

## Examination of environmental legislation (related administrative law and some criminal and civil law) and sanctions for illegal waste dumping in the V4+ countries (Czech Republic, Poland, Hungary, Slovakia and Slovenia)<sup>3</sup>

### Abstract

*Illegal dumping of waste is a high-profile environmental problem today. In order to address these challenges, cooperation and information exchange between the Visegrad Group (V4) countries and Slovenia (V4+) is vital. This study, which examines the regulatory mechanisms in the V4+ countries to combat illegal dumping, seeks to understand the environmental practices and legal frameworks related to this issue. The V4+ countries – the Czech Republic, Poland, Hungary, Slovakia and Slovenia – face similar challenges in the area of illegal waste management. The study seeks to highlight the common cultural, historical and legal backgrounds binding these countries together, providing an ideal basis for cooperation and exchange of experiences.*

*The analysis is accompanied by a detailed comparison of the environmental legal frameworks, criminal sanctions and enforcement mechanisms operational within the V4+ countries. Apart from analysing the specificities and strengths of each country, it focuses on the methods that have proved more effective in tackling the illegal waste problem. The document also highlights the importance of strengthening cooperation between the V4+ countries. By exchanging information and sharing best practices, countries in the region can apply tried and tested solutions. The document aims to promote enhanced regional cooperation as a catalyst for sustainable environment and waste management.*

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## 1. Introduction

The environmental impact of illegal waste dumping and other related problems on the circular economy constitutes critical challenges for society. Illegally abandoned waste is not only a visual nuisance, but also poses a serious threat to the environment. Abandoned waste can spread easily, pollute soil and water sources, and cause serious damage to biodiversity.

Circular economy principles suggest that resources should be conserved and recycled, thereby minimizing waste. Illegal landfilling, however, has a contrary effect. Waste that is discarded and illegally dumped is not only environmentally damaging, but also represents resource misuse. Recycling and extending the life of products are crucial for a circular economy. Illegal landfilling distorts this process by making reuse impossible, thereby preventing discarded materials from getting recycled back into the economy.

Waste problems are not limited to environmental damage, but also have economic and social impacts. Illegal landfilling increases waste management costs and affects economically backward communities. These landfills are often found in poverty-stricken areas, and a lack of environmental justice increases social inequality.

Understanding and addressing the gravity of the problem require strong legal and regulatory measures, including sanctions and accountability for illegal dumping. Additionally, society and businesses must play a role in raising awareness and improving waste management practices. Technological developments and innovations can also contribute to tackling this problem, for example, through waste tracking devices or recycling technologies.

For a sustainable future, it is vital that both society and the economy are committed to circular economy principles and sustainable waste management. While illegal landfilling poses serious environmental, economic, and social problems, it can be prevented and managed through effective measures and concerted efforts.

To address this problem, this study examines the regulatory mechanisms related to illegal dumping in the Visegrad Group (V4) countries and Slovenia (V4+). The aim of this joint analysis is to identify more effective solutions and practices in the field of waste management, with specific focus on illegal waste disposal.

A comparative analysis of the regulatory mechanisms in V4+ countries will allow effective practices to be shared with and adapted to other regions. This study examines how the V4+ countries can effectively apply legal frameworks to prevent illegal waste dumping and punish offenders.

Closer cooperation and exchange of experiences between V4+ countries can help increase the effectiveness of environmental protection measures.

Strengthening cooperation provides an opportunity to jointly develop solutions that respond to specific challenges in the region.

The results of this pilot study are intended to promote more effective legislation, better resource use, and greater social awareness in the fight against waste abandonment. This comparative analysis will allow V4+ countries to inspire each other and contribute more effectively to sustainable waste management and environmental protection efforts.

## 2. Global waste management

The world generates approximately 20 billion tons of waste annually, but this figure is partly based on estimates. Global economy growth has led to a quantitative increase in the total waste stream.

The most accurate data are available for municipal waste. Currently, the world generates about two billion tonnes of municipal solid waste annually. The World Bank predicts that by 2050, the municipal waste generated will increase by 3.4 billion tonnes/year<sup>4</sup>. This is twice the expected population growth during this period.

The amount of waste generated is determined by two main factors: the population, and the level of consumption resulting from the standard of living. It is estimated that, by 2050, daily waste generation per capita in low- and middle-income countries will increase by 40% compared to 19% in high-income countries.

In the coming decades, the growing volume of waste and the concomitant increase in environmental concerns will pose significant challenges for global waste management. These challenges must be understood regionally. Uncontrolled and technically unprotected landfills remain the basis for disposal in most parts of the world. In many countries, basic environmental targets are not met, let alone those for energy and material recovery. Organised waste transport is also lacking in low-income countries, accounting for only 50% of waste collected in urban areas, and even lesser in rural areas. This is because of the lack of basic equipment and facilities required for organised waste collection.

### 2.1. Waste management in Europe

While Europe boasts the most complex and organised waste management systems, encouraging examples of complex systems working well in other parts of the world are also observed. Leaving behind the linear economic model, the European Union (hereinafter: EU) formulated the Circular Economy Package in 2018. This package sets a new waste management target for landfilling by municipal

4 | Kaza, Yao, Bhada-Tata & Van Woerden 2018

solid waste of 10%<sup>5</sup> by 2035 and a recycling efficiency target of 65%<sup>6</sup>. The Circular Economy Package will mark a truly paradigm shift in the EU, affecting not only waste management, but also industry and trade. The EU demonstrates a mixed picture of municipal waste management. Some Member States have already met the set target. However, many countries still need to cover a lot of ground to achieve results even close to the 'best performers'.

Of course, geographical factors and the principle of regionality must not be overlooked; that is, country-specific and territorially professional solutions must be sought to address the challenges facing the Member States of the Community.

### **3. General context of illegal dumping and waste management activities**

Improper and environmentally harmful management of waste, which is against the law of any country, is considered illegal waste management. Of course, we can define illegal waste management activities or illegal waste dumping where the level of waste management development in a region or country allows these definitions to be justified. The differences in development already discussed in the chapter on world waste management indicate that many countries do not have the conditions for professional and environmentally sound waste management in place.

Consequently, the concept and legal interpretation of illegal waste management may vary among different regions and countries. In least-developed countries, the concept of illegal dumping is almost meaningless. Many places lack basic waste management services and infrastructure. These countries almost exclusively have unprotected landfills that are often operated by the informal sector. Non-technically protected landfills are an even better solution, as in most cases, waste does not even reach them, but is dumped on riverbanks. It is worth pointing out that the situation is no better in many middle-income countries, for example, in India, where about 500 million people do not have access to regular waste management services; the situation in neighbouring Pakistan is similar. However, we do not need to look far from the V4 region, and we can also take Ukraine as an example: in Transcarpathia, approximately 200 villages do not have regular waste disposal services. This is one reason for regular river pollution, which has been repeatedly observed in the Hungarian stretch of Tisza.

Illegal waste disposal can be effectively countered in countries where a suitable framework is in place. This framework includes appropriate logistical and

5 | Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste

6 | Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

infrastructural backgrounds, environmental awareness among citizens, and legislation.

It is important to note that even when the right framework is in place, there is not always a clear and continuous positive trend. A sensitive framework for combating illegal dumping must be carefully calibrated. There is a strong correlation between the quality and geographical location of existing infrastructure and service charges.

Research has shown that illegal dumping and waste management are mainly due to the lack of sufficient quality and quantity of waste management infrastructure. At the same time, it is also worth highlighting the fees charged to the public or to businesses for waste management services.

Public service aspects of waste management cannot be understood solely in market terms. Social and environmental aspects must also be considered in the management of municipal waste. Although municipal waste yards play an important role in separate waste collection, they also play a key role in combating illegal dumping. Therefore, it is important that gate fees for yards be set at a level that is accessible to the public. Therefore, municipalities or states must contribute to the financing of yard operations. In the long term, this is a worthwhile investment, in view of the enormous cost of cleaning up illegal waste.

Accessible and affordable waste management infrastructure alone is not the solution for tackling illegal dumping; increasing citizens' awareness of environmental issues is also essential for success in this area. Achieving these goals will require decades of work and effort; further, change in social habits will not occur overnight. However, tangible results can be observed in countries with conscious, systematic, and long-term communication efforts.

Finally, a legal framework is indispensable for the successful fight against illegal waste.

The creation of an appropriate legal framework that provides guidance and is easy to implement by economic operators and the public goes beyond sectoral legislation. Legal regulations must be grounded in reality, and real perpetrators and polluters must be punished and deterred.

## 4. The Waste Framework Directive

The EU Waste Framework Directive (hereinafter: WFD)<sup>7</sup> took a significant step towards the protection of the environment and human health, paying particular attention to dealing with hazardous materials during waste processing and returning recyclable materials to the supply chain. In previous systems, workers

7 | Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

and waste management environments have been exposed to significant risks owing to limited access to safety documentation.

In 2018, the EU introduced fundamental amendments to several laws regulating the handling of products in the European Economic Area (EEA). Among them, updating the EU WFD<sup>8</sup> stands out, as it affects all products sold in the EU, regardless of their manufacturing origin. This update works to move towards a single market and create a balanced business environment in the EU.

The aim of the EU is to make waste management more efficient and sustainable, thereby preventing damage to the environment and human health. The amendments introduced in 2018 aimed to curb illegal waste disposal, promote recycling and reuse, and tighten waste regulations.

#### **4.1. Reduction of illegal waste dumping**

Member States must do everything to prevent the growth of illegal waste dumps; one of the ways is to impose sanctions on them. Article 36 of the WFD (2008/98) states: (a) Member States shall take the necessary measures to prohibit the abandonment, dumping or uncontrolled management of waste. (b) Member States shall establish provisions on the penalties applicable to infringements of this directive and shall take all measures necessary to ensure that they are implemented. Penalties need to be effective, proportionate, and dissuasive.

Further defines in (33) of the WFD amendment (2018/851): Litter, whether in cities, on land, in rivers and seas, or elsewhere, exerts direct and indirect detrimental impacts on the environment, well-being of citizens, and the economy. Further, the costs of cleaning it present an unnecessary economic burden for society. Member States should take measures aimed at preventing all forms of abandonment, dumping, uncontrolled management, and other forms of waste disposal. Member States should also take measures to clean up the litter present in the environment, whether discarded wilfully or negligently, and irrespective of its source or size. Measures to prevent and reduce litter from key sources in natural and marine environments could consist of, *inter alia*, improvements in waste management infrastructure and practices, economic instruments, and awareness-raising campaigns. When considering a measure with restrictive effects on intra-union trade, member states should be able to demonstrate that it is adequate to attain the objective of preventing and reducing littering in the natural and marine environment, does not go beyond what is necessary to attain that objective, and does not constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.

8 | Directive (Eu) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste

## 4.2. The latest changes

The EU Commission proposed new amendments in 2023 to strengthen and accelerate action by the Union and member-states on the European Green Deal and the Circular Economy Action Plan. The proposal focuses on textile and food industries.

## 5. Czech regulations on illegal waste dumping

An illegal dumpsite may be defined as a site where waste is being discarded or collected despite the site not being designated for waste disposal or collection under relevant laws. Under Czech law, a waste management site (facility) is defined in § 14. of Act No. 541/2020 Coll., on Waste (hereinafter, the Waste Act). The Act defines ‘illegally collected waste’ as waste collected outside a designated waste management facility.<sup>9</sup>

Anyone who illegally establishes a landfill or deposits waste outside a designated area commits an offence under the Waste Act. Such conduct may constitute several types of offence. The following acts may be considered to be offences. (a) Disposal of waste outside a facility designated for management of that type and category of waste (b) Breach of the obligation to transfer waste in accordance with the waste management hierarchy to a facility or place designated by the municipality or to a waste dealer holding the relevant permit.

### 5.1. Legal obligations

In such cases, if the owner of the property learns about illegally dumped waste on their land, they are obliged to report this fact without undue delay to the concerned municipal office. When a municipal office learns about illegally dumped waste within its administrative district, it immediately attempts to identify its owner. If it is not possible to identify the person responsible for waste dumping (or if such a person has died), the municipal office will call on the owner of the land to eliminate the waste and hand it over to a waste treatment facility within 30 days of the call date.

In justified cases, the municipal office may set a longer deadline for the elimination of waste and its transfer to a waste treatment facility. It may also assist the landowner in the process.

If the landowner does not ensure the removal of waste and its handover to a waste treatment facility within 30 days from the date of delivery of the call, or within a longer stipulated period, the municipal office may: (a) Order the landowner

9 | Kanický 2022, 43.

to, at their own expense, secure a place where illegally dumped waste is located – in order to prevent further illegal dumping. (b) Secure waste that poses a threat to the environment by leaking harmful substances into the surrounding environment. (c) Remove the illegally dumped waste and hand it over to a waste treatment facility.

The landowner is not required to fulfil the obligation if they transfer the waste to a waste treatment facility at their own expense within 30 days of the date of the legal force of the decision imposing such obligation.

The person authorised by the municipal office is entitled to enter the land for the time necessary to secure or remove waste, and the landowner or user is obliged to allow and tolerate the securing or removal of waste.

## **5.2. The responsibility of authorities**

In the Czech Republic, several institutions and organisations are involved in the management and control of illegally abandoned waste: (a) The Ministry of Environment – responsible for the development and implementation of environmental policies, including the management of illegal waste. (b) The Czech Environmental Inspectorate – responsible for monitoring compliance with environmental laws and regulations, including fighting illegal dumping. (c) the Police of the Czech Republic. (d) regional authorities. (e) municipal authorities of municipalities with extended competence. (f) municipal authorities.

## **5.3. Criminal law provisions**

Unauthorised dumping may also cause environmental damage and endangerment under certain conditions.

Typically, this will be in case of hazardous waste landfills that leak environmentally damaging substances. A criminal offence is committed if the perpetrator, intentionally or through gross negligence, damages or endangers any component of the environment (water, soil, air, etc.) through dumping.

An offender's conduct must be more socially harmful than misdemeanours to constitute a criminal offence. Therefore, the damage to or endangerment of environmental components must be at a significant scale; for example, affecting a larger area or causing severe damage to human health, or death, or involving considerable cost in eliminating the consequences the landfill (minimum CZK 1000 000)<sup>10</sup>.

10 | Zahálková 2022

## 5.4. Waste prevention programme

Waste prevention is an integral part of the transformation of a circular economy. It is expected to reduce the input of natural resources into the economy and make necessary efforts to collect waste to minimise illegal waste dumping and channel it into the circular economy.

In 2020, the Ministry of the Environment, Czech Republic, initiated the revision of the Waste Management Plan (hereinafter: WMP) in response to changes in EU legislation.

Regional authorities and the public were consulted in the revision of the WMP. Presentations and extensive discussions with key stakeholders in the waste management sector on the updated WMP draft were held at a session organised by the Waste Management Council. The document received internal and inter-ministerial comments.

Following these extensive consultations and revisions, the updated WMP in the Czech Republic entered the environmental impact assessment process in accordance with Act No. 100/2001 Coll. on Environmental Impact Assessment, as amended. It was subsequently approved by the government.

The process culminated in May 2022 when the government officially approved an updated Waste Management Plan in the Czech Republic.

### 5.4.1. 'Don't throw it away'

In the Czech Republic, outstanding examples of waste management include the 'Don't throw it away' initiative in Prague, where city dwellers can 'drop off' items that they no longer require but which can still be useful to others. The initiative has been running for more than 10 years with regular users and has saved more than 65 000 items from being discarded. The initiative has expanded to other Czech cities, such as Ostrava, also involving private companies who can use closed corporate 'Don't throw it away' portals for their employees.

As part of the initiative, 'Recycling Points' have also been set up in Prague's collection yards, where citizens can directly bring unneeded items without uploading them to the online portal. The Recycling Point operator accepts the donated items, captures their photographs, and posts them on the web portal. These items are offered first to the city's social services or other selected organisations and then to all users of the portal.<sup>11</sup>

## 6. The tools for regulating illegal waste dumping in Poland

The Waste Act (Journal of Laws of 2022, Item 699) specifies regulations for acting against entities (or individuals) responsible for illegal dumping or waste storage.

The authority to force an entity that illegally dumped waste to remove it by means of administrative proceedings is bestowed upon the town mayor or regional director of environmental protection and, in the case of waste abandonment after the cessation of the activity, to the provincial marshal or district governor with jurisdiction over the place of the activity.

The proceedings conducted by the aforementioned authorities for the removal of illegally dumped waste are initiated pursuant to the provisions of the Act on Waste. These regulations indicate that waste holders are obliged to remove waste from places that are not intended for storage or warehousing, including waste abandoned after business operations. If the obligor fails to perform the aforementioned obligation, environmental authorities are obliged to issue a decision ordering waste removal and, if necessary, to conduct administrative enforcement proceedings.

However, when it is necessary to eliminate waste immediately because of threat to human life, health, or the environment, the competent authority shall take action to remove and manage the waste itself.

The authorities taking these actions are: (a) Regional director of environmental protection – in case of closed areas and properties owned by municipalities as landowners. (b) The authority competent to issue the decision – in case the obligation to remove waste has arisen in connection with the annulment, revocation, or expiration of a decision related to waste management. (c) The mayor or city president- in other cases.

In these cases, due to the nature of the case, the authority determines, in the form of administrative decision addressed to the waste holder, the scope and date of making available the land surface, facilities or other places where the waste is located, the scope and method of waste removal and the date of commencement and completion of activities.

### 6.1. Obligors

According to current national law, the holder is obliged to remove illegally dumped waste. In turn, the authorities of the territorial units are fully responsible for enforcing the removal of illegal waste dumped by the holder.

In addition, in 2019, the government introduced certain provisions into the national law. These stipulate that when it is necessary to remove waste immediately owing to a threat to human life and health or the environment, the competent authority of the territorial unit shall act to remove and manage the waste. The

individual responsible for illegal waste dumping is required to reimburse the authority of the territorial unit for the costs incurred in waste removal.

## **6.2. Authorities' responsibility in the elimination of illegal waste dumping**

Several authorities in Poland are responsible for managing and controlling illegally abandoned waste. (a) The Environmental Inspectorate is responsible for monitoring compliance with Polish environmental laws and regulations, including combating illegal dumping. (b) Local municipalities and city inspectorates are responsible for managing and removing illegal waste generated in local areas. (c) The police are also involved in the fight against illegal waste and help identify and prosecute perpetrators. (d) The Ministry of Climate and Environment is responsible for developing and implementing environmental policies, including the management of illegal waste. (e) Environmental Agencies in different regions of Brazil are involved in managing and controlling illegal waste.

These agencies work together to effectively address the problem of illegal waste abandonment in Poland and ensure compliance with environmental rules and regulations.

Despite recent efforts to strengthen waste-processing oversight and penalties, illegal dumping practices have increased, aided by measures introduced during the pandemic.

Poland's Environmental Inspectorate has established a new unit to combat illegal dumping that identifies organised groups that dispose of waste illegally, often including materials sent for processing to other countries.

The new unit, comprising former police officers, utilises modern tools, such as satellite surveillance and drones, aiming to coordinate various services to eliminate illegally abandoned waste. One of the tasks of the new departments is to coordinate the work of various services: the environmental inspectorate, the prosecutor's office, the police, the national revenue office, and the road safety inspectorate.

## **6.3. Financing**

Waste removal is implemented by the authority at its own expense, and reimbursement is demanded from the waste holder or obtained from the financial guarantee.

Moreover, financing waste removal from places not intended for this purpose is possible under the provisions of the Act of 27 April 2001 and the Environmental Protection Law (Journal of Laws of 2021, Item 1973, as amended). This provision enables local governments to conduct activities for the elimination of abandoned and illegally dumped waste.

The National Fund for Environmental Protection and Water Management has also launched a priority program addressed to regional directors of environmental protection, voivodeship marshals, commune heads, mayors or presidents of cities. It is entitled 'Removal of abandoned waste', and is aimed at reducing the threat to human life or the possibility thereof; moreover, financing the removal of waste from places not intended for this purpose is possible under the provisions of the Act of 27 April 2001 Environmental Protection Law (Journal of Laws of 2021, item 1973, as amended). This provision makes it easier for local governments to conduct activities for the removal of abandoned and illegally dumped waste.

#### **6.4. Criminal law provisions on the behaviour of illegal waste abandonment**

Regarding legal provisions pertaining to crimes in waste management, the Polish Penal Code (Article 183 of the Act of June 6, 1997, Journal of Laws of 2022, no. 1138, as amended) provides for a prison sentence of up to 10 years to be imposed on the perpetrator for: (a) causing the possibility of danger to human life or health or, (b) causing a reduction in the quality of water, air or land surface, or (c) causing damage to the plant or animal world (regardless of the amount of waste), or (d) importing from abroad, in violation of regulations, substances that endanger the environment, or (e) importing from abroad or exporting abroad, against the law, waste, or (f) allowing, against the obligation, the commission of the aforementioned acts.

For abandoning hazardous waste in a place not intended for storage or warehousing, the punishment is imprisonment for 2 to 12 years. If the aforementioned acts are unintentional, the perpetrators are subject to a fine, restriction of freedom, or imprisonment for up to five years.

#### **6.5. Tools for detecting illegal landfills**

##### *6.5.1. Satellite monitoring*

In Poland, the European Space Agency's (ESA) Sentinel and other satellites regularly provide images to help authorities monitor areas and identify possible illegal waste accumulation. This allows authorities to monitor areas remotely and respond quickly to potential problems.

##### *6.5.2. Spatial Information Systems (hereinafter: GIS)*

GIS can also be used in Poland to identify and analyse the illegal dumping of waste. These systems help authorities collect, analyse, and map data, which facilitate a better understanding of the information and more effective action.

## 7. The problem of illegal waste dumping in Hungary

The Fundamental Law of Hungary states in the National Declaration of Faith that “*we bear responsibility for our descendants, and, therefore, we shall protect the living conditions of future generations by careful use of our material, intellectual and natural resources*”. Article XXI – which is the specific article on environmental rights – states: “(1) Hungary shall recognise and enforce the right of every person to a healthy environment. (2) Anyone who causes damage to the environment shall be obliged to restore it or bear the costs of restoration, as provided for by the Act. (3) No polluting waste shall be brought into Hungary for placement”. The article contains a specific provision for waste management that is considered unusual in Europe. It states that “*it is prohibited to import polluting waste into the territory of Hungary for the purpose of disposal*”. This statement is controversial in its placement and worrisome because its concepts are incompatible with existing waste management legislation. The term ‘disposal of waste’ is not used in the WFD. Another problem is the use of the term ‘polluter’, which is not in line with standard waste management terminology.<sup>12</sup> However, this term refers to certain waste treatment processes. Pollution from these processes can only be assessed on a case-by-case basis, making the material scope of the provision nonspecific. Therefore, we conclude that this is a declaratory rather than normative provision.<sup>13</sup>

Bándi highlighted a similar issue in his study, stating that Par (3) was an unfortunate reference to the transboundary movement of waste. He suggested that the wording needs to be further clarified for future reference or, preferably, removed from Fundamental Law altogether.<sup>14</sup> Regarding this proposal, Szilágyi favoured a more precise wording of the basic law. He viewed the simple deletion of provisions as a retrograde step.<sup>15</sup>

Act CLXXXV of 2012 on Waste (hereafter, the Waste Act) transposed the provisions of the Framework Directive into Hungarian law. The difficulties of interpretation raised above have been alleviated by the 2013 amendment to the Waste Act, which states that “*hazardous waste destined for disposal, household waste destined for disposal and residues from the incineration of household waste may not be imported into Hungary*”, thus addressing the terminological and specificity issues mentioned above.<sup>16</sup>

According to Article 31 of the WA, waste may be disposed of only in designated or reserved places in a manner that does not endanger the environment.

12 | Hornyák & Lindl 2023, 37.

13 | Fodor 2012, 643.

14 | Bándi 2020, 17.

15 | Szilágyi 2021, 138.

16 | Hornyák & Lindl 2023, 37.

Thus, according to the terminology of § 61 (2), the definition of abandoned waste is “*waste deposited or abandoned on the property by another person without the consent of the property owner in uncontrolled circumstances*”.

### **7.1. Legal consequences of illegal dumping**

Pursuant to WA Section 61 (2), the obligation to remove and treat waste deposited or abandoned on property by another person without the consent of the property owner under uncontrolled circumstances should be borne by the owner or former holder of the waste. Illegally abandoned waste must be eliminated within 30 days of the decision of the waste management authority imposing a fine and the obligation becoming final.

In cases where the owner or former holder is unknown, the obligation to clean up the abandoned waste shall, until proven otherwise, be borne by the owner of the property where the waste was deposited or abandoned.

Looking at the case law, as encoded in the above norms, it can be concluded that the obligation to eliminate illegally abandoned waste overwhelmingly falls on the owners of the property where the waste was deposited or abandoned. The resulting characteristics of the country’s snapshot of illegal abandoned waste are inherent.

The person obliged to eliminate the abandoned waste as described above shall arrange for its removal from the property and shall provide proof of this to the competent body of the waste management authority by means of private documents of full probative value issued by the recipient or, in the case of hazardous waste, by means of a delivery note or receipt.

Upon receipt, the obligor will, without delay, forward the certificate to the waste management authority that issues the obligation. If the transferee does not hand over the certificate at the same time as delivery, the obligor shall immediately inform the waste management authority.

If the obligation is unsuccessful, the waste management authority shall, during the course of the enforcement procedure, ask the obligated party to comply voluntarily. If the obligor fails to comply, a procedural fine will be imposed. If waste is still found on the property, the waste management authority may remove it and charge obligatory costs. If the obligor is the owner of the property concerned and does not pay the costs of removal by the waste management authority, the latter may mortgage the property concerned up to the amount of the costs.

The unpaid waste management fine and the cost of waste removal charged to the obligor shall be considered public debt to be recovered through taxes in the enforcement procedure.

Overall, the statutory responsibility of property owners has increased; if the perpetrator is not known, the owner is obliged to eliminate any illegally placed or abandoned landfills on the property. If the owner fails to do so, the waste

management authority will remove it by official means and charge the property owner for the cost incurred, which, if not paid, may result in a mortgage being placed on the property. Waste management authorities have been allocated special funds by the government for this task, and following a public procurement procedure, they contract with a waste management company to remove illegal waste.

## **7.2. Obligors**

### *7.2.1. Municipally owned real estate*

The method of obligation for municipalities is also as described above, according to the WA § 61 (25).<sup>17</sup>

Depending on the outcome of the procedure, the municipality bears the full cost of cleaning up the waste on the grounds of municipal ownership. If the municipality fails to comply within the time limit, the decision is enforceable, and the body responsible for enforcement is the waste management authority. The unpaid waste management fine and the costs of waste removal incurred by the debtor in the enforcement procedure shall be considered public law liabilities to be recovered by way of taxes.

Thus, if the local authority does not comply with its obligation to eliminate waste, but has it removed, the cost is borne by the local authority as an enforcement cost, subject to successful recovery.

The legal environment has not led to the development of fining practices to enforce authority.

According to Municipal 'burden' under the WA Article 61 (24), the waste management authority shall mortgage the property in favour of the Hungarian State up to the amount of the claim and interest.<sup>18</sup>

### *7.2.2. Natural persons*

In most cases, a natural person is the property owner(s) responsible for waste elimination. Due to the nature of the waste, the cost of doing so for 'long outstanding' cases exceeds the financial capacity of the natural person. Such cases have often been reported in the media. The fairness criterion (see below) provides appropriate relief.

The amendment to the Act, which came into force on 1 July 2023 provides the possibility of free waste transfer in waste yards of up to a maximum of 1 m<sup>3</sup> once a

17 | If the municipality becomes aware of the waste, it immediately notifies the waste management authority and, within 30 days, the concession company or the concession subcontractor, arranges for the waste to be removed, certifies its removal to the authority and sends a statement of costs to the authority.

18 | The incidence of this is negligible, with only 3 cases reported nationally.

year to the obligated persons. This is a form of assistance to obligated parties, but is not expected for larger quantities of waste.

### *7.2.3. Fairness*

Pursuant to Section 61 (24a) of the WA, the waste management authority may, in cases requiring special fairness, reduce or waive the debt with respect to the costs incurred in connection with the elimination of waste, or limit enforcement of the property specified in Section 61 (3), upon application by the obligor.

In the case of a natural person, a case requiring special fairness is one wherein payment of debt would seriously jeopardise the livelihood of obligors and their dependents or would impose a disproportionate burden. In the case of a non-natural person who is not primarily engaged in an economic activity, a case requiring special consideration is one in which the payment of debt would impose a serious and disproportionate burden on the obligors, which would jeopardise its primary activity.

In WA 61 (24b)–(24c), the law defines what are considered cases of special fairness, so the criterion to be considered may be broadly defined as the ratio between the obligor's income or budget and the cost of elimination.

A methodological guide is developed to ensure consistency in jurisprudence regarding fairness claims.

## **7.3. Authorities dealing with illegal dumping**

In February 2020, the Hungarian government launched the Climate and Environmental Protection Action Plan (CEPAP), which focused on reducing the amount of waste, banning the most harmful plastic materials, promoting separate waste collection, implementing effective waste management, and eliminating illegally dumped or abandoned waste.

The CEPAP states that, to achieve this goal, the entire waste management sector must be subject to much stronger regulatory control.

First, CEPAP decided to establish waste management authorities (ministerial, national, and regional). With the entry into force of Government Decree 124/2021 (12.3.2021) on the designation of waste management authorities, the county government offices (regional waste management authorities) and the department designated by the Minister responsible for waste management (ministerial waste management authorities) were designated as waste management authorities for administrative matters.

In March 2021, with the creation of the Department of Environment, Nature Protection, and Waste Management within the county government offices, waste management authorities were accorded new responsibilities in the field of waste management.

As of 1 January 2017, environmental, natural protection, and waste management authorities were operational in county government offices. In March 2021, a new waste management authority was established that created a separate waste management department and doubled the number of posts. While waste management permits, records, and annual returns have been addressed previously, the change in legislation has strengthened their presence on the ground.

This has led to more effective eradication of illegal landfills in the country.

#### **7.4. Waste management fines**

The rules on the imposition of waste management fines on the amount of waste management fines and the method of their imposition and determination are laid down in Government Decree 271/2001 (XII. 21.) (hereafter, the Government Decree).

Under Articles 86 (10) and (11), waste management fines may also be imposed as on-the-spot fines. In this case, in addition to the waste management authority, the National Tax and Customs Board, police, notary, and authorised administrators of the professional disaster management body may also impose waste management fines in the form of on-the-spot fines, public area inspectors, nature conservation guards, field guards, mountain guards, state fish guards, members of the forestry authority performing law enforcement duties or authorised administrators, and food inspectors.

Currently, to determine the amount of fines for waste management, a Government Decree must be applied by the waste management authority and cooperating authorities according to Section 86 (11) of the WA.

There is no provision for on-the-spot fines for enforcement.

In the twenty-two years since Government Decree 271/2001 came into force, several amendments have been made to several WA provisions. Changes in the legal environment and economic conditions justified the revision of the existing provisions.

Currently, a new draft Decree on the amount, imposition, and method of determining on-site fines for waste management is still under consultation; this will replace the current Government Decree, thereby providing a solution to the above.

The new draft decree on fines retains the institution of the basic fine laid down in the Government Decree, but raises the amount per infringement. It maintains the method of calculating the waste management fine, but introduces a new formula according to which the amount of the fine is determined by multiplying the basic fine expressed in HUF by the quantity of waste expressed in tons and by a multiplier expressing the hazardousness. Thus, in addition to the basic fine for infringement, quantitative and qualitative criteria will influence the fines

to be paid. It establishes a fixed amount of fine per specific waste management infringement and introduces new offences. It lays down detailed rules applicable to the illegal dumping or abandonment of waste and introduces a new element on the conditions and procedures for imposing on-the-spot fines. The amount of fines was increased significantly.

The future goal of the Government Decree is to significantly increase the amount of waste management fines that can be determined and imposed based on the new calculation system, and to enable the concerned authorities to impose on-the-spot fines in the event of red-handed detection, thus realising the socio-political expectations set out in the CEPAP.

### **7.5. Criminal law provisions**

Under Section 248 of the Criminal Code, individuals who unlawfully dispose of waste may face varying penalties depending on the category and severity of the offence. According to the law, those who engage in waste management activities without registration, notification, or proper authorisation, or conduct unlawful waste activities, can be punished with imprisonment for up to three years.

In the case of illegally deposited hazardous or significant amounts of waste, the severity of the penalties increases. Perpetrators may be imprisoned for one to five years for these crimes, and in the case of recidivism or aggravating factors, a sentence of two to eight years may be imposed.

For offences committed because of negligence, different categories are associated with varying degrees of imprisonment, ranging from one to three years.

Overall, illegal waste disposal is a punishable activity with significant legal consequences for the perpetrators.

### **7.6. Tools of dealing with illegally abandoned waste**

#### *7.6.1. 'Clean up the Country!' project*

In the implementation of CEPAP, based on Government Decision 1598/2020 (IX.21.), the Ministry for Innovation and Technology announced the 'Clean up the Country!' project, which, with the cooperation of the state and municipalities, began to clean up the illegal waste accumulated over decades in forests, along rivers, railways, and roads.

#### *7.6.2. WasteRadar*

The project also created the WasteRadar app, which has been available since July 2020 for citizens to report illegally dumped waste throughout the country. Over the past year, the WasteRadar application has been developed further to

increase efficiency, making it easier for users to report and public authorities to manage.

Currently, the app has more than 30,000 registered users, with almost 50,000 notifications. The WasteRadar app has helped waste management authorities initiate official procedures based on WasteRadar data and public-interest reports.

### *7.6.3. Clean Country Programme*

Government Decision 2309/2020 (non-public) on further measures necessary for the implementation of the Clean Country Program stipulated that, in 2021, the Prime Minister's Office had to make HUF 5 billion available in additional resources to finance the costs of the removal of illegal waste from the capital and county government offices.

Every year, the government subsidises the elimination of illegally abandoned waste, apart from the operating costs of waste management authorities included in the budget of the functional managing authority (Prime Minister's Office). In 2023, approximately HUF 3 billion were available to government agencies to eliminate illegally abandoned waste.

## **8. Illegal waste dumping in Slovakia**

According to generally published information, hundreds of illegal landfills are set in Slovakia. Most waste is placed unlawfully in gardening settlements, along railways, etc.

'Illegal placement of waste', is regulated in Section 15 of Act No. 79/2015 Coll. on waste and amendments to certain acts.

Any natural or legal person may report the placement of waste on a property – in conflict with this Act – to the competent waste management administrative authority (the municipalities and waste management administrative authorities (District Offices) or the municipality in the territory where the property is located.

Once aware of illegally placed waste on their property, the owner, administrator, or tenant shall report this fact to the authorities.

The municipality and the waste management administrative authority shall inform each other of any notifications made under Paragraphs 1 and 2 within seven working days of the day of the announcement.

If the competent waste management administrative authority is not aware of any facts indicating a criminal offence, it shall commence the procedure to determine the person responsible by: (a) identifying the person responsible for the illegal placement of waste, (b) identifying whether the owner, administrator, or tenant of the property on which waste has been placed illegally has neglected the obligation

to take all measures to protect their property under a specific regulation<sup>19</sup>, an obligation derived from a court decision<sup>20</sup>, or whether they derived material or other gain from the placement of the waste if the actual perpetrator is not identified.

The person who illegally places waste is primarily responsible for eliminating the illegally abandoned waste.

In the procedure for determining the responsible person, if the competent waste management administrative authority discovers that the circumstances referred to the case as the owner neglected its obligation to take all measures to protect their property, it shall designate the owner of the property on which waste was placed illegally as the person liable to ensure the management of the illegally placed waste.

If such a person cannot be determined, the settlement in which the waste was placed is contrary to national law, in the case of municipal waste or construction waste of minor importance, or the district office.

Illegally abandoned waste must be eliminated within the deadline specified in the decision of the competent waste management authority.

### **8.1. Authorities' responsibility in the elimination of illegal waste dumping**

The municipality and waste management administrative authority shall inform each other of any notifications of illegal placement of waste within seven working days of the announcement. If waste has been placed unlawfully in a water stream, coastal area, or floodplain, the recipient of the notification shall immediately inform the relevant water administrative authority of this fact.

Based on notifications from the natural or legal person, owner, administrator, or tenant of the property on which waste has been placed illegally, on its own initiative, or that of another administrative authority, the competent authority shall verify whether the extent of the illegal placement of waste is such that a criminal offence may have been committed, and issue an expert opinion.

If it is assumed that a criminal offence has been committed, the competent waste management administrative authority shall make a notification thereof in accordance with a specific regulation, and the procedure for determining the responsible person shall not commence.

If the competent waste management administrative authority is not aware of any facts suggesting that a criminal offence has been committed, it shall commence the procedure to determine the person responsible.

19 | Implementing Decree of the Slovak Occupational Safety Office No 59/1982 laying down the basic requirements for ensuring safety at work and safety of technical equipment, as amended. Implementing Decree of the Ministry of Labour, Social Affairs and Family of the Slovak Republic No 147/2013 laying down the details of ensuring health and safety in construction and related work and details of the professional qualifications for the performance of certain work activities.

20 | Civil Code.

## **8.2. Costs of the removal**

The person who ensures the recovery or disposal of waste shall be entitled to the compensation for the costs incurred by the person responsible for the illegal placement of waste. If the person responsible cannot be determined, the costs of removal will be borne by the municipality or state (from the municipal or state budget).

Subsidies are available from the Environmental Protection Fund, and municipalities can obtain loans at favourable interest rates.

## **8.3. Criminal law provisions on the behaviour of unauthorised handling of waste**

Act No. 300/2005 Coll. Criminal Code, in the framework of Criminal Offences against the Environment, regulates the body of the Criminal Offense Unauthorized Handling of Waste (Section 301 of the Criminal Code).

Unauthorized Handling of Waste is committed by any person who breaches binding legal regulations when handling waste.

## **8.4. Civil law practice of compensation for illegally abandoned waste**

According to Section 415 of Act No. 40/1964, Coll. Civil Code, everyone is obliged to act in such a way that there is no damage to health, property, nature, or the environment because of their actions. Pursuant to Section 420 of the Civil Code, everyone is responsible for damage caused by a breach of legal obligation.

The injured party is entitled to compensation under national civil law and may take direct action against the perpetrator.

# **9. Illegal waste dumping in Slovenia**

Slovenian regulations are based on Article 248 of the Environmental Protection Act and Article 10 of the Decree on Waste.

Article 248 of the Environmental Protection Act aims to regulate the management of discarded or abandoned waste, particularly on the land owned by the State or municipalities.

If the perpetrator cannot be identified or refuses to remove the waste, a competent inspector may order the public service provider to remove it.

Littering is an exception to this regulation.

The Waste Decree states that the primary objective is to minimise the negative environmental and health impacts of waste. It is important that waste management does not cause excessive pollution of the water, air, and soil. It is also necessary to avoid excessive exposure to noise and unpleasant odours. Adverse

effects should be minimised in areas requiring special protection, such as nature reserves. Waste management should consider the landscape and cultural heritage of the protected areas.

Another important aspect of this measure is the need for an approach that promotes waste prevention throughout the life cycle of products, including design, production, distribution, consumption, and use. To this end, sustainable and environmentally friendly practices should dominate the production and consumption processes, emphasising the importance of social and environmental responsibility throughout the product chain.

### **9.1. The cost of the removal**

In the case of abandoned waste, particularly on land owned by the State or municipalities, the costs of the ordered removal of waste shall be borne by the State or respective municipality, and the perpetrator shall be required to reimburse them.

In the case of waste abandoned on the private property of a person owning immovable property, the owner of the property bears the removal costs, but may recover them from the perpetrator. The perpetrator identified by the police or during an inspection is liable to pay the costs, including interest.

### **9.2. Authorities in the elimination of illegal waste dumping**

The following authorities function collaboratively to effectively manage the problem of illegally abandoned waste and ensure compliance with environmental rules and regulations in Slovenia: (a) The Ministry of the Environment, Climate, and Energy is responsible for the development and implementation of the country's environmental policies, including measures against illegal waste management. (b) Environmental and Energy Inspectorate is responsible for environmental inspections that monitor compliance with environmental laws and regulations, including the fight against illegal dumping of waste. (c) Local municipalities and municipal bodies may also be responsible for the management and cleaning up of illegal waste in their areas. (d) The Slovenian police and – in case of a fire hazard – the fire brigade are also involved in the fight against illegal waste.

### **9.3. Criminal law provisions**

The regulation of illegal waste abandonment behaviour is based on Article 332 of the Criminal Code.

The regulations are violated when: (a) the release, emission, or intake of substances or ionising radiation into the air, soil, or water endangers the life of one or more persons or causes a risk of serious bodily harm or actual damage to the quality of air, soil, water, animals, or plants. (b) the collection, transport,

recovery, or disposal of waste, or control of such procedures or activities after terminating the operation of the waste disposal, whether by trade in waste or transmission, endangers the life of one or more persons or causes a risk of severe physical damage or actual damage to the quality of air, soil, water, animals, or plants.

If the act referred to is committed in a criminal society for the implementation of these acts, the perpetrator shall be punished by imprisonment from one to 12 years.

Slovenia has some of the harshest laws in the EU, with smuggling and illegal waste dumping punishable for up to 12 years in prison.<sup>21</sup>

#### **9.4. Civil law practice of compensation for illegally abandoned waste**

The Environmental Protection Act stipulates that, in the event of environmental damage, the perpetrator alone should cover the costs of all preventive or remedial measures.

In the field of civil law, the Code of Obligations, which contains general rules for all obligatory relationships, does not contain specific provisions regarding compensation for damage caused by illegally dumped waste. In case of damage caused by illegally dumped waste, the beneficiary could only claim reimbursement in accordance with the general rules of tort liability (he would have to prove the cause of the damage, causation, and responsibility).

#### **9.5. A tool for detection illegally abandoned waste**

Although Slovenia is a small country (20.273 sq. km.), several thousand illegal dumping sites are scattered throughout the country. More than 15,000 of these are already included in the Register of illegal dumping Sites (a project run by a national NGO), which is estimated to covers only 30-40% of the total.

In 2010, 7,000 dumping sites were cleaned, but new ones keep arising, or fresh dumping is observed on the cleaned sites. Most of the material in these landfills consists of construction and organic waste (approximately 85%), while 10% is municipal waste.<sup>22</sup>

The National Register of Wild Dumping Sites is an innovative tool that contributes to the regulation and unification of wild dumping sites across Slovenia. The register, with more than 15,000 wild dumping sites, is currently the largest collection demonstrating the state of illegal dumping in Brazil.<sup>23</sup>

21 | Investigate Europe – Authorities struggle to track Europe’s Illegal waste trade, 2023

22 | Global Atlas of Environmental Justice – Illegal dumping sites, Slovenia, 2021

23 | National Register of Wild Dumping Sites, Slovenia

## 10. Summary

In the V4+ countries, illegal waste dumping remains a serious concern. Adapting to the challenges of the EU WFD, these countries attempted to implement the concept and sanctions for illegal waste dumping within their own legal environmental systems.

In accordance with the provisions of the WFD, member states not only used legal instruments against illegal waste dumping, but also developed various technical and social solutions to tackle the problem. The tools developed to detect illegal waste dumps include the use of satellite surveillance and GIS to help identify and locate illegal waste dumps.

Additionally, member states launched community and awareness-raising campaigns to draw public attention to the harmful effects of illegal waste dumping. Such initiatives create awareness about the importance of correct waste management in society by involving local communities.

The challenge is further aggravated by the fact that the problem of illegal waste dumping is growing dynamically, and member states must constantly adapt to dynamic environmental challenges to manage it effectively. The fight against illegal waste dumping is complex and multilevel, and member states must collaborate closely, using different tools and strategies, to effectively tackle the threat.

In summary, it is worthwhile to examine the differences between the regions within the EU. While V4+ countries focus mainly on the problem of illegal dumping through the EU WFD, Hornyák & Lindl shows that France, Spain, and Germany regulate the right to a healthy environment, mainly at the constitutional level. In France and Spain, the right to a healthy environment is enshrined directly, or in documents of constitutional value, whereas in Germany, this right is indirectly expressed through the State's responsibility for future generations.<sup>24</sup> In contrast, V4+ countries have developed practical solutions, such as technological and community initiatives to combat illegal dumping, highlighting the dynamic growth of the problem and the need for continuous adaptation.

### 10.1. Legislation on illegal waste dumping

The Czech Republic, Hungary, Poland, Slovakia, and Slovenia comprise legislations on illegal waste dumping under their national waste or environmental protection laws.

In the Czech Republic, the environmental police and local authorities play key controlling roles, whereas in Poland, environmental inspectorates lead the regulations.

24 | Hornyák & Lindl 2023, 44.

In Hungary, waste management authorities in county government offices, disaster management authorities, and the police are involved in the clean-up of illegal waste. In Slovakia, the national environmental inspectorate controls the rules, and local authorities are also involved. In addition to the legal framework, regulations have established rules for waste management in Slovenia, and public service providers are involved in the removal of illegal waste.

Together, these regulatory regimes reinforce the commitment of member states to effectively fight illegal waste and ensure strict compliance with environmental and health requirements. These measures aim to promote sustainable waste management and prevent illegal waste disposal.

## **10.2. Obligors and costs**

Illegal dumping is often difficult to trace back to the perpetrator; therefore, the owner of the contaminated land is responsible for removing illegal waste. The owner can be a private individual, the state, or a local authority. The cost of eliminating illegal waste is usually borne by the owner of a site, which places a significant burden on individuals and communities. However, the Hungarian legal system introduced the principle of 'fairness', which allows for discretionary action by authorities in the case of disadvantaged landowners.

## **10.3. Criminal law provisions**

V4+ countries have established strict criminal frameworks for illegal waste dumping.

In the Czech Republic, criminal prosecution for environmental damage and endangerment includes the dumping of hazardous waste. Intentional or grossly negligent abandonment of waste is a criminal offence that endangers or damages various environmental components, such as water, soil, and air. The scale of the offence is related to the damage to society; for example, in terms of the area covered or the seriousness of impact on human health or life.

Poland is also strict with regard to illegal waste management. Under the provisions of the Penal Code, severe penalties are imposed on those who leave hazardous waste in areas that are not designated for this purpose. Penalties can include up to 10 years of imprisonment.

Hungary also takes the issue of illegally dumped waste seriously. An amendment to the Penal Code in 2021 will issue severe prison sentences for those depositing hazardous or significant quantities of waste in unauthorised areas. Although

Hungarian criminal law is in line with the new EU Directive<sup>25</sup>, some punishable acts are not clearly defined in the Hungarian Criminal Code. Moreover, the sanctions in the Hungarian Criminal Code did not always meet the requirements of the new directive.<sup>26</sup>

Slovakia regulates the criminal offence of unauthorised handling of waste and punishes anyone who breaks the mandatory legislation when handling waste. This includes unauthorised waste dumping, which incurs severe penalties.

Slovenia has particularly severe penalties for the illegal disposal of waste. The offences are regulated by Article 332 of the Criminal Code and punish those who discharge hazardous substances into the environment or collect, transport, recover, or treat waste illegally with up to 12 years of imprisonment. This is one of the strictest environmental laws in the European Union.

Overall, all V4+ countries apply strict penalties for illegal waste management, underlining their commitment to environmental and health protection.

#### **10.4. Civil law practice**

Two aspects of civil law practice appear in V4+ countries, wherein personal liability and compensation play prominent roles.

In the first case, Article 415 of the Civil Code of the Czech Republic stipulates that everyone is obliged to act such that their activities do not cause damage to health, property, nature, or the environment. Article 420 lays down the principle of liability to pay compensation for damages resulting from any infringement. The affected party is entitled to compensation under the national civil law and can take direct action against the offender.

In the second case, a law is set out in the Slovenian Environmental Protection Act, which states that in the event of environmental damage, the polluter is exclusively liable for the costs of any preventive or remedial measures. However, in civil law, the general rules of the Code of Obligations do not include specific provisions on the compensation for damage caused by illegally dumped waste. In such cases, the concerned party can only claim compensation in accordance with the general principles of liability for damages, which include proof of the cause of the damage, causation, and liability.

Both jurisprudences emphasise the importance of preventive measures to avoid damage and ensure the financial liability of persons responsible for the damage caused.

25 | Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC

26 | Udvarhelyi 2023, 169.

### **10.5. Good practices**

V4+ countries are adopting innovative approaches to waste management to prioritise the environment. For example, the Czech Republic is transforming its economy into a circular one by adopting a new waste management plan under the Waste Reduction Program. The country's 'Don't throw it away' initiative allows city dwellers to drop off usable items and reduce unnecessary waste.

Poland uses satellite monitoring and geographic information systems to combat illegal waste accumulation. The Sentinel satellites of the European Space Agency provide regular images to authorities, allowing remote monitoring of areas and rapid identification of potential problems. Geographic information systems help collect and analyse data.

Hungary is acting against illegal waste with its 'Clean up the Country!' project and WasteRadar. Under the project, the country organises clean-ups to remove illegal waste accumulated in forests, along rivers, and roadsides. The WasteRadar application allows citizens to report illegally dumped waste, thereby contributing to efficient processing.

Slovenia uses the National Register of Illegal Waste Sites as a unique tool for identifying and registering illegal waste sites across the country. This systematic approach helps authorities assess the depth of the illegal waste problem and develop more effective measures. The V4+ countries are taking concerted action to ensure a sustainable future for environment and waste management.

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