

**REDUCTION OF ENVIRONMENTAL POLLUTION  
AND POVERTY BY CONTEMPORARY  
EU ENVIRONMENTAL POLICY\***

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**Abstract.** *Governments have a special responsibility to provide corrective action in the presence of negative externalities because only governments can establish and enforce legal frameworks for regulating the use of environmental resources and transfer resources in this way that different social groups have unique possibilities in order to eradicate poverty. Unidirectional negative externalities are particularly anti-poor. Many potentially environmentally hazardous activities are unjustified not only because of their negative economic impact but also for environmental and poverty reasons. The conventional economic approach to problems is to perceive them in terms of market failure and the mis-allocation of resources. Subsequently, the remedial or policy perspective is explicit in terms of the need to maximise social welfare. According to this viewpoint, justification for government intervention lies in the higher sustainable yield on natural assets and in the reduction of poverty.*

**Key Words:** *Negative Externalities, Environmental Pollution, Poverty, Social Welfare, EU Environmental Policy*

INTRODUCTION

The main source of environmental degradation in developing countries is caused by small, almost unnoticeable, damage by many people to one another. Thus, the "invisible poor" often live in almost invisibly but gradually degrading environments.

The purpose of this paper is to show how the structure of property rights in natural resources affects the poor and the environment as well as what links them, and, more specifically, how unclear property rights cause environmental degradation and increased

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poverty. It is suggested that the link between poverty and the environment is usually indirect, and that this link is created by the structure of property rights.

Property rights have not been defined clearly in many countries. Moreover, most common resources are used without taking into account poor or vulnerable population groups. To the detriment of the poor, many developing countries de facto recognize polluter's rights, because of either legislative flaws or enforcement problems. This implies that the private costs of production are lower than its social costs, and thus excessive use of the resource are to be expected.

Property rights are an important poverty issues. Empirical studies have shown that common property resources are disproportionately important in the livelihood of the poor.

Property rights alone are not always sufficient to explain the occurrence of increased poverty or degradation of the environment. Two other factors, lack of information and binding constraints on current consumption by the poor, explain in some cases the conflict between the poor and the environment.

#### 1. EXTERNALITIES, PROPERTY RIGHTS AND POVERTY

One of the main sources of the externality is unclear property rights: if they have not been clearly defined, the resource's use by some will cause externalities to others. One of Coase's [2, 1-44] major contributions to economic theory has been to point out the equivalence between unclear property rights and the existence of externalities. Coase suggested a radically different approach from Pigou's by claiming that "... if there are no transaction costs, there is no need form government intervention to correct for the environmental problems. The most efficient solution is to define clearly the property rights".<sup>1</sup>

Transaction costs would alter the Coase theorem in two ways. First, if transaction costs were high, both the producer of the damage and the victim could be put into the same legal entity. Second, if the administrative costs of organizing actions within the firm were high, for instance if the number of actors suffering from or causing pollution is high, the government would be able to correct the problems more cheaply than a private organization. Although Coase's theorem has been used for advocating the market to deal with environmental problems, he emphasizes that the problem to solve the environmental conflicts is one of choosing the suitable social arrangement for dealing with the harmful effects.

Unclear property rights give rise to unidirectional and reciprocal externalities. Unidirectional negative externalities are the ones that are usual review in literature as pollution, i.e. where the production or consumption of a good affects the well-being of other people. Society can increase the welfare of its citizens - and in particular of the poorest and most vulnerable ones - by ensuring that the costs of unidirectional externalities are internalized. This is in balance with Rio Principle 16: "National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments..." [15].

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<sup>1</sup> Actually, Coase's theorem has the following underlining assumptions: (a) the negotiating game is common knowledge among participants; (b) there are no transaction costs; (c) the game is well-defined or convex; and (d) there are only two parties in the negotiation [8].

Reciprocal externalities are prevalent in open-access resources where nobody effectively controls their use. The consumption of open-access resources is conflictual, i.e. the consumption of the resource by one party can be at the expense of another. In this case, the private costs of using the resource fall below its shadow price and there is an incentive to overuse the resource. A shadow price of a good takes into consideration the externalities of production or consumption. The larger the externality, the greater the difference is between the shadow price and the market price. In the case of reciprocal externalities, everyone would benefit from an optimal use of open-access resources. However, the poor would benefit more particularly because they have less private property than the rich, and thus their consumption is more dependent on open-access resources.

Nevertheless, it is very important that assigning or reallocation initial property rights affects income distribution. If the poor, who are victims of a negative externality, are assigned the property rights over the resource, then both efficiency and income distribution will improve. If the polluter is assigned property rights, efficiency improves but income distribution will suffer or environment will improve and poverty will increase.

## 2. THE EFFECT OF UNIDIRECTIONAL EXTERNALITIES ON POVERTY

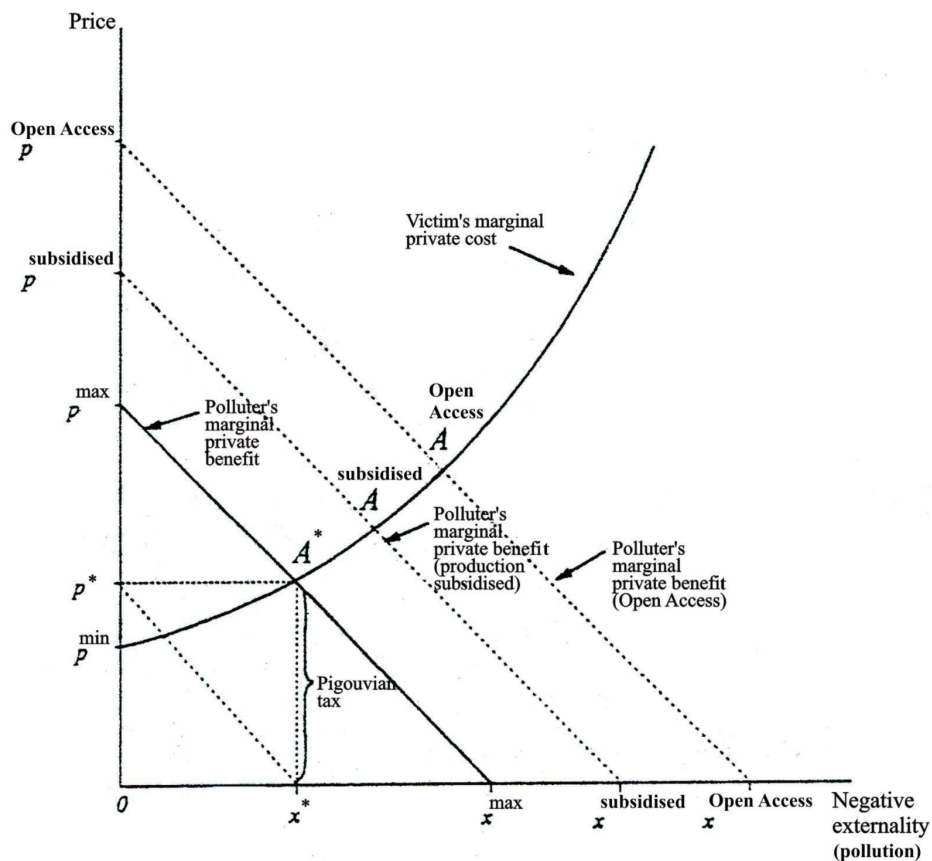
The fundamental environmental problem is that the prices of goods do not reflect their social costs as a result of externalities. To illustrate the case of unidirectional negative externalities, it is first assumed that the producer can use the environmental resource without restrictions. The producer's marginal private benefit from polluting is shown in Figure 1. At  $x^{\max}$  the production is optimized, however, without taking into consideration the environmental effects. The cost to the victims – or the marginal private cost<sup>2</sup> – has also been shown in Figure 1. This is the amount that the victim would be willing to pay to the producer so that he would cut down the externality.

The social optimum  $A^*$  is where the marginal benefit of the polluter and the marginal cost to the victim are equal. The reduction of unidirectional externalities to an optimal level can be achieved by using three different, albeit not necessarily mutually exclusive, approaches. The social optimum  $A^*$  can be reached by:

- establishing and monitoring a standard (the "command and control" solution);
- setting a tax on the externality (the "Pigouvian" solution) or
- establishing or reassigning the property rights on the use of the environmental resource (the "Coasean" solution).

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<sup>2</sup> This can also be called the marginal damage of externality. Note that in Figure 1 the marginal private cost curve has been drawn to start above zero, indicating that even the first amount of pollution would be fairly damaging to the victim. In the opposite case, if the assimilative capacity of the environment were high, a marginal damage curve should be drawn to cross the x-axis to the right of zero.



**Fig. 1** Three approaches to solve the problems caused by unidirectional externalities

Source: [17, 10]

### 2.1. Command and Control Solution

The government can set a standard or a norm,  $x^*$ , above which the polluter cannot produce externality. This is the level of externality that the government sets (i.e. "commands") and enforces or monitors (i.e. "controls"). Government, regional and local authorities use predominantly "command and control" to regulate environmental problems, mainly because it is administratively simple.

A very important drawback of the "command and control" approach is that it often tackles the environmental problem inefficiently. There are three reasons for this. First, the regulator does not know the marginal benefit to the polluter, i.e. the regulator does not know how much the producer would be willing to pay for the right to pollute. Second, the regulator does not know how much the people suffer from pollution, i.e. it is very difficult for the regulator to know the marginal private cost of the negative externality. Finally, even if the regulator knew both the marginal benefit and cost curves, it would have great difficulty monitoring application of the norms.

## 2.2. Pigouvian Tax Solution

Pigou [14] was the first to suggest that the government should make the polluter pay a tax so that his marginal benefit from producing negative externality would be zero at point  $x^*$ . The amount of tax would be the distance between  $p^{\max}$  and  $p^*$  in Figure 1. This tax was not intended for raising fiscal revenue but to internalize the cost of pollution. However, most – if not all – of the taxes raised with an environmental justification are not Pigouvian in nature because they are not based on externality but rather on fiscal considerations.

One problem in the Pigouvian solution is "to devise practical arrangements which will correct defects in one part of them without causing more serious harm in other parts" [2, 27]. Another problem with a (Pigouvian) tax is that it is confined to a tax on the producer for the damage caused. The potentially much lower costs of the prevention of damage are omitted from these calculations.

A particular problem with a Pigouvian solution is that if the tax is not set optimally, it will be distortionary. In addition, fiscal considerations may dominate in the collection of the tax, and the environmental tax is in danger of becoming another among others.

## 2.3. Coasean Property Rights Solution

The property rights of the environment could be defined so that the preferences of the polluter and the victim are taken into consideration. This solution, first suggested by Coase [2], would entail a bargaining process that would lead to point  $A^*$ , i.e. the optimal level of pollution. Tradable emission permits use this approach, in effect, these are a combination of "command and control" and "Coasean" solutions. A quota is allocated for each polluter in such a way that the carrying capacity of the ecosystem is not exceeded. However, after allocation of the quotas<sup>3</sup>, the polluters or the victims could sell and buy parts of the quotas (or permits) from the market to one another, thus making it more expensive for polluters to produce externalities.

Market/based approaches are generally favoured by economists over "command and control" because these approaches require less information. As in the real world information is imperfect, economic instruments have the important advantage of economizing on the need for the government to acquire information on the abatement costs of the producers of a negative externality. This is also an example of the capacity of markets to generally deal efficiently with information problems.

## 2.4. Equivalence of Pigouvian and Coasean Solutions

The equivalence between the Pigouvian and Coasean solutions may also be illustrated here. The government could set a Pigouvian tax of  $p^{\max} - p^*$ , and thus lower the producer's marginal benefit curve (shown as a dashed line from  $x^*$  to  $p^*$ ). Thus, the producer's optimal pollution point would move from  $x^{\max}$  to  $x^*$ . In the Coasean solution the producer would compensate the victims, whereas in the Pigouvian solution the producer would pay the tax to the government. The government could redirect the Pigouvian tax to compensate the victims (although according to welfare theory this should not occur). However, there are no real

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<sup>3</sup> The initial allocation of permits by Environmental Protection Agency (EPA) may be by auction or by free initial allocation of permits on an arbitrary basis.

world examples of this, partly because Pigouvian taxes are not used in practice and partly because of the negative assessment of the application of earmarked taxes.

In theory, the "command and control", "Pigouvian" and "Coasean" solutions are equally good, but in practice any solution is difficult because it is often impossible to know what the marginal benefit and marginal damage costs are. In particular, it is impossible for the authorities to know the marginal benefit function of the polluters because the producers have no incentive to reveal this.

If the amount of negative externality can be measured and monitored, the Coasean solution would be the establishment of pollution markets. The advantage is that the government does not have to know the marginal benefit and damage costs.

### 2.5. Removal of Subsidies to Inputs for Improving the Environment and Poverty

Figure 1 illustrates what happens if the production of the good that provides negative externality is subsidized by  $p^{\text{subsidized}} - p^{\text{max}}$ . Examples of this can be found in agriculture and industries, where the prices of inputs are subsidized. As the subsidy increases the production of the good, the marginal benefit curve of pollution will shift out, and the amount of pollution will increase to  $x^{\text{subsidized}}$ .

If the victims had the property right of the environmental resource, they would be willing to bargain with the producer and accept more pollution with a higher price. The mutually acceptable point would be  $A^{\text{subsidized}}$ . The victims are still worse off because of the subsidy, but obviously not as badly off as if they had no bargaining power.

### 2.6. Polluter-Pays Principle

The "polluter-pays principle" means that the polluter should pay for polluting the environment. It contains implicitly the notion that the victim has the property right of the natural resource. In Figure 1, if the victim of the externality has the property right over the resource (e.g. clean air or water), the producer will pay him compensation in the area between 0,  $p^*$ ,  $A^*$  and  $x^*$  for the right to produce negative externality at  $x^*$ .

The amount that the victim would require as compensation is depicted at the marginal private cost curve, while the amount the polluter is willing to pay is depicted by the producer's marginal benefit curve. Even if the polluter paid in the area 0,  $p^*$ ,  $A^*$  and  $x^*$ , he would still be clearly better off than if he had no possibility to pollute: at  $x^*$  he gains the triangle depicted by  $p^{\text{max}}$ ,  $A^*$  and  $p^*$ . With the compensation, the victim would also gain the triangle depicted by  $p^*$ ,  $A^*$  and  $p^{\text{min}}$ . The area depicted by 0,  $p^{\text{min}}$ ,  $A^*$  and  $x^*$  is the damage that the victim would be compensated for by the polluter.

### 2.7. Relevance to Poverty

As the poor are often victims of unidirectional negative externalities, the internalization of environmental costs would work to their benefit, while encouraging simultaneously sustainable development. From the poverty viewpoint, a well implemented "command and control" scheme can be beneficial in the sense that the living standard of the poor, who are usually the victims of negative unidirectional externalities, can rise because they receive less pollution than without intervention (i.e. less than  $x^{\text{max}}$ ). However, if the scheme is implemented using norms that are much stricter than their marginal willingness to accept compensation (i.e. to left of  $x^*$ ) would

imply, both the victims and the producers would be worse off.<sup>4</sup> The producers would face an unnecessarily strict norm and would not produce at optimal level (and risk bankruptcy), whereas the poor would suffer as a result of the loss of economic efficiency, for instance because of reduced direct and indirect employment opportunities.

In developing countries, the risk in "command and control" is that the norm is set too loose, thus allowing the producer to pollute much more than what would be socially optimal. In this case the government or regional or local authority gives the producer an implicit subsidy because the producer does not have to bear the full cost of its production. It should be noted that most of these increased costs are not born by the government but by the victims themselves, who are mostly from the poorer strata of society.

### 3. COMBINED EFFECT OF RECIPROCAL AND UNIDIRECTIONAL EXTERNALITIES ON POVERTY

Open-access resources are subject to reciprocal externalities. In addition, some open-access resources provide positive unidirectional externalities to their environment. For instance, if forest is an open-access resource there is a tendency to overuse it, which is wasteful in itself. Moreover, the negative unidirectional externalities of cutting down forests are not taken into account either. This combined effect shifts the marginal private benefit curve in Figure 1 further out.

If the forest were private, the owner would cut down forest and cause negative externality up to point  $x^{\max}$  in Figure 1. However, if the forest were open-access, the combined effect is illustrated by point  $x^{\text{Open Access}}$ , which shows the worst case of environmental degradation: the victims of externalities of subsidized overuse of an open-access resource have no power to regulate its use. The community as a whole is losing large amounts of welfare. If the victims had the property rights for the resource, they would be able to bargain with the producers of the externality and come to point  $A^{\text{Open Access}}$  in Figure 1.

The people who lack property rights over natural resources and who suffer from externalities tend to belong to the poorest strata of society. Thus, finding a solution to this both economically and socially unsustainable use of natural resources should be in the interest of any government.

### 4. THE SUSTAINABLE DEVELOPMENT CONCEPT

In the base of contemporary environmental policy is sustainable development principle. The following recommendations on a broad agenda for policies leading to sustainable development [16] can and should be implemented in ways to prioritize the interests of vulnerable groups:

1. Alleviation or eradication of policies that distort resource allocation, particularly environmentally harmful subsidies;
2. Revision of main incentive failures, such as insecure or non-existing property rights or unpriced resources;

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<sup>4</sup> If the poor do not suffer from the pollution or if they are not employees of the producer, they would not suffer in any particular way from too strict environmental standards. However, the producer would suffer in the same way as if there were other restrictions to the efficient production of goods.

3. Step-by-step initiation of other policy instruments:
  - a) revenue generation through, fore example, charges;
  - b) use of revenue to increase knowledge and enforce environmental institutional capacity;
  - c) introduction of economic instruments, such as marketable permits and emission charges;
4. Internalization of environmental costs induced by public projects, sectoral and macroeconomic policies [17, 28].

It should be noted that many environmental problems are caused by the negative externalities of dispersed (non-point) activities, such as agriculture, deforestation or traffic. Thus, it would be difficult to use some of the above policy measures, such as charges or marketable pollution permits, which are better suited for point source pollution.

Sustainable development is a dynamic concept. It is not about society reaching an end state, nor is it about establishing static structures or about identifying fixed qualities of social, economic or political life. It is better to speak about promoting, not achieving, sustainable development. Promoting sustainable development is an on-going process, whose desirable characteristics change over time, across space and location and within different social, political, cultural and historical contexts.

Awareness of the outer limits of the global environment has gone hand in hand with a new awareness of the ways in which the internal organization of society, whether at the local or the international level, shapes the prospects for a sustainable future. Attention has thus to be given to the interlinked spheres of authority and influence that shape the way society is constructed and policies are made (Figure 2).

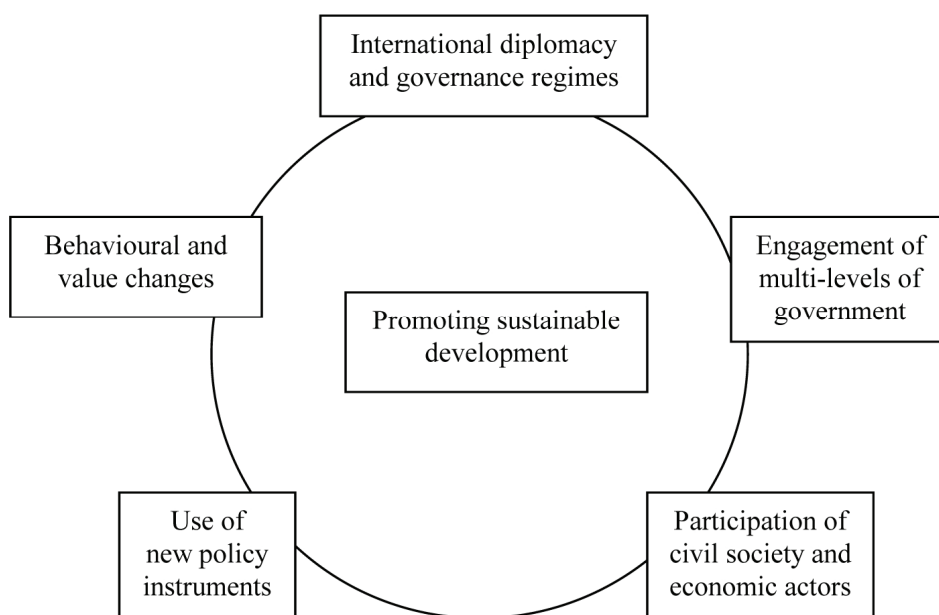


Fig. 2 Promoting sustainable development involves multi-dimensional actions

Source: [1, 214]



5. EUROPEAN GOVERNANCE AND "NEW" ENVIRONMENTAL POLICY INSTRUMENTS

During 1980s, EU tries to find the ways to become innovator and leader in international politics. One part of its attempts is involving development of ambitious plans for governance in areas such as climate change and promotion topics such as sustainable development in international arenas including UN and OECD. Second dimension in this global effort is creation of "new" environmental policy instruments (NEPIs), which emphasize role of information (such as eco-labels) and manipulate with incentives on market (such as eco-taxes). The environment is a good sector in which to assess dynamics as it has apparently witnessed the appearance of many so-called "new" environmental policy instruments (i.e. market based instruments (MBIs) (i.e. eco-taxes and tradable permits), voluntary agreements (VAs), environmental management systems and eco labels). In 2000, the European Commission reported that the number of MBIs had grown "substantially" since 1990 [3, 2]. Voluntary agreements and eco-labels are also becoming much more prevalent [9]. This shift is not, of course, confined to Europe. In a wide ranging assessment, Golub recently concluded that the world is witnessing a "fundamental transition" in the way that environmental policy instruments are deployed across the world [10, xiii].

Table 1. A Typology of Environment Instrument Types

	The state specifies the goal to be achieved	The state does not specify the goals to be achieved
The state specifies how the goal is to be achieved	Regulation (e.g. linking an emission target to the use of a certain type of technology); subsidies	Technology-based regulatory standards (e.g. BAT)
Non-state actors specify how the goal is to be achieved	Most negotiated VAs; some MBIs; some regulation (e.g. EQOs); subsidies	EMSs; most MBIs; some VAs; ecolabels

Source: [13,10]

Table 1 provides a very simple typology of the main instrument types delineated on the basis of who determines the ends and means of policy. This typology usefully reveals both the overlap between the main sub-types. For instance, forms of regulation are found in three of the four cells. Subsidies could be placed in all four cells, but they tend to be found within the two on the left. The definitions of instrument sub-types are also not discrete. For instance, many EMSs could be defined as voluntary agreements, specifically unilateral commitments and public voluntary schemes.

As for EMSs, some systems (e.g. EMAS) involve, or are closely allied to regulation (EMAS scheme is actually implemented via an EU Regulation), whereas others do not (e.g. ISO 14001). Under EMAS, compliance with existing environmental regulation is a condition of certification, but under ISO 14001 it is not. In some countries EMSs have been explicitly linked to the use of other NEPIs (e.g. eco-taxes) which are characterised by a much higher degree of state-led steering.

However, although there are many NEPIs, the overall pattern of change is highly differentiated across sectors and political jurisdictions. Table 2 provides a summary of the distribution of NEPIs across the eight countries and the EU. Rather than populate the cells with numbers, we have decided instead to offer a qualitative weighting. The descriptors indicate the popularity of a given instrument in the jurisdiction in question relative to the other eight jurisdictions, rather than to some absolute baseline. In other words, they allow comparisons to be made between the jurisdictions within a particular column, rather than the other way round.

Table 2. The Distribution of NEPIs in the Nine Jurisdictions, c. 2000

	Ecotaxes	Tradable permits	Voluntary agreements	Eco-labels	Environmental management systems	Regulation
Australia	Low	Low	Low	Low	Medium	Still dominant
Austria	Medium	Low	Low/ Medium	Medium	High	Still dominant
Finland	High	Low	Medium	High	High	Still significant
France	Medium	Low	Low	Low	Low	Still dominant
Germany	Medium	Low	High	High	High	Still dominant
Ireland	Low	Low	Low/ Medium	Low	Medium	Still dominant
Netherlands	High	Medium/ High	High	Low	Medium	Still significant
The UK	Medium	High	Medium	Low	Low/Medium	Still significant
The EU	Low	Low/ Medium	Medium	Medium	n/a	Still dominant

Source: [13, 14]

A few things are immediately apparent. The first is that all nine jurisdictions have adopted at least one form of NEPI. To that extent, the diversity of instruments used has indeed grown significantly since 1970. Today, even the least innovative and environmentally ambitious countries (in our sample – Ireland and Australia) have a number of NEPIs in place, although regulation remains important in all nine jurisdictions. Second, although NEPIs are generally more popular, they are relatively more popular in some jurisdictions (e.g. the Netherlands, Germany and Finland) than others (e.g. Austria, Australia and Ireland). There are, as we shall see, also important cross sectoral variations in the use of environmental instruments. Third, no country is enthusiastic about all the instruments; even the most innovative countries have shunned certain types of new instrument (e.g. tradable permits in Germany and Finland; ecolabels in the Netherlands; eco-taxes in the EU). Furthermore, some countries are enthusiastic about a particular type of NEPI (e.g. tradable permits in the UK; EMSs in Australia) but fairly uninterested in the rest. In short, just as there were enduring differences in the way that (traditional) regulation was applied in the past [18], there appear to be significant differences in the way that NEPIs are being utilised today.

The EU's role in facilitating and/or retarding the shift to NEPIs (and hence governance) is rather more difficult to decipher [12, 555-574]. After all, a cursory inspection of Table 2 reveals that EU membership is generally associated with higher levels of NEPI adoption. However, while EU member states appear to be more enthusiastic adopters than Australia (a broadly comparable non-member), there are still member states with a similarly low uptake (e.g. Ireland). And if we look in more detail at the EU's promotion and adoption of NEPIs, its performance is strikingly at odds with its widespread reputation for innovation in environmental affairs. In short, regulation remains the mainstay of EU environmental policy in spite of substantial NEPI use at the national level.

Apart from the many questions raised about their transparency and legitimacy, VAs are difficult to negotiate across borders especially when well established large industry associations are absent (i.e. it is significant that the first EU VAs target the chemical and car industries and not retailing). Meanwhile, several states (initially the UK and more recently Ireland and Spain) have sought consistently to block the Commission's ability to innovate with environmental taxation, which unlike most other aspects of EU environmental policy, still falls under the unanimity rule. Two recent political breakthroughs should nonetheless be mentioned: the 2003 agreement to set minimum rates of tax on certain fuel oils, and the EU's emissions trading regime which becomes fully operational in 2005. These recent innovations notwithstanding, the Commission's reliance on regulation is so deep seated that it even has to implement many of its NEPIs (such as the eco-labelling, emissions trading and EMAS schemes) using regulation. Regulation is also being used to implement some of the outcomes of the EU's VA on car emission standards (the "Auto-Oil" programme). So, far from being an unambiguous case of "new" governance [11, 38-65], the EU's experience with NEPIs demonstrates that is actually quite strongly constrained by member state (i.e. government) preferences. To conclude, EU membership is associated with higher levels of NEPI adoption and use, but this probably has more to do with the fact that EU member states share similar domestic drivers of NEPI adoption and many (relatively ambitious) EU environmental policy goals, than any concerted leadership shown by the EU institutions in relation to the use of NEPIs.

Furthermore, as far as environment policy instruments are concerned, the renewed EU Strategy for Sustainable Development calls on the member states to take further steps to shift taxation from labour to resource and energy consumption and to pollution. By 2008, the European Commission will submit a roadmap for the reform of environmentally harmful and unsustainable subsidies. It is confirmed that relative to the Lisbon Strategy, the two strategies complement each other. However, the EU Sustainable Development Strategy represents the overall framework, within which the Lisbon Strategy will serve as a driving force of a more dynamic economy.

## CONCLUSION

Governments, along with regional and local authorities, must play a central role in the reduction of poverty and the improvement of the environment. Governments establish and enforce the legal frameworks regulating activities within their territories and, in addition, they can transfer resources between different social groups and thus affect income distribution. As the poor are predominantly victims of environmental degradation, policies leading to sustainable development would also be in their interests.

An appropriate government policy may simply be to set the rules and monitor them by providing and enforcing the necessary economic, environmental and social legislation, and then leave their execution to the markets (e.g. the allocation or redefinition of the property rights of natural resources).

Subsidies to agricultural inputs or energy are mainly harmful to the environment. The removal of such subsidies has in many cases helped to improve the environment and raise the living standard of the poor. Concurrently, the government can save funds to be used in other ways for the benefit of the poor.

The main conclusion is that sound environmental policies would also alleviate poverty. However, the argument can be reversed: if a constant public eye is kept on the conditions of the poorest in the community, environmental resources would be protected and their sustainable use would be better promoted. Pro-poor economic policies are not desirable in themselves, but they tend to be good for the environment.

Moreover, in spite of the political rhetoric about finding less direct forms of state involvement, we still find the state being drawn inexorably into the detailed design, adoption and implementation of all environmental policy tools, however soft and supposedly unintrusive. This can include critically important administrative activities such as negotiating the precise content of VAs, determining ecolabelling criteria, allocating tradable permits, undertaking economic valuation studies to set pollution taxes, ensuring fair play, monitoring compliance and penalising defectors. Performing these tasks in turn requires huge amounts of bureaucratic time.

To conclude, EU membership is associated with higher levels of NEPI adoption and use, but this probably has more to do with the fact that EU member states has similar domestic NEPI adoption procedures and many EU environmental policy goals, than any concerted leadership shown by the EU institutions in relation to the use of NEPIs.

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## **SMANJENJE ZAGAĐENJA ŽIVOTNE SREDINE I SIROMAŠTVA SAVREMENOM POLITIKOM ŽIVOTNE SREDINE EU**

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*Vlade imaju posebnu odgovornost za korektivne akcije u prisustvu negativnih eksternalija zato što jedino vlade mogu uspostaviti i sprovesti pravne okvire za regulisanje korišćenja resursa životne sredine i transfer resursa na takav način da različite društvene grupe imaju jednake mogućnosti radi iskorenjivanja siromaštva. Jednosmerne negativne eksternalije su naročito protiv siromašnih. Mnoge potencijalno ekološki štetne aktivnosti su neopravdane ne samo zbog njihovog negativnog ekonomskog uticaja već takođe sa stanovišta životne sredine i siromaštva. Konvencionalni ekonomski pristup problemima je da im pristupa u smislu tržišnog nedostatka i pogrešne alokacije resursa. Zatim, dodatna ili politička perspektiva je eksplicitno u smislu potrebe za maksimizacijom društvenog blagostanja. Prema tom gledištu, opravdanje državne intervencije leži u većem održivom prinosu prirodne imovine i u smanjenju siromaštva.*

*Ključne reči: negativne eksternalije, zagađenje životne sredine, siromaštvo, društveno blagostanje, politika zaštite životne sredine EU*