**Special Report** 

# The Polluter Pays Principle:

Inconsistent application across EU environmental policies and actions





# **Contents**

ı	Paragraph
Executive summary	I-V
Introduction	01-14
The origins of the Polluter Pays Principle	03-05
The PPP in the EU	06-14
Policy framework	06-09
EU funding	10-14
Audit scope and approach	15-18
Observations	19-68
The PPP underlies EU environmental legislation	19-41
The PPP applies to the most polluting installations but the cost of residual pollution to society remains high	20-25
Waste legislation reflects the PPP, but does not ensure polluters cover the full cost of pollution	26-31
Polluters do not bear the full costs of water pollution	32-38
No overall EU legislative framework to protect against soil pollution	39-41
The Commission's action plan to improve the operation of the ELD did not achieve the expected results	42-62
Following the evaluation of the ELD, the Commission adopted an action plate to address the gaps identified	n 43-48
Key ELD concepts remain undefined	49-55
Some Member States require industrial companies to insure against environmental risks	56-62
The EU has financed environmental remediation projects	63-68
EU funds have been used to clean orphan pollution	65-66
EU funds were also used when national authorities failed to enforce environmental legislation and make the polluters pay	67
Lack of financial security to cover environmental liability increases the risk that costs are borne by taxpayers	68

### **Conclusions and recommendations**

69-74

### Annex

Annex I – Sectors covered by the Industrial Emissions Directive

**Acronyms and abbreviations** 

Glossary

**Replies of the Commission** 

**Audit team** 

**Timeline** 

# **Executive summary**

The Polluter Pays Principle is one of the key principles underlying the European Union's (EU) environmental policy. Application of the principle means that polluters bear the costs of their pollution including the cost of measures taken to prevent, control and remedy pollution and the costs it imposes on society. By applying the principle, polluters are incentivised to avoid environmental damage and are held responsible for the pollution that they cause. It is also the polluter, and not the taxpayer, who covers the cost of remediation.

This report focuses on whether the principle was well applied in four EU environmental policy areas: industrial pollution, waste, water, and soil. We assessed whether the Commission's actions related to the Environmental Liability Directive for regulating environmental damage from economic activity brought results. Finally, we assessed whether the Commission and Member States protected the EU budget from being used to bear expenses that polluters should have paid. Over the 2014-2020 period, the planned EU budget on cohesion policy and the LIFE Programme amounts to about €29 billion on projects aimed specifically at protecting the environment. We examined EU spending and action over the 2014-2020 Multiannual Financial Framework.

- We decided to audit this subject because:
- Pollution represents a significant cost for society and is a key concern for EU citizens;
- The Polluter Pays Principle is a key tool for delivering Europe's environmental objectives in an efficient and fair manner;
- This report identifies opportunities for improved integration of the principle into future environmental legislation and in EU funding of environmental remediation projects; and
- Its conclusions and recommendations are also relevant to the Parliament and Council scrutiny of all environmental legislation and the Commission's evaluation of the Environmental Liability Directive, to be finalised in 2023.

Overall, we found that the Polluter Pays Principle is reflected and applied to varying degrees in the different EU environmental policies and its coverage and application was incomplete. With regards to environmental liability, the Commission's actions to support Member States' implementation of the Environmental Liability Directive had not solved key weaknesses, such as unclear key concepts and definitions and the absence of financial security in cases of insolvency. The EU budget is sometimes used to fund clean-up actions, that should under the Polluter Pays Principle have been borne by polluters.

### V We recommend the Commission to:

- assess the scope for strengthening the integration of the Polluter Pays Principle into environmental legislation;
- o consider reinforcing the application of the Environmental Liability Directive; and
- protect EU funds from being used to finance projects that should be funded by the polluter.

# Introduction

**01** The European Union's (EU) environmental policy aims to ensure that all EU citizens live in a healthy environment where natural resources are managed sustainably, and biodiversity is protected<sup>1</sup>. In recent decades, emissions of pollutants into the air, water and soil have fallen significantly<sup>2</sup>, yet pollution and environmental damage remain a significant challenge.

O2 Across the EU, 26 % of groundwater bodies are yet to achieve "good chemical status", and around 60 % of surface waters (rivers, lakes, and transitional and coastal waters) are not in good chemical and ecological status<sup>3</sup>. There are some 2.8 million sites in the EU that are potentially contaminated, primarily by industrial activity and waste disposal<sup>4</sup>. Air pollution, the greatest environmental health risk in the EU, also damages vegetation and ecosystems<sup>5</sup>.

### The origins of the Polluter Pays Principle

O3 The Organisation for Economic Co-operation and Development (OECD) first introduced the Polluter Pays Principle (PPP) in 1972<sup>6</sup>. It stated that the polluter should bear the expenses of carrying out the pollution prevention and control measures introduced by public authorities, to ensure that the environment is in an acceptable state. Policymakers can use this principle to curb pollution and restore the environment. By applying it, polluters are incentivised to avoid environmental damage and are held responsible for the pollution that they cause. It is also the polluter, and not the taxpayer, who covers the costs created by pollution. In economic terms, this constitutes the "internalisation" of "negative environmental externalities". When the

<sup>&</sup>lt;sup>1</sup> Based on the vision presented in the General Union Environment Action Programme to 2020.

General Union Environment Action Programme to 2020, "Living well, within the limits of our planet", p. 14.

<sup>&</sup>lt;sup>3</sup> EEA, EEA 2018 water assessment.

<sup>&</sup>lt;sup>4</sup> EEA, Contamination from local sources, 2020.

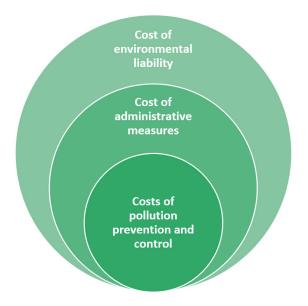
<sup>&</sup>lt;sup>5</sup> EEA, Air quality in Europe, 2019.

<sup>&</sup>lt;sup>6</sup> OECD, Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies, 2020.

costs of pollution are charged to the polluter, the price of goods and services increases to include these costs. Consumer preference for lower prices will thus be an incentive for producers to market less polluting products<sup>7</sup>.

O4 Since 1972, the scope of the PPP has gradually increased (*Figure 1*)<sup>8</sup>. The principle initially focused solely on pollution prevention and control costs but was later extended to include the costs of the measures authorities took to deal with pollutant emissions. A further extension of the principle covered environmental liability: polluters should pay for the environmental damage they caused, irrespective of whether the pollution giving rise to the damage was below legal limits (termed "allowable residual pollution") or accidental<sup>9</sup>.

Figure 1 - Expansion of the PPP



Source: ECA.

05 In 1992, the United Nations Declaration on Environment and Development (commonly known as the "Rio Declaration" 10) included the PPP as one of the 27 guiding principles for future sustainable development.

<sup>&</sup>lt;sup>7</sup> Jans, Jan H. and Vedder, Hans H. B., European Environmental Law, 2008.

<sup>&</sup>lt;sup>8</sup> OECD, The Polluter-Pays Principle, Analyses and Recommendations, 1992.

OECD, Recommendation of the Council concerning the Application of the Polluter-Pays Principle to Accidental Pollution, 1989.

<sup>&</sup>lt;sup>10</sup> UNCED, Rio Declaration on Environment and Development, 1992.

### The PPP in the EU

### **Policy framework**

Treaty on the Functioning of the European Union (TFEU)<sup>11</sup> states that: "Union policy on the environment (...) shall be based on the precautionary principle and 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". EU legislators are not bound by the principle when enacting EU policy in areas other than that of the environment, even when they might have a significant environmental impact, e.g. transport, fisheries, or agriculture policy.

O7 The European Commission is responsible for drafting proposals for environmental legislation that shall be based on the PPP, while Member States are responsible for transposing, applying and enforcing EU environmental directives and regulations. EU and national legislators have various instruments to apply the PPP, as shown in *Figure 2*.

11 Treaty on the Functioning of the European Union.

### Figure 2 – Instruments for implementing of the PPP



#### Command and control law

- Licensing procedures
- Bans
- Emission limit values
- · Administrative orders & sanctions

aims to cut pollution at source by setting environmental standards, mandating pollution control and monitoring systems to reduce risks, prohibiting certain activities and capping the emissions of certain pollutants. The PPP is applied because the polluter is required to bear the compliance costs.



#### **Market-based instruments**

- · Subsidies/feed-in tariffs
- Taxes, charges, fees
- Tradable permits and quotas
- Liability rules

are intended to achieve environmental objectives in a flexible manner. Financial incentives or disincentives are used to influence polluters' behaviour by incorporating environmental costs and benefits into the budgets of households and enterprises. Not all market-based instruments can be adopted at EU level. In particular, taxation is primarily a Member State competence.



#### Voluntary approaches

- · Voluntary agreements
- Environmental management systems (e.g. ISO 14001)
- Labelling (e.g. eco-label, energy label)

can encourage less polluting products or companies. For example, consumers may favour products bearing the "Ecolabel", which gives producers the incentive to manufacture less polluting products.

Source: ECA, adapted from the European Commission's "Principle of EU Environmental Law, The Polluter Pays Principle".

Over the past decades, the EU has adopted a broad range of environmental legislation. Policies cover environmental issues, such as biodiversity, forestry, soil and land use, water and air. Other policies specifically target sources of pollution, such as chemicals, industrial pollution, and waste. Relevant pieces of environmental legislation for the application of the PPP include:

- The Industrial Emissions Directive 2010/75/EU (IED) sets emission limits based on a permit system for around 52 000 large industrial installations in the EU. The IED is based on an integrated approach so that the permits must take into account the whole environmental performance of the plant, covering e.g. pollutant emissions, the use of raw materials, energy efficiency and restoration of the site upon closure.
- The Waste Framework Directive 2008/98/EC covers waste management. Other legal instruments address specific issues and types of waste, such as packaging waste, single-use plastic, electrical and electronic equipment, batteries and accumulators, end-of-life vehicles, mining waste, landfill and waste shipment.

- The Water Framework Directive 2000/60/EC (WFD) covers water policy, together with associated Directives including the Urban Waste Water Treatment Directive 91/271/EEC and the Drinking Water Directive (EU) 2020/2184, as well as the Floods Directive 2007/60/EC. Other sector-specific legislation cover pollution affecting water, such as the Pesticides Directive 2009/128/EC or the Nitrates Directive 91/676/EEC.
- The Environmental Liability Directive 2004/35/EC (ELD) sets the EU framework for environmental liability. Environmental liability means that economic operators who damage the environment are responsible to pay for its remediation, and thus incentivised to avoid damage. Under the ELD, when significant environmental damage to land, water, and biodiversity results from an economic activity that is considered risky (as detailed in Annex III of the ELD), the operator responsible is required to undertake all necessary remediation measures at its own expense. For economic activities that are not considered environmentally risky, including farming, the ELD requires operators to remedy the damage to biodiversity only when they are at fault or negligent.
- Companies storing dangerous chemicals are also subject to the Seveso Directive 2012/18/EU, which aims at the prevention of major accidents involving dangerous substances.
- The Birds Directive 2009/147/EC and the Habitats Directive 92/43/EEC, termed the "Nature Directives", form the backbone of EU biodiversity policy. The Nature Directives require Member States to protect natural habitats. Member States can use EU funding to do so. The Habitats Directive explicitly states that the PPP has limited application for nature conservation. The ELD covers significant damage to protected species and habitats.

O9 There is no single EU framework legislation dealing with soil pollution. However, around 35 EU legislative, strategic policy and funding instruments were identified as being potentially relevant to soil protection<sup>12</sup>.

-

<sup>&</sup>lt;sup>12</sup> Ecologic Institute, Updated Inventory and Assessment of Soil Protection Policy Instruments in EU Member States, 2017.

### **EU funding**

- **10** Pollution generates significant costs for EU citizens. There is no comprehensive assessment of the full cost of pollution to society. One recent study done for the Commission estimated that the failure to meet the requirements of EU environmental legislation amounts to around €55 billion per year in costs and foregone benefits <sup>13</sup>.
- 11 A significant share of the EU budget is dedicated to achieving the EU's climate change and environment-related objectives. During the 2014-2020 period, the EU committed to spend at least 20 % of its total budget on climate action. The EU integrates environmental objectives in many of its funding programmes. For example, the Commission classified €66 billion of common agricultural policy and €1 billion of fishery spending during 2014-2020 as benefitting biodiversity, although a recent report shows that this figure was overestimated <sup>14</sup>.
- 12 The EU budget supports projects for the cleaning-up of polluted sites and environmental protection principally through the cohesion policy funds (i.e. the European Regional Development Fund and the Cohesion Fund), under the broad theme of "Environment and Resource Efficiency", and the LIFE programme (LIFE). These support the cost of the infrastructure needed for wastewater treatment and waste management in certain Member States, and measures to monitor the state of the environment and develop green infrastructure <sup>15</sup>.
- 13 LIFE<sup>16</sup> is an EU programme addressing environment and climate change. For the period 2014-2020, the Multiannual Financial Framework made €2.6 billion available for the environment sub-programme under LIFE.
- **14** Over the 2014-2020 period, the planned EU budget on cohesion policy and LIFE amounts to about €29 billion on projects aimed specifically at protecting the environment (*Figure 3*).

-

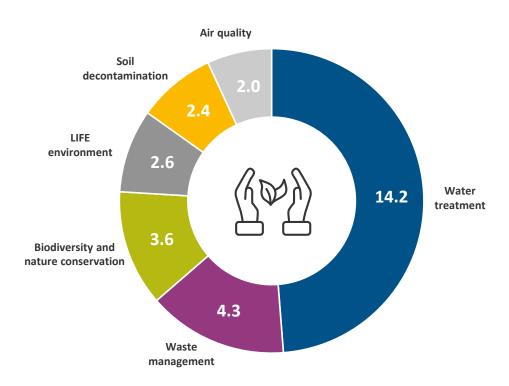
<sup>&</sup>lt;sup>13</sup> The costs of not implementing EU environmental law, Final Report, 2019.

Special report 13/2020 - Biodiversity on farmland: CAP contribution has not halted the decline.

<sup>&</sup>lt;sup>15</sup> Commission's information on Environment and Resource Efficiency under Cohesion Policy.

<sup>&</sup>lt;sup>16</sup> Regulation (EU) 1293/2013.

Figure 3 – Overview of the EU funds under the Cohesion policy and the LIFE environment sub-programme set aside for environmental projects (2014-2020, in billion euros)



*Source:* ECA, based on data extracted in April 2021 from the European Commission's database of planned EU spending under EU Structural and Investment Funds and the LIFE sub-programme for the environment.

# Audit scope and approach

25 Pollution represents a significant cost for society and is a key concern for EU citizens. The Polluter Pays Principle is a key tool for delivering Europe's environmental objectives in an efficient and fair manner. In previous reports, we found cases where the PPP was not applied 17. However, we have not previously examined the PPP per se. This report identifies opportunities for improved integration of the PPP into future environmental legislation and in EU funding of environmental remediation projects. Its conclusions and recommendations are relevant to Parliament and Council for the scrutiny of all environmental legislation and the Commission's evaluation of the ELD, which is to be finalised in 2023.

16 We examined the EU policy framework for the PPP. We focused on whether:

- the principle was well applied in four EU environmental policy areas: industrial pollution, waste, water, and soil;
- the Commission's actions related to the ELD brought results;
- the Commission and Member States protected the EU budget from being used to bear expenses that polluters should have paid.

17 We examined EU spending and action over the 2014-2020 Multiannual Financial Framework. We did not focus the audit on the energy and climate sector, and on air pollution, as we covered these topics in several other reports<sup>18</sup>. We excluded from our scope Member States' environmental taxes.

<sup>&</sup>lt;sup>17</sup> See for example ECA's special reports 19/2018, 22/2016, 23/2015, 02/2015, 04/2014, 23/2012, 20/2012.

See for example special report 23/2018 - Air pollution: Our health still insufficiently protected, special report 18/2020 - The EU's Emissions Trading System: free allocation of allowances needed better targeting, and special report XX/2021 on CAP and Climate.

# 18 In our audit work, we:

- examined Commission's and relevant agencies' reports and other actions related to the application of the PPP in EU policies;
- obtained explanations from national authorities responsible for implementing the ELD in Italy, Poland and Portugal. We selected these Member States based on the number of cases reported under the ELD and taking into account geographical balance;
- o scrutinised 42 environmental remediation projects. We did so by selecting projects dedicated to restoring the environment worth €180 million from the Cohesion Policy Funds and LIFE, in Italy, Poland and Portugal, over the 2014-2020 period. We selected these projects as they were funding decontamination work caused by human-made pollution.

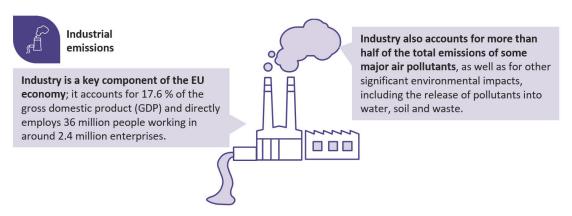
# **Observations**

### The PPP underlies EU environmental legislation

19 We examined how the EU integrated the PPP in key legislative areas, such as the IED for industrial pollution, the Waste Framework Directive for waste, the Water Framework Directive for water pollution, and various directives and regulations related to soil pollution. We checked whether they contained provisions to apply the PPP and to which extent the polluters were responsible to pay for their pollution.

The PPP applies to the most polluting installations but the cost of residual pollution to society remains high

Figure 4 – Industrial pollution in brief



Source: Eurostat and EEA.

20 The IED covers 33 industrial sectors (*Annex I*). In some industrial sectors, it covers all installations. In others, it covers larger installations (for example, power stations with a total rated thermal input above 50 megawatts).

21 Installations covered need a permit to operate, setting specific rules and emission limits based on "Best Available Techniques (BAT)" conclusions). The associated BAT reference documents provide technical solutions to limit pollution while keeping industrial installations economically viable. The Commission regularly reviews and updates BAT conclusions, all existing installations concerned must comply with them after a transition period of four years, and new installations must be immediately compliant. Member State authorities inspect installations covered by the IED, penalize non-compliant ones and close them in the most serious cases.

The Commission published, in 2020, an evaluation of the IED<sup>19</sup>, which showed that the cost of damage of all IED installations' emissions to air had fallen by around 50 % between 2010 and 2017. The Commission estimated the costs and benefits of the IED for certain sectors: for example, in the iron and steel sector, compliance with the IED costs around €90 million per year, while preventing pollution saves €932 million per year<sup>20</sup>. In its Communication on the European Green Deal<sup>21</sup>, the Commission announced that it will propose a revision of the EU measures addressing pollution from large industrial installations.

23 The owners of the installations have to bear the cost of complying with the conditions of their IED permits. This includes taking measures to keep emissions within legal limits, meaning that they internalise the cost of pollution prevention and control. Public funds can however support actions going beyond existing standards<sup>22</sup>. If installations cause significant environmental damage, they are subject to the ELD (paragraphs 42-62), meaning that they have to pay for remediation. A majority (17) of Member States do not make installations liable when the environmental damage resulted from emissions allowed under their permit<sup>23</sup>, and the installation was not at fault or negligent.

24 The IED covers the most polluting industrial installations as detailed in paragraph 20. The IED does not require installations to meet the cost to society of the impact of residual pollution. In 2014, the European Environment Agency (EEA) estimated that the cost to society of residual air pollution damage caused by 14 000 major industrial facilities over the 2008-2012 period was between €329 billion and €1 053 billion<sup>24</sup>.

European Commission, Evaluation of the Industrial Emissions Directive (IED), SWD(2020) 181 final.

European Commission, Guidelines on State aid for environmental protection and energy 2014-2020, OJ C 200, 2014.

-

<sup>&</sup>lt;sup>20</sup> Ricardo Energy & Environment, Ex-post assessment of costs and benefits from implementing BAT under the IED, 2018.

<sup>&</sup>lt;sup>21</sup> The European Green Deal.

<sup>&</sup>lt;sup>23</sup> Article 8.4(a) and (b) of Directive 2004/35/EC.

<sup>&</sup>lt;sup>24</sup> EEA, Costs of air pollution from European industrial facilities 2008–2012, 2014.

25 Among the 42 environmental remediation projects we examined, we found a project aimed at dealing with the pollution generated by a large steel and iron plant, that did not comply with the IED (*Box 1*).

#### Box 1

# Non-compliance with the IED led to significant pollution: the case of a large steel plant in Italy

In 2005, the Supreme Court of Italy ruled that a company owning a large steel and iron plant was responsible for air pollution, dumping of hazardous materials, and emission of particles. In 2010, the municipality where the plant is located claimed that cleaning up the environmental damage would cost €2 billion and took legal action to obtain compensation. In 2011, the Court of Justice of the European Union (CJEU) found that Italy had not complied with the IED. In 2015, the company was taken over by the State. In 2017, criminal proceedings started by the judiciary against the previous owners of the plant resulted in an out of court settlement exceeding €1 billion. The money recovered is being used by the Italian State for decontamination activities. In 2019, an appeal court in Italy awarded compensation to the municipality but the company could not pay for the damage.

A €375 000 EU-funded project was aimed at identifying and dealing with pollution and concerned another municipality located near the steel and iron plant. The project consisted in an environmental analysis and a risk assessment of an agricultural area of almost 6 000 hectares. The project identified a severe industrial contamination posing significant risks to health.

Waste legislation reflects the PPP, but does not ensure polluters cover the full cost of pollution

Figure 5 – Waste in brief



#### Waste

Between 2010 and 2018, the EU generated, across all sectors, 5.2 % more waste, amounting to 2 317 million tonnes, including 101 million tonnes of hazardous waste.

The EU generated 5.2 tonnes of waste per inhabitant in 2018.



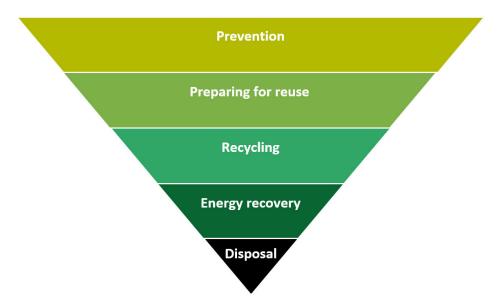
The EU sent 38.7 % of waste to landfill and recycled 38.1 % in 2018

Construction accounted for 36 % of total waste, followed by mining and quarrying (26 %), manufacturing (11 %), waste and water services (10 %) and households (8 %).

Source: All data from Eurostat.

26 Waste is a source of pollution to air, water and soil. The EU's waste legislative framework seeks to apply a "waste hierarchy" (Figure 6) to reduce waste and use unavoidable waste as a resource.

Figure 6 – The waste hierarchy



Source: Waste Framework Directive.

27 The Directive requires Member States to meet binding targets<sup>25</sup>. For example, 55 % of municipal waste should be prepared for reuse or recycling by 2025 (increasing to 60 % by 2030 and 65 % by 2035, with no more than 10 % being sent to landfill).

28 The Waste Framework Directive requires that "in accordance with the PPP, the costs of waste management, including for the necessary infrastructure and its operation, shall be borne by the original waste producer or by the current or previous waste holders". Member States decide whether the costs of waste management are to be borne by the end user (e.g. the consumer disposing of the waste) or partly or wholly by the producer of the product that has become waste. This is termed "Extended Producer Responsibility" (EPR). EPR is not the only way to implement the PPP. For example, the Plastic Bags Directive requires Member States to take measures, such as national reduction targets and/or economic instruments (e.g. fees, taxes).

29 EPR schemes make producers responsible for managing their products once they become waste. The price paid by producers and consumers hence reflects the cost of

<sup>25</sup> The main binding targets for various waste streams are summarised in the ECA's review No 4: EU action to tackle the issue of plastic waste.

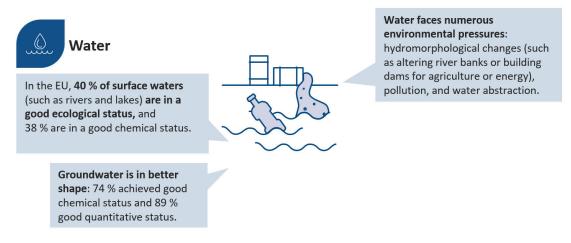
waste management, thereby reducing the cost to public authorities and taxpayers. They also incentivise producers to develop greener products that avoid unnecessary waste. EPR schemes are mandatory for certain waste streams, such as electrical and electronic waste, batteries, accumulators and vehicles, and will be required for all packaging waste, single-use plastic and fishing gear by 2024.

30 Charges levied on citizens or businesses should be proportional to the waste generated and take account of environmental damage caused. One study on the financing of waste management<sup>26</sup> stated that, "the evidence suggests that environmental externalities are only to a limited extent internalised in the user charges paid by households".

**31** The EU budget planned to contribute, mainly through cohesion policy, €4.3 billion over the 2014-2020 period to finance waste management infrastructure for waste collection, sorting and treatment.

### Polluters do not bear the full costs of water pollution

Figure 7 – Water in brief



Source: All data from the EEA's 2018 European waters assessment.

32 The Water Framework Directive establishes a common framework for protecting all types of water in the EU and preventing further deterioration of water quality. It sets objectives for surface and groundwater bodies.

Study on investment needs in the waste sector and on the financing of municipal waste management in Member States, 2019.

33 The OECD estimated<sup>27</sup> that Member States already spend around €100 billion per year on water supply and sanitation and that they will need (except Germany) to increase that amount by over 25 % to meet the objectives of EU legislation on wastewater treatment and drinking water. This does not include investments needed to renew existing infrastructure or meet the objectives of the Water Framework Directive and the Floods Directive.

34 Article 9 of the Water Framework Directive requires Member States to "take account of the principle of recovery of the costs of water services, including environmental and resource costs, [...], and in accordance in particular with the polluter pays principle". Member States are required to ensure that the contribution from the industrial, agricultural and household sectors to the recovery of costs for water services is adequate relative to their water use. *Figure 8* below shows water use by economic sector.

Electricity, gas, Mining and Agriculture, steam, and air quarrying, forestry and conditioning manufacturing Households Service industry fishing supply and construction 3 % 18 % 58 %

Figure 8 – Water use by economic sector in Europe, 2017

Source: ECA, based on EEA data for European Environment Agency member and cooperating countries.

When setting their water pricing policy, Member States can take into account the social, environmental and economic effects of cost recovery. Therefore, they have discretion in deciding who should pay, how much, and for what service. Ruling C-525/12 by the CJEU confirmed that Member States do not necessarily have to apply the cost-recovery concept to all water use.

-

<sup>&</sup>lt;sup>27</sup> OECD, Financing Water Supply, Sanitation and Flood Protection, 2020.

36 In the EU, users pay on average for around 70 % of the cost of providing water services (through water tariffs), while the public purse finances the remaining 30 %, although there are considerable differences between regions and Member States<sup>28</sup>. EU households usually pay for most of the cost of water supply and sanitation services<sup>29</sup>, even though they consume only 10 % of water, as shown in *Figure 8*. Agriculture, the sector exerting most pressures on renewable freshwater resources<sup>30</sup>, contributes the least. A 2011 study estimated that in France additional expenses paid by households due to agricultural pollution were up to €494 per household per year for the most affected localities<sup>31</sup>.

37 The Commission identified in 2019<sup>32</sup> that Member States needed to make further progress integrating environmental and resource costs into water pricing. While progress had been made in addressing specific pollutants, for many enterprises the price of water does not cover the full costs imposed by the pollutants they release into the water.

38 The cost recovery principle is difficult to apply to pollution originating from diffuse sources, for example from agriculture, where it is difficult to identify the polluters. The agricultural sector is often not charged for wastewater treatment, because the majority of the water it uses is not discharged into sewage (and therefore the water is not treated). In the EU, diffuse agricultural pollution from nitrates and pesticides is the main cause of the failure of groundwater to achieve good chemical status. Nitrate pollution poses a great risk for the future of groundwater bodies, as experts have shown<sup>33</sup> that vast quantities of nitrates are currently stored in the rocky layers between the soil and the groundwater body. As nitrates slowly travel through the rock, it can take a century or more for the pollutants to reach the groundwater

-

<sup>&</sup>lt;sup>28</sup> OECD, Financing Water Supply, Sanitation and Flood Protection, 2020.

<sup>&</sup>lt;sup>29</sup> Fitness Check of the WFD, SWD(2019) 439 final, p. 64.

<sup>&</sup>lt;sup>30</sup> EEA, Use of freshwater resources in Europe, 2020.

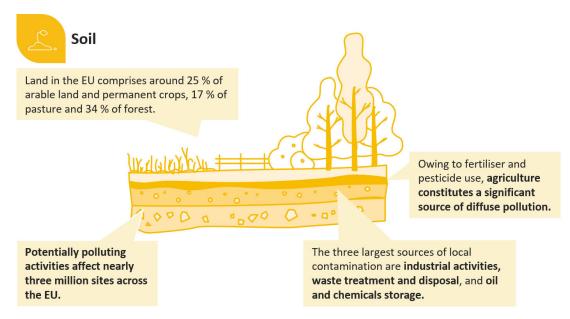
Assessing water pollution costs of farming in France, République Française, Ministère de l'écologie, Department for the Economics, Assessment and Integration of Sustainable Development, Studies and documents n. 52, 2011.

<sup>&</sup>lt;sup>32</sup> Fitness Check of the WFD, SWD(2019) 439 final.

Ascott, M.J., Gooddy, D.C., Wang, L. et al., Global patterns of nitrate storage in the vadose zone, 2017.

body, which delays the impact of changes in agricultural practices on groundwater quality.

No overall EU legislative framework to protect against soil pollution Figure 9 – Soil pollution in brief



*Source:* EEA Signals 2019, JRC, Status of local soil contamination in Europe, Eionet National Reference Centre Soil.

39 Various EU directives and regulations contribute to preventing and mitigating soil pollution, covering the sectors that most pressure soil, such as industry and agriculture (for example paragraphs 20-25 and 38). In 2006, the Commission proposed a "Soil Framework Directive" which covered the prevention of soil contamination and degradation and the identification, registration and remediation of contaminated sites. The European Parliament adopted a positive opinion on the proposal, but not the Council. The Commission withdrew the proposal in May 2014.

40 There are no common EU-wide objectives related to soil pollution and remediating contaminated sites. A study<sup>34</sup> funded by the Commission showed that some Member States had very comprehensive national legislation in place, while others lacked coordinated action on soil protection.

Ecologic Institute, Updated Inventory and Assessment of Soil Protection Policy Instruments in EU Member States, 2017.

**41** Decontamination of polluted soils is expensive: the Commission estimated in 2006 the total cost of cleaning-up contaminated soil in the EU at €119 billion<sup>35</sup>. Public budgets, including EU funds, fund more than 42 % of remediation activities<sup>36</sup>: many polluting activities took place a long time ago so that the risk is higher that polluters either no longer exist, cannot be identified, or are insolvent. Moreover, the PPP is difficult to apply in cases of diffuse soil contamination because of the inherent difficulty to attribute liability to specific polluters.

# The Commission's action plan to improve the operation of the ELD did not achieve the expected results

42 We reviewed the 2016 ELD evaluation and assessed whether the actions the Commission took in response to it have since addressed the identified gaps.

# Following the evaluation of the ELD, the Commission adopted an action plan to address the gaps identified

## **43** The Directive required:

- Member States to submit to the Commission, by April 2013 data on all cases of environmental damage remedied under the ELD over the 2007-2013 period, then in 2022 and every five years thereafter; and
- The Commission to report to the European Parliament and the Council, in 2014 then in 2023 and on a five-year cycle thereafter.

44 Member States reported 1 230 cases treated under the ELD during the 2007-2013 period<sup>37</sup>. As shown in *Figure 10*, the number of cases varied significantly between Member States, with two countries, Hungary and Poland, reporting more than 85 % of the total number of cases. A Commission Staff Working Document concluded that the

\_

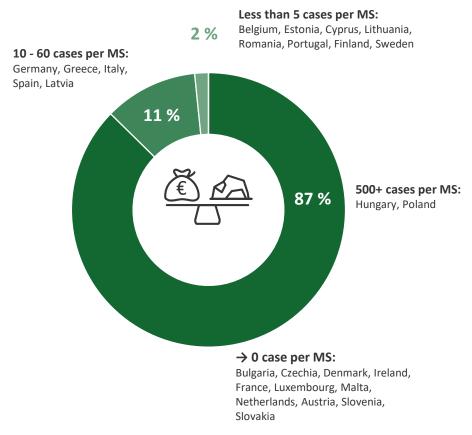
Estimate for the EU-25 (including the United Kingdom, excluding Bulgaria, Croatia and Romania), Impact Assessment of the Thematic Strategy on Soil Protection, SEC(2006) 620.

<sup>&</sup>lt;sup>36</sup> JRC, Status of local soil contamination in Europe, 2018.

<sup>&</sup>lt;sup>37</sup> SWD/2016/0121 final, p. 21.

main reason for these major differences was the uneven application of the ELD across Member States<sup>38</sup>.

Figure 10 – ELD cases reported by EU Member States for the 2007- 2013 period



Source: ECA, based on Commission's 2016 evaluation.

45 The Commission's 2016 evaluation of the ELD concluded that it remained relevant and that Member States progressed in achieving its objectives. However, it found that some issues, either from a policy design or implementation standpoint, hindered the efficiency and effectiveness of the liability regime:

- o lack of consistent and comparable data on ELD implementation;
- o poor stakeholder awareness of the regime;
- o unclear key concepts and definitions;
- scope limitations due to exceptions and defences; and

<sup>&</sup>lt;sup>38</sup> SWD/2016/0121 final, p. 37 and 70.

o absence of financial security in cases of insolvency.

46 Based on this evaluation, the Commission, in consultation with experts from Member States, adopted a Multi-Annual ELD Work Programme (MAWP) for the period 2017-2020<sup>39</sup> to address the gaps identified. In 2020, the Commission approved a new work programme with actions for the 2021-2024 period <sup>40</sup>.

47 One of the actions addressed data reporting. The evaluation concluded that the quality of the data reported was poor and prevented the Commission from reaching sound conclusions regarding the implementation of the ELD. The evaluation stated that, while some Member States submitted detailed and well-structured data, others did not provide all the information needed for a complete assessment.

48 To improve the coherence and quality of the data, the Commission in 2017 developed an ELD Information System. However, the system is not operational. The Commission plans to encourage the use of the information system, by holding discussions with Member States on how to organise data collection at national level. Given the differences in legal systems there is no assurance that this new system will support a consistent analysis across the EU.

### **Key ELD concepts remain undefined**

49 The ELD defines three types of environmental damage that fall within its scope, i.e. to protected species and natural habitats, water, and land<sup>41</sup>. The Directive applies when such "environmental damage" is considered "significant". The Directive does not specify criteria for assessing damage or determining the significance threshold for damage to water and land.

50 The Commission's 2016 evaluation suggested that the absence of clarity and uniform application of key concepts of the ELD ("environmental damage" and "significance") had hampered the Directive's objective of achieving a high level of environmental protection in the EU<sup>42</sup>.

<sup>&</sup>lt;sup>39</sup> Multi-Annual ELD Work Programme (MAWP) for the period 2017-2020.

<sup>&</sup>lt;sup>40</sup> Multi-Annual ELD Rolling Work Programme (MARWP) for the period 2021-2024.

<sup>&</sup>lt;sup>41</sup> Article 2 of Directive 2004/35/EC.

<sup>42</sup> SWD/2016/0121 final, p. 60.

51 The interpretation of what constitutes significant environmental damage and is therefore subject to the PPP under the Directive, varies significantly between Member States. An event that triggers application of the ELD in one Member State may not trigger it in another. In the specific case of the definition of what constitutes "land damage", the ELD only refers to damage that creates a significant riskto human health, but not to the environment.

**52** Under the 2017-2020 MAWP, the Commission employed a contractor to draw up a "Common Understanding" document to provide further clarification on key ELD concepts. Neither the Commission nor the Member States endorsed it<sup>43</sup>.

In 2017, the European Parliament stated that "the different interpretations and application of the 'significance threshold' for environmental damage are one of the main barriers to an effective and uniform application of the ELD"<sup>44</sup>. The European Parliament called on the Commission to revise the definition of "environmental damage" and clarify the concept of "significance threshold".

54 In 2019, an amendment to the ELD<sup>45</sup> required the Commission to develop guidelines on the term "environmental damage" by the end of 2020. After consultations with the Member States, the Commission issued a notice in March 2021<sup>46</sup> on its legal interpretation of the definition of "environmental damage". The Commission's interpretation is not binding and does not contain specific criteria or thresholds from which the ELD should apply as this would require a legislative change.

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) identified the need for national practitioners to share experiences for the detection, identification and determination of environmental damage. To meet this need, IMPEL is developing a manual for stakeholders detailing criteria for assessing "environmental damage", which it plans to publish in 2021<sup>47</sup>. The Commission stated in its 2021 – 2024 work programme that it plans to "cooperate with the IMPEL project, and to use the outputs of the project as part of capacity building".

<sup>46</sup> Commission Notice 2021/C 118/01

<sup>&</sup>lt;sup>43</sup> 18th to 22nd ELD Government expert group meeting reports.

<sup>&</sup>lt;sup>44</sup> Recital 9 of the European Parliament resolution of 26 October 2017.

<sup>45</sup> Regulation (EU) 2019/1010.

<sup>&</sup>lt;sup>47</sup> Terms of reference of the IMPEL project.

The Commission has not planned any specific action on this in its 2021-2024 work programme.

# Some Member States require industrial companies to insure against environmental risks

Where the remediation costs of environmental damage exceed an operator's assets, in case of insolvency, the operator is unable to complete the remedial action, hence the costs fall to the public purse.

Member States were not obliged to provide information on remedial costs for the 2007-2013 reporting cycle. Twelve Member States provided information on such costs, 96 % of the remediation projects costed below €1 million<sup>48</sup>. Our analysis of remedial projects whose costs were borne by the EU budget showed that these frequently concerned cases where remedial costs were considerable in relation to the operator's financial capacity, and financial security was not in place (paragraph 68).

The ELD requires Member States to "encourage the development of financial security instruments and markets in order to enable operators to use financial guarantees to cover their responsibilities" <sup>49</sup>. Financial security can take the form, among others, of an insurance policy, a contribution to an environmental fund, a bank guarantee, a bond, or an own reserve. Member States are not obliged to make this financial security mandatory.

Seven Member States (Czechia, Ireland, Spain, Italy, Poland, Portugal and Slovakia) require financial security for some or all environmental liabilities, as shown in *Figure 11*.

<sup>&</sup>lt;sup>48</sup> SWD/2016/0121 final, p. 35.

<sup>&</sup>lt;sup>49</sup> Art. 14 of Directive 2004/35/EC.



Figure 11 – Financial security for ELD liabilities in the EU

Source: ECA, based on data from a report by Stevens & Bolton LLP.

A study prepared for the European Parliament concluded that the problem of insolvency can be addressed through mandatory financial security. For example, Portugal imposes mandatory financial security for all environmentally risky activities identified in the ELD. Portugal accepts a wide range of financial security instruments, including insurance policies, bank guarantees, environmental funds and own funds. Portugal did not report any cases of insolvency that prevented the application of environmental liability<sup>50</sup>.

61 As part of the 2017-2020 MAWP, the Commission funded a study on the availability of and demand for insurance policies in Member States<sup>51</sup>. It found that

<sup>50</sup> Fogleman, V., Improving financial security in the context of the Environmental Liability Directive, 2020, pp. 127-128.

٠

Fogleman, V., Improving financial security in the context of the Environmental Liability Directive, 2020.

insurance policies for ELD liabilities, the most popular instrument for financial security, were not widely available across the EU, and did not exist in some Member States. It also found that availability did not necessarily correspond to demand, and that there were countries where availability was high, but demand was low. However, the study also showed that in Member States where financial security for ELD liabilities was mandatory, the obligation drove the development of insurance market.

The Commission, in its 2021-2024 work programme, plans to conduct a follow-up study to examine "the overlaps between pre-existing national legislation on environmental liability and the application of the ELD in each Member State". It also plans to encourage "Member States that have not introduced mandatory financial security for ELD liabilities [...] to consider extending existing mandatory financial security requirements [...] to include requirements for liabilities under the ELD" and "to consider imposition of secondary liability on other persons such as directors and officers and parent companies" 52.

### The EU has financed environmental remediation projects

Member State authorities should ensure that whenever possible, polluters bear the costs of their pollution. The EU guidelines on using public money for environmental protection<sup>53</sup> specify the conditions under which such investment is possible in relation to the PPP:

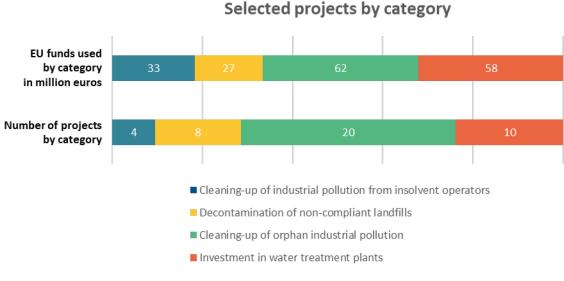
- o For reducing pollution from industrial emissions, public funding is permitted when the investment is intended to exceed EU standards or increase environmental protection in the absence of any such standard (paragraph 23). Public funding is also permitted to prepare for future EU standards;
- For cleaning contaminated sites, public funding is permitted when the polluter has not been identified or cannot be held legally liable for financing the remediation;
- Public funding for waste management projects may not be used to allow an operator generating waste to be relieved of the cost of its treatment.

<sup>&</sup>lt;sup>52</sup> Multi-Annual ELD Rolling Work Programme (MARWP) for the period 2021-2024, pp. 8-9.

<sup>&</sup>lt;sup>53</sup> Communication from the European Commission, Guidelines on State aid for environmental protection and energy 2014-2020, 2014/C 200.

64 To verify the application of the PPP when projects are co-financed with EU funds, we analysed 42 projects (*Figure 12*) worth €180 million of European Structural and Investment (ESI) and LIFE Funds. The projects were located in eight regions in three Member States - 19 in Italy, 10 in Poland and 13 in Portugal. We reviewed whether, when funding these projects, the responsible authority had considered the application of the PPP, notably by seeking to identify the polluter, requiring containment of the pollution and decontamination of the area concerned, and initiating procedures to recover the public money spent.

Figure 12 – Selected projects



Source: ECA.

### EU funds have been used to clean orphan pollution

Orphan pollution is pollution that took place in the past and where the PPP cannot be applied because the polluter is either unknown, no longer exists, or cannot be made liable. The ELD recognises this and applies to pollution that occurred after 2007. The most significant sources of orphan pollution are former industrial activities, which contaminated soils with metals, tars and other dangerous substances<sup>54</sup>.

66 Twenty of the 42 projects we examined relate to orphan pollution (with a budget of €62.1 million). In these cases, the PPP could not be applied and public funds had been used, as illustrated in *Box 2*.

<sup>54</sup> EEA, Soil contamination: the unsettling legacy of industrialisation, 2019.

#### Box 2

### Orphan pollution in Portugal and Italy where the PPP does not apply

In 2011, Portugal listed 175 abandoned mines that required extensive decontamination because they contained metallic sulphides or radioactive minerals. We examined three projects financed by ESIF related to abandoned mines, and which operated between the nineteenth and twentieth centuries. The planned EU contribution is €9.1 million between 2015 and 2021. The projects involve rehabilitating mines and the surrounding areas. Since the mining activities took place decades ago, no operators can be held responsible, as they either no longer exist and they are no longer liable, or they had no legal obligation to decontaminate the land when they operated.

We examined an ESI-funded project, worth €1.9 million, to decontaminate a piece of land in Puglia (Italy) formerly occupied by a gas power plant that operated between the middle of the nineteenth century and the 1960s. The plant contaminated approximately 20 000 m² of land and underground water with metals, hydrocarbons, asbestos and other harmful substances. The municipality owns the land and partially owned the company operating the plant. The Italian authorities conducted an environmental analysis between 1999 and 2004; afterwards, they cleaned the soil and they are currently cleaning the aquifer. No environmental legislation prevented the plant from polluting while it was operating.

# EU funds were also used when national authorities failed to enforce environmental legislation and make the polluters pay

67 We identified eight projects in Campania in Italy that received €27.2 million of EU funds to clean pollution that occurred when EU environmental legislation was already in force. The operators responsible for landfill sites for municipal waste did not comply with the environmental legislation in force. The public authorities responsible for overseeing these sites did not oblige these operators to clean their pollution. This use of EU funding does not respect the PPP, as illustrated in *Box 3*.

#### Box 3

## Failure to enforce environmental legislation leading to nonapplication of the PPP in an Italian region

The CJEU<sup>55</sup> ruled in 2007 that Italy had not, for a number of landfill sites, complied with EU rules on landfill waste over a prolonged period, causing significant damage to the environment.

Municipalities or publicly owned utility companies operated the eight landfills we examined, out of which four covered by the above ruling, to collect solid urban waste between the 1970s and early 2000s. However, they did not respect EU environmental requirements in force, which caused serious environmental damage. The planned ESI Fund contribution to all eight landfill remediation projects in Campania in the 2014 − 2020 programming period was €27.2 million.

For example, one of the landfills was not equipped to protect the soil, water table or air against pollution. The operator did not protect the site against illegal dumping of waste, including hazardous one, neither during operations nor after closure. The Italian authorities used €2.2 million of EU funds to decontaminate the site in 2017 and 2018, after which the Commission deemed the former landfill site compliant with EU environmental legislation.

# Lack of financial security to cover environmental liability increases the risk that costs are borne by taxpayers

Where operators do not have sufficient financial security, they might not be able to cover the cost of remediating the pollution they caused (paragraphs 56-62). We found four such remediation projects, worth €33 million, where an operator, identified as the party responsible for the pollution, went bankrupt. As a result, public money had to be used to decontaminate soil and water. This does not respect the PPP, as illustrated in Box 4.

#### Box 4

**Examples of lack of financial security leading to non-application of the PPP** 

In 1995, a few years after having stopped production, a company producing asbestos products in Italy filed for bankruptcy. Before the liquidation procedure

<sup>&</sup>lt;sup>55</sup> Judgement of the Court from 26 April 2007 in Case C-135/05.

began, the company had started cleaning up the environmental damage caused by its production, at the Italian Ministry of the Environment's request. However, as soon as the bankruptcy proceedings began, the bankruptcy administrator stopped financing the remediation. As a result, the regional public authorities continued the decontamination. The project we audited received €7.1 million of EU support. It involved demolishing buildings above ground-floor level and securing asbestoscontaining materials placed in storage underground. The authorities completed the work in 2019. They have launched legal proceedings to recover the funds used for the clean-up operation but they consider they may fail to recover money from a company undergoing bankruptcy proceedings.

In Poland, environmental authorities found toxic substances in the groundwater and soil where a chemical plant was located. The groundwater pollution poses a risk to the health of the nearby residents and could spread to a Natura 2000 area. In 2000, the regional authorities started a remedial action procedure against the chemicals company that failed to decontaminate the site. In 2014, the company declared bankruptcy and started liquidation proceedings. The authorities lodged a claim in the course of the insolvency proceedings in 2016, but the bankruptcy administrator took no remedial action and sold parts of the installations that were preventing the release of chemicals.

According to the authorities, the infrastructure is deteriorating further and the pollution continues to spread, and the legal decision imposing preventive or remedial measures might be impossible to enforce because of the bankruptcy. As a result, the authorities used public funds, including €17.3 million from ESIF, to remediate the environmental damage on a first area of 27 hectares. The authorities estimate that the pollution covers a few thousands hectares and that the total remediation cost could exceed €540 million.

# **Conclusions and recommendations**

69 The Polluter Pays Principle (PPP) underlies the EU's environmental policy and requires that polluters should bear the costs of their pollution including the cost of measures taken to prevent, control and remedy pollution and the costs it imposes on society.

We examined the EU policy framework for the PPP, focusing on its application to EU environmental policy areas, the Commission's actions related to the Environmental Liability Directive (ELD), and whether the EU budget was protected from bearing expenses that polluters should have paid.

**71** Overall, we found that the PPP is reflected to varying degrees in the different EU environmental policies and its coverage and application was incomplete. The Commission's actions to support Member States' implementation of the ELD had not resolved key weaknesses. The EU budget is sometimes used to fund clean-up actions that should, under the PPP, have been borne by polluters.

72 The PPP is applied differently across different EU environmental policies. As regards industrial emissions, we concluded that the PPP is applied to the most polluting industrial installations, which are covered by the Industrial Emissions Directive (IED). The owners of the installations have to bear the cost of complying with the conditions of their permits, including by taking measures to limit emissions below the emission limits. The IED does not apply to smaller installations and does not require installations to meet the cost to society of residual pollution (paragraphs 20-25). Even though the EU waste legislation requires Member States to apply the PPP fully, the funding gap remains wide and significant public investments are needed to meet recycling targets (paragraphs 26-31). While progress had been made in addressing specific pollutants, for many enterprises the price of water does not cover the costs imposed by the pollutants they release into the water. The recovery of the cost of water services is difficult to apply to pollution originating from diffuse sources, for example from agriculture (paragraph 32-38). There is no overall EU framework to protect soil, although many pieces of legislation indirectly contribute to reduce environmental pressures (paragraphs 39-41).

# Recommendation 1 – Assess the scope for strengthening the integration of the Polluter Pays Principle into environmental legislation

The Commission should assess the regulatory and administrative changes and the overall cost-benefit of better applying the Polluter Pays Principle, in particular:

- (a) lowering emissions limits to further reduce residual pollution;
- (b) dealing with diffuse water pollution from all sources, including agriculture.

Timeframe: end of 2024

73 The ELD establishes the EU's framework for environmental liability, based on the PPP. We found that the ELD provides for a partial application of the PPP in the event of environmental damage. The latest data available on the ELD implementation, although incomplete, indicate gaps in the implementation of the ELD across Member States (paragraphs 44-48). The ELD does not clearly define some key concepts, resulting in different interpretations and applications at Member State level (paragraphs 49-55). The absence of mandatory financial security at EU level means in practice that taxpayers pay for remediation costs when an operator causing environmental damage becomes insolvent (paragraphs 56-62). We concluded that the Commission's actions to date have not been able to address the shortcomings of the ELD.

# Recommendation 2 – Consider reinforcing the application of the Environmental Liability Directive

We recommend that, through the evaluation of the Environmental Liability Directive due by April 2023, the Commission examine the scope to:

- (a) improve criteria for defining the environmental damage to which the Directive should apply;
- (b) make more use of instruments providing financial security.

Timeframe: end of 2023

74 We found EU funds projects that should have been paid for by the polluter (paragraph 63-68). In cases of orphan pollution, when the entity responsible could not be identified or made liable, the use of public funding was justifiable and necessary to remedy the situation (paragraphs 65-66). They are also used when responsible authorities failed to enforce environmental legislation in due time (paragraph 67). The absence of financial security to cover environmental liability also forced authorities to use public money to restore polluted areas, when the polluter was insolvent (paragraph 68).

# Recommendation 3 – Protect EU funds from being used to finance projects that should be funded by the polluter

#### The Commission should:

- (a) in its supervisory capacity, make the use of EU funds for cleaning pollution conditional on checks, in collaboration with the Member States, that the relevant authorities took all the necessary steps to charge the polluter for the pollution they are responsible for;
- (b) examine the scope for legislative changes to require the use of financial security for environmental risks for operators.

Timeframe: 2025

This Report was adopted by Chamber I, headed by Mr Samo Jereb, Member of the Court of Auditors, in Luxembourg on 19 May 2021.

For the Court of Auditors

Klaus-Heiner Lehne

President

### **Annex**

### Annex I – Sectors covered by the Industrial Emissions Directive

The industrial Emissions Directive applies to the following sectors. In some sectors, it covers only installations above a certain size.

- Energy industries: fuel combustion in installations, refining of mineral oil and gas,
   coke production, and gasification or liquefaction of coal and other fuels
- Production and processing of metals: metal ore roasting or sintering, production
   of pig iron or steel, and processing of ferrous and non-ferrous metals
- Mineral industry: production of cement, lime and magnesium oxide, and asbestos, manufacture of asbestos-based products, and glass, melting of mineral substances, and firing of ceramic products
- Chemical industry: production of organic and inorganic chemicals, fertilisers, plant protection products or biocides, pharmaceutical products, and explosives
- Waste management: disposal or recovery of hazardous waste, waste in incineration or co-incineration plants, and non-hazardous waste, and landfill management
- o Production of pulp from timber or other fibrous materials, as well as paper and cardboard, and wood-based panels
- Pre-treatment or dyeing of fibres/textiles
- Tanning of hides and skins
- Animal slaughter, and the treatment and processing of food products from animal and vegetable raw materials
- o Disposal or recycling of animal carcasses and waste
- Intensive rearing of poultry or pigs
- Surface treatment of substances, objects or products using organic solvents
- Production of carbon or electrographite by means of incineration or graphitisation
- Capture of carbon dioxide streams for the purpose of geological storage
- Chemical preservation of wood and wood products
- Independent wastewater treatment under specific circumstances

### **Acronyms and abbreviations**

**BAT:** Best Available Techniques

**EEA:** European Environment Agency

**ELD:** Environmental Liability Directive

**EPR:** Extended Producer Responsibility

**ESIF:** European Structural and Investment Funds

**IED:** Industrial Emissions Directive

IMPEL: Implementation and Enforcement of Environmental Law

MAWP: Multi-Annual Work Programme

**OECD:** Organisation for Economic Co-operation and Development

**PPP:** Polluter Pays Principle

WFD: Water Framework Directive

### **Glossary**

**Best Available Techniques (BAT):** Industrial technology, installation design and operational measures with the best environmental performance, as determined through an evaluation of best practices as they evolve over time. Used to set emission limit values and permit conditions.

Climate action: Action to address climate change and its impact.

**Cohesion Fund:** An EU fund for reducing economic and social disparities in the EU by funding investments in Member States where the gross national income per inhabitant is less than 90 % of the EU average.

**Common Agriculture Policy:** The EU's single unified policy on agriculture, comprising subsidies and a range of other measures to guarantee food security, ensure a fair standard of living for the EU's farmers, promote rural development and protect the environment.

**Emission limit:** The mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time.

**Environmental liability:** Economic operators who damage the environment are responsible to pay for its remediation.

**European Regional Development Fund (ERDF):** An EU fund that strengthens economic and social cohesion in the EU by financing investments that reduce imbalances between regions.

**Extended Producer Responsibility (EPR):** Approach which adds the post-consumer stage of a product's life cycle, including recycling and disposal, to the producer's environmental responsibilities.

**Fertiliser:** Any substance (synthetic or organic) containing one or more plant nutrients, applied to soil to maintain or improve fertility.

**Financial security:** Any financial instrument, such as an insurance policy, a contribution to an environmental fund, a bank guarantee, a bond, or an own reserve, which ensures that a company will be able to meet its financial obligation in the event of a liability.

**Internalisation:** Measures taken so that unpaid benefits or costs are taken into account in the composition of the prices of goods and services.

**LIFE:** The financial instrument supporting implementation of the EU's environmental and climate policy through co-financing of projects in Member States.

**Polluter Pays Principle:** Principle that requires that polluters should bear the costs of their pollution including the cost of measures taken to prevent, control and remedy pollution and the costs it imposes on society.

### REPLIES OF THE EUROPEAN COMMISSION TO THE EUROPEAN COURT OF AUDITORS SPECIAL REPORT:

### "THE POLLUTER PAYS PRINCIPLE: INCONSISTENT APPLICATION ACROSS EU ENVIRONMENTAL POLICIES AND ACTIONS"

#### **EXECUTIVE SUMMARY**

I. The Commission recalls that the European Green Deal stresses that only by making full use of pricing and well-designed tax reforms can Europe meet its environmental objectives in an efficient and just way. Reflecting the European Green Deal, the Commission will work to strengthen the implementation of the Polluter Pays Principle (PPP) in European Union law and corresponding national policies in order to help deliver the EU's zero pollution ambition for a toxic-free environment and to support climate, energy and circular economy policies.

III. Fourth indent - The Commission considers that the conclusions and recommendations are relevant to the European Parliament and the Council as they have significant competence in applying the PPP and implementing Environmental Tax Reform (ETR).

IV. The Commission recalls that whilst it makes efforts to apply the PPP in environmental policy, one of the main instruments to achieve this, namely taxes, is usually subject to unanimity in co-decision. Therefore, the full application requires the engagement of Member States.

With regard to the Environmental Liability Directive (ELD), a key Commission action, the adoption of Guidelines on a common understanding of environmental damage, was only completed in March 2021 following extensive consultations. It is therefore premature to conclude that it has failed to solve a key weakness. As for the absence of mandatory financial security, the Commission agrees that the issue of financial security remains a legitimate concern and it will be looking at this closely in the context of the evaluation due by April 2023.

The EU budget is sometimes justified in its use to fund clean-up actions.

V. First indent - The Commission accepts the need to examine how the PPP is applied in delivering the European Green Deal commitments. The Commission accepts recommendation 1.a, and partially accepts recommendation 1.b in relation to the competencies that falls under its responsibility.

Second indent - The Commission accepts this recommendation.

The evaluation of the ELD will examine the scope to better apply the PPP.

Third indent - The Commission accepts this recommendation.

The Commission will ensure that applicable EU law is respected in relation to the necessary steps to charge polluters for the pollution that they are responsible for and will ensure that Member States are aware of their obligations in this respect.

#### **INTRODUCTION**

03. The Organisation for Economic Co-operation and Development (OECD) considers pricing instruments including environmental taxes an important tool for delivering the PPP.

This includes charges, taxing of pollution that is permitted, environmental liability, and the phasing out of environmentally harmful subsidies.

- 04. The PPP also covers impacts on society and wellbeing.
- 06. The Commission takes into account the application of the Polluter Pays Principle in other areas that affect the environment, e.g. transport, fisheries and agricultural policy.

The Commission considers that the PPP is implemented in the Common Agricultural Policy (CAP) through, *inter alia*, the sanction system of cross-compliance where reductions of CAP payments are applied when farmers do not respect applicable EU relevant law on the environment and climate including certain statutory rules (e.g. the Nitrates Directive).

In addition, the CAP can directly support practices, investments, etc., in the service of the environment and climate that compensates only for action going beyond relevant legal obligations.

- 07. Member States have significant competence in deciding whether and how to apply the PPP in line with the principle of subsidiarity that implies that policy measures are decided at a level as close as possible to the citizen and so at Union level only where necessary. The Commission is supporting Member States in tax reform and phasing out of environmentally harmful subsidies.
- 08. Fourth indent The Commission recalls that environmental damage includes not only the damage to the natural resource itself (i.e. protected species and natural habitats; water; and land) but also the impairment of natural resource services provided by the resource.
- 10. The Environmental Implementation Review (EIR) is a tool to improve implementation of EU environmental law and policy. It aims to address the causes of implementation gaps and try to find solutions before problems become urgent.
- 11. The investment needs for delivering the green transition require additional investment to reach the EU's current 2030 climate and environmental policy goals of around EUR 470 billion per year<sup>1</sup>.
- 12. The implementation of the European Structural Investment Funds (ESIF) follows the principle of co-financing, in order to ensure the ownership of the policies on the ground. The European Regional Development Fund (ERDF) and the Cohesion Fund co-finance *inter alia* activities in both waste and water sectors to meet the requirements of the Union's environmental acquis and beyond those requirements, investments in protecting and restoring biodiversity and soil as well as green infrastructure, and investments in regenerating and decontaminating brownfield sites. In addition, the scope of support of the ERDF includes investments in innovative technologies to improve environmental protection in the waste sector, water sector and with regard to soil.

#### **OBSERVATIONS**

21. The Industrial Emissions Directive (IED) allows competent authorities some flexibility to set less strict emission limit values (Art 15(4)). This is possible only in specific cases where an assessment shows that achieving the emission levels associated with Best Available

-

<sup>&</sup>lt;sup>1</sup> Identifying Europe's recovery needs, COM(2020) 456

Techniques (BAT) described in the BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to the geographical location or the local environmental conditions or the technical characteristics of the installation. The competent authority shall always document its justification for granting such derogations.

Furthermore, Chapter III of the IED on large combustion plants includes certain flexibility instruments (Transitional National Plan, limited lifetime derogation, etc.).

- 23. The Environmental Liability Directive (ELD) applies to "environmental damage" the definition of which includes different references to significance.
- 24. The Commission considers that the PPP is embedded in the whole IED approach and also cover pollution within legal limits, as those legal limits become stricter over time. Operators have to invest, i.e. pay in order to stay within the limits. The fact that permit conditions shall be based on Best Available Techniques (BAT), and that these BATs are periodically reviewed, strengthened and updated; leads industrial sectors to constantly invest in better performing and less polluting equipment, so as to comply with more stringent emission limits.

The IED does not require installations to pay the impact on society of pollution that is allowed under a permit.

- 35. Member States have to set up water pricing policies that have adequate incentives to use water efficiently and that include, following the PPP, an adequate contribution of different water uses to the cost recovery of water services (there is some margin of discretion which allows to take into account social, economic or environmental elements, e.g. social tariffs, tariffs that take into account water scarcity).
- 36. The Commission considers that households bear the bulk of the cost of water purification (related to contamination by other activities, including agriculture), while agriculture uses a large quantity of water that is not purified. Water pricing application for cost recovery of services (including the environmental costs) is "erga omnes", while for the purpose of sanctioning breaches, the polluter pays principle is applicable at the level of the polluters.
- 38. The application of the polluter pays principle is mainly in the hands of the Member States, which must integrate this principle in the national legislations. The application of fines is always at individual level due to the infringement of national or EU rules.
- 39. The Commission is updating the EU Soil Thematic Strategy in 2021 to address soil and land degradation in a comprehensive way and to help achieve land degradation neutrality by 2030. The new Zero Pollution Action Plan for Air, Water and Soil looks at soil pollution and remediation of contaminated sites, in particular.

There are a number of instruments and measures in the current CAP contributing to the implementation of activities limiting soil pollution.

- 40. For the most polluting industrial installations, the IED provides for an integrated approach to prevention and control of emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention.
- 41. For polluting activities that took place a long time ago, the risk is higher that the polluter no longer exists, cannot be identified or is insolvent. However, it is possible to apply the polluter-pays principle also in some of these cases, certainly when there are stringent soil

contamination laws and liability schemes in place at national level. As regards the Environmental Liability Directive, if the environmental damage derives from activities carried out "but not finished before" 30 April 2007, the Directive shall apply pursuant to paragraph 34 of the judgment in Joined Cases C-379/08 and C-380/08.

54. The Notice presents a very detailed analysis to help explain how the existing provisions are to be applied in practice.

As regards the legal validity of the notice, the Commission stresses that only the Court of Justice can provide a definitive interpretation of the ELD and underlines that it represents the Commission's understanding of the correct legal interpretation of the ELD.

- 56. The Commission considers the situation described by the European Court of Auditors as a serious risk.
- 57. The Commission considers, similarly to the European Court of Auditors, that the greater the remedial costs, the greater the risk that the operator will not have the resources to meet these costs without accompanying financial security.
- 60. The Commission considers, similarly to the European Court of Auditors, that mandatory financial security should reduce the risk of costs being transferred to the public purse by reason of insolvency.
- 63. Second indent Under the IED, the baseline report is the basis to assess remediation activities to be undertaken by the operator upon definitive cessation of the activity. Pursuant to the Commission 'Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions' (2014/C 136/03), where relevant, the site history and historic pollution have also to be included in the baseline report; and thus should be remediated by private funding.

#### **CONCLUSIONS AND RECOMMENDATIONS**

- 71. The Commission is also acting to support Member States' implementation of the PPP, but despite doing so, it is still not fully applied.
- 72. It is for Member States to ensure that pollution within permitted levels is priced.

For water, there is the resource cost and pollution cost associated with (over-) abstraction.

Emissions within legal limits also require investments, as those legal requirements become stricter over time.

Certain smaller installations are covered by the Medium Combustion Plant Directive (MCPD) (EU) 2015/2193 on the limitation of emissions of certain pollutants into the air from medium combustion plants. It applies to combustion plants with a rated thermal input equal to or greater than 1 Megawatt and less than 50 Megawatt irrespective of the type of fuel they use. Even if the PPP is not explicitly mentioned there, installations concerned also face a price on pollution when bearing the costs of complying with the MCPD requirements.

### Recommendation 1 – Assess the scope for strengthening the integration of the Polluter Pays Principle into environmental legislation

The Commission accepts the need to examine how the PPP is applied in delivering the European Green Deal commitments by undertaking an evaluation of its application and

working with Member States on PPP implementation including pricing and the phasing out of environmentally harmful subsidies.

The Commission accepts recommendation 1.a.

The Commission will propose a revision of EU measures addressing pollution from large industrial installations in early 2022, as announced in the European Green Deal. The aims of the revision are to progress towards the EU's zero pollution ambition for a toxic-free environment and to support climate, energy and circular economy policies.

The Commission partially accepts recommendation 1b.

Within the framework of the European Green Deal, the Farm to Fork Strategy, the Biodiversity Strategy, and the new Zero Pollution Action Plan set out the actions the Commission will take to tackle water pollution. The Commission reinforced conditionality in its proposal for the new CAP, which would better tackle diffuse pollution, and this is being considered under co-decision. The Commission accepts that it should consider the costs and benefits of the application of the polluter pays principle in its regulatory policies, in line with its Better Regulation Guidelines. However, the Commission cannot accept the recommendation to consider the cost-benefit and the regulatory and administrative changes of specific measures where these are the responsibility of Member States.

73. The ELD defines key concepts and related concepts are defined in other directives (such as the Water Framework Directive) closely linked to the ELD. It has proved challenging to develop a common understanding of the full implications of the definitions of these concepts. The Commission Guidelines adopted in March 2021 address the need for such an understanding.

# Recommendation 2 – Consider reinforcing the application of the Environmental Liability Directive

The Commission accepts Recommendation 2 (a).

The Commission accepts that there is indeed an absence in the ELD of express criteria for assessing damage to water and land of the kind that Annex I of the ELD provides for assessing damage to protected species and natural habitats. Having legally binding criteria for water and land damage might indeed be useful and the Commission will consider this in the context of the evaluation.

The Commission accepts Recommendation 2 (b).

## Recommendation 3 – Protect EU funds from being used to finance projects that should be funded by the polluter

The Commission accepts the recommendation.

Under shared management it is the responsibility of the Member States to select operations where the conditions recommended by European Court of Auditors should be applied.

- a) the Commission will ensure through the mechanisms put in place in the legal framework for cohesion policy that applicable EU law is respected in relation to the necessary steps to charge polluters for the pollution that they are responsible for and will ensure that Member States are aware of their obligations in this respect.
- b) the Commission will examine this in relation to the context of Recommendation 2.

### **Audit team**

The ECA's special reports set out the results of its audits of EU policies and programmes, or of management-related topics from specific budgetary areas. The ECA selects and designs these audit tasks to be of maximum impact by considering the risks to performance or compliance, the level of income or spending involved, forthcoming developments and political and public interest.

This performance audit was carried out by Audit Chamber I Sustainable use of natural resources, headed by ECA Member Samo Jereb. The audit was led by ECA Member Viorel Ştefan, supported by Roxana Banica, Head of Private Office and Olivier Prigent, Private Office Attaché; Colm Friel, Principal Manager; Frédéric Soblet, Head of Task; Roberto Resegotti, deputy Head of Task, Georgios Karakatsanis, Katarzyna Radecka-Moroz, and Anna Sfiligoi, Auditors. Graphic design by Marika Meisenzahl. Cathryn Lindsay provided linguistic support.



Viorel Ştefan



Roxana Banica



**Olivier Prigent** 



Colm Friel



Frédéric Soblet



Roberto Resegotti



Katarzyna Radecka-Moroz



Anna Sfiligoi

## **Timeline**

Event	Date
Adoption of Audit Planning Memorandum (APM) / Start of audit	11.3.2020
Official sending of draft report to Commission (or other auditee)	26.3.2021
Adoption of the final report after the adversarial procedure	19.5.2021
Commission's (or other auditee's) official replies received in all languages	14.6.2021

#### **COPYRIGHT**

© European Union, 2021.

The reuse policy of the European Court of Auditors (ECA) is implemented by Decision of the European Court of Auditors No 6-2019 on the open data policy and the reuse of documents.

Unless otherwise indicated (e.g. in individual copyright notices), the ECA's content owned by the EU is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence. This means that reuse is allowed, provided appropriate credit is given and changes are indicated. The reuser must not distort the original meaning or message of the documents. The ECA shall not be liable for any consequences of reuse.

You are required to clear additional rights if a specific content depicts identifiable private individuals, e.g. in pictures of the ECA's staff or includes third-party works. Where permission is obtained, such permission shall cancel and replace the abovementioned general permission and shall clearly indicate any restrictions on use.

To use or reproduce content that is not owned by the EU, you may need to seek permission directly from the copyright holders.

Software or documents covered by industrial property rights, such as patents, trade marks, registered designs, logos and names, are excluded from the ECA's reuse policy and are not licensed to you.

The European Union's family of institutional Web Sites, within the europa.eu domain, provides links to third-party sites. Since the ECA has no control over them, you are encouraged to review their privacy and copyright policies.

#### Use of European Court of Auditors' logo

The European Court of Auditors logo must not be used without the European Court of Auditors' prior consent.

PDF	ISBN 978-92-847-6308-5	1977-5679	doi:10.2865/590639	QJ-AB-21-014-EN-N
HTML	ISBN 978-92-847-6289-7	1977-5679	doi:10.2865/896058	QJ-AB-21-014-EN-Q

Pollution represents a significant cost for society and is a key concern for EU citizens. By applying the Polluter Pays Principle (PPP), polluters are incentivised to avoid environmental damage and are held responsible for the pollution that they cause. Overall, we found that the PPP is reflected and applied to varying degrees in the different EU environmental policies and its coverage and application was incomplete. The EU budget is sometimes used to fund clean-up actions that should, under the PPP, have been borne by polluters. We recommend strengthening the integration of the PPP into environmental legislation, reinforcing the environmental liability regime at EU level, and better protecting EU funds from being used to finance projects that should be funded by the polluter.

ECA special report pursuant to Article 287(4), second subparagraph, TFEU.

