

RESEARCH ARTICLE	The Polluter Pays Principle and Its Most Important Applications in Urban Legislation
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Abstract

The Polluter Pays Principle, also known as the principle of polluter responsibility, is one of the most prominent general legal principles aimed at effectively achieving sustainable development. It holds that whoever causes pollution must bear its costs. This principle is characterized by its economic dimension through the imposition of fees as a cost for polluting the environment. Since the urban environment is constantly exposed to pollution due to activities that harm or may harm it, any person engaging in such activities must bear the expenses of all measures aimed at reducing pollution or restoring places to their original state..

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Introduction:

The Polluter Pays Principle is one of the fundamental principles upon which environmental responsibility is based in both international and domestic law. It refers to the inclusion of environmental resource costs in the price of goods or services offered in the market. Disposing of waste—whether into the air, water, or soil—is considered a type of use of these materials or elements in production processes. Any use of these resources without compensation inevitably leads to their depletion and waste. Thus, the free use of environmental resources is one of the main causes of environmental degradation.

The concept of the Polluter Pays Principle has evolved and crystallized through many revisions and re-evaluations, particularly by the Organization for Economic Cooperation and Development (OECD) in Europe, as a recommendation under the Paris Agreement dated December 14, 1965. This aimed to contribute to economic development, considering environmental protection an integral part of development. It mandates that public authorities collect from the polluter the expenses of measures aimed at keeping the environment in an acceptable state. The principle was also solidified in the Rio de Janeiro Declaration of 1992, specifically in Principle 16, which stated that countries should seek to promote the internalization of environmental protection costs through economic instruments.

It is worth noting that the Polluter Pays Principle has been codified in many international public law agreements, such as the 1994 Sofia Convention on the sustainable use of the Rhine River, the 1991 Convention on the Protection of the Alps, the 1990 London Convention on combating hydrocarbon pollution, and the 1972 London Convention on the prevention of marine pollution by dumping waste and other materials.

On the domestic level, the French legislator was a pioneer in adopting this principle within Europe by incorporating it into many of its domestic laws, most notably the Bernier Law (Loi Bernier) on enhancing environmental protection. In Algeria, the legislator did not explicitly reference this principle until the enactment of Law No. 03-10 on environmental protection within the framework of sustainable development. Article 3 of that law states that under



the Polluter Pays Principle, any person who causes or may cause environmental harm through their activities must bear the costs of preventive measures, pollution reduction, and restoration of sites to their original condition.

Based on the idea that whoever causes environmental harm must bear responsibility, and considering the urban environment to be one of the most human-connected and vulnerable to pollution, it became essential to enshrine the Polluter Pays Principle for its protection. This would involve applying an environmental tax system to any activity with a negative impact on it, in addition to other means that are more regulatory than financial.

This raises the core issue of this study: To what extent is the Polluter Pays Principle effectively enshrined in urban legislation?

To answer this question, we will primarily adopt descriptive and analytical methods to explore this principle and identify its main applications in environmental laws and urban planning legislation by analyzing the legal texts.

To address this study and achieve its intended goals, we have divided the research into two parts. The first part focuses on identifying the means of implementing the Polluter Pays Principle in environmental legislation, while the second explores the principle's applications in urban legislation through urban planning and related laws.

Section One: Implementing the Polluter Pays Principle in Environmental Legislation

By analyzing Article 3 of the previously mentioned Law on Environmental Protection in the Framework of Sustainable Development and other environmental laws, it becomes clear that the legislator adopted several mechanisms to activate the Polluter Pays Principle. These can take the form of fiscal tools (first subsection) or regulatory tools (second subsection).

Subsection One: Fiscal Tools to Implement the Polluter Pays Principle

These fiscal tools may take the form of environmental taxation (first), or exemptions and environmental incentives (second).

First: Environmental Taxation

Among the most important economic tools for addressing environmental problems, environmental taxes were created to internalize environmental costs and provide economic incentives for individuals to promote environmentally sustainable activities. This is a national policy tool aimed at correcting market failures by imposing pollution taxes or fees.

Environmental taxation includes all fees and taxes imposed by the state on legal or natural persons who pollute the environment. It also includes exemptions and tax incentives granted to those who use environmentally friendly technologies, such as paper mills employing water treatment systems for recycling.

01 - Environmental Taxes:

Environmental taxes are imposed by the state on polluters who harm the environment through various economic activities, whether through polluting products or environmentally harmful production methods. These taxes are a mandatory and final payment made without compensation to the public treasury, with the aim of protecting the environment. These are considered compulsory contributions to public expenses, with environmental protection falling under public burdens. The rate of these taxes should be based on the quantity and severity of harmful emissions.

02 - Environmental Fees:

Environmental fees are the most commonly used tool in environmental protection. They are monetary payments made by citizens in exchange for services provided by official entities such as municipalities. They are considered a type of tax levied for services rendered by the state using specific environmental safety techniques—such as fees for sanitation or waste management.



Environmental fees are also defined as monetary payments made by the polluter for using the environment, based on marginal damage estimates, and are generally paid to the state. Their goal is to encourage producers and consumers to change their behavior for the benefit of the environment.

The Algerian legislator has enacted various fees related to environmentally connected activities, including fees on polluting or hazardous activities, solid waste management fees, and fees for polluting liquid discharges such as industrial wastewater.

It is important to note that although both taxes and fees are paid compulsorily, taxes are obligatory from the moment the taxable asset arises, while fees are initially optional, as the individual may choose whether to request the state's service. Moreover, fees are paid in return for services, while taxes are paid without direct return. Additionally, the primary aim of fees is to fund the public treasury, whereas taxes serve broader economic, social, and political goals.

Second: Tax Incentives and Exemptions

Not all fiscal tools are taxes and fees—some take the form of incentives and exemptions that promote environmentally friendly industries and economic activities. These often result in voluntary compliance and adoption of green technologies, unlike taxes and fees, which may lead to evasion and fraud.

Tax incentives often aim to encourage the establishment of sectors dedicated to environmental protection—such as waste management and sanitation—or to promote the purchase of equipment to reduce pollution. Environmentally focused tax incentives are tax policies designed to achieve environmental goals by directing investments into areas that help reduce environmental harm, thereby encouraging individuals and enterprises to behave more positively toward the environment.

The Algerian legislator has adopted such policies. For example, Article 76 of the Environmental Protection Law in the Framework of Sustainable Development reduces the taxable profit in exchange for engaging in environmentally beneficial activities.

Tax Exemptions:

Tax exemption is the state treasury's waiver of its right to collect taxes from certain taxpayers in return for engaging in specific activities or operating under particular conditions—such as the nature or location of the activity. It refers to the non-imposition of taxes on certain amounts due. Exemptions can be either:

01 - Permanent Exemption:

Permanent exemption refers to full exemption from taxes or fees throughout the lifetime of an economic project. It is granted to activities in specific regions, such as deserts or remote areas (e.g., shadow zones), or to particular economic sectors to promote them—for example, permanent exemption for institutions affiliated with approved associations for disabled individuals.

02 - Temporary Exemption:

Temporary exemption is the most common and applied form. It is limited to a specific time frame during the economic project's early years, usually between 3 to 10 years. For instance, a company may be exempted from taxes for its first five years to encourage its establishment and indirectly assist in producing environmentally friendly goods.

These tools are among the most effective and efficient for environmental protection. Environmental taxation acts as a deterrent through punitive measures for non-payment and also provides state revenue. Additionally, exemptions and reductions guide investments toward non-polluting industries, encouraging green and sustainable activities.

These tools are among the most successful and efficient means for environmental protection. Environmental taxation is a deterrent method through the punitive measures that result from non-payment by the taxpayer. It is also considered an economic tool that contributes to providing financial revenues for the state and can also be used as a



tool to direct investments toward non-polluting activities such as exemptions, reductions, or shifting toward environmentally friendly ("non-polluting") activities.

By examining the structure of environmental taxation in Algeria, we find that it is mostly financial and deterrent, and rarely incentivizing.

Subsection Two: Regulatory Means for Implementing the Polluter Pays Principle

Regulatory means are those that are not directly financial and are borne by the person responsible for the pollution. They mainly consist of restoring places and their environments to their original state before pollution. This system was stipulated by the Algerian legislator through Article 03 of the Environmental Protection Law of 2003, linking it to the Polluter Pays Principle, and it was also reinforced through other principles such as the principle of non-degradation of natural resources and the principle of substitution.

It is worth noting that the system of restoration to the original state finds its legal basis in the Algerian Civil Code. Its application in civil liability is common, whereby the injured party may request the judge to assess compensation in cash or demand the restoration of the situation to what it was. The system of restoration of the environment to its original state derives its importance from the necessity to halt or remove the damage for the future and to return the natural elements that have been degraded to their original condition or at least to a condition close to it.

The objective of restoring the environment to its original state is both to compensate for the damage and to eliminate the pollution. However, in practice, it is impossible to fully restore places to their original state. For example, a section of a public road paved with asphalt concrete cannot be returned to its original condition, even when using the same materials it was paved with.

Section Two: Implementation of the Polluter Pays Principle in Urban Planning Laws and Related Legislation The Algerian legislator has worked to establish the Polluter Pays Principle in the urban field through a set of laws related to this field. These laws oblige the polluter to pay fees (First Clause) or bear the costs of anti-pollution measures (Second Clause).

Clause One: Environmental Fees and Costs Related to Urban Planning Rules

Environmental fees alone are not sufficient to protect urban environmental health. Therefore, anyone who causes damage to the urban environment must bear the costs of repairing or reducing the damage.

First: Environmental Fees Related to Urban Planning Rules

These are the fees established in favor of municipalities, and they apply specifically to urbanization contracts and all licenses and certificates related to them, which must be subject to this fee upon issuance. Examples include: building permits, demolition permits, subdivision permits, conformity certificates, partition certificates, urbanization certificates, and urbanizability certificates.

Article 77 of the Finance Law of 2018 set the fee on urbanization contracts and all related licenses and certificates. The amounts of these fees are determined for each category of document, depending on the built area, the commercial value of the building, or the number of its parts. The goal behind establishing such fees, which are linked to the urban environment, is to regulate and control urban activity.

Moreover, construction activities result in damage to the urban environment, such as inert waste generated by these works. These fees, which go to the benefit of the municipality, contribute to the expenses of waste collection.

Second: Costs Related to Urban Planning Rules

A person practicing an urban activity who causes or may cause harm to the environment or one of its elements bears the costs of pollution prevention or reduction measures, such as restoring places to their original state.



For example, the municipality imposes fees on anyone wishing to connect their home to the potable water network, requiring prior authorization from its services in exchange for paying fees, in addition to the applicant's commitment to restore the condition of the public road to its original state. This procedure falls under what is called the Road Network Permit, which was stipulated in Executive Decree No. 04-392.

Article 04 of the decree considers the Road Network Permit an administrative contract by which any individual or collective use or occupation of parts of public road property is authorized. These roads form part of the urban environment surrounding humans and may pose a danger to their security and safety if exploited in a random and unregulated manner.

Based on this, the legislator, through Article 06 of the same Executive Decree, required that the Road Network Permit be granted according to environmental obligations, such as repairing damage to public property and restoring the place to its original state upon the expiration of the permit. Article 07 of the same Executive Decree also stipulates that this permit may include any other special obligation, particularly those related to security conditions for the public interest.

If the specifications of the tourism development plan or various approved building and urban planning documents by the competent authority are not respected, the administration warns the violator to comply with the instructions within a specified period. If the violator does not comply and proceeds with construction works, the matter is referred to the competent judicial authority to stop the works, demolish what was built, and order the restoration of the place to its original state.

The aim of this procedure is to protect the urban environment by combating buildings that are not legally authorized, stopping them, demolishing them, and restoring places to their original condition.

Clause Two: Environmental Fees in the Field of Classified Facilities

Due to the great importance that the Polluter Pays Principle has acquired in the field of environmental management, the Algerian legislator did not suffice with recognizing it as one of the principles introduced by the Environmental Protection Law within the Framework of Sustainable Development of 2003. Instead, he incorporated it into most sectoral policies related to the environmental field.

The Algerian legislator established this principle to protect natural environmental elements such as water, air, soil, and the industrial environment, including classified facilities due to their impact on the environment.

For the first time, a fee was introduced for licenses related to the exploitation of new classified establishments of the first, second, and third categories, subject respectively to the authorization of the minister, the wali (governor), and the president of the municipal people's assembly. This fee is paid to the tax collector in exchange for a receipt proving payment.

Referring to the aforementioned Finance Law of 1992, we find that the Algerian legislator imposed a base fee for classified establishments subject to declaration of about 3,000 DZD, unlike those subject to prior authorization, for which the fee is about 30,000 DZD. For establishments employing no more than two persons, the base fee was reduced to 750 DZD.

The legislator also imposed incentive fees on industrial facilities to discourage the storage of industrial waste. According to the 2002 Finance Law mentioned earlier, the value of this fee was increased to 10,500 DZD per ton of stored special and/or hazardous industrial waste.

Section Three: Fees Related to Municipal Waste and Associated Costs

Due to the significant impact of household waste on the environment in general and on urban environmental health in particular—and given that municipalities responsible for waste management lacked the capacity to develop treatment methods—household waste was often disposed of in natural environments or in random dumps on the outskirts of public roads.



The 2000 Finance Law, previously mentioned, embodied the "polluter pays" principle to address these issues by organizing several ecological fees. These fees vary depending on the type of premises: residential, professional, commercial, artisanal use, or land prepared for camping and trailers, as well as industrial or similar premises.

As for Law No. 01-19 related to waste management, monitoring, and removal, it also embodied the "polluter pays" principle by assigning the cost of collection, sorting, storage, removal, and even monitoring to the waste producer or the party whose activity caused the waste.

Section Four: Fees in Urban Works Contracts

In applying the "polluter pays" principle to public contracts—especially those related to urban construction—the legislator obligated the contractor working with the administration to mitigate pollution effects. This is achieved by restoring the sites provided by the contracting authority to their original state after service execution, including cleaning, sanitization, and restoration operations.

If the contractor fails to comply with the aforementioned measures within a period ranging from 8 to 15 days from the date of notification, financial penalties are imposed, in addition to other punitive sanctions, while the contracting authority takes necessary actions to protect the environment.

Conclusion:

This study has led to several findings and recommendations.

Findings:

- The "polluter pays" principle was adopted internationally immediately after the 1992 Rio de Janeiro Conference. However, its adoption in Algerian legislation came relatively late in comparison to other legal systems, as it was only explicitly incorporated in Environmental Protection Law No. 03-10 related to sustainable development.
- The "polluter pays" principle is one of the most important environmental principles recognized both internationally and domestically. Algerian legislators embodied this through environmental laws aimed at general environmental protection, and through urban planning and construction laws aimed at safeguarding the urban environment.
- The "polluter pays" principle provides dual protection: it protects the environment from pollution and mitigates potential damage, while also ensuring compensation for parties harmed by pollution. The principle plays both a preventive role—by avoiding damage—and a remedial role—by requiring the polluter to bear the costs of restoring the environment to its original state.

Recommendations:

- Amend Article 06 of Executive Decree No. 04-392 on road network permits by adding a requirement to pay a guarantee for restoring the road to its original condition, rather than relying solely on a written commitment.
- Incorporate general environmental principles, especially the "polluter pays" principle, into both environmental and urban planning legislations due to their preventive and remedial benefits.
- Expand the environmental tax base. It should not be limited to municipal waste fees but should also include inert waste and taxes on other pollution types, such as noise and sound pollution.
- The application of the "polluter pays" principle in urban areas cannot be effectively implemented without coordination among various state entities—such as local governments and environmental departments—



through joint efforts in collecting environmental taxes, protecting the environment from alterations to its natural state, and overseeing restoration processes.

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