



# Economic instruments for managing environmentally harmful products in Ukraine



May 2015

*Current practices and  
policy recommendations*



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## ACRONYMS

CV	Cylinder volume
EaP GREEN	Greening Economies in the Eastern Neighbourhood initiative
EPR	Extended producer responsibility
ETD	Energy Taxation Directive
EU	European Union
MSW	Municipal solid waste
OECD	Organisation for Economic Co-operation and Development
PRO	Producer responsibility organisation
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
WEEE	Waste electrical and electronic equipment
WTO	World Trade Organization

## 1. INTRODUCTION

The project “Economic instruments for managing environmentally harmful products in Ukraine” is part of the European Union’s initiative “Greening Economies in the Eastern Neighbourhood” (EaP GREEN) implemented by the OECD in partnership with UNEP, UNIDO and UNECE. Its objective was to help the Government of Ukraine to improve the design of existing instruments and develop new ones in order to provide incentives for both reducing pollution and introducing greener products. The regional Policy Manual for Eastern Partnership countries “Creating Market Incentives for Greener Products” developed by the OECD Secretariat in 2014 provided the analytical basis for the work.

The project was launched in October 2013 and included the following activities:

- A review of the existing policy and regulatory framework, as well as of the current practice of using product-related economic instruments;
- A series of stakeholder workshops to discuss options for the introduction or reform of product-related economic instrument and respective challenges;
- The development of policy recommendation on the key issues.

From the project’s outset, the policy discussions focused on two principal policy instruments: environmentally related product taxes and extended producer responsibility (EPR) schemes. Ukraine has made several attempts to introduce environmental taxes on harmful products but, in line with the current Government’s tax consolidation policy, decided to pursue the differentiation of general excise taxes based on environmental criteria. Ukraine’s interest in EPR schemes is driven by its waste management challenges as well as by the process of harmonisation of its legislation with that of the European Union, to which Ukraine has committed itself under the Association Agreement. The following sections describe Ukraine’s experience to-date with the design and implementation of each of these instruments and provide recommendations based on international best practices.

The draft project report was discussed and endorsed at a national stakeholder workshop on 16 April 2015 in Kyiv.

## 2. ENVIRONMENTALLY RELATED PRODUCT TAXES

### 2.1 Current practice

#### 2.1.1 Taxes on motor fuels

Prior to 1 January 2015, the Tax Code of Ukraine (2010) imposed an environmental tax “on mobile sources of air pollution”. It was paid by economic agents that either produced and sold or imported motor fuel. The rates were differentiated based on the sulphur content in diesel and the bioethanol content in petrol (for petrol with bioethanol the rates were lower). The highest rate was less than EUR 6 per tonne of fuel. The revenue from this environmental tax went to extra-budgetary environmental funds at the national and local levels.

The excise taxes are paid by manufacturers and importers of energy products. The pre-2015 excise taxes on motor fuels were set at the rate of EUR 198 per tonne of petrol and EUR 98 per tonne of diesel fuel with low sulphur content (a higher excise tax was imposed on high-sulphur diesel). The Tax Code sets separate but equal rates for leaded and unleaded petrol, even though officially leaded petrol was phased out in Ukraine in 2001 (the Ministry of Finance maintains a separate tax rate for leaded fuel as a “precautionary measure” in case such fuel is imported into Ukraine). The existing tax rates do not provide any incentives for petrol that contains bioethanol or for biodiesel, although these fuels have a lower environmental impact than respective regular fuel.

As of 1 January 2015, pursuant to the Ukrainian Government’s tax consolidation policy, the environmental taxes on motor fuels were incorporated into the excise tax (whose revenues go to the general state budget). The excise tax rates for selected energy products are presented in Table 1. These rates are significantly lower than the OECD average of over EUR 600 per tonne of petrol and about EUR 380 per tonne of diesel.<sup>1</sup>

In addition, an excise tax on the sales of excisable goods, including fuels, has been levied. The rate is 5% of the product price, including VAT. The proceeds of the sales excise tax go into the local budget.

**Table 1. Excise tax rates for motor fuels, 2015**

Product	Tax rate, EUR per tonne
Petrol (leaded and unleaded)	202
Petrol mixed with biofuel (at least 5% of bioethanol)	202
Diesel (sulphur content up to 0.002%)	100
Diesel (sulphur content above 0.002%)	132
Biodiesel (with less than 70% oil products)	102

Source: Ministry of Finance of Ukraine, 2015

<sup>1</sup> This report does not consider the taxation of heating fuels.

### 2.1.2 Taxes on motor vehicles

Excise taxes on motor vehicles are also payable by domestic producers and importers, with their rates depending on the vehicle type, age, engine type, and cylinder volume (CV). These rates (Table 2) were doubled in March 2014 as a purely fiscal measure.<sup>2</sup> As of 1 January 2015, the first-time vehicle registration fee was incorporated into the excise tax. There is, however, a tax on heavy vehicles entering Ukraine.

**Table 2. Excise tax rates for vehicles, 2015**

Vehicle/engine type	Age	Tax rate, EUR/c.c. <sup>3</sup>
<b>Vehicles for transport of more than 10 persons (buses)</b>		
Engine CV no more than 5000 c.c.	new	0.003
	used, up to 8 years	0.006
	over 8 years	0.3
Engine CV more than 5000 c.c.	new	0.003
	used, up to 8 years	0.014
	over 8 years	0.7
<b>Light passenger cars</b>		
Engine with spark ignition (petrol-fuelled)	new	0.102 – 2.209 <sup>4</sup>
	used, up to 5 years	1.094 – 3.329 <sup>3</sup>
	over 5 years	1.438 – 4.985 <sup>3</sup>
Engine with compression ignition (diesel-fuelled)	new	0.327 – 2.209 <sup>3</sup>
	used, up to 5 years	1.923 – 2.779 <sup>3</sup>
	over 5 years	2.441 – 4.715 <sup>3</sup>
<b>Cargo transport vehicles (trucks)</b>		
Off-road and dumper trucks, weight up to 5 tonnes	up to 5 years	0.01
	5-8 years	0.4
	over 8 years	0.5
Off-road and dumper trucks, weight over 5 tonnes	up to 5 years	0.016
	5-8 years	0.64
	over 8 years	0.8
Other trucks, weight up to 5 tonnes	new	0.01
	used, up to 5 years	0.02
	5-8 years	0.8
	over 8 years	1.0
Other trucks, weight between 5 and 20 tonnes	new	0.013
	used, up to 5 years	0.026
	5-8 years	1.04
	over 8 years	1.3
Other trucks, weight over 20 tonnes	new	0.016
	used, up to 5 years	0.033
	5-8 years	1.32
	over 8 years	1.65

Source: Ministry of Finance of Ukraine, 2015

<sup>2</sup> At the same time, the “utilisation fee” (discussed below in the context of extended producer responsibility) was abolished by the Government in April 2014.

<sup>3</sup> Cubic centimetre of engine cylinder volume (CV).

<sup>4</sup> Depending on engine CV.

### **2.1.3 Taxes on other environmentally harmful products**

In 2013, the then-Ministry of Revenue and Fees presented draft amendments to the Tax Code, which, among others, envisaged the introduction of taxes on the following product categories:

- Aerosol-packaged products;
- Luminescent bulbs;
- Batteries;
- Lubricant oils;
- Plastics (packaging);
- Rubber products (tyres);
- Household chemicals (detergents, bleaches, cleaning liquids, etc.); and
- Natural gas (to replace the then-existing environmental tax on it).

The tax rates were to be set mostly on the *ad valorem* basis: as 1% of the declared customs value or retail price (for plastics and rubber products a minimum rate was proposed at EUR 100 per tonne). An *ad quantum* rate was proposed only for luminescent bulbs (EUR 1 per unit). The taxes were to be paid by economic agents who either import the listed categories of products into Ukraine (except transit) or produce and sell those products in Ukraine. The revenue would go to the national budget.

However, the reform proposal was eventually abandoned using the argument that the parallel application of such product taxes and the already existing taxes on air emissions, wastewater discharges and waste disposal (that cover some of the same substances and products) would amount to “double taxation”.

## **2.2 Best practices and recommendations**

Given the current Ukrainian Government’s tax consolidation policy and the fact that both the environmental tax on fuel and the registration fee for motor vehicles have been incorporated into the respective excise taxes, ***the priority direction for reform at this time is to rationalise and strengthen the differentiation of the excise taxes on motor fuels and motor vehicles.***

The main purpose of environmentally motivated differentiation of excise taxes on energy products and transport vehicles is to send a price signal aimed at reducing the consumption and use of their more environmentally harmful varieties. Tax rates may vary between products with different environmental characteristics (such as petrol and diesel cars), or between several types of one product with different environmental characteristics (such as diesel with different sulphur content).

Adapting excise tax differentiation will affect the revenues that currently taxes (apart from the local sales tax) go into the state budget. While presently the Ukrainian Government would welcome additional tax revenue, there are practical limits to how high a rate of tax can be set without stimulating tax evasion and false accounting. There are also political limits to how high the tax can be without excessive producer and voter resistance. Budget neutrality may be preferable from the perspective of political acceptability of



the proposed changes. At the same time, increasing state income from excise taxes in the framework of an environmental fiscal reform may allow the government to reduce other taxes (on labour or investment).

### 2.2.1 Taxes on motor fuels

With respect to excise taxes on energy products, EU Member States are bound by minimum levels stipulated by in the Energy Taxation Directive (ETD, 2003/96/EC). In practice, some EU countries have set their tax rates close to the minimum level, while others have made them (much) higher. The Directive is currently under revision: proposals for minimum tax rates to be effective in 2018 include taking into account the carbon content of fuels (on the basis of a tax rate of EUR 20 per tonne of CO<sub>2</sub>) as well as their energy content, which may lead to considerably higher tax rates for some fuels.<sup>5</sup>

*The Government of Ukraine should consider bringing the tax rates for energy products more in line with their carbon content and reducing excise taxes on motor fuels mixed with biofuels.*

Table 3 provides suggestions on how the existing tax rates could be amended. Currently, the tax rate for petrol in Ukraine is twice the rate for diesel, whereas their carbon content and caloric value are approximately at the same level. The EU ETD proposed rates are at approximately the same level (less than a 10% difference). Transplanting this logic to the Ukrainian context could result in a basic rate of EUR 150 for both fuels. To include the sulphur content as a factor for the tax on diesel, the current tax differentiation of about 30% would result in a rate of EUR 195 for high-sulphur diesel fuel.

With regard to mixes of motor fuels with biofuels (bioethanol, ethyl tertiary butyl ether, etc.), it is recommended to modulate the tax rate in accordance with the content of biofuels<sup>6</sup>. The tax rate of biodiesel with less than 70% of oil products would result in a maximum rate of EUR 105 (70% of EUR 150). Petrol with at least 5% biofuel would then result in a maximum rate of EUR 142 (95% of EUR 150). Fuels without any oil content should be exempt from excise taxes.

**Table 3. Proposed revision of excise taxes on motor fuels, EUR per tonne**

Product	Current Ukrainian tax rate	ETD proposed minimum tax rate	Proposed new Ukrainian tax rate
Petrol	202	500	150
Petrol mixed with biofuel (at least 5% of bioethanol)	202	according to component parts	0-142
Diesel (sulphur content up to 0.002%)	100	464	150
Diesel (sulphur content above 0.002%)	132	464	195
Biodiesel (with less than 70% oil products)	102	according to component parts	0-105

### 2.2.2 Taxes on motor vehicles

Excise taxes on motor vehicles in Ukraine are comparable to registration taxes in EU countries. However, there is a wide variety of ways in which those countries tax motor vehicles. Several EU countries

<sup>5</sup> Motor fuels with a sulphur content higher than 0.001% are not allowed in the EU.

<sup>6</sup> This would also be consistent with the 2012 Law of Ukraine “On the development of production and consumption of biofuels”.



(e.g. Denmark and the Netherlands) have a high registration tax on passenger cars, while others (e.g. Bulgaria and Germany) do not apply a registration tax on vehicles. Most countries base registration taxes partly on CO<sub>2</sub> emissions for one or more categories of vehicles.

#### *Passenger cars*

The Dutch registration tax on passenger cars is based on CO<sub>2</sub> emissions (Table 4).<sup>7</sup> Five brackets of increasing levels of CO<sub>2</sub> emissions per kilometre driven<sup>8</sup> correspond to five increasing tax rates per gram of CO<sub>2</sub> per km. “Pure” electric cars (but not hybrid cars) are exempted from the registration tax.

**Table 4. Registration tax rates in the Netherlands, new passenger cars, 2015**

Emissions, g/km	Tax rate, EUR/g
1-82	6
83-110	69
111-160	112
161-180	217
> 180	434

Source: <http://www.government.nl/issues/car-and-motorcycle-taxes/private-motor-vehicle-and-motorcycle-tax-bpm>

A comparison of the Ukrainian and the Dutch system may be illustrated by using examples of a small and a larger new car, e.g. a Fiat Panda 0.9 and a Opel Insignia 1.6, both with petrol engines (Table 5).

**Table 5. Comparative illustration of vehicle registration taxes in Ukraine and the Netherlands**

	Fiat Panda 0.9	Opel Insignia 1.6
<b>Cylinder volume (c.c.)</b>	964	1598
<b>CO<sub>2</sub> emissions (g/km)</b>	88	139
<b>Tax amount in Ukraine, EUR</b>	964 x 0.102 = <b>98</b>	1598 x 0.327 = <b>523</b>
<b>Tax amount in the Netherlands, EUR</b>	82 x 6 + 6 x 69 = <b>906</b>	82 x 6 + 27 x 69 + 29 x 112 = <b>5603</b>

*The Government of Ukraine should consider including CO<sub>2</sub> emissions as a factor in the determination of registration excise taxes for passenger cars, which would take better account of the environmental impact of car ownership.*

As can be seen from Table 5, the excise tax in Ukraine is roughly ten times lower than the registration tax in the Netherlands. A gradual increase of excise taxes on passenger cars in Ukraine would be advisable, using CO<sub>2</sub> emissions, rather than on cylinder volume, as a basis of their differentiation. Regarding the excise tax on used (imported) cars, Ukraine should consider a less drastic increase of the tax based on the age of the vehicle, but make it more closely linked to the vehicle’s CO<sub>2</sub> emissions.

#### *Buses and cargo vehicles*

Most EU Member States have no registration tax for buses following the policy of promoting public transportation. The registration tax for heavy cargo vehicles in many EU countries (e.g. the Netherlands) is

<sup>7</sup> A fixed base tax rate of EUR 175 applies to all cars with emissions larger than zero. On top of that, there is a diesel surplus of EUR 86 per gram of CO<sub>2</sub> per km over 70 grams/km, which serves to compensate for the lower excise tax rate on diesel. These surpluses are not considered here, in line with the suggested equivalence of excise taxes on diesel and petrol.

<sup>8</sup> According to the European Type-Approval System for Motor Vehicles, based on Directive 2007/46/EC.

based on the acceptable limits for exhaust emissions of new vehicles sold in EU member states (Euro standards) and the number of axes.

The EU Directive on the Charging of Heavy Goods Vehicles for the Use of Certain Infrastructures (2011/76/EC) sets rules for Member States for distance-related tolls and time-based user charges for trucks with capacity of over 12 tonnes. The Directive provides an option to also include costs of pollution and noise into the charge. All EU countries have circulation taxes in one form or another. For instance, Germany has a distance-based charging system for heavy vehicles; some countries use road tolls (e.g. France and Spain), others apply the Eurovignette (e.g. the Netherlands and Belgium).

*The Government of Ukraine should consider differentiating the excise tax structure for buses and cargo vehicles based on environmental characteristics (CO<sub>2</sub> emissions, Euro standards, engine type) or approximations such as weight or number of axes. These tax differentiation factors would take better account of the overall environmental impact of the transport sector.*

Ukraine’s current excise tax rates for new buses and trucks are low, so the differences in tax rates are small, apart from the large coefficients that apply for vehicles older than five years (for cargo vehicles) and eight years (for buses). Instead of using the age factor, Ukraine should consider applying the Euro standards I to VI as a basis for tax differentiation. The respective ranges of excise tax rates are suggested in Table 6.

**Table 6. Proposed tax rates for bases and cargo vehicles**

<b>Euro standard</b>	<b>Implementation date</b>	<b>Excise tax rate range, EUR/c.c.</b>
VI	January 2013	0.005-0.01
V	October 2008	0.01-0.015
IV	October 2005	0.015-0.02
III and lower	before October 2005	0.02-0.04

Restructuring excise tax differentiation may be only one component in a taxation policy mix affecting motor vehicles. For example, while there is presently no annual road tax in Ukraine, its introduction may be considered in future.

### ***2.1.3 Taxes on other environmentally harmful products***

In a longer-term perspective Ukraine should evaluate the environmental rationale for introducing environmentally related product tax for other product categories. These taxes should be confined to those products where the price signal can lead to behavioural change and reduced consumption and production of the taxed product. In particular, the Ukrainian Government should consider introducing environmental taxes on the following product groups: *fertilisers, pesticides, electric light bulbs, paints and other solvent-containing products, detergents and other cleaning liquids*. The argument of “double taxation”, i.e. the incompatibility of environmentally related product taxes with pollution taxes, is contradicted by the experience of OECD countries which shows that it is feasible to have several tax instruments with different bases applying to the same product (energy being a prominent example).

### 3. EXTENDED PRODUCER RESPONSIBILITY

#### 3.1 Current practice

Municipal solid waste (MSW) management is one of the key environmental challenges in Ukraine. Currently, less than 4% of the country's MSW is processed (just 2.5% is recycled), only 30-75% of the existing MSW treatment and recycling capacity (depending on the waste stream) is utilised, while 30 million tonnes of MSW end up in legal and illegal landfills.<sup>9</sup>

The Cabinet of Ministers approved on 3 January 2013 a Concept of a State Programme for Waste Management for 2013-2020. The Concept encourages the development of extended producer responsibility (EPR) schemes for selected waste streams. The President's Decree No. 572 of 18 October 2013 required that the Cabinet of Ministers prepare necessary regulatory documents for the improved management of priority waste streams: packaging, tyres, waste oils, end-of-life vehicles, electric and electronic equipment, medical and construction waste.

#### 3.1.1 EPR for packaging

Government Resolution No. 915 of 26.07.2001 "Introduction of a system for collection, processing and reuse of waste", targeting packaging waste, created a state-owned Ukrecoresursy company and put it in charge of managing the system. It set fees (per kg) for the collection and processing of paper, cardboard, plastic, glass, tin and aluminium packaging and established minimum recycling targets for packaging: 25% for 2009, 30% for 2010 and 35% for 2011, etc. (none of which has been achieved). Packaging producers and importers had a choice of organising recycling themselves or signing a contract with Ukrecoresursy. The fee revenues were to be collected on a special treasury account and managed by the government. The Ministry of Ecology and Natural Resources was given the responsibility of enforcing the targets, the State Customs Service had to report quarterly to the environment ministry on the packaging imports, and the Standards Committee had to develop appropriate marking of packaging products.

In practice, the system worked primarily with respect to packaging of imported products, in accordance with joint Decree No. 789/414/709 of 30 July 2009 of the Ministries of economy and environment and the Customs Service. To get customs clearance, the importing company had to obtain approval from an environmental inspector by showing a contract with Ukrecoresursy or proof of independent recycling arrangements. Domestic producers remained practically unaffected because there was no effective control mechanism.

After 2009, this approval became impossible to obtain by demonstrating a contract with any other company than Ukrecoresursy. This led to a situation where importers paid a nominal fee to Ukrecoresursy, but there was very little waste collection and recycling activity undertaken by Ukrecoresursy using the revenue (UAH 10 million per month in 2013, down from UAH 20 million per month several years earlier). An individual company's "agreement" with Ukrecoresursy did not stipulate actual collection and recycling obligations, so the associated fees contributed to a large corruption scheme. Ukrecoresursy's use of funds

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<sup>9</sup> Roundtable at the Ministry of Regional Development of Ukraine, 2 April 2014.

and compliance with collection and recycling targets (which have not even been set for the last several years) was not controlled by competent environmental or other enforcement authorities.

Producers that really wanted to have their waste recycled (when it was profitable) had to sign an additional contract with one of 69 private recycling companies currently operating in Ukraine. Indeed, as of 2014, 37 Ukrainian enterprises specialised in the recycling of plastics, 15 were engaged in paper recycling business, another 15 in glass recycling, etc.<sup>10</sup>

Several Ukrainian companies have contested Decree No. 789/414/709 in court. Following lengthy litigation, the State Service for Regulatory Policy and Entrepreneurship Development suspended the Decree in April 2014. In May 2014, the Decree was reinstated by the Kyiv District Administrative Court. Finally, on 18 March 2015 the Cabinet of Ministers revoked the entire Resolution No. 915 and abolished Ukrecoresursy.

A draft Law on Packaging and Packaging Waste has been developed by the Ministry of Ecology and Natural Resources. The draft Law envisages establishing an industry-owned producer responsibility organisation (PRO) which would ensure compliance with packaging recovery rates stipulated by the government. It would receive fees from packaging producers, importers, distributors, wholesalers and retailers for managing the recovery and recycling operations while compensating local governments and specialised firms for collecting recoverable packaging waste. While this draft law has certain shortcomings (e.g. it does not establish sanctions for non-compliance with waste collection and recycling targets), it has been almost unanimously endorsed by the Ukrainian business community.

At the same time, there are alternative legislative proposals to introduce a fee for packaging producers and importers and have the revenues from this fee be channelled to a special budgetary fund. It is unclear, however, how such a state-run scheme would constitute an improvement over the recently abolished arrangement with Ukrecoresursy.

### ***3.1.2 EPR for waste oils***

About 400,000 tonnes of waste oils are generated in Ukraine every year, and this amount is growing by 5-10% per year. However, there is almost no waste oil processing and recycling capacity in the country. Waste oil is considered hazardous waste, and processing it requires a licence.

Government Resolution 1221 of 17.12.2012 approved special rules for the collection, processing and disposal of used industrial oils and lubricants, establishing such terms as “authorised enterprise” (a state-owned entity managing the system) and “specialised enterprise” (performing the technical operations). Enterprises are required to contract an “authorised enterprise” (a list has been established by government authorities) and pay a minimum fee of 0.8 UAH per litre for the collection. The Resolution set a mandatory recycling target of 40% of the volume of oil used.

Most of industrial oils in Ukraine are imported, and so far only the importers have been affected by this scheme. The imports are supposed to be controlled at the border by environmental inspectors. However, it is impossible to evaluate how well the system is functioning in the absence of an established reporting mechanism.

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<sup>10</sup> Ukrainian Packaging and Ecological Coalition, presentation at a waste management roundtable, Ministry of Regional Development and Construction, 2 April 2014.

### **3.1.3 EPR for tyres**

According to expert estimates, over 180,000 tonnes of waste tyres are generated in Ukraine per year, of which only about 14,000 tonnes (less than 10%) are recycled. There are no modern facilities for processing old tyres, and the existing facilities are very polluting and wasteful.

Government Resolution 1136 of 27.07.2011 targeted the collection, processing and reuse of old tyres. It also imposed on producers and importers an obligation to either organise the collection and processing themselves or contract an authorised company but did not set any policy targets or fee rates. The Ministry of Ecology and Natural Resources has drafted a decree on the collection, processing and reuse of old tyres (and associated fees), but the decree has not been adopted, and the system is not functioning.

### **3.1.4 EPR for end-of-life vehicles**

Law 421-VII of 4.07.2013 “On the utilisation of end-of-life vehicles” and Law 422-VII “On amendments to the Tax Code” established a “utilisation fee” for passenger cars and trucks, diversified for cars based on the engine volume and on trucks based on total weight. The utilisation fee went into effect on 1 September 2013, with revenue going to the state budget in the absence of legal norms on the use of this revenue.

Article 6 of Law 421 left domestic vehicle producers the option of not paying the utilisation fee and committing to their own recovery and recycling scheme<sup>11</sup>. As a result, the EU and importing companies criticised the law as violating the WTO rules. Partly for this reason and partly to mitigate the price increase caused by the doubling of excise taxes on motor vehicles (see Section 2.1.2), the Ukrainian Government abolished the utilisation fee in April 2014.

### **3.1.5 Deposit-refund scheme for batteries**

Law 3503-IV of 23.02.2006 “On chemical sources of electricity” aimed at designing a deposit-refund system for large batteries (with capacity over 7 Amperes per hour). Physical and legal persons were required to pay a deposit of 5% of the retail price (without VAT) on batteries and return them to specialised processing facilities. However, the Government has not adopted an implementing regulation on their collection and processing, and the system remains dysfunctional. In practice, the deposit is not levied.

Large batteries are accepted by some licensed enterprises, either for scrap lead (in which case a small refund is paid) or as hazardous waste (in which case a fee is charged). The Ministry of Ecology and Natural Resources opposes the de-classification of batteries as hazardous waste and insists that their processing should be subject to licensing.

## **3.2 Best practices and recommendations**

### **3.2.1 Establishing a legal framework**

*In order to set a precedent of creating an EPR scheme consistent with good international practice, the Ministry of Ecology and Natural Resources should, as a first step, finalise the draft Law on Packaging and Packaging Waste and ensure its adoption by the Parliament.*

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<sup>11</sup> In reality, this obligation meant only the establishment of collection points in every region of Ukraine and every city with a population of over 50,000 (103 collection points in total).

*Additional legislation, based on the same EPR principles and in line with relevant EU Directive, should then be drafted for waste oils, tyres, end-of-life vehicles and electric and electronic equipment (WEEE), including batteries, to replace the existing dysfunctional regulations.*

The EPR legislation should define clearly the EPR scheme and its objectives. The European Commissions' study "Development of Guidance on Extended Producer Responsibility"<sup>12</sup> has shown that the differences in EPR implementation in different EU Member States arise from the varied interpretation in terms of scope and exact definition.

The scope of the EPR legislation should be clear and explicit, otherwise it may create uncertainty for business and lead to costly and wasteful litigation disputing the scope of application of the policy. In particular, it should specify the products covered by the scheme and the categories of firms subject to its requirements (only manufacturers and importers or wholesale or retail firms selling the product as well).

Even if EPR focuses on the responsibility of the producers/importers for products which are placed on the market, many other actors play a role in reaching the objectives of the scheme (consumers, local authorities, waste management companies, social economy actors, retailers etc.). The EPR legislation should also clarify and define the responsibilities (organisational and/or financial) and roles of each actor throughout the whole product life cycle as recommended in the Annex of the "Legislative proposal to review recycling and other waste-related targets in the EU".<sup>13</sup> Generally, there is no "one size fits all" solution when allocating the responsibilities as it depends on the local context and the type of products. However precise roles should be defined at the national scale, in accordance with the respective financial and/or operational obligations.

The individual responsibilities of all actors could be defined along these lines:

- Producers/distributors: Responsible for the products they put on the market, for executing take-back or financial obligations, for low-environmental-impact treatment of their waste products and for meeting recovery and recycling targets;
- Producer Responsibility Organisations: Act collectively on member producers' behalf, to collectively implement their take-back or financial obligations;
- National authorities: Responsible for implementing legislation, reaching mandatory legal targets, defining regulations and operational requirements, monitoring and enforcing the proper implementation of the EPR principle by all stakeholders as well as establishing additional economic instruments like landfill taxes or disposal fees (Pay-As-You-Throw schemes);
- Consumers/citizens: Responsible for participating in the separate collection schemes through effective sorting and using the provided infrastructure for separate collection to the fullest extent possible;
- Local authorities: In charge, in certain cases (e.g. for certain types of household waste covered by EPR) of waste collection and/or certain transport and treatment operations, achieving environmental objectives in direct collaboration with citizens-sorters/tax-payers and in charge of setting up local incentives fostering separate collection and efficient recovery schemes (including disposal fees).

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<sup>12</sup> [http://ec.europa.eu/environment/waste/pdf/target\\_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf](http://ec.europa.eu/environment/waste/pdf/target_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf)

<sup>13</sup> The adoption of the Proposal and its Annex is expected by end of 2015.







In addition to the definition of responsibilities within EPR schemes, one important and related feature is the way that dialogue is organised among co-responsible stakeholders. Over time, the waste management chain may evolve along with stakeholders' responsibilities. This may require an institutional co-ordination mechanism through which stakeholders can interact on a regular basis.

### 3.2.2 Rules for Producer Responsibility Organisations

Producers or importers are generally assigned certain obligations concerning the collection (“take-back”) of product packaging or end-of-life products, either at the level of individual firms or, more commonly, through a collective non-profit organisation – a PRO. PROs potentially exert three main functions: financing the collection and treatment of the targeted stream of end-of-life products by collecting fees and redistributing the revenue; managing the corresponding data; organising and/or supervising these activities. However their role can vary according to the type of product. For example, at the EU level, the most common role for PROs in EPR schemes for batteries includes a partial organisation of the waste battery collection system. Regarding end-of-life vehicles and waste oils, the majority of PROs mostly bear a mere financial responsibility. Finally, in the case of WEEE, the responsibility of PROs is either partially or fully organisational.

The different types of producers' responsibilities in 36 EPR schemes covering six waste streams identified by the European Commission in the study “Development of Guidance on Extended Producer Responsibility” are illustrated in Table 7. This table shows that there is no ‘one size fits all’ solution at the EU level.

**Table 7. PRO responsibilities in EPR schemes across the EU**

						
Financial responsibility	Austria Netherlands Slovakia Sweden	Italy Portugal Spain	United Kingdom			
Financial responsibility through contracts with municipalities		Belgium	Czech Republic France Netherlands	France		
Financial responsibility with partial organisational responsibility			Belgium		Austria Belgium Denmark France Netherlands Switzerland	Ireland Sweden United Kingdom
Financial responsibility with full organisational responsibility	Germany Finland		Austria Germany	Sweden Finland		Denmark Finland France Latvia

Source: Development of Guidance on Extended Producer Responsibility, European Commission, 2014



EPR legislation should include provisions which allow producers to choose between setting up a PRO or an individual responsibility scheme. In some cases, an individual responsibility scheme is more relevant. These might be cases where the corresponding products market is highly concentrated or where producers can implement a take-back system to their consumers. Given the high share of imported products in Ukraine, it is expected that most producers will set up a PRO. However, in some cases (e.g. large professional equipment) an importer may be in direct contact with its customers and therefore consider setting up an individual scheme.

*Ukraine should establish regulatory provisions allowing producers to choose between setting up a PRO or an individual responsibility scheme while ensuring a level-playing field among all producers and importers.*

All PROs, and single-firm collection and recycling operations, should be subject to equivalent targets and effective monitoring of compliance, with meaningful sanctions for non-compliance. Individual schemes should not offer an opportunity for non-compliance or lower compliance. PROs should also face equivalent financial conditions, based on cost-sharing by the participating firms. PROs should not be given competitive advantage by public subsidy, nor should they be burdened with responsibilities that are more onerous than those applying to individual schemes.

### **3.2.3 Rules for PRO financing**

Typically, a PRO levies charges on participating firms to cover partly or fully the net costs for the management of waste that has been separately collected (e.g. costs for collection and treatment, minus revenues from the sales of recovered materials); collection, transport and treatment costs for non-separately collected waste; as well as administrative, reporting, monitoring and enforcement, and public information and awareness raising costs relative to the operation of collective schemes.

In addition, for those costs explicitly covered by the EPR system, the level of coverage (full or partial) by the producers varies. This level of coverage is closely linked to the share of responsibilities between stakeholders as well as to the national framework for EPR. For instance, in most cases for battery waste, the financial responsibility assumed by battery producers covers 100% of collection and treatment costs. For WEEE, PROs cover 100% of transportation (pick-up from public amenity centres) and treatment costs. However, only few PROs reimburse 100% of the collection costs to local public authorities.

The EPR legislation should include provisions to clarify the level of cost coverage by the EPR systems.<sup>14</sup> When the costs that need to be covered by EPR do not fall within the operational responsibility of producers, nor within the direct functioning costs of PROs, some EPR systems use a reference formula (or reference cost) to estimate the amounts to be covered, and to determine how much producers should contribute (e.g. by reimbursing local authorities).

The charge levied on a firm should reflect as faithfully as possible the end-of-life cost of his own products. For example, with regards to packaging, a different fee should be applied for different materials. Similarly, a higher fee should be applied for WEEE arising from products containing hazardous substances which go through complementary waste treatment.

At a later stage, these schemes could introduce a form of fees “modulation” based on certain eco-design criteria. More globally, the modulation of fees aims at promoting the true cost principle which aims at individualising the producer responsibility by linking the financial responsibility with the true costs of

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<sup>14</sup> As recommended by the European Commission in the Annex of the “Legislative proposal to review recycling and other waste-related targets in the EU”, 03.07.2014

the management of the products put on the market by a specific producer. For instance, in France, PROs have introduced a fee modulation depending on the batteries' respective environmental impacts and accompanied by technical adaptation propositions. In Belgium, fees are set to reflect the realistic costs of collecting and treating various types of packaging material.

*Ukraine's EPR regulations should specify the basis for calculating annual fees to be paid by producers and importers to contribute to the running costs of the PRO – producers' fees should reflect the actual waste management costs of the products put on the market.*

In some industries that have undergone major restructuring, a high proportion of current wastes may be the products of manufacturers who are no longer in business. These “orphan” products, being older, may have relatively high waste management costs. Requiring existing producers to pay for managing these wastes is likely to meet with a lot of opposition on the grounds that the burden is excessive and unjust. It is recommended to undergo a cost-benefit analysis for relevant product category with long lifetime (such as WEEE) in order to establish whether some element of public subsidy to the operating costs of the PRO, based on the proportion of orphan products that it handles is necessary.

### **3.2.4 Setting and ensuring compliance with performance targets**

The legislation needs to contain a clear specification of the standards of waste management that producers are expected to achieve, either through individual management of their wastes or through the operations of the PRO which they finance and control. It should stipulate targets for the proportion of waste products to be collected through the EPR system as well as for the proportion of the waste to be recycled. The proposed minimum targets could be those already required by the European Commission in the specific directives framing the recovery and recycling of specific waste streams<sup>15</sup> or those recently outlined in the “Legislative proposal to review recycling and other waste-related targets in the EU”.<sup>16</sup>

The legislation may specify the targets directly or define a clear process for subsequent target-setting by the government. The latter option has the advantage that waste recovery and recycling targets can be adjusted more flexibly in the light of experience, though firms may fear that it increases the risks that they will face sudden and unrealistic demands to meet more stringent targets.

Both the public authorities and any collective industry-run PRO need to collect regular information on the performance of the system and on the relevant activities (sales, etc.) of individual participating firms. Two main performance indicators could be used to assess their performance:

- Recycling rate (the ration between the quantities of waste recycled and the quantities of waste produced;
- Costs (full costs for the management of the end-of-life products, including those that may not be directly covered by the producers).

However, the EU study has shown that assessing the well-functioning of EPR schemes in the EU is made very difficult due to the lack of transparency and availability of reliable data. Most of the time, scope, definitions, and calculation methods differ from one country to another. The EPR legislation should

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<sup>15</sup> Packaging waste (2004/12/EC), batteries (2006/66/EC), waste electrical and electronic equipment (2012/19/EC) and end-of-life vehicles (2000/53/EC).

<sup>16</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014PC0397>. The adoption of this proposal is expected by end of 2015.

contain clear provision for producers regarding the transparency regarding the costs, benefits and flows of data.

Although surveillance specifications generally exist for each stream in almost all EU member states, freeriding is a common problem in the implementation of EPR. Freeriding refers to producers who do not finance the end-of-life management costs, although they put a share of the corresponding products on the market. In the case of packaging schemes, the free riders phenomenon is frequently an important issue. Another form of freeriding is non-compliance. This refers to producers who contribute to the PRO but do not fulfil all obligations that they have agreed to respect or provide erroneous data about quantities put on the market.

EPR legislation should contain clear provisions for monitoring compliance so that firms that fail to meet their obligations can be clearly identified, and corrective action taken.

*The EPR regulations should specify how the collection and recycling performance targets for the PRO will be set (e.g. via decrees of the Ministry of Ecology and Natural Resources) and establish arrangements for annual financial audit and performance monitoring of participating firms.*

*Sanctions that would be applied to the PRO and its shareholder firms in the event of non-compliance with the performance targets should be included in Ukraine's Code of Administrative Offences. They should be set at a level high enough so that they are likely to exceed the financial savings that firms might make through non-compliance.*



The project “Economic instruments for managing environmentally harmful products in Ukraine” is part of the European Union’s initiative “Greening Economies in the Eastern Neighbourhood” (EaP GREEN) implemented by the OECD in partnership with UNEP, UNIDO and UNECE. Its objective was to help the Government of Ukraine to improve the design of existing instruments and develop new ones in order to provide incentives for both reducing pollution and introducing greener products. The regional Policy Manual for Eastern Partnership countries “Creating Market Incentives for Greener Products” developed by the OECD Secretariat in 2014 provided the analytical basis for the work..



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