REVIEW OF ENVIRONMENTAL TAXATION AND ENVIRONMENTAL PROTECTION EXPENDITURE IN UKRAINE

YULIIA OHARENKO
Outline

• **Review of the environmental taxation system**
  - Definitions and scope
  - Legal and institutional setup
  - Revenue from environmentally related taxes and non-tax payments
  - Key deficiencies of environmental taxation
  - Options for reforming environmental taxation

• **Review of the environmental protection expenditure management**
  - Definitions and scope
  - Legal and institutional setup
  - Budget funding of environmental protection measures
  - Key deficiencies of public environmental protection expenditure
  - Options for reforming environmental expenditure
• EU Regulation N° 691/2011 on European environmental economic accounts, ‘environmentally related tax’ means a tax whose tax base is a physical unit (or a proxy of a physical unit) of something that has a proven, specific negative impact on the environment, and which is identified in European System of Accounts (ESA) as a tax

• Only those payments to the government, which are defined as taxes can be considered as environmental taxes whereas non-tax payments are not. According to the ESA, taxes are ‘compulsory, unrequited payments, in cash or in kind, which are levied by general government, or by the institutions of the European Union…’

• Most environmental taxes are attributed to ESA category D.2 (taxes on production and imports), a few may reside in category D.59 (other current taxes) and very few may represent category D.91 (capital taxes)
In the national legislation of Ukraine, environmental tax is defined in a rather narrow way, resembling “pollution” and partly “energy” Eurostat categories of environmental taxes.

The Tax Code of Ukraine defines environmental tax as «a nationwide mandatory payment that is charged on the actual amount of emissions into the atmosphere, discharges of pollutants into water, waste disposal, the actual amount of radioactive waste temporarily stored by its producers, the actual amount of generated radioactive waste and the actual amount of radioactive waste accumulated before 1 April 2009».

However, several taxes and duties in Ukraine are comparable with other Eurostat categories of environmentally related related taxes.

Although rent is considered a tax in the Tax Code of Ukraine, it is designed to capture royalties for exploiting natural resources of Ukraine owned by the state. Thus, it could not be treated as an environmental tax and is excluded from the overall analysis.
## Comparability of the environmentally related taxes in Ukraine with the Eurostat categories

### Comparable taxes in Ukraine

<table>
<thead>
<tr>
<th>Energy and transport aggregated:</th>
<th>Energy and transport aggregated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty on petroleum products, vehicles and tyres for them, imported by business entities and citizens</td>
<td>Duty on petroleum products, vehicles and tyres for them, imported by business entities and citizens</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy</th>
<th>Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Excise tax on electricity</td>
<td>• Excise tax on vehicles produced in Ukraine and imported</td>
</tr>
<tr>
<td>• Excise tax on fuel produced in Ukraine and imported</td>
<td></td>
</tr>
<tr>
<td>• Environmental tax levied on CO₂ emissions into the air by stationary sources of pollution</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Environmental tax levied on emissions of pollutants into the air by stationary sources of pollution (excluding CO₂ emissions)</td>
</tr>
<tr>
<td>• Environmental tax levied on discharges of pollutants directly into water bodies</td>
</tr>
<tr>
<td>• Environmental tax levied on the disposal of waste in specially designated areas or facilities, except for the disposal of certain types of waste as secondary raw materials</td>
</tr>
<tr>
<td>• Environmental tax levied on the generation of radioactive waste (including already accumulated) and/or temporary storage of radioactive waste by its producers over the period specified in the license</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent for the extraction of subsoil minerals and use of forest resources applicable in Ukraine should be treated as ‘property income’ for the purposes of national accounts rather than the ‘tax’ according to Eurostat (2013a) Statistical Guide on Environmental Taxes. Thus, rent is not compatible with ‘resources’ category of environmental taxes</td>
</tr>
</tbody>
</table>

### Source
Prepared based on the reports of the State Treasury Service (2021) and Eurostat (2013a).

### Note
Figure covers only taxes valid as of 2020.
Distribution of environmental tax revenue across budgets and funds over the period 2010 - 2022


Note: For 2010 the Figure illustrates the distribution of the revenue from the charge for environmental pollution. Revenue from the environmental tax levied on CO₂ emissions and the generation of radioactive waste is not reflected in the Figure.
Revenue from environmentally related taxes and non-tax payments

Environmental tax revenue in the state budget

Revenue from environmentally related taxes and non-tax payments

Environmentally related taxes revenue in the state budget

Revenue from environmentally related taxes and non-tax payments

Environmentally related tax revenue in the EU countries and Ukraine in 2020, EUR million

Note: Total revenues from taxes and social contributions for Ukraine are estimated as the sum of the consolidated budget revenue and own revenue of the Pension Fund.
Environmentally related tax revenue as a share of GDP in the EU countries and Ukraine in 2020

Revenue from environmentally related taxes and non-tax payments

Source: Prepared based on data from Eurostat (2022), State Treasury Service (2021) and World Bank (2022b).
Environmental taxation system: key deficiencies

- Most experts interviewed noted that environmental taxes do not stimulate the reduction of pollution and serve only fiscal goals in Ukraine.

- Novitska (2016) estimated that the increase of environmental tax revenue by 1% increases the environmental protection expenditure of enterprises by 0.4%, which indicates static effectiveness (the ability to influence the level of environmental protection investment). The same increase in environmental taxes results in a decrease in the spending on environmental innovations of enterprises by 3.2%, which demonstrates that the dynamic effectiveness (the ability to influence environmental protection innovations) of environmental taxes is not observed.

- Market conditions and international requirements are the main drivers of the ecological modernisation of enterprises in Ukraine rather than taxes.

- Novitska (2016) and Kanonishena-Kovalenko (2017) note that the fiscal function of the environmental tax is also quite limited as its share in the state budget ranged from 0.2% to 1.2% over the period under review.

- Several interviewed stakeholders believe that one of the reasons for the limited effectiveness of environmental taxes is low tax rates that do not stimulate polluters to invest in environmentally sound technologies.

- Complicated and ineffective administration of environmental tax is another reason for its limited effectiveness.
Environmental taxation system: options for reform

- Reform of environmental taxation has been on the government agenda for more than ten years already
- Most interviewed experts agreed that there is no comprehensive and coordinated vision for environmental tax reform at the highest political level
- Reform should commence with the improvement of administrative procedures to eliminate the deficiencies of the current system, particularly, by building up cooperation and information exchange between the tax authorities and the State Environmental Inspection
- Effectiveness of the environmental tax administration is closely linked to the reform of the environmental monitoring and control system
- Revision of the environmental tax base should be an essential part of the reform. Consider differentiation of excise taxes depending on the sulphur content.
- Increase in taxes needs to be gradual and predictable to allow sufficient time for adaptation
- Most interviewed experts found it reasonable to spend part of the environmental tax revenue on environmental modernisation projects of enterprises, under clear and transparent procedures
- Review earmarking of the revenue
Review of the environmental protection expenditure management
Environmental protection expenditure: definitions and scope

- OECD (2007) framework for the collection of environmental protection expenditure, environmental protection is defined as “all purposeful activities directly aimed at the prevention, reduction and elimination of pollution or any other degradation of the environment resulting from the production process or the use of goods and services”

- Similar definition is used by the Eurostat (2020): “economic activities aimed at preventing, reducing and eliminating pollution or any other degradation of the environment”

- Environmental protection activities are grouped according to the Classification of Environmental Protection Activities (CEPA) - an international classification designed for “classifying activities, products, expenditure and other transactions related to environmental protection”

- CEPA distinguishes between nine environmental domains
<table>
<thead>
<tr>
<th>Classification of Environmental Protection Activities (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Protection of ambient air and climate</strong></td>
</tr>
<tr>
<td>1.1. Prevention of pollution through in-process modifications</td>
</tr>
<tr>
<td>1.2. Treatment of exhaust gases and ventilation air</td>
</tr>
<tr>
<td>1.3. Monitoring and measurement and similar activities</td>
</tr>
<tr>
<td>1.4. Other activities</td>
</tr>
<tr>
<td><strong>2. Wastewater management</strong></td>
</tr>
<tr>
<td>2.1. Prevention of pollution through in-process modifications</td>
</tr>
<tr>
<td>2.2. Sewerage networks</td>
</tr>
<tr>
<td>2.3. Wastewater treatment</td>
</tr>
<tr>
<td>2.4. Treatment of cooling water</td>
</tr>
<tr>
<td>2.5. Monitoring and measurement and similar activities</td>
</tr>
<tr>
<td>2.6. Other activities</td>
</tr>
<tr>
<td><strong>3. Waste management</strong></td>
</tr>
<tr>
<td>3.1. Prevention of pollution through in-process modifications</td>
</tr>
<tr>
<td>3.2. Collection and transport</td>
</tr>
<tr>
<td>3.3. Treatment and disposal of hazardous waste</td>
</tr>
<tr>
<td>3.4. Treatment and disposal of non-hazardous waste</td>
</tr>
<tr>
<td>3.5. Monitoring and measurement and similar activities</td>
</tr>
<tr>
<td>3.6. Other activities</td>
</tr>
<tr>
<td><strong>4. Protection and remediation of soil and water</strong></td>
</tr>
<tr>
<td>4.1. Prevention of pollutant infiltration</td>
</tr>
<tr>
<td>4.2. Cleaning up of soil and water bodies</td>
</tr>
<tr>
<td>4.3. Protection from erosion and other degradation of soil and water</td>
</tr>
<tr>
<td>4.4. Prevention and remediation of soil and groundwater salinity</td>
</tr>
<tr>
<td>4.5. Monitoring and measurement and similar activities</td>
</tr>
<tr>
<td>4.6. Other activities</td>
</tr>
<tr>
<td><strong>5. Noise and vibration abatement</strong></td>
</tr>
<tr>
<td>5.1. Preventive in-process modifications at the source</td>
</tr>
<tr>
<td>5.2. Construction of anti-noise/anti-vibration facilities</td>
</tr>
<tr>
<td>5.3. Monitoring and measurement and similar activities</td>
</tr>
<tr>
<td>5.4. Other activities</td>
</tr>
<tr>
<td><strong>6. Protection of biodiversity and landscapes</strong></td>
</tr>
<tr>
<td>6.1. Protection and rehabilitation of species and their habitats</td>
</tr>
<tr>
<td>6.2. Protection of natural and semi-natural landscapes</td>
</tr>
<tr>
<td>6.3. Monitoring and measurement and similar activities</td>
</tr>
<tr>
<td>6.4. Other activities</td>
</tr>
</tbody>
</table>
7. Protection against particle radiation (excluding external safety)
   7.1. Protection of ambient media
   7.2. Transport and treatment of high-level radioactive waste
   7.3. Monitoring and measurement and similar activities
   7.4. Other activities

8. Research and development

9. Other environmental protection activities
   9.1. General environmental administration, management and regulation
   9.2. Other activities
   9.3. Education, training and information
   9.4. Activities not elsewhere classified
The legislative framework of Ukraine lacks an explicit definition of environmental protection measures at the highest level.

In 1996, the Cabinet of Ministers introduced the list of environmental protection measures with the approval of Resolution No. 1 147.

The list encompasses 85 environmental protection and resource management measures organised in ten categories.

In certain cases measures are similar to those of CEPA but the general approach is different: the list aims to elaborate on specific technologies while CEPA rather provides an approach for tackling environmental pollution.

At the same time, at the level of enterprises, the statistical data collection form on environmental protection was fully harmonised with the CEPA one back in 2006.

Order of the State Statistics Committee of Ukraine No. 494 of 24 October 2006 defines environmental protection as “a set of measures aimed at preventing, reducing or eliminating pollution, other types of harmful effects of economic and other activities on the environment, the provision of services or use of products, as well as the conservation of biodiversity and habitat.”
Environmental protection expenditure: budget funding

State budget expenditure on environmental protection measures

- Other environmental protection activities
- Research and Development
- Protection against radiation
- Protection of biodiversity and landscapes
- Protection and remediation of soil and water
- Waste management
- Wastewater management

Note: p. – provisional data.
Expenditure on environmental protection measures in the consolidated budget by functional budget classification

Environmental protection expenditure: key deficiencies (1)

- Most experts interviewed noted that the **effectiveness of budget funding for environmental protection measures is rather low**. This conclusion is also supported by the findings of the Accounting Chamber and State Audit Service in their audits of budget programmes.

- **Imperfect procedures:**
  - list of environmental measures provided in the Resolution of the Cabinet of Ministers № 1 147 is too broad
  - Imperfect and not clear enough criteria
  - allocation of funding and implementation of measures need to fit in one year in line with general budgeting procedures
  - protracted administrative procedures and decision-making processes

- **Institutional capacity for managing environmental funds is rather limited both at the central and local levels**
Environmental protection expenditure: key deficiencies (2)

• **Weak monitoring and assessment system:**
  o *ex-ante* and *ex-post* monitoring is not carried out to assess to what extent implemented measure resulted in the improvement of environmental quality
  o rather formal system of quantitative indicators such as the number of procured equipment, developed documentation and studies that does not allow to assess the extent to which budget funding has contributed to the improvement of air and water quality, or biodiversity conservation
  o the link between the short-term indicators (in most cases related to the procurement of services and equipment, development of technical studies and reports) provided in the passports of budget programmes and long-term environmental policy objectives is often missing

• **The mismatch between policy ambitions and budget funding:**
  o commitments and ambitions related to the implementation of the EU environmental *acquis* are not reflected in the state budget
  o out of twelve policy priorities of the Ministry of Environmental Protection and Natural Resources for 2020-24 only three (climate change mitigation, biodiversity conservation and nuclear safety) are explicitly supported with budget funds
  o most experts noted that environmental programmes are considerably underfunded and often financed on a residual basis
Improvement of current procedures for funds allocation and strengthening of institutional capacity:

- Define priorities for budget funding
- Introduce explicit definitions of environmental protection and resource-saving measures
- Review of the Cabinet of Ministers Resolution No 1 147
- Review criteria for selecting projects
- Review procedures for allocation of budget funds on environmental programmes
- Introduce regular monitoring of environmental expenditure programmes
- Increase institutional capacity for management of environmental expenditure
- Increase transparency of budget funding of environmental programmes
- Review budget classifications
Establishment of the Environmental Fund as a legal entity:

- The establishment of the Environmental Fund as an independent legal entity with its own management structure was supported by many experts interviewed. This is also envisioned in the current National Economic Strategy for the Period until 2030.
- The independence of the fund from the leadership of the Ministry of Environment will minimise subjective factors in the decision-making in the allocation of funds.
- A key advantage of the fund would be the possibility of providing long-term guaranteed funding (for several years) for strategic environmental projects.
- EBA argues that private businesses should also have access to public funds to undertake environmental modernisation projects, which is currently not the case but which is done on other similar EU Funds.
- Transparent and trustworthy management structure is a crucial factor for the effective operation of the fund.
- Several experts noted the importance of recycling back environmental tax revenue to local communities.
- To ensure the successful functioning of the fund, it is critically important to vest it with proper financial resources and dedicated full-time staff.
Conclusions and policy recommendations

- Although the reform of environmental taxation has been on the government agenda for more than ten years already, there is no comprehensive and coordinated vision at the highest political level.
- Reform of the environmental finance in Ukraine is very closely linked to wider reforms in the environmental domain and political will is needed to roll it out.
- Dialogue and cooperation need to be built between the Ministry of Environment and the Ministry of Finance to ensure the balance of fiscal and environmental functions of environmental taxes and the timely allocation of budget funds for environmental programmes.
- The Post-War Recovery Plan of Ukraine envisions the development of a roadmap for the harmonisation of the environmental taxation system of Ukraine with the EU one by December 2023.
- Reform of the environmental taxation system should commence with the improvement of administrative procedures and interactions between different state bodies, particularly, by building up cooperation and information exchange between the tax authorities and the State Environmental Inspection.
- Considering that the allocation of budget funding for environmental programmes is unstable and is often done on a residual basis, earmarking of all revenue from environmental taxes could be viewed as a solution to have a reliable funding source for environmental protection measures.
- Part of the environmental tax revenue can be allocated to finance environmental modernisation projects of business but a clear and transparent funding mechanism should be developed to avoid the misuse of funds.