Polluter Pays Principle – fitness check of its application to the environment- submission from the European Environmental Bureau

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The EEB is the largest network of environmental citizens’ organisations in Europe. It currently consists of 180 member organisations in 38 countries, including a growing number of networks, and representing some 30 million individual members and supporters.

The polluter pays principle (PPP), while recognised as a key principle underlying EU Environmental policy has not been well adhered and implemented. We agree with the European commission that a fitness check whether the PPP has been effective in the various environmental policies and legal texts at the EU and national level is necessary now.

The PPP in its implementation should ensure the full internalisation of negative environmental externalities, make the polluter pay, reduce and prevent pollution and provide a legal recourse for justice and compensation for environmental and health damages. The polluter pays principle should be complementing the precautionary principle and preventive action.

However, in the present implementation of PPP is restricted to taxation and market-based instruments (almost exclusively targeting energy and transport, while overlooking pollution and resource use) and does not provide any recourse to compensation for environmental, health and climate damage.

Air pollution

In 2021 the EEA estimated the societal cost of air pollution to be at least € 277 billion up to € 433 billion. However, studies have shown that taxes on pollution cover far less (44% in the case of air pollution, according to one estimate) than the cost of the damage caused. At the EU level, total environment related tax revenue amounted to 2.2% of the EU GDP, while the costs of air pollution and GHG alone are at about 5 % of the EU GDP. Large combustion plants pollute more than what is technically feasible because the Industrial emissions directive (IED) prescribes very wide range of emission limit values leading to extensive adoption of least expensive emission controls and limits.

Water pollution

Studies have estimated the damage to ecosystems and human health from water pollution from Nitrogen and Phosphorous alone is estimated to be € 22 billion while the costs paid by polluter is about € 900 million as derived from revenues on account of poor water quality. The estimates of the damage cost of other water pollutants, like pharmaceuticals, microplastics, PFA’s and mercury run into hundreds of billions of euros. Despite the possibility to recover the environmental and resource costs of water services under the Water Framework Directive (WFD), it's been largely restricted to residential water services while water tariffs to industry and agriculture sectors have been very low or free of cost. The ecological and chemical status of water bodies reported don't reflect the localised pollution leading to a situation that unless a water body is reduced in its status, the pollution caused does not trigger a liability under the Environmental liability directive (ELD).
Diffuse pollution

The use of synthetic inputs in agriculture is a key factor contributing to diffuse pollution of air, soil and water. Intensive livestock rearing is hardly regulated today other than large scale pig and poultry farms under the IED. The prescribed emission limits on these large-scale farms are so lax that intensive pig and poultry rearing farms have been able to continue with ‘business-as-usual’. The proposal for the review of the IED has included medium scale farms into the directive there are many weak links in its proposed implementation and aquaculture remains excluded.

The discharges from wastewater treatment plants still represent a main reason for surface water bodies to fail good chemical status and were reported to contaminate over 13000 water bodies with polycyclic aromatic hydrocarbons (PAHs), mercury, cadmium, lead and nickel. With a lack of effective pollution control at source and weak extended polluter responsibility regimes the urban wastewater treatment plants directive has no provision for ensuring the polluter shares the cost of many recalcitrant pollutants.

Chemicals

The polluters pay principle is included in the EU REACH legislation (article 1.3), however its effective implementation has been lacking in ensuring that companies are held accountable for their pollution and that the public is protected from potential harm caused by the use of hazardous chemicals. In the REACH context, one of the reasons for this lack of application could be explained to the fact that legislation often focuses on trying to connect a certain substance to a certain company or person, which is almost impossible due to the lack of information as well as widespread presence of chemicals in the environment, society and our bodies. As a result, it is difficult to trace the source of chemicals, making it challenging to hold companies accountable under the principle of "duty of care" and "extended producer liability".

Enforcement under REACH legislation is still very weak, with high levels of non-compliance contributing to a scenario of massive chemical pollution without accountability. For example, studies show that chemical pollution has crossed a "planetary boundary", pushing the Earth outside of its stable environment. To address this, the polluters pay principle should be integrated into all relevant proposals for reform in the chemicals policy field, with the introduction of punitive fees for using and introducing hazardous substances on the market as well as non-compliant chemical safety dossiers. The revenue from these fees could be used to cover costs related to enforcement, pollution prevention, (human and environmental) monitoring and remediation of pollution as well as establishing and funding an EU-wide substitution and green innovation centre that supports industry, particularly SMEs, in reducing the use and manufacture of toxic chemicals.

Exemptions preventing the implementation of polluter pays principle

Many EU directives contain exemptions or derogations that prevent the full internalisation of negative environmental externalities. Article 8(4) of the ELD exempts the polluter from most of the damages caused to the environment if the pollution is permitted through an operating permit. Article 15(4) of the IED provide a cost benefit assessment for derogating from stricter emission limits. Article 4 of the WFD exempts the water bodies from achieving good status and to extend the good status date even beyond 2027. The misuse of WFD exemptions have led to the situation that two thirds of Europe's surface water bodies and one quarter of groundwater bodies are not in good status.
Just Transition Fund and environmental rehabilitation costs

An analysis of the Just Transition Fund (JTF) plans indicates that hundreds of millions of euros are being approved for site rehabilitation which should have been the liability of the polluter. The plans do not include sufficient safeguards, as they recommend using JTF resources to pay for land restoration without any analysis – or commitment to analysis – of the possibility, applicability and extent of PPP.

Environmental responsibilities and liabilities of operators are at risk of being paid by public finances as closure aid. A case in point is the lignite state aid from Germany. More than half of the 1.75 billion Euro meant for the Lusatian coal mines are accounted for mine remediation, which should be paid by the mining company LEAG.

Extended Producer Responsibility (EPR) and circular economy

EPR is a policy instrument, which applies the ‘polluter pays principle’ by placing the responsibility of a product’s entire life cycle – from designing environment friendly and low-impact products to managing their end-of-life – onto the producers. However, an assessment of current EPR practices for the product streams of packaging, WEEE, batteries and textiles shows that EPR and ecomodulation of fees are currently focused almost exclusively on waste management (primarily recycling), instead of driving waste prevention (reusability, durability, reparability). Further, EPR fees and ecomodulation hardly take into account the social and environmental costs associated with the products, thus failing to adequately implement the polluter pays principles for these products streams.

These issues stem from the current cost coverage of EPR systems which is based on the limited concept of “necessary costs” (disciplined in art. 8 and 8a of the Waste Framework Directive) and seeks to minimize the costs (by essentially only including the costs incurred to improve recycling and collection). In the pursuit of cost minimization, the fee potentially becomes too low to effectively implement the PPP principle and encourage producers to design products, which have high environmental performance regarding waste prevention and reusability.

The untapped potential of environmental taxation

Despite its clear potential to apply the polluter pays principle while raising revenues to create fiscal space for green investment and broader tax shifts (e.g. from labour to resource-use and pollution), environmental taxation remains a largely unexploited, as concrete green fiscal action is still very limited and uncoordinated across the EU.

Currently, less than 6% of all the taxes collected yearly by Member States come from environmental taxes (covering all uses of natural resources, pollution and GHGs emissions). In the EU, revenues from environmental taxes as percentage of GDP have stagnated over the last ten years and have been on a downward trend as a percentage of total government revenues. Moreover, they also declined in absolute terms in 2020 (~ 9.1 % compared with 2019.)

As confirmed also by the Commission study "Green taxation and other economic instruments" (2021), figures show clearly that in EU the polluter pays principle is not being fully applied across all pollutants, in all Member States and across all sectors of the economy. A decisive expansion of environmental taxation and other economic instruments in the EU (including by targeting resource use) is therefore urgently needed to enable a more effective implementation of this principle.
The general failure of proper external cost internalisation

Another shortcoming in the implementation of the polluter pays principle is the lack of proper methods to account for the full damage costs of pollution from certain activities versus the benefits of pollution prevention at source. This shortcoming is more evident in the application of cost benefit assessment (CBA), often used within the policy making of the European Commission to assess the impacts (economic) of various policy options. The CBA is also applied when Member States implement certain standards at national level, however there is no harmonised application across the EU. CBA has the potential to drive more action on pollution prevention at source when better cost valuation methods are used. We provide two Illustrations of this shortcoming in the context of Industrial policy and air quality:

**Illustration 1: Use of low-cost valuation methods while determining the costs and benefits.**

The assessment to test viability of Best Available Techniques (BAT) depends upon the cost benefit analysis to judge proportionality of benefits (to public) versus costs to the operator, while deciding on the need for higher pollution abatement. Under article 15(4) of the IED, CBA is used to derogate from stricter emission limits which were formulated after considering the economic and technical viability (BAT) of the pollution abatement technologies. The analysis should be based on well-established data and any assumptions should be as transparent and as objective as possible. The costs (of pollution abatement) used for assessing the disproportionality in the CBA should be provided by third parties in official quotes and shared by the operator of the installation.

The EEA publishes results for health costs from air pollution by using two cost valuation methods - the Value of Life Year Lost (VOLY) or the Value of Statistical Life (VSL). Using one or the other yields a factor 3 difference (at least).

The VOLY method disregards the impact on older people, if they die earlier due to air pollution this is considered as “good for the economy” and hence not accounted as a real cost. For the VSL method (willingness to pay) the externalised costs do not discriminate against elderly people. It is a politically relevant decision as to which method to use (or not to use) for accounting the negative externalities of pollution - the damages to society from the polluting activity and the compensation paid to reflect the real cost of those damages.

The OECD already suggested the EU to adapt its method to VSL and rather align the price level to what is applied by the US EPA ($7.15 million /statistical life). Applying this method would give a more honest and clearer picture of the scale of the bill the polluter should be accountable for. The VOLY approach is often used by companies and even listed in the guidelines published by member states to justify the derogations from complying with the emission limits under the IED.

However, the directive (IED) does not enforce the use of higher cost valuation methods (VSL) despite recommendations from the OECD leading to widespread adoption of lower pollution abatement techniques across the EU.

**Illustration 2: EU ETS – persistence of free allocations and inadequate carbon prices.**

The EU ETS system is often claimed by its proponents as implementing the polluter pays principle while its at best an incomplete implementation. The existence of free allocations is a reflection that the polluter does not pay for the climate damage caused. In 2021, the costs paid by the polluter for CO2...
pollution under the EU ETS is about €25 billion while the revenue foregone from free allocations is €29 billion. Of the revenues raised, 28% were not spent on climate action defeating the purpose of EU ETS.

For those polluters who pay a price for CO2 pollution, the EUA (GHG pollution allowance) is at best less than 100 € / tonne since its inception. This is in stark contrast to the levels for the carbon debt have been estimated by DG MOVE- 104€/t CO2 central estimate as from 2030 and 283€/tCO2 (central estimate) as from 2040. A more precautionary (high estimate) level is evaluated at 254€ (from 2030) and 524€ (from 2040). This shows a major gap of what the polluter is actually paying compared to the real cost of pollution. More information has been provided by the EEB in the General Block Exemption Regulation context, which provides an exemption to internalisation of external costs)

**Conclusion**

The above examples are not complete and only reflect the views of the European Environmental Bureau in some of the policy areas we engage with. We would also like to see this fitness check as the first step in developing recommendations for better implementation of polluter pays principle in the environmental acquis of the EU and further steps to review the legislations will be initiated following the completion of this fitness check.