{For the purposes of this outline, we focus on Article 9(1) WFD and will not address the rest of the provision.} Cost recovery for water services is one of the instruments to strive for sustainable water use.

Article 9(1) WFD states:

'Recovery of costs for water services

1. Member States shall take account of the principle of recovery of the costs of water services, including environmental and resource costs, having regard to the economic analysis conducted according to Annex III, and in accordance in particular with the polluter pays principle.

Member States shall ensure by 2010:
– that water-pricing policies provide adequate incentives for users to use water resources efficiently, and thereby contribute to the environmental objectives of this Directive,
– an adequate contribution of the different water uses, disaggregated into at least industry, households and agriculture, to the recovery of the costs of water services, based on the economic analysis conducted according to Annex III and taking account of the polluter pays principle.

Member States may in so doing have regard to the social, environmental and economic effects of the recovery as well as the geographic and climatic conditions of the region or regions affected.'

This provision ensures that Member States in their water policy insert adequate incentives for water users to use water resources efficiently, contributing, inter alia, to the promotion of sustainable water use (Article 1(b) WFD). Promoting sustainable water use is one of the fundamentals mentioned as the Directive’s purpose.

The cost recovery provision (Article 9 WFD) prescribes a structure in collecting the costs of water services, as the second indent states that the Member States need to ensure an adequate contribution of the different water uses to the costs of water services.\footnote{Water services is defined in Article 2(38) WFD.} Member States need to disaggregate the water uses into at least three sectors: households, industry and agriculture. The costs to be retrieved consist not only of the financial costs of the water services, but need to include the environmental and resource costs.\footnote{Environmental costs: these costs reflect the costs of damage that water uses impose on the environment, on ecosystems and on those who use the environment. Examples of these costs are a reduction in ecological quality of aquatic ecosystems or salinization and degradation of productive soils. Resource costs: these costs represent costs related to foregone opportunities which other [resource] users suffer due to depletion of the resource beyond its recovery rate. These costs are for example costs for lost opportunities due to over-abstraction of groundwater.} At first sight one may think that Member States have a large freedom in choices regarding the effectuation of cost recovery, like cost recovery based on solidarity or – differently – based on profit. However, it is interesting to determine the effects of the identified markers of the polluter pays principle on the cost recovery provision, as this principle is mentioned twice in this provision. Does the polluter pays principle restrict Member States in the application of cost recovery and, if so, in what way?

The cost recovery provision in the WFD mentions the polluter pays principle twice in the same provision, in the main provision as well as in the executive part of the provision (second indent). This
is rather remarkable and it is obvious that the principle cannot be ignored in executing cost recovery. It confirms that the polluter pays principle is not only relevant with respect to the adequate contributions that water users need to pay for water services (second indent), but also for the design of water-pricing policies which should provide adequate incentives for users to use water resources efficiently (first indent).

4.2.1. How to interpret the polluter pays principle, broadly or narrowly?

As mentioned in Subsections 2.1 and 2.2 above, there are different views on the extensiveness of the polluter pays principle, ranging from a narrow view, only containing emissions, to an extensive and broad view, intrinsically including payment for environmental and resource damage. Before taking a look at the limitations on cost recovery due to the identified markers, an assessment needs to be made of whether the polluter pays principle as referred to in Article 9 WFD needs to be interpreted broadly or narrowly. If it should be interpreted broadly the polluter pays principle itself already includes recovery of both environmental and resource costs. This would imply an even broader interpretation of the polluter pays principle than usual. However, there have been signs that confirm such extensive interpretation of the polluter pays principle. Mossoux for instance mentions that – although he personally has another point of view – one could argue that in EU primary law the polluter pays principle covers every conduct that causes environmental damage. As environmental damage is broader than ‘pollution’ in a strict sense of the word, this interpretation of the polluter pays principle would also include the user pays principle.49

But is this broad interpretation of the polluter pays principle applicable/used in Article 9 WFD? One can present arguments to confirm this broad interpretation, but there are also arguments that oppose it. First of all the WFD does not define the polluter pays principle. The preamble (11) refers to the Treaty, outlining:

‘As set out in Article 174 of the Treaty, the Community policy on the environment is to contribute to pursuit of the objectives of preserving, protecting and improving the quality of the environment, in prudent and rational utilisation of natural resources, and to be based on the precautionary principle and on the principles that preventive action should be taken, environmental damage should, as a priority, be rectified at source and that the polluter should pay.’

And although ‘pollutant’ and ‘pollution’ are defined (mainly in relation to Article 16 WFD regarding the strategies against pollution of water) focussing on emission of substances, the polluter is not defined.

As the reference regarding the polluter pays principle in the preamble of the WFD refers to the Treaty, one may refer to the Council Recommendation regarding cost allocation and action by public authorities on environmental matters that did provide a definition of polluter, a polluter being ‘someone who directly or indirectly damages the environment or who creates conditions leading to such damage.’50 In that (broad) sense, the party causing resource damages due to – for instance – over-abstraction of groundwater would be a ‘polluter’. Emission of pollutants is not necessary. One could argue that this broad interpretation of the polluter pays principle is also confirmed because the Council Recommendation also mentions that the polluter should pay all costs necessary to achieve an environmental quality objective. Again this formulation leaves room for a broad interpretation. But is a broad interpretation of the polluter pays principle actually meant to be used in the WFD?

In the drafting process of the Directive, one can – with regard to Article 9 WFD – find some confirming elements. With regard to charges for water use, the explanatory memorandum of the first official proposal mentions the following:

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The abstraction and consumption of surface water and groundwater and the emission of pollutants into surface water are distinct ways of using water. These activities, as well as some in-situ water uses, have the potential to cause damage to the environment if they are not controlled and regulated and, in fact, such activities are the subject of a great deal of legislation which will be coordinated within the framework of this Directive. Whilst the Commission recognizes the difficulties inherent in attributing diffuse pollution to its exact source, it feels that the costs of this pollution is internalized in existing legislation which follows the polluter-pays principle, e.g. the Nitrates Directive.

However, there is scope for improving the efficiency of water use and the effectiveness of environmental provisions relating to its use by ensuring that, so far as is reasonable, the price of water is a genuine reflection of the economic costs involved, including the environmental and resource costs. This concept was not outlined in the Commission’s Communication, but has emerged from the consultation exercise as a means of more fully implementing the polluter-pays principle in this sector.\(^\text{51}\)

The last part was not recalled in a later stadium. Also the WATECO guidance document on economics and the environment seems to imply a broad interpretation, as it states with regard to the calculation of the recovery rate of costs of water services: ‘the polluter pays principle (PPP) requires that users pay according to the costs they generate’.\(^\text{52}\)

The above findings in parliamentary and guidance documents however are rather limited sources to conclude that a broad interpretation is evident. However, such view would also be in line with the extensive view on the polluter pays principle in the Directive on environmental liability, which states in preamble (2):

> ‘The prevention and remedying of environmental damage should be implemented through the furtherance of the polluter pays principle, as indicated in the Treaty and in line with the principle of sustainable development. The fundamental principle of this Directive should therefore be that an operator whose activity has caused the environmental damage or the imminent threat of such damage is to be held financially liable, in order to induce operators to adopt measures and develop practices to minimise the risks of environmental damage so that their exposure to financial liabilities is reduced.’\(^\text{53}\)

This Directive refers directly to the Water Framework Directive when it concerns water damage (Article 2(b), being referred to as ‘any damage that significantly adversely affects the ecological, chemical and/or quantitative status and/or ecological potential, as defined in Directive 2000/60/EC, of the water concerned, with the exception of adverse effects where Article 4(7) of that Directive applies.’\(^\text{54}\)

From the text in Article 9 WFD and the rest of the Water Framework Directive a broad interpretation of the polluter pays principle however is not evidently clear. Insofar as one looks at the definitions of pollutant and pollution (Article 2(31) and 2(33) WFD) it reflects bringing substances ‘into’ the environment and not damage by extracting resources from the environment.

As no relation is made to just environmental or resource damage as a result of use (not necessarily pollution) of water, one should be prudent when stating that a broad interpretation of the polluter pays principle is indeed intended.

Also Article 9 WFD is worded in a way that makes it unlikely that the user pays principle (and damages resulting from (non-polluting) use) is included in the polluter pays principle, as the provision mentions that account should be taken of the principle of recovery of the costs of water services, including

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\(^{52}\) WATECO Working Group 2.6., p.139. (emphasis added).


\(^{54}\) Ibid. (emphasis added).
environmental and resource costs on the one hand, and in accordance in particular with the polluter pays principle on the other hand. This extra emphasis on the compliance with the polluter pays principle (‘in particular’) makes it clear that as water use should be charged (from users), the polluter pays principle needs to be adhered to, i.e. the extra costs incurred due to pollution may not be retrieved solely from users in general, but a user also being a polluter should be identified and in the water cost retrieval this double cost factor needs to be taken into account. If a broad interpretation of the polluter pays principle were intended, this extra emphasis would not be necessary, nor would the explicit mentioning of environmental and resource costs.

In what way does the polluter pays principle contribute to the foundations of cost recovery then? Over the years, European Court of Justice case law has provided five concrete markers that the Community and Member States can fall back on when questions regarding application of the principle arise. These markers, as set by the European Court of Justice, represent at least part of the normative framework of the polluter pays principle that in itself influences the effectuation of cost recovery for water services directly. Especially in the case law where the European Court of Justice starts its reasoning in direct referral to the polluter pays principle (and not the specific case), one may conclude that the norm underlying the polluter pays principle comes to the surface. The five markers identified (Section 3) need to be taken into account in the application of the principle of recovery of the costs of water services.

From a water-financing point of view the markers implicate that the financing system chosen for water services should be (mostly) based on the profit principle, which is based on the starting point that the polluter and user should pay for damages due to pollution and/or use of water. Adherence to the polluter pays principle (as mentioned in Article 9 WFD) seems less easy to achieve if water financing of services is completely, or almost completely, based on the principle of solidarity. Combinations of the two systems seem to be allowed to a certain extent.

Some, however, believe that it is justifiable to let concerns of affordability prevail over the idea that the polluter should pay. These scholars find it acceptable to rely on cross-subsidies or general taxes for achieving public service obligations such as affordability or universal access to sanitation facilities. However, it is rather an unclear issue whether it is allowed to set aside cost recovery as laid down in the WFD, and also the application of the polluter pays principle, due to/as a result of socio-economic reasons. Arguments against this point of view can be found too. There are arguments that underline the strict adherence to the separation of environmental and social or economic (development) policy. For instance, in the initial phase of the drafting process of the Water Framework Directive, discussion took place on whether areas that qualify for Community assistance under the structural funds could be excluded from cost recovery. In the end, this suggestion did not stand, as ‘a basic charging system should be established in these areas and then, if appropriate, Community assistance can be used to meet these charges.’ This implies that economic/social concerns, like affordability, should be tackled by means of adjusting social policy, not by non-application of the polluter pays principle. Furthermore, Article 192(5) TFEU limits the possibilities to exclude certain groups fully from cost recovery. This provision states that in situations where the measures Member States need to take in order to achieve the environmental objectives and the relating costs are deemed disproportionate, the Council may provide specific provisions as temporary derogations or financial support. Article 192(5) also stipulates that, in allowing such derogations from the environmental objectives, the polluter pays principle needs to be adhered to. One may argue that the fact that costs for measures to reach environmental objectives are too high does not give Member States the excuse to refrain from applying the polluter pays principle, even though Article 175(5) is addressed to the Community and not to the Member States. As the Treaty is higher in hierarchy than the directives or their implemented national legislation, the directives’ content or national legislation is not allowed to deviate from the provisions in the Treaty. Furthermore, this view would be in line with the text of the

Directive. According to the WFD (Article 9(1) last sentence) the Member States may in so doing have regard to the social, environmental and economic effects of the recovery as well as the geographic and climatic conditions of the region or regions affected. In conclusion, in applying cost recovery, some, but no full, allowance of cost recovery is permitted. The same applies to the polluter pays principle explicitly cited in the cost recovery obligation in the WFD: it cannot be completely ignored with reference to social circumstances or affordability arguments.

5. Concluding remarks

The polluter pays principle is seen by some as ‘old environmentalism’ in need of a supplement of innovation, incentives and integration in order to be able to tackle problems before they happen, respecting the physical limits of the earth.58 This paper, however, shows that the polluter pays principle is not old-fashioned and is still a very topical and effective manifestation of the concept of sustainability. It is, and will in the future continue to be, one of the main pillars of sustainability.

As the polluter pays principle developed from a rather vague concept at first, the principle has been further defined during the years and the scope and width of the application of the principle broadened. The European Court of Justice has provided a number of very clear markers that need to be taken into account by the Member States. One might even say that the polluter pays principle is slowly changing in nature: from principle to rule. At least, the discretionary room of Member States has been diminishing as the polluter pays principle is more and more intrinsically being defined – especially by case law.

Case law of the European Court of Justice on the polluter pays principle provides guidelines for burden-sharing and recovery of costs. Thus, the polluter pays principle underpins the obligation of establishing coherent programmes of measures aimed at achieving (environmental) policy aims. Programmatic approaches may be used as instruments for burden-sharing, addressing all sources of pollution and allocating responsibilities to all levels of government, as the polluter pays principle requires. In view of the ECJ case law on the polluter pays principle, however, establishing a plan or programme is more than just a useful policy instrument. In situations where pollution is caused by a multitude of sources, establishing a plan or programme will be necessary to achieve a fair sharing of the burden in line with the polluter pays principle. The guidelines of the polluter pays principle may also be applied in cases of transboundary pollution and underpin the need of cooperation between all levels of government.

We have also shown that the influence of the polluter pays principle on the cost recovery for water services is larger than one might first think. Cost recovery for water services cannot be effectuated without taking account of the limits and prescriptions that the polluter pays principle requires. Firstly, because the provision in the Water Framework Directive itself explicitly requires Member States to take into account this principle in the cost recovery. Secondly, because the manifestation of the polluter pays principle affects the discretionary room that Member States have in the application of cost recovery. User groups defined by Member States for cost recovery not only have to comply with the user pays principle – materialised in Article 9 WFD – but also need to adhere to the polluter pays principle. Users should be charged for water use, where extra costs incurred due to pollution must not be retrieved from users in general, but the user who is also the polluter should be identified. If applied correctly, this way of cost recovery for water services will contribute to sustainable and equitable water use.

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