



Twinning Fiche

Project title: Twinning air quality and environment

Beneficiary administrations: Ministry of Environment of the Republic of Moldova (MoE) as the central beneficiary, and the Environment Agency, the Environment Protection Inspectorate as other main beneficiaries.

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EU funded project

TWINNING TOOL

List of abbreviations

Acronyms Term	Explanation
AA	Association Agreement
AQFD	Air Quality Framework Directive
AQMS	Air Quality Measurement Stations
AQMP	Air Quality Management Plan
BAT	Best Available Techniques (or Best Available Technologies)
BC	Beneficiary Country (as different from an EU Member State)
BREF	Best Available Techniques Reference (Document)
CO	Carbon Monoxide
DCFTA	Deep and Comprehensive Free Trade Area
EA	Environmental Agency (of the Republic of Moldova)
EC	The European Commission
EI	Environmental Protection Inspectorate (of the Republic of Moldova)
EIA	Environmental Impact Assessment
ELV	Emission Limit Values
EPR	Extended Producer Responsibility
EU	The European Union
GD	Government Decision
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
GIZ	German Agency for International Cooperation GmbH
IE	Industrial Emissions
IED	Industrial Emissions Directive
IPPC	Integrated System of Pollution Prevention and Control
CLRTAP	Convention on Long-Range Transboundary Air Pollution (Air Convention)
MoE	Ministry of Environment
MoH	Ministry of Health
MCP	Medium Combustion Plants
MEAs	Multilateral Environmental Agreements
MFA	Ministry of Foreign Affairs
Moldova	The Republic of Moldova
MS	Member State (EU)
NDS	National Development Strategy “European Moldova 2030”
PCB	Polychlorinated Biphenyls
PCT	Polychlorinated Terphenyls
POP	Persistent Organic Pollutants
PRTR	Pollutant Release and Transfer Register (abbr. in Romanian: RETP)
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
RNMCA	National Air Quality Monitoring Network (abbreviation is in Romanian language)
RoHS	Restriction of the use of certain Hazardous Substance
SAC	Special Areas of Conservation
WEEE	Waste Electrical and Electronic Equipment
WFD	Waste Framework Directive

1. Basic Information

- 1.1 Programme: NDICI Moldova/ACT-60722/EU4Recovery and Resilience (ref. NDICI-GEO-NEAR/2022/044-614)
- 1.2 Twinning Sector: Environment
- 1.3 EU funded budget: EUR 2,000,000.00
- 1.4 Sustainable Development Goals (SDGs):
 - Goal 3: Ensure healthy lives and promote well-being for all at all ages (in particular target 3.9)
 - Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable (in particular target 11.6)
 - Goal 12: Ensure sustainable consumption and production patterns
 - Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (in particular target 16.6)

2. Objectives

2.1 Overall Objective

The overall objective is the sustainable development and protection of the environment for present and future generations by strengthen the capacity of the Republic of Moldova to fulfil environment-related commitments, in line with the EU-Republic of Moldova Association Agreement, the EU Integration process and international agreements.

2.2 Specific objective

The specific objective of this Twinning project is to increase the pace of approximation and implementation of the *acquis communautaire* in the fields of air quality and air pollution reduction, environmental information, circular economy/waste management and sustainable management of chemicals.

- 2.3 The elements targeted in strategic documents (such as the National Development Strategy “European Moldova 2030”, EU-Moldova Partnership and Cooperation Agreement, Association Agreement, Sector reform strategy and related Action Plans)

The proposed project will support the Government of the Republic of Moldova (hereinafter ‘Moldova’) to build its institutional capacities to harmonize its legislation with the *acquis communautaire* and international commitments, including implementation of the Association Agreement (AA¹, signed on 27 June 2014, and fully applied after ratification in 2016) between the European Union and the Republic of Moldova (specifically Chapter 16 on Environment, i.e., Articles 86-91, and Annex XI on Environment)². Also, a Deep and Comprehensive Free Trade Area Agreement (DCFTA) became applicable.

The implementation of the AA has been monitored through Association Implementation Reports (the latest issued on 19 October 2021³) and reviewed in several bilateral dialogue

¹ https://eur-lex.europa.eu/legal-content/hr/ALL/?uri=uriserv%3AOJ.L_.2014.260.01.0004.01.ENG,
https://eeas.europa.eu/archives/docs/moldova/pdf/eu-md_aa-dcfta_en.pdf,
https://gov.md/sites/default/files/document/attachments/7048451_en_acord_asociere.pdf, <https://eur-lex.europa.eu/EN/legal-content/summary/association-agreement-with-moldova.html>

² http://eeas.europa.eu/archives/docs/moldova/pdf/eu-md_aa-dcfta_en.pdf

³ https://ec.europa.eu/commission/presscorner/detail/en/IP_21_5368

formats⁴. The EU-Republic of Moldova Association Agenda⁵ is the main tool of the AA⁶; its present version is valid for the years 2017-2027. Within this frame, the most recent ‘Recommendation of the EU-Republic of Moldova Association Council’ is dated 22 August 2022⁷, listing (in its Annex, chapter 3 IV 2 on Environment) short-term and long-term priorities related to the environmental sector as follows (p. 124-125):

- “Continue approximation to the EU laws on environment in terms of relevant policy documents, laws and secondary legislation, in particular on waste management, (...) industrial pollution, chemicals, (...) air quality and climate change.
- Complete the institutional reform in the sector in order to build a sound environmental administration (...) to implement and enforce the EU environmental acquis.
- Cooperate with the Republic of Moldova on development of green and circular economy (...) thus contributing to the goals of the European Green Deal”.

During the European Council on 23 June 2022, Moldova was granted EU candidate status⁸. Ahead of this decision, the country submitted the ‘Information requested by the European Commission to the Government of the Republic of Moldova for the preparation of the Opinion on the application of the Republic of Moldova for membership of the European Union’⁹. Chapter 27¹⁰ outlines the status in areas to be addressed by this Twinning project. An annual assessment of progress under Chapter 27 will be part of the annual Enlargement Packages.

This Twinning is also coherent with the national priorities set in the main strategic planning document of the country, the National Development Strategy (NDS) “European Moldova 2030” (approved by the Parliament in November 2022¹¹), which includes a socio-economic analysis in its chapter 2 and wherein “Goal 10 Ensuring a healthy and safe environment” is directly relevant to this Twinning. This NDS streamlines environmental topics, especially in its chapter 4¹², and (in its section 5.23, page 69) contains environmental targets¹³ and indicators¹⁴ that should be regularly monitored and reported.

3. Description

⁴ https://www.eeas.europa.eu/moldova/european-union-and-republic-moldova_en?s=223

⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A22017D1489>,
<https://mfa.gov.md/en/content/association-agenda>

⁶ <https://mfa.gov.md/en/content/association-agenda>

⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22022D1997&from=EN>

⁸ <https://www.consilium.europa.eu/en/policies/eastern-partnership/moldova/>

⁹ Part I: (general part): <https://gov.md/ro/content/informatii-solicitate-de-comisia-europeana-catre-guvernul-republicii-moldova-pentru-0> and Part II (specific part, with single chapters): <https://gov.md/ro/content/informatii-solicitate-de-comisia-europeana-catre-guvernul-republicii-moldova-pentru>

¹⁰ https://gov.md/sites/default/files/document/attachments/chapter_27_environment_and_climate_change.pdf

¹¹ <https://www.moldpres.md/en/news/2022/11/17/22008740> and for the entire text use https://imf.md/press/SND2030_377.2022.ro_ENG_google.docx

¹² within Chapter 4 mainly the section entitled “General objective 10. Ensuring a healthy and safe environment”, therein especially Specific objective 10.1. Improving water, air and soil quality; Specific objective 10.3. Ensuring the responsible consumption of natural resources; and Specific objective 10.4. The active transition to the green and circular economy. This section on “General objective 10” contains: “actively promoting the polluter-pays principle”, “imposing the internalization of the negative effects of economic activities”, “measures and principles of the circular economy into the production processes”, and states that “Innovative ideas, solutions and projects for integrated waste management will be supported.” (page 54 of the English translation).

¹³ especially: Target (10) Reducing and eliminating the impact of chemicals on the environment and the health of the population by developing an integrated system of management of chemicals from a legislative, institutional, technical and informational point of view; Target (11) The creation of integrated waste management systems through the development of the necessary infrastructure and services, with the main objective of preventing environmental pollution, reducing the amount of stored waste, increasing the recycling rate and reducing the consumption of natural resources; and Target (12) Creation of the integrated air quality management system, reduction of atmospheric pollutant emissions and greenhouse gas emissions compared to the reference year 1990.

¹⁴ including indicator 101 (Recycled waste, the share of the total volume of waste formed, in %) and 104 (The amount of air pollutant emissions from mobile sources (by sources), thousands of tons, reported per person, in %) in chapter 6.

3.1 Background and justification

3.1.1 Perspectives on Moldova from international viewpoints

Moldova is a small lower-middle-income economy. Although among the poorest countries in Europe, it has made significant progress in reducing poverty and promoting inclusive growth since the early 2000s¹⁵. GDP growth oscillates around 3-4% annually during the past decades¹⁶ (the contraction of -7.4% in 2020 being compensated by a +13.9% growth in 2021; but promising only a nil in the first half of 2022). In 2022, Moldova's monetary stance has tightened significantly. A sharp increase in food and energy prices unfolded, culminating with an inflation rate of 34.3 percent in August 2022 as result of the Russia's war of aggression against Ukraine. The current account deficit doubled in the first quarter of 2022, reaching 17.1 percent of GDP as the cost of energy imports expanded quickly¹⁷. While the SDG parameter "access to electricity" amounts to 100% since decades¹⁸, shelling of Ukrainian infrastructure by Russian aggression in late 2022 produced power outages even in Moldova. In some statistics, Moldova ranks last among a European cluster of countries¹⁹: lowest life expectation (70.9 years), GDP per capita (PPP 2017), only investing 0.1% of GDP into environment; but also regarding per-capita atmospheric emissions of pollutants (e.g., PM2.5) in 2014 (but since then facing over 80% increase till 2019), thus presenting a disparate overall image calling for structural reforms.

The Republic of Moldova ranks 80th out of 191 countries as per the Human Development Index (HDI) for 2021²⁰, which measures national progress in health, education, and standard of living. In the last decade, the Republic of Moldova has made important positive progress in terms of human development, yet the country continues to face a number of very complex challenges that require a collaborative effort and action by all stakeholders involved. Some of these challenges are intensifying in their complexity, such as migration (both internal and outmigration) and the connected brain drain.²¹ Increasing pollution and continuous degradation of the environment also add a negative impact to the generally challenging situation.

3.1.2 Moldovan national environmental planning

Environment and climate considerations are embedded into the new **Moldova 2030 National Development Strategy** (the earlier MDS is dated 2018, and the new one is already approved as MDS 2030), both as standalone priorities and as clearly defined sustainability objectives²².

Moldova has an **Environmental Strategy for the years 2014-2023**²³ that also was triggered by the political vector of the country's European integration, by the current requirements of national legislation alignment to the provisions of EU directives and by assuring the country's sustainable development via promoting a green economy, and the project of the Environmental Strategy for the next period (2030) is in the process of elaboration.

The Republic of Moldova submitted its revised **Updated Nationally Determined Contribution** (NDC2) honouring its commitments to implementation of the Paris agreement in March 2020. The Republic of Moldova set an economy-wide unconditional target is to reduce its greenhouse gas emissions by 70 per cent below its 1990 level in 2030. In 2016, about 72.7 per cent of the national net direct greenhouse gas (GHG) emissions originated from the

¹⁵ <https://www.worldbank.org/en/country/moldova>

¹⁶ <https://data.worldbank.org/country/moldova>

¹⁷ <https://www.worldbank.org/en/country/moldova/overview#3>

¹⁸ <https://data.worldbank.org/country/MD>

¹⁹ <https://www.eu4environment.org/app/uploads/2022/03/Report-Green-Growth-Indicators-in-Moldova-ENG-1.pdf> (p. 53ff)

²⁰ <https://www.undp.org/moldova/press-releases/moldova-multidimensional-shocks-exacerbate-inequalities>

²¹ <https://hdr.undp.org/system/files/documents/2020nhdrmdovapdf.pdf> , page 3

²² https://www.eeas.europa.eu/sites/default/files/swd_2021_295_f1_joint_staff_working_paper_en_v2_p1_1535649.pdf or also [here](http://extwprlegs1.fao.org/docs/pdf/mol191490.pdf) and in Romanian at <http://extwprlegs1.fao.org/docs/pdf/mol191490.pdf>

²³ Government Decision No. 301 of 24.04.2014:

<http://green.gov.md/pageview.php?l=en&idc=41&t=/Regulatory-framework/Environmental-Strategy> or <https://www.unep.org/resources/report/environmental-strategy-years-2014-2023>

energy sector. Other relevant direct GHG sources were represented by agriculture (17.8 per cent of the total), waste sector (10.7 per cent of the total) and industry (5.6 per cent of the total).

According to national authorities, the environmental sector suffers from a lack of funding, including public investment, and significant understaffing in the public administration.

3.1.3 Institutions to be involved in this Twinning project

The central beneficiary for this Twinning project is the **Ministry of Environment (MoE)** of the Republic of Moldova. As its main task, the MoE develops and promotes state policy in the field of environmental protection and rational use of natural resources, aimed at creating conditions favourable to life, sustainable development of the country, international collaboration, approximation of national legislation to that of the European Union. After the re-establishment of the Ministry of Environment (MoE) in 2021 (i.e., separated from the earlier Ministry of Agriculture, Regional Development and Environment MARDE), the circular economy policy and economic instruments service was founded within the Ministry as a separate entity.²⁴ While MoE's responsibility includes drafting environmental legislation, the **Environmental Agency** (EA, see its organisational structure in Figure 2) and the **Environmental Inspectorate** (direct translation from Romanian: Inspectorate for Environmental Inspection, EI, see its organisational structure in Figure 3) are bodies subordinated²⁵ to the MoE and are responsible for implementation of legislation²⁶, and therefore are included in this Twinning as "other main beneficiaries". The institutional collaboration follows the three institutions' mandates.

3.1.4 Perspectives on Moldova from a European Union viewpoint

According to the latest²⁷ 'Association Implementation Report on the Republic of Moldova'²⁴, substantial progress was made on waste and chemicals management and industrial emissions. In June 2020, Parliament ratified the financing agreement with the EIB for the 'Solid Waste in the Republic of Moldova' project, implemented as part of the 2013-2027 National Waste Management Strategy. The framework law on chemical substances, adopted at the end of 2018, came into force in February 2020.

The Commission states in its analytical report following the Commission Opinion on the Republic of Moldova's application for membership of the European Union²⁸: 'The main elements of the EU *acquis* are enshrined in law, although Moldova needs to achieve further alignment with EU horizontal legislation and implement the rules. (...) Implementation of its current environmental strategy is challenged by the lack of funding, low administrative capacity, especially for implementation and enforcement of environmental legislation, and heavy reliance on international donors.'

(1) Air quality

Reducing air pollution will be beneficial to improve health of the citizens as well as have positive implications on economic development and nature/ecosystems and biodiversity. Currently, welfare costs associated with air pollution by fine particles (PM2.5) represent about 6.5% of GDP equivalent in Moldova, compared to 3.8% on average in the EU.²⁹

²⁴ <https://www.mediu.gov.md/ro/content/organigrama>

²⁵ listed at <https://mediu.gov.md/ro/content/autorit%C4%83%C8%9Bi-administrative-din-subordinea-ministerului-mediului>, especially for EA at <https://ipm.gov.md/ro/leadership> and for EI at <https://am.gov.md/>

²⁶ in Romanian or Russian languages, at <https://www.legis.md/>; <http://lex.justice.md/>; <https://mediu.gov.md/ro/content/legislatie>

²⁷ https://ec.europa.eu/commission/presscorner/detail/en/IP_21_5368

²⁸ https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-02/SWD_2023_32_%20Moldova.pdf

²⁹ <https://www.oecd.org/countries/moldova/Country-profile-Moldova-2019-2020.pdf>

Since 2010, Moldova has seen a rise in air pollutants emissions – a trend that amplifies environmental and human health risks³⁰. This trend is caused by the rapid increase in emissions of pollutants from road transport. Emissions from stationary sources have been slowly declining. In the period 2014-2019, nitrogen oxides and sulphur oxides emissions per capita more than doubled in Moldova³¹. In 2021, some 20% of all air quality samples exceeded the requirements of the national law³². The monitoring of fine particulate matter (PM2.5 and PM10) is limited. Overall, Moldova relies on manual air quality monitoring and there is no accredited reference laboratory for air quality³³.

In response to this situation and the commitments as defined in the Association Agreement³⁴, the Parliament of the Republic of Moldova adopted a **Law on atmospheric air quality** in April 2022 (No. 98/2022³⁵). The law aims to improve monitoring and assessment of air quality and to ensure that information on air quality is provided to the public in accordance with European Directives. A **Law on industrial emissions** (No. 227/2022³⁶) was adopted and will enter into force in 2024, promoting application of best available techniques (BAT) and introducing integrated environmental permitting. Besides addressing pollution, this law set the framework for a level playing field in the industrial sector. At present, the important task is to put into operation these laws. More detailed references are provided in Chapter 3.5, under the respective headings of the Twinning's task list.

Another measure under development is the **National Integrated Air Quality Monitoring and Management System** (RNMCA, in its Romanian-language abbreviation), which is planned to be country-wide. The aim is obtaining accurate data on air pollution levels and verifying the contributions of various sources of pollution. Such data will be used for the development of air quality management plans and for identifying economic agents causing air pollution.

(2) Integrated environmental data system

Currently, environmental data is managed and administered by several different institutions and collected through several different reports and registers (air, waste, water, forestry statistics as well as on biodiversity and natural ecosystems etc.), resulting in a scattered environmental database in Moldova and not yet allowing consistent regular monitoring. Insufficient environmental data on pollution together with an inefficient data management has made it difficult to monitor, implement and enforce, as well as ensure compliance with legal requirements.

(3) Circular Economy – waste management

Moldova has historically used a large number of landfills, including substandard landfills, open burning, and indiscriminate dumping of mixed domestic, industrial and hazardous waste. This has resulted in significant pollution of the environment. There is a need to reduce the number of landfills, develop the capacities of waste recycling, establish the market of secondary materials and promote circular economy and resource efficiency.

Between 2014 and 2018, the volume of household waste remained around 2 million m³ before growing more rapidly between 2019 and 2020. As a result, Moldova generated about 2.4 Mm³

³⁰ <https://www.eu4environment.org/app/uploads/2022/03/Report-Green-Growth-Indicators-in-Moldova-ENG-1.pdf>

³¹ <https://www.eu4environment.org/app/uploads/2022/03/Report-Green-Growth-Indicators-in-Moldova-ENG-1.pdf>, page 53ff.

³² https://statistica.gov.md/files/files/publicatii_electronice/Anuar_Statistic/2022/1_AS.pdf

³³ https://eni-seis.eionet.europa.eu/east/governance/project-documents/RepMoldova_Country_Final_MIH_v2cleaned.pdf

³⁴ specifically defined in its Annex XI, see <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:22014A0830%2801%29> or also <https://eur-lex.europa.eu/EN/legal-content/summary/association-agreement-with-moldova.html>

³⁵ https://cancelaria.gov.md/sites/default/files/lege_nr_98_aerul_atmosferic.pdf

³⁶ https://www.legis.md/cautare/getResults?doc_id=133705&lang=ro

in household waste in 2020²⁰. In the last years, the country has made efforts to systematically transform its approach to waste management and adopted a framework Law on Waste (No. 209/2016 as amended in 2022³⁷) in order to implement the Waste Framework Directive (2008/98/EC), while still many by-laws are missing³⁸. While the new Environmental Strategy for the period 2023-2030 is under development (the preceding one was valid for the period 2014-2023) and the Waste Management Strategy (2013-2027) is currently still under revision, Moldova attempts first steps in the promotion of circular economy and resource efficiency, reducing waste disposal in landfills, increasing the scope of sorting and recycling of waste, and strengthening environmentally sound management of waste and chemicals – while the practical implementation of the extended producer responsibility (EPR) is one of several hurdles. The legal framework covers E-waste (Waste Electrical and Electronic Equipment, WEEE) and batteries, while a packaging waste implementing act is approved but will be modified³⁹. According to its experts, Moldova needs strong support in converting its economy into a circular economy, given that there is no secondary market yet, including on EPR schemes.

(4) Environmentally sound management of chemicals

The framework Law on chemical substances (No. 277/2018⁴⁰), adopted at the end of 2018, came into force in February 2020. It sets out to transpose the three key EU chemicals regulations (see chapter 3.5) in order to ensure the environmental protection and health based on the precautionary principle in the management of hazardous substances and as well as sustainable management of chemicals. The law on the control of major accident hazards involving dangerous substances was adopted in June 2020, approximating to the Seveso III Directive, while a number of implementing acts in this field are not yet approved. A Moldovan persistent organic pollutants (POP) regulation is planned for 2023.

The competences are divided between several institutions of the environmental and agriculture sector. A ‘Chemicals Agency’ as a common administrative umbrella does not exist. The sound management of chemicals and hazardous waste from households and industry remains a priority.

3.2 Ongoing reforms

Moldova early embarked on implementing environmental policies, however, with a clear orientation towards the environmental acquis though not necessarily with reliable quantitative data basis, sufficient administrative capacity, and evidence-based policy-making.

Most significant single ongoing reform actions for the Twinning are related to the National Environmental Strategy and National waste strategy, to which specific Twinning tasks should be allocated (see section 3.5). Critical issues include amendments to the Law on the Payment for Environmental Pollution: as of 2023, the Law on the Payment for Environmental Pollution is still in force in Moldova. It sets an obligation for payment of both the emission and discharge of pollutions into air and wastewater within the established norms and also for payment of emissions/discharges of pollutants in excess of the established regulations. A similar provision exists for waste generation in installations.

³⁷ https://www.legis.md/cautare/getResults?doc_id=130544&lang=ro

³⁸ The following regulations are developed according to the Law on Waste: Regulation on the export and import of chemicals; Regulation on packaging and packaging waste; Regulation on batteries and accumulators and their waste; and Regulation on the control of emissions of volatile organic compounds resulting from the storage and distribution of petrol from terminals to petrol stations.

³⁹ Meanwhile, as of February 2023, the pertaining Regulation is approved already.

⁴⁰ https://www.legis.md/cautare/getResults?doc_id=112668&lang=ro

As to the implementation of REACH⁴¹, the creation of a single institution ('Swedish model'), a National Chemicals Agency is under discussion, but its mandate (control functions) are yet to be defined in detail.

3.3 Linked activities

The following projects are linked with the scope of this Twinning:

- **LIFE programme** for environment and climate. Moldova joined on 28 November 2022⁴², enabling that Moldova (as the third non-EU country) can benefit⁴³ from EU LIFE's support for mobilising public and private resources for climate action, biodiversity protection, circular economy and clean energy transition. The LIFE programme is the EU's funding instrument for the environment and climate action running since 1992.
- **EU4Environment Green Economy in Eastern Partner Countries**⁴⁴: 2019-2023, 20 M€, the programme encompasses various projects helping Moldova develop green investment strategies, including to implement Resource Efficient and Cleaner Production (RECP) in SMEs activities⁴⁵, a sustainable lifestyle campaign⁴⁶, Eco-Industrial Park pre-feasibility assessment⁴⁷, Sustainable Public Procurement (SPP) and eco-labelling, develop waste management strategy, contribute to green innovation, strengthen green regulations for enterprises and compliance assurance, greening SMEs, assess and reinforce administrative capacity and develop Green Growth Indicators (GGIs).
- **EU4Environment Water and Data**: The programme runs 2021-2024 and has a budget of 12.75 M€. It aims at contributing towards Eastern Partnership countries environmental and climate resilience with a focus on: (i) knowledge-based decision-making, further development of environmental statistics and monitoring and extending access to high-quality data as part of open government; and (ii) better management of water resources and further alignment with EU water law, in particular the Water Framework Directive.⁴⁸
- **Recovery through a Circular Economy and Pollution Reduction in the Eastern Partnership countries (EU4Green Recovery East)**: 20 M€ regional programme supporting the partner countries' recovery by promoting green, circular economy and pollution reduction. Foreseen to start implementation in 2024.
- **EU Neighbours East**: 0.3 M€ in 16 small grants, including (as an example) support to 16 civil society development projects on both banks of Nistru River⁴⁹.
- **The European Union Network for the implementation and enforcement of Environmental law (IMPEL)** implements a number of projects and interventions in the area of waste, industry and air.
- In support of implementing the 2013-2027 National Waste Management Strategy, the 'Solid Waste in the Republic of Moldova' project was formulated with financial support

⁴¹ Regulation 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

⁴² https://environment.ec.europa.eu/news/moldova-joins-life-programme-environment-and-climate-2022-11-28_en

⁴³ <https://albasat.md/en/environmental-projects-in-moldova-will-be-financed-by-eu/>

⁴⁴ <https://www.eu4environment.org/where-we-work/republic-of-moldova/>

⁴⁵ <https://www.eu4environment.org/app/uploads/2022/11/Press-release-EU4Environment-supports-Moldova-path-to-resource-efficiency-circular-economy.pdf>

⁴⁶ <https://www.eu4environment.org/news/sustainable-lifestyle-campaign-in-the-republic-of-moldova/>

⁴⁷ <https://www.eu4environment.org/news/towards-economic-and-environmental-performance-with-eco-industrial-park-pre-feasibility-assessment-in-moldova/>

⁴⁸ <https://eu4waterdata.eu/en/>

⁴⁹ <https://euneighbourseast.eu/news/latest-news/moldova-european-union-and-undp-to-support-16-civil-society-development-projects-on-both-banks-of-nistru-river/>

from the **EIB**⁵⁰ (20 M€) and a EBRD loan agreement amounting to 25 M€.⁵¹ It is the first large-scale undertaking in the solid waste management sector in Moldova involving multiple Waste Management Zones (Ungheni, Nisporeni and Călărași). It will finance critical infrastructure as well as purchase of waste collection and transfer assets, such as containers and collection vehicles, as well as the construction of solid waste disposal and treatment infrastructure, such as landfills and material sorting and treatment facilities.

- **UNDP** (2018-2023), 2.8 MUS\$: **Moldova Sustainable Green Cities**⁵². beneficiaries: Chișinău City Hall⁵³, Ungheni and Bălți municipalities, Sîngerei District Council. The objective of the project is to catalyse investments in low carbon green urban development based on integrated urban planning approach by encouraging innovation, participatory planning and partnerships between a variety of public and private sector entities. One of the results is a fully operational Green City Lab (GCL).
- **UNEP** (2018-2020), 0.2 MUS\$: **Improving sustainable institutional and regulatory framework for chemicals and waste management** throughout their lifecycle in the Republic of Moldova⁵⁴. The project aims to improve the sustainable institutional and regulatory framework for sound management of chemicals and waste throughout their lifecycle in Moldova. This will be achieved by reinforcing and strengthening the national chemicals and waste coordination mechanism as well as promoting the adoption and enforcement of the waste and chemicals secondary legislation.
- **UNECE**: **3rd Environmental Performance Review** of the Republic of Moldova (while a 4th such review will start to be developed at the end of 2023); and a much less relevant, because outdated Evaluation of the implementation of the Environmental Strategy for the period 2014-2023 and development of a draft environmental strategy⁵⁵.
- **OECD**: **Promoting Clean Urban Public Transportation and Green Investment in Moldova: Setting the scene for a green public investment programme**⁵⁶.

3.4 List of applicable *Union acquis*/standards/norms

Environmental governance and integration of environment⁵⁷ into other policy areas

- Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information.
- Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.

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- Commission Directive (EU) 2015/1480 of 28 August 2015 amending several annexes to Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council laying down the rules concerning reference methods, data validation and location of sampling points for the assessment of ambient air quality

⁵⁰ <https://euneighbourseast.eu/news/latest-news/ebird-lends-e25-million-to-moldova-to-finance-critical-solid-waste-management-infrastructure/>

⁵¹ <https://www.ebrd.com/work-with-us/project-finance/project-summary-documents.html?l=1&filterCountry=Moldova>

⁵² <https://www.undp.org/moldova/projects/moldova-sustainable-green-cities>

⁵³ <https://www.ebrdgreencities.com/news-events-and-publications/chisinau-landfill-revamp-financed-by-ebird-eib-eu-its-members-moldova-and-norway/>

⁵⁴ <https://www.unep.org/ru/node/22051>

⁵⁵ <https://unece.org/environment-policy/environmental-performance-reviews/unda-project-1819ae-republic-moldova>

⁵⁶ <https://www.oecd-ilibrary.org/sites/b4b68030-en/index.html?itemId=/content/component/b4b68030-en>

⁵⁷ While the EAI and SEA Directives are also contained in the Annex XI of the AA and certainly have relevance as a general context for this Twinning, they are not listed here because it is not a specific task within this Twinning to transpose and implement these two directives.

- Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (here, the major effort of implementation is achieved by the Moldovan Act on Air).
- Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.
- Council Directive 1999/32/EC of 26 April 1999 relating to a reduction of sulphur content of certain liquid fuels.
- Council Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations as amended by Regulation (EC) No 1882/2003.
- Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products.
- Directive 2016/2284 on the reduction of national emissions of certain atmospheric pollutants.
A revision for a more ambitious Ambient Air Quality Directive was proposed in 2022 to set interim 2030 EU air quality standards, aligned more closely with WHO recommendations, to achieve EU zero pollution for air at the latest by 2050, in synergy with climate-neutrality efforts.

Waste and Resource Management

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste (here, the major effort of implementation is achieved by the Moldovan Act on Waste).
- Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste as amended by Regulation (EC) No 1882/2003.
- Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries.

Industrial pollution and industrial hazards

- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (here, the major effort of implementation is achieved by the Moldovan Act on Industrial emissions).
- Council Directive 96/82/EC of 9 December 1996 on the control of major accident hazards involving dangerous substances as amended by Directive 2003/105/EC and Regulation (EC) No 1882/2003.

Chemicals

- Regulation (EC) No 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals (here, the major effort of implementation is achieved by the Moldovan Act on Chemicals).
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
- Regulation (EC) No 1907/2006 of the European Parliament and the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency.

Additionally:

- Directive 94/62/EC of 20 December 1994 on packaging and packaging waste;
- Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) (notably referring only to dangerous chemicals in its Annex XVI sub-heading) and
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment;
- Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators;
- Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT);

and:

- Regulation (EC) No 1013/2006 on shipments of wastes (which converts the so-called Basel Convention into EU law) should be mentioned (Moldova has transposed the Basel Convention);
- EU Commission Decision¹⁵ of 3 May 2000, establishing a list of wastes and a list of hazardous waste is also not part of the AA. Notably that EU Waste List has been adopted by Moldova through GD No. 99 of 30.01.2018.

3.5 Components and results per component

Mandatory Result 1 / Component 1: Air quality management, control and enforcement strengthened

Results to be achieved under component 1 include strengthening the legal and regulatory framework and strengthening institutional capacities for implementation, monitoring and control (enforcement). Twinning support shall be provided to development of the **National Air Pollution Monitoring and Control Programme** and the **National Integrated Air Quality Monitoring and Management System** (RNMCA, in its Romanian-language abbreviation).

Sub-result 1.1 National legal and regulatory framework on ambient air quality, industrial emissions, pollution prevention and control aligned with EU acquis and good practices

An initial rapid gap-analysis shall define the latest developments in the transposition of the EU acquis⁵⁸, identify needs and establish a work plan for support in the drafting of legal texts (primary and secondary legislation, by-laws, ordinances), guidelines, handbooks and procedures, in close cooperation with the Ministry of Environment and other stakeholders, as appropriate. This includes the following normative acts (not exhaustive) to be developed with support from the Twinning:

- Regulation on the monitoring and management of atmospheric air quality (Law no. 98/2022, Art. 5 (2)).
- Regulation regarding the procedure of requesting and issuing the integrated environmental authorization, the environmental authorization and the registration of enterprises, according to Law no. 227/2022 Art. 12, paragraph (3) on industrial emissions.
- The Law No. 1540/1998 on Payment for Environmental Pollution is planned to be revised or repealed and a new law on environmental taxation drafted. The drafting processes (legal text) as well as the regulatory impact assessment should be supported with Twinning expertise.

Key deliverables (indicative):

- *Gap-analysis of National legislation versus EU acquis for ambient air quality, national emission reduction commitments and industrial emissions with Road map and Action plan prepared*
- *legal texts drafted with expert support*

Sub-result 1.2 (Re)design of the National air quality measurement network

Based on the existing network and design studies⁵⁹ (e.g with GIZ⁶⁰ support), the Twinning will conceptualize the new monitoring network, defining types of measurement stations, criteria for

⁵⁸ detailed analysis of Law No. 98/2022 transposing Directive 2008/50/EC 'Ambient air quality and cleaner air for Europe'; Moldova's Industrial Emissions Law No. 227/2022⁵⁸ Directive 2010/75/EC, Seveso Directive 2012/18/EC and the EIA Directive 2014/52/EC; Moldova's Seveso Law No. 108/2020 on the control of major accident hazards involving dangerous substances' transposing Seveso III Directive 2012/18/EC; as well as other air related directives.

⁵⁹ Strategy for the implementation of EU compliant ambient air quality monitoring and management in Moldova (doc file), GIZ, authored by U. Zimmermann, 2017. Available at the European Delegation in Moldova.

⁶⁰ In German language: Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, in English: German Agency for International Cooperation GmbH

location/siting of sampling points, parameters and frequency of measurement of air quality in relation to air pollutants.

The identification and delimitation of the territory of the Republic of Moldova into air quality assessment and management zones and agglomerations is to be carried out with the Environment Agency (EA) based on the preliminary assessment of atmospheric air quality (and modelling studies) and on the basis of a methodology to be established in accordance with the Regulation on creating the national system of monitoring and integrated management of atmospheric air quality. The Twinning project will support the EA in this classification into zones, management regimes, minimum number of air quality sampling points determined for each pollutants, as well as location of measuring points in each zone etc. by providing suitable methodologies and models.

Clear implementing procedures shall be defined, considering precise internal links between tasks and competences of all involved institutions.

A financial investment plan shall be developed as well as precise requirements for the measurement equipment to be used must be formulated for procurement under a separate investment project (specifications for purchasing needed RNMCA stations). Compatibility and integration of these stations into one National measuring network must be ensured.

Key deliverables (indicative):

- *National air quality measurement network design/outline*
- *Detailed technical specifications for purchasing needed RNMCA⁶¹ stations*

Sub-result 1.3 Air quality management and air pollution reduction strengthened

Expertise shall be provided in drafting of the National Air pollution monitoring and control programme (Law no. 98/2022, Art. 8 d): the Twinning will support the preparation of the report on the reference situation, definition of air quality goals and emissions reductions targets, using emissions inventories, air monitoring data, air quality modelling and other assessment tools.

More specifically, support the EA for carrying out the national inventory of atmospheric pollutant emissions to the UNECE Air Convention and in line with the EU NEC Directive, the National Register of Emissions and Transfer of Pollutants (RETP, in English PRTR), the Report on the quality of atmospheric air at the Moldovan national level, and for developing the national inventory of air pollutants together with its institutional framework.

Develop pollution monitoring (incl. development of a methodology for forecasting/modelling emission and atmospheric air quality), control and enforcement strategies and provide guidance regarding the issuance of the integrated environmental authorization, the environmental authorization and the registration of activities. For controlling industrial emissions, the procedures to verify compliance with environmental permits and measures required in the event of exceeding specific limits must be elaborated, incl. when information or alert thresholds are exceeded.

Based on the analysis of the legal and regulatory framework (sub-result 1.1) and concrete capacity building needs and demand articulated by the Twinning beneficiary institutions, a relevant training program/ “skills agenda”, shall be developed for staff in monitoring, assessment, evaluation, modelling of air data (quality, emissions, contamination remediation, damage etc.), calculation of environmental damage in cases of air pollution. Topics can include the application of BAT, zero-pollution innovation, creating level playing field conditions, improving public access to information, the decision on the issuance of the integrated environmental permit and the environmental permit, including addressing the relevant flagships and actions from the EU Action Plan: “Towards a Zero Pollution for Air, Water and Soil”⁶².

⁶¹ National Integrated Air Quality Monitoring and Management System

⁶² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0400&qid=1623311742827>

Moreover, practical on-site trainings for Environment Agency and Environmental Protection Inspectorate staff shall be conducted on methodologies in monitoring, how to collect, interpret and integrate data needed for annual reporting and in view of improving control of installations. Moreover, trainings on methodologies to define pollution from other sources, as pesticides in air, ammonia, precursor of fine particles emission related to agriculture (animal feeding practices, manure management, use of fertilizers etc.) shall be conducted.

Air quality plans: Establishment of *guidelines* containing a Methodology for drawing up air quality plans and air quality maintenance plans (Law no. 98/2022, Art. 8 e), especially for establishing local or regional air quality plans for zones and agglomerations where levels of pollutants exceed limit values or target values. These guidelines also include measures for short-term action plans (Art. 24) on a local level created by the local authorities.

Control and enforcement: Experts shall analyse and refine Moldova's risk assessment methodology for inspection planning (2018 Government Decision on the Approval of the Methodology for State Control of Entrepreneurial Activity Based on Risk Analysis in Areas within the Competence of the Inspectorate for Environmental Protection) as well as inspection procedures/guidelines for integrated inspections and integrated permit checks (Law on State Control of Entrepreneurship Activities, Law on Industrial Emissions). A number of joint inspections with Twinning experts/EU national Authorities inspectors shall be envisaged as a learning exercise.

Information and reporting: experts shall support the establishment of a regular data collection and reporting framework through electronic and other means, including to establish responsibilities, define institutions and procedures, data collection and processing procedures, quality insurance, as well as reporting formats (by objective and target audience).

Tools to be developed with support of the Twinning should include interactive maps, GIS portals with the location of air quality monitoring stations and real-time data on pollution levels throughout the country for the public as well as in view of future reporting to the European Environmental Agency for the European Air quality index (AQI) (in cooperation with Twinning Component 3).

The public authorities for environmental protection shall ensure the information of the public. Within this Twinning, methodology and guidelines shall be elaborated enabling the beneficiary to do so. If a gradual approach for the development of the data/reporting system is proposed (requiring additional procurements or services (e.g. IT)), a roadmap must describe respective phases/sequences, critical deliverables, additional needs and indicative timeframes.

Key deliverables (indicative):

- *RNMCA assessment regime*
- *National Air pollution monitoring and control programme*
- *Guidance note on issuance of the integrated environmental authorization, the environmental authorization and the registration of activities*
- *Methodology for forecasting/modelling emission and atmospheric air quality developed*
- *Methodology for drawing up air quality plans and air quality maintenance plans*
- *Data collection and reporting framework internal procedures and protocols*
- *joint inspections conducted*
- *National air quality report published / reporting template elaborated*

Sub-result 1.4 Environmental Reference Laboratory for air quality strengthened, aligned with International and European standards and accreditation

Trinwing support to the Environmental Reference laboratory for air quality shall focus on its preparation for enlarging its scope of accreditation of methods based on ISO 17025: review the methods of analysis, data accuracy and quality control, checking the reliability of the sampling and analysis methods used, harmonisation and standardisation of measurement techniques.

Examine existing capacities and outline requirements to fully implement requirements aligning to EU standards (Action plan with short, medium and longer term measures).

Elaborate a concept design for the national quality assurance and quality control (QA/QC) programme for air pollution measurements, defining roles and responsibilities of involved institutions as well as information flows, data interpretation and reporting. Elaborate a quality management handbook, requirements for documents and records, and definition of internal procedures (through internal orders and protocols). Review existing inspection procedures and checklists.

Analyse existing financing mechanism of the National Reference Laboratory regarding its independence and sustainability in the short- and long-term periods and formulate recommendations for its development.

Jointly with EI and laboratory, conduct training on risk assessment and sampling procedures, as well as training on in situ measurements.

Key deliverables (indicative):

- *'Inspection report' for ISO/IEC 17020 and ISO 17025 Conformity assessments⁶³ (simulation)*
- *Capacity development Action plan and training programme*
- *National quality assurance and quality control (QA/QC) programme and handbook*
- *Trainings on sample collection, laboratory analysis, data assessment*
- *Enlarged scope of accreditation*

Sub-result 1.5 Intersectoral and multi-stakeholder cooperation enhanced

Intersectoral and multistakeholder action is crucial for the successful development and implementation of air quality policies, including achievement of the goals and targets. The Twinning shall support the adoption of a 'whole-of-government approach' with attribution of clear responsibilities for air quality shared among government institutions and foster collaboration across sectors (public health, energy, agriculture etc.).

A concept for MoE, EA, EI in support of business entities shall be elaborated and organization of meetings/workshops supported for awareness rising of the business representatives with particular focus on issues regarding application of the industrial emissions law and respective emission standards/ limits (integrated environmental permit, environmental authorization/ BAT / self-monitoring, etc.).

Actions shall include sharing of good practises, experience exchange and study visits of decision makers (including EA and EI) as well as information and awareness-raising activities for business sector and civil society organizations. Study visits on implementation of the Industrial emission provisions and Seveso Law shall include concrete practice for EA and EI as well as enterprises (i.e., the economic actors) in fields as cement manufacturing, metallurgy, glass manufacturing, brick manufacturing, paint production etc., in order to familiarize with the best BATs, with the authorization procedure, with checking and reporting emissions, among others.

Key deliverables (indicative):

- *Concept paper for MoE, EA, EI action in support of business entities*
- *information and awareness rising events (public institutions, civil society, private/business sector)*

⁶³ The **ISO 17020** standard addresses factors such as impartiality, consistency, and the technical competence of inspection bodies. On the other hand, **ISO 17025** is a standard used by testing and calibration laboratories to demonstrate that they operate a quality system, are technically competent, and are capable of producing technically valid results.

- *study visits, sharing of good practises, experience exchange events (days) for MoE, EA, EI staff members*

Mandatory Result 2 / Component 2: Integrated environmental data system improved

Component 2 focusses on support of the Ministry of environment in creating and operationalizing an integrated system for environmental data with a ‘one-entry point’ for environmental data analysis and reporting to meet future reporting obligations arising from EU accession. This includes strengthening the Environmental monitoring system, ensuring provision of timely and the high quality information that supports strategic environmental policy planning and compliance control and improved public access to environmental information. This component will be closely coordinated with the EU4Environment Water and Data programme 2021-24 and subsequent relevant regional programmes in formulation.

Sub-result 2.1 Analysis of existing data sets related to the environment conducted

Twinning experts should undertake a comparative analysis of Moldovan data clusters⁶⁴ in compliance with EU Directives⁶⁵, EUROSTAT rules (including its Environmental indicators data set⁶⁶, and using its methodological recommendations⁶⁷; the Sustainable Development Goals SDGs⁶⁸, and Ecosystem Accounts) and rules pertaining to the European Environment Agency (EEA) in Copenhagen and respective reporting obligations.

For the areas of this Twinning (mainly air quality, air emissions; then circular economy / waste, and to the extent possible, chemicals), create a procedure defining how the existing data sets in Moldova can be merged into a Moldovan integrated environmental data system which is in line with EU requirements. Also, identify inconsistencies and which data sets are still missing. Create a structured list of those data and quality requirements that at present are not yet fulfilled and add a responsible institution and a procedure for improvement. Overall, emphasis will be placed on data quality, including how data are recorded, processed, tracked and confirmed, and on their availability for the public.

Key deliverables (indicative): Comparative analysis of Moldovan data sets on environment respective requirements and future reporting obligations arising from EU accession

Sub-result 2.2 Conceptualising a Moldovan integrated environmental data system - concept of integration of environmental data developed

Create a priority list (with justification of a phased approach and for the data excluded, if exceeding the Twinning scope and period of implementation) containing which environmental data sets are to be merged into an integrated environmental data system. Define a time schedule for realistic implementation with all involved institutions within the beneficiary country, considering available resources and investments needs (if applicable). Clarify responsibilities, based on existing Moldovan legislation. Propose required changes in the legal and regulatory framework, if required. Identify investment and capacity building needs (financial and human resources) for the full operationalization and functioning of the system.

Key deliverables (indicative): Concept and roadmap for development of the Moldovan Integrated environmental data system

⁶⁴ Environmental data sets can be found on: <http://date.gov.md>, <https://moldova-map.md/#/>, <https://www.am.gov.md/ro/content/indicatori-de-mediu>, <http://statistica.md>, and Natural Resources Datasets on <https://am.gov.md/ro/content/monitorijgul-resurselor-naturale>

⁶⁵ including the INSPIRE Directive 2007/2/EC, transposed by Law No. 254/2016 on the national spatial data infrastructure at https://www.legis.md/cautare/getResults?doc_id=130329&lang=ro, moreover the Aarhus Convention (1999) and the PRTR Protocol

⁶⁶ <https://ec.europa.eu/eurostat/web/environment/environmental-indicator-catalogue>

⁶⁷ <https://ec.europa.eu/eurostat/web/environment/methodology>

⁶⁸ <https://ec.europa.eu/eurostat/web/sdi/database>

Sub-result 2.3 Environmental data and information data sets and reporting framework created

Design environmental data according to the priority list into the integrated environmental data system, and link to real data sources. Implement rules for regular updates. Design the path how the data will be filled into annual reporting schemes and into the practically needed portals for physical retrieval (including by public).

Scan Moldovan by-laws and air-related legislation in order to deduce concrete specifics of data for air, waste, chemicals, product related sets, among others, define responsible institutions, and create a sample data set for the most recent year. Include data on metallurgical plants and on large (and medium) combustion plants on the entirety of the territory of the Republic of Moldova.

Key deliverables (indicative): Data specifics and sample data set

Sub-result 2.4 Technical implementation improved – linking data systems with ongoing administrative procedures

Examination of the possibility of transposing European practices of digitization, management and evaluation of environmental data to the Republic of Moldova⁶⁹. Usage for the regular procedures of application and issuance of environmental permits, monitoring and control of their implementation, reporting on the self-monitoring process carried out according to the environmental permit acts, the record of the permit acts and the environmental monitoring system – of a common environmental information system through which the monitoring programs of all environmental components are carried out, environmental data and information are regularly collected, cleaned, evaluated, validated and generalised.

Key deliverables (indicative): Draft Internal procedures for functioning of the Integrated environmental data system

Mandatory Result 3 / Component 3: Circular Economy – waste management systems strengthened

Twinning actions under result number 3 aim at the creation of an integrated waste management system, that contributes to reduction in the amount of landfilled waste and increase in recycling rates. Specific expert support shall be coordinated with other EU and development partner initiatives as the regional programme ‘EU4Green Recovery East’.

Sub-result 3.1 Waste management gap-analysis of legal and regulatory framework conducted

Legal analysis of the current level of fulfilment of Moldova’s legal framework (including Moldova’s framework Law on Waste No. 209/2016⁷⁰ as amended 2022) regarding the EU acquis (esp. WFD (2008/98/EC)⁷¹), and create a work plan for performing remaining tasks, keeping in mind that waste management should be converted into the circularity paradigm:

Verify completeness, including designation of competent authorities, preparation of waste management plans in line with the five-step waste hierarchy and of waste prevention

⁶⁹ one of many possible for examples is the Estonian practice of implementing integrated environmental information systems (the "Eagle" monitoring system, an information system that organizes the entire decision-making process in the environmental compliance activity.

⁷⁰ https://www.legis.md/cautare/getResults?doc_id=130544&lang=ro

⁷¹ Including but not limited to: Directive 94/62/EC of 20 December 1994 on packaging and packaging waste; Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) (notably referring only to dangerous chemicals in its AA Annex XVI sub-heading); Directive 2011/65/EU on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment; Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators; Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)

programmes⁷². Ensure that the Waste Law does not limit itself to rather declaratory provisions but goes beyond a waste policy document and is clear and normative, including practical applicability and enforcement through secondary legislation. Perform a legal analysis to ensure the alignment of Moldova's legal framework with EU Acquis, identify gaps in transposition and necessary amendments. Throughout the sub-results of component 3, the Twinning shall support the development the material for enforcement (based on concepts developed under component 3) and methods for informing and sensitizing the public.

Key deliverables (indicative): Gap-analysis of legal and regulatory framework and roadmap/action plan for its improvement

Sub-result 3.2 Permitting system for undertakings carrying out disposal or recovery operations established, with specific obligations for hazardous wastes management

Ensure that the permitting procedures work in practice in full clarity (who does what when how), including for hazardous waste management. Ensure that the rules are precise enough to work well in daily practice. Also ensure the suitable relationship (and the legal link) to the Integrated Permit (IE Directive).

Key deliverables (indicative): Critical review of permit system ('legal and practise') for waste disposal or recovery operations and recommendations for improvement

Sub-result 3.3 Assessment of the register of waste collection and transport establishments and undertakings for establishments or undertakings conducted

Critical analysis of the operability/functioning of the register of waste collection and transport establishments (incl. registration in the Automated Waste Management Information System), both for collection and transport of waste, including transport of dangerous goods. Ensure the legal prerequisites as well as monitoring and enforcement mechanisms are in place so that the register is operational (accurateness, completeness, quality etc.).

Key deliverables (indicative): Assessment of the register of waste collection and transport establishments, including recommendations for improvement (based on good/best practises).

Sub-result 3.4 Extended Producer Responsibility (EPR) strengthened

Support the practical implication of all needed regulation and procedures to implement EPR, according to concrete needs expressed by Moldovan beneficiaries at the time of the Twinning, given recent progress. Analyse what EPR schemes already have their legal background, relate to EU Acquis, and work well in practice. Define what are shortages and the room for improvement and what is the potential of application EPR schemes for various waste streams (incl. collective system of packaging of hazardous chemical by-products (PUPs etc.)). Assess the capacities of institutions regarding EPR schemes and circular economy interlinks; identify room for improvement of collaboration between institutions. Focus on the weakest points that need improvement. For the EI include the development of methodologies, guidelines, inventories for monitoring, enforcement and control of implementation of EPR mechanisms (and authorities), including the development of methodologies and guidelines for business entities on implementation of EPR schemes.

Establishment of cost recovery mechanism in line with the **polluter pays** principle. Ensure that costs issues are tackled by the Waste Law in these provisions in clear and normative (and not only descriptive) manner and be related to the waste owner and waste holder obligations. Support the definition of rules how the payments are calculated as a part of the program for waste management (named "the platforms").

Key deliverables (indicative):

⁷² GD No. 248 from 10-04-2013 on the approval of the Waste Management Strategy for the years 2013-2027: https://serviciilocale.md/public/files/deseuri/2013_01_24_NATIONAL_WASTE_MANAGEMENT_STRATEGY_2013-27_ENG.pdf; to be updated based on the AA

- *Concept for implementation of the Extended Producer Responsibility schemes for various waste streams*
- *methodologies, guidelines, inventories for monitoring, enforcement and control of implementation of EPR mechanisms*
- *Mechanism for payments and cost recovery (calculations, formulas) in line with the polluter pays principle*

Sub-result 3.5 Circular economy strengthened - waste planning and recycling

Analyse the recycling capacities of the country ("**recycling map**"), as well as status and needs of secondary materials market. Assess the instruments and means (especially strategic and programming documents) relevant for the circular economy and waste prevention. Assess standards, guidance, and practices how waste management interlinks with production from secondary materials. Evaluate the potential of secondary material market in Moldova and the preparedness of institutions to manage and promote it. Include a short SWOT analysis of the recycling situation in Moldova.

The Twinning shall also analyse waste management plans, their focus on circularity, implementation of the “waste hierarchy”, and to what extent they will enhance a circular economy in Moldova. Concrete reformulations and adaptations of national and regional plans shall be provided to inform future (national, regional, local) plan formulation in Moldova.

Include guidelines on how to start a **market for used materials**, suggest implementation procedures and division of mandates, in cooperation also with the Ministry of Economy responsible for goods placed in the market (electronic waste, packaging, used tyres oils, accumulators and batteries should be looked at during the Twinning).

Foster Moldova’s participation in EU-level and regional meetings and expert panels on circular economy.

Key deliverables (indicative): Concept note/guidelines on development of a market for used materials

Sub-result 3.6 Environmental inspection activities regarding waste reinforced

Based among others on an earlier gap analysis for enforcement⁷³, develop methodologies, internal procedures and protocols for inspectors (‘real-life’ practice) considering the following:

Damage calculation: Development of methodologies to implement (taking into account recent EU practice⁷⁴) for calculating the damage caused to the environment as a result of the unauthorized storage of waste, the pollution of land resources and water resources with hazardous waste and chemical substances and their implementation in practice. Access to programs for evaluating the damage caused to the environment in case of industrial accidents, fires of chemical substance warehouses.

Products at customs: Exchange of experience (good practises) in establishing real mechanisms for verification by the Customs Service of products entering the country (REP products, PUF, detergents, fertilizers) in accordance with national legislation: methods to check the traceability of waste in the case of import, transit of products, including establishing the end of waste status.

Key deliverables (indicative):

- *Internal procedures and protocols for inspections and control actions*
- *simulations of ‘in-situ’ inspections (practical trainings)*

⁷³ The Environmental Compliance Assurance System in the Republic of Moldova: Current Situation and Recommendations. EU4Environment (2022), 58 pages, see <https://www.eu4environment.org/app/uploads/2022/03/Environmental-compliance-assurance-system-in-the-Republic-of-Moldova.pdf>

⁷⁴ Still, the computation of formulae might be handled differently in different EU member states. It can be helpful to compare to what already exists in the sector of air.

- *trainings, experience sharing events and exchange visits*

Sub-result 3.7 Awareness raising and environmental education promoted

Support the design and implementation of a sensitization campaign and capacity building measures for public institutions, economic actors, civil society. Identify possible partnerships and funding opportunities for design of information material on separate collection, consumption habits etc.. Inform on the ‘EU Action plan for circular economy’.

Key deliverables (indicative): Information material and events

A Study visit (including EA and EI, Local authorities, economic operators) for exchange of experiences and good practises shall be organized by the Twinging to enhance familiarity with concepts developed under component 3. These could include aspects regarding the practical application of the selective collection of municipal waste, the development of centralized services for the collection and transportation of municipal waste, the normative disposal of waste, circularity in hazardous waste-related best practices, control activities (incl. at customs), among others. The detailed proposal of the study visit shall be presented in the Steering Committee for approval.

Mandatory Result 4 / Component 4: Environmentally sound management of chemicals strengthened

Twinning activities under this component shall support strengthening the legal and regulatory framework as well as institutional and staff capacities for the sound management of chemicals, including dangerous substances.

Sub-result 4.1 Legal and regulatory framework gap-analysis conducted

First, generally analyse the relevant national legal framework in line with commitments under AA (including its needed updates), EU chemicals strategy, relevant MEAs, SDGs⁷⁵. Conduct an Analysis of institutional framework of the domestic capacities for chemicals management, including the designation of competent authorities, incl. the Chemicals Agency and its competences (where details of the CLP system might still need to be drafted and adopted). Formulate a road map to address the identified gaps.

Key deliverables (indicative):

- *Analysis of management and state control of chemicals (report)*
- *Road map and list of concrete actions,*
- *training actions*

Sub-result 4.2 Institution building – monitoring and control reinforced

Ensure the designation of competent authorities for enforcement and setting up the official system of monitoring and control, to ensure state control of chemicals (mainly through inspections), incl. with a view to placing products on the market, e.g., detergents, persistent organic pollutants etc.; storage, disposal. Revise regulation and application of penalties for infringements of national laws concerning chemicals.

An Automated Information System ‘Register of chemicals placed on the market of the Republic of Moldova’ was created under the auspices of the MoE. Verify how the (future) Chemicals Agency maintains the registry, based on a technical concept adopted by the GD No. 535 of

⁷⁵ with special attention to Implementing Regulation (EU) No 649/2012 concerning the export and import of hazardous chemical, Implementing Regulation 1272/2008 on the classification, labelling and packaging of substances and mixtures, Implementing Regulation 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

20.07.2020. Also, verify the adoption of national provisions concerning the information in the supply chain on chemical substances and mixtures and downstream user obligations, as well as the list of restrictions as specified in Annex XVII of REACH.

Decontamination: development methods of mapping lands contaminated with phytosanitary products as a result of the demolition of pesticide warehouses used in previous years in urban and rural localities, as working with specialised institutions and laboratories in order to investigate these lands and establish real decontamination proposals. Development of clear guidelines, procedures, instructions on how to perform controls and methods of inspections.

Conduct training sessions on subjects as identification of management of challenges of pharmaceutical products, to address microplastic pollution, persistent organic pollutants (POPs) in waste and harmful and persistent substances in products such as per- and polyfluoroalkyl substances (PFAS), endocrine disruptors, mercury-added products, including certain lamps, and other.

Key deliverables (indicative):

- *Analysis of management and state control of chemicals (report)*
- *Road map and list of concrete actions needed for full compliance with the EU Acquis.*
- *training actions*

Sub-result 4.3 Moldova's Seveso Law on the control of major accident hazards involving dangerous substances implementing framework created

Support to implementation of Moldova's Seveso Law⁷⁶ No. 108/2020 'on the control of major accident hazards involving dangerous substances' based on gap-analysis.

Develop all necessary by-laws (guidelines / methodologies) and prepare their approval. Ensure precise and effective coordination mechanisms between relevant authorities, verify notification requirements on relevant installations, reporting on major accidents and making relevant information publicly available. Specifically, formulate guidelines and training for EA who evaluates the Major Accident Prevention Policy and the Safety Report presented by the operators and issues the conclusions of the evaluation regarding content, procedures, creation and quality assessment.

Offer practical support, trainings and capacity building of the Environment Agency/EPI and operators of installations in implementation of the SEVESO Law related to industrial accidents which cause air, water and soil pollution (emergency response), identifications of hazardous materials and waste, elaboration of the notification, calculations of quantity of dangerous substances, plan of prevention of major accidents, security report, emergency plans, etc.

Key deliverables (indicative):

- *Road map and list of concrete actions needed for full compliance with the EU Acquis.*
- *draft legal acts*
- *training actions*

3.6 Means/input from the EU Member State Partner Administration(s)

The project will be implemented in the form of a Twinning contract between the Beneficiary Country and EU Member State(s). The implementation of the project requires one Project Leader (PL) with responsibility for the overall coordination of project activities and one Resident Twinning Adviser (RTA) to manage implementation of project activities, Component Leaders (CL) and pool of short-term experts to cover all areas included in the project description.

⁷⁶ https://www.legis.md/cautare/getResults?doc_id=133049&lang=ro#

Proposals submitted by Member State(s) shall be concise and focused on the strategy and methodology and an indicative timetable, the quality of the expertise to be mobilised to clearly show the administrative structure and capacity of the Member State entities. Proposals shall be detailed enough to respond adequately to the Twinning Fiche, but focus on key activities during the implementation of the project to ensure the achievement of overall and specific objectives and mandatory results/outputs. The set of proposed activities will be further developed with the Twinning partners when drafting the initial work plan and successive rolling work plans, keeping in mind that the final list of activities will be decided in cooperation with the Twinning partner.

The Twinning project will be implemented by close co-operation between the partners aiming to achieve the mandatory results in sustainable manner. Interaction between beneficiary institution's staff and the Twinning experts shall be based on 'expert-to-expert' cooperation through joint working sessions for review and elaboration of documents, and mentoring and backstopping focussing on 'on the job'-knowledge transfer rather than single short term expert missions and participation in trainings.

At least 2 study visits shall be organized, that cover a variety of Twinning themes, with a clear focus on practical application and real-world control activities, for exchange of good practices and experience in connection with implementation of air quality legislation (and the other themes including waste/circular economy) for the representatives of the institutions involved in the project from the beneficiary country. Traineeships or internships can be proposed.

It is important to note that this Twinning project extends not only on transposition (of legal texts) but is focused on *implementation* (i.e., real-life practice) and enforcement.

The interested Member State(s) shall include in their proposal the CVs of the designated Project Leader (PL) and the Resident Twinning Advisor (RTA), as well as the CVs of the potentially designated Component Leaders (CLs).

3.6.1 Profile and tasks of the PL:

Project Leader Profile:

- Master degree in a relevant field (environment, environmental technology etc.) or equivalent professional experience of 8 years in the absence of the required degree;
- At least 3 years of professional experience as high-ranking official in the environmental sector of an EU member state administration;
- Previous experience in project management;
- Professional work experience in EU accession countries, the western Balkans or neighbourhood east is an asset.
- Good communication skills in written and spoken English (minimum C1 level);
- Proven contractual relation to a public administration or mandated body, as defined under Twinning Manual 4.1.3.

The Member State Project Leader (MS PL) should be a high-ranking public servant within the Member State administration. The Project Leader's seniority will ensure his/her ability to call on short term experts in support of the efficient implementation. The Project Leader should attend the Steering Committee meetings with at least a quarterly visit in the Beneficiary Country.

The Project Leader is responsible to coordinate the activities, disseminate project information among all stakeholders, take part in discussions with high level officials, present and defend project input and expected outputs, manage the project team, prepare project management reports, help overcome project related problems, and assist the RTA for continuous development of project initiatives. In addition, he/she will coordinate, from the MS side, the Project Steering Committee (PSC), which will meet in Moldova every three months. He/she will involve other relevant entities, taking into account on-going horizontal public administration reform efforts and sectorial activities that could have an impact on the project, and bear – together with the Beneficiary Country Project Leader – the final responsibility for an efficient and effective implementation of the Twinning project.

Project Leader Tasks:

- Overall coordination, guidance and monitoring of the project in cooperation with BC Project Leader;
- Timely achievement of the project results;
- Monitoring and evaluating the needs and priorities in the respective sector, project risks, progress against the project budget, benchmarks and outputs, and taking any necessary remedial actions if needed;
- Co-chairing of project Steering Committees;
- Project reporting;
- Provision of legal and technical advice and analysis whenever needed.

3.6.2 Profile and tasks of the RTA:

The Resident Twinning Advisor (RTA) will be based in the Republic of Moldova to provide full-time input and advice to the project for the entire duration of the project. This expert will be the main liaison partner for the Beneficiary, will bear the responsibility to coordinate in the field and on a day-to-day basis all the activities planned in the Twinning. The RTA will be responsible for the selection and supervision of the RTA Assistant and the management of the short-term experts' input. S/he will brief, guide and support the STEs seconded to the project and participants of study visits. S/he will provide continued guidance and support in the organisation of workshops and roundtable discussions. The RTA can come from a Member State administration or mandated bodies (full or ad hoc).

RTA Profile:

- University degree in a relevant field (environment, environmental technology, natural resource management etc.) or at least eight years of working experience in the environmental sector related to the implementation of the *Union acquis* and/or policy objectives and mandatory results/outputs agreed by the EU and the Beneficiary administration(s) defined in the Twinning Fiche;
- At least 3 years of general professional experience in environmental sector;
- Experience in project management; in the environmental sector will be an asset;
- Excellent communication skills in written and spoken English (minimum C1 level).
- Excellent analytical and communication skills (verbally and written/report writing skills).
- Cultural and interpersonal sensitivity in working with diverse stakeholders and interest groups.
- Computer literacy.
- Knowledge of Romanian or Russian language is an asset;
- Proven contractual relation to a public administration or mandated body, as defined under Twinning Manual 4.1.6.

RTA Tasks:

- Coordination of all Twinning project activities and experts' inputs in the country;
- Ensuring smooth correlation between the activities, deadlines and the envisaged results in the Work Plan;
- Provision of technical advice and assistance to the administration or other public sector bodies in the BC in the context of a predetermined work-plan to ensure timely completion of project outputs;
- Guiding and coordinating assistants to the RTA;
- Coordination, facilitation and monitoring of the STEs work during their missions (organize briefings and debriefings, sharing of mission report and recommendations);
- Document and knowledge management allowing an appropriate record of the delivered outputs;
- Liaison with MS, BC Project Leaders, EU Delegation Sector/Programme manager; daily contact with the RTA counterpart;
- Monitor and follow-up on implementation of expert mission findings;
- Drafting of project progress reports with the Project Leader;
- Ensure visibility of EU support provided through the Twinning and establish the communication strategy.

The RTA shall be supported by a full-time project assistant and by a full-time language assistant, therefore in sum by two full-time assistants. Both RTA assistants will cooperate on organisational matter under the direction of the RTA and will be recruited and funded by the project. The RTA assistants will provide logistical and administrative support, technical translation and interpretation services for the RTA to facilitate the implementation of the Twinning project activities and assist in the preparation of working documents, organisation of seminars, training and study tours. The profile of the RTA assistants will be specified by the RTA who will proceed to their recruitment following the provisions of the Twinning Manual.

3.6.3 Profile and tasks of Component Leaders:

For each of the four mandatory results, the Member State(s) will identify and assign a Component Leader with appropriate skills and knowledge. Considering that the project will benefit multiple institutions and cover different areas of activities, it will be crucial to have skilled and autonomous Component Leaders. These Component Leaders will ensure continuity

and consistency within each of the fields concerned as well as monitoring progress and the implementation of recommendations. While Component Leaders will not be resident in Chişinău, they are expected to visit Chişinău and work locally with the beneficiary institutions at least 3 times per working year. CV's and proposed activities of each Component Leader shall be an integral part of the MS proposal. The detailed expert input shall be established when drawing up the Twinning Work Plan. The Component Leaders of each Mandatory Result will work in close collaboration with the RTA. They will report to the RTA and Project Leader and cooperate with their counterparts and other beneficiaries at the PSC meetings. The main task of the Component Leaders is to coordinate the activities under the area of responsibility in liaison with the partner institutions.

The Components Leaders shall comply with the following minimum requirements:

- Be a civil servant or a staff member in a Member State public administration or mandated body responsible for the environmental sector
- University degree in a field relevant to this assignment or equivalent professional experience of 8 years in the absence of the required degree;
- At least 3 years of experience specifically in the field covered by the project component for which the Component leader will be responsible;
- Excellent communication skills in written and spoken English (minimum C1 level).
- Excellent analytical and communication skills (verbally and written/report writing skills).
- Cultural and interpersonal sensitivity in working with diverse stakeholders and interest groups.
- Computer literacy.
- Moldova Country experience is an asset;
- Knowledge of Romanian or Russian language is an asset;

3.6.4 Profile and tasks of other short-term experts:

The project will require a number of short-term experts (STE) in order to cover the full range of specialised expertise required, providing the necessary skills and experience according to the expected results mentioned above.

STE profiles (general experience):

- University degree in a field relevant to this assignment or equivalent professional experience of 8 years in the absence of the required degree;
- At least 3 years of specific experience in the specific field of expertise;
- Experience in knowledge transfer and/or training of employees of supervisory and/or regulatory bodies in EU Member State;
- Excellent communication skills in written and spoken English (minimum C1 level).
- Excellent analytical and communication skills (verbally and written/report writing skills).
- Cultural and interpersonal sensitivity in working with diverse stakeholders and interest groups.
- Computer literacy.
- Moldova Country experience is an asset;
- Knowledge of Romanian or Russian language is an asset;

STE Tasks:

- To provide technical inputs in specific areas of project implementation in order to achieve mandatory results listed in the Twinning fiche, including organisation of workshops, training, coaching, drafting of methodological and relevant handout materials, as per the terms of reference provided by the RTA prior to each mission;
- To cooperate closely with all beneficiaries' experts in undertaking all activities;
- Advance preparation and familiarisation with relevant documentation;
- To report to the project team.

4. Budget

The project will be implemented through a Twinning Contract estimated at a maximum of EUR 2,000,000.

5. Implementation Arrangements

5.1 Implementing Agency responsible for tendering, contracting and accounting (European Union Delegation):

The European Union Delegation to Moldova (EUD) will be responsible for operational management, payments and financial reporting, and will work in close cooperation with the Beneficiary.

Contact person - **Mrs Natalia Burciu**

Contact person for Twinning
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5.2 Institutional framework

The Ministry of Environment (MoE) is the leading beneficiary institution, specifically the Department of Policy analysis, monitoring and evaluation (*Direcția analiză, monitorizare și evaluare a politicilor*).

Other main beneficiaries are:

- The Environment Agency (EA): responsible for environmental monitoring, implementation, and authorisation.
- Environment Protection Inspectorate (EI): responsible for the environmental implementation, control and enforcement.

Other key stakeholders are:

- The Ministry of Infrastructure and Regional Development
- Ministry of Economic development and digitalization
- Ministry of Health
- Ministry of agriculture and food industry
- Local public authorities
- Civil Society organizations and business community (economic operators, sector associations, service providers etc.) active in the thematic areas covered by the Twinning.

5.3 Counterparts in the Beneficiary administration:

The Project leader (PLs), Resident Twinning advisor (RTA) and Component leader (CL) counterparts will be staff of the Beneficiary administration(s) and will be actively involved in the management and coordination of the project.

5.3.1 Contact person:

Olesea Tarlev, Head of monitoring the external assistance and public sector debt administration Division, Public Sector Debt and External Assistance General Directorate, Ministry of Finance of the Republic of Moldova
Chişinău mun., 7 Constantin Tănase street, MD-2005

5.3.2 PL counterpart

Ms. Aliona Rusnac, State Secretary,
Ministry of the Environment of the Republic of Moldova
162, blvd. Stefan cel Mare si Sfânt, office 1213
Chisinau, Republic of Moldova

5.3.3 RTA counterpart

For Component 1:
Andrei Cucos, Principal consultant,
Air Policy and Climate Change Directorate (DPASC)
Ministry of the Environment of the Republic of Moldova
162, blvd. Stefan cel Mare si Sfânt, office 1213
Chisinau, Republic of Moldova

For components 2,3,4 :
Mr. Mihai Rusu, Principal consultant,
Policy Service in the Field of Circular Economy and Economic Instruments,
Ministry of the Environment of the Republic of Moldova
162, blvd. Stefan cel Mare si Sfânt, office 1213
Chisinau, Republic of Moldova

6. Duration of the project

The overall execution period of the Twinning project is 33 months, i.e., 30 months of implementation plus 3 months.

7. Management and reporting

7.1 Language

The official language of the project is the one used as contract language under the instrument (English). All formal communications regarding the project, including interim and final reports, shall be produced in the language of the contract.

7.2 Project Steering Committee

A project steering committee (PSC) shall oversee the implementation of the project. The main duties of the PSC include verification of the progress and achievements via-à-vis the mandatory results/outputs chain (from mandatory results/outputs per component to impact), ensuring good coordination among the actors, finalising the interim reports and discuss the updated work plan. Other details concerning the establishment and functioning of the PSC are described in the Twinning Manual.

7.3 Reporting

All reports shall have a narrative section and a financial section. They shall include as a minimum the information detailed in section 5.5.2 (interim reports) and 5.5.3 (final report) of the Twinning Manual. Reports need to go beyond activities and inputs. Two types of reports are foreseen in the framework of Twinning: interim quarterly reports and final report. An interim quarterly report shall be presented for discussion at each meeting of the PSC. The narrative part shall primarily take stock of the progress and achievements *via-à-vis* the mandatory results and provide precise recommendations and corrective measures to be decided by in order to ensure the further progress.

8. Sustainability

With the Twinning, the delivery of the long-term benefits from acquiring additional expert knowledge and skills, strengthening administrative capacities, improving regulatory framework and harmonising legislation with the EU shall be ensured – alongside ongoing reforms.

Expert recommendations must be reviewed according to their feasibility in the context of Moldova, its legal and regulatory framework, political will, institutional and other stakeholder capacities. Joint monitoring of project progress and achievement of results will be conducted, fostering the commitment and leadership by the beneficiary administration.

The project approach will focus on supporting beneficiaries by providing them with tools and approach to analysis and by facilitating the development of policy options instead of offering solutions and delivering final outputs. Acquired expertise and skills of the staff and increased capability will be continued to be used for further alignment with European standards and best international practice after Project end. The development and practical use of these skills during the Project will also ensure sustainability in the future operations of the beneficiaries.

Finally, it is anticipated that the Project will serve as a significant opportunity to further develop existing partnerships with EU institutions having in mind that Project aiming at harmonisation of the legislation with the Union *acquis*.

9. Crosscutting issues (*equal opportunity, environment, climate etc...*)

Each Twinning partner is required to comply with the equal-opportunities requirements of the European Union. The principal of equal opportunity will be integrated into all stages of the project implementation. The activities envisaged under the present Project should not negatively affect the environment. During the implementation of the Project, the production of printed material will be kept to the strictest minimum, single use plastics avoided and digital means used as possible.

10. Conditionality and sequencing

The project includes the following conditionality elements:

- Appointment of the beneficiary administration counterparts by Twinning components and sub-results and time allocation to actively involve in activities, trainings and follow-up of recommendations.
- Formulation of a coordination mechanism, collaboration and complementarity with other development partners interventions, with ongoing or future EU funded projects, including the High Level Advisory Mission.

11. Indicators for performance measurement

Specific objective of the project is to increase the pace of approximation and implementation of the *acquis communautaire* in the fields of air quality, environmental information, circular economy/waste management and sustainable management of chemicals. Therefore, key performance indicator will be the progress reported in the Enlargement progress report chapter 27 ‘environment’ as per improved level of preparedness, including the number of legal acts, regulations and administrative procedures formulated / revised with EU support.

Overall, Twinning performance measurement will be based on the quality and timeliness of expert inputs (reports, mappings, training manuals, presentations etc.) provided as well as beneficiary satisfaction with the collaboration in response to the expressed needs for human resource and institutional capacity development.

Result:		Indicator:
1	Air quality management, control and enforcement strengthened	<ul style="list-style-type: none"> - Increased alignment of National legislation with EU acquis for ambient air quality and industrial emissions - # Number of legal texts drafted with expert support - National Integrated Air Quality Monitoring and Management System operational: <ul style="list-style-type: none"> - Air quality data availability, quality and public accessibility increased - More effective inspection (improved risk assessment, sampling, inspection) - Increased number and timeliness of control and enforcement actions; - Readiness of the air quality reference laboratory for ISO/IEC 17020 and ISO 17025 accreditation improved / no. of findings addressed - Training, event, study tour reports and participants satisfaction and progress evaluations
2	Integrated environmental data system improved	<ul style="list-style-type: none"> - Quality, timeliness and public accessibility of environmental reports on environmental indicators;
3	Circular Economy – waste management systems strengthened	<ul style="list-style-type: none"> - More detailed and quality permits; - More effective inspection (improved risk assessment, sampling, inspection); - Updated / more complete registers of establishments; - Increased number and timeliness of control and enforcement actions;
4	Environmentally sound management of chemicals strengthened	<ul style="list-style-type: none"> - # of legal acts drafted with EU support % of Road map implementation / # number of concrete actions implemented

Annex 1 Logical framework includes a more detailed overview of project specific targets and indicators for performance measurement, complementing the mandatory results and sub-results enumerated in Chapter 3.5.

12. Facilities available

Office space will be at the MoE for the RTA and the two assistants as well as for (on an average) two short-term experts. These offices will be equipped with all necessary equipment (computer, printer, internet access). Trainings and presentations will take place in conference rooms provided by the beneficiary, equipped with projector and computer for presentations, flipcharts and stationary items. STEs may also work with involved beneficiary experts in their offices and will be provided with the necessary equipment (computer, internet access, specific software).

ANNEXES TO PROJECT FICHE

Annex 1: The Simplified Logical Framework Matrix

Annex 1: Simplified Logical Framework Matrix

Twinning air quality and environment					
	Description	Indicators (with relevant baseline and target data)	Sources of verification	Risks	Assumptions (external to project)
Overall Objective	The overall objective is the sustainable development and protection of the environment for present and future generations by strengthen the capacity of the Republic of Moldova to fulfil environment-related commitments, in line with the EU-Republic of Moldova Association Agreement, the EU Integration process and international agreements.	Reduction of pollutants emissions; Air quality improvement; Increased waste reduction and recovery rates; Emissions of polluting substances into air from stationary sources of economic entities, in thousands of tones: 17.5 (2021) Air pollutant emissions from mobile sources, in thousands of tones: 193,4 (2021) Generation/recovery of waste, in tonnes: 415 768,9 / 247 803,0 (2021)	National Bureau of statistics annual edition of ‘Resursele Naturale si mediul’ ¹		
Specific (Project) Objective(s)	The specific objective of this Twinning project is to increase the pace of approximation and implementation of the <i>acquis communautaire</i> in the fields of air quality, environmental information, circular economy/waste management and	Level of compliance with the EU Acquis increased: - Number of legal acts, number of regulations and administrative procedures formulated / revised with EU support - Enlargement progress report chapter 27 environment: progress/ improved level of preparedness	Enlargement progress reports; Official journal and tables of compliance for legal acts	Unclear mandates and responsibilities among involved entities causes delays in counterpart mobilization and engagement as well as preparation and follow-up of activities	Continuation of Moldova’s path of cooperation with the EU. Environmental protection and sustainable management of resources continues a Government priority and vested interests do

¹ https://statistica.gov.md/ro/resursele-naturale-si-mediul-in-republica-moldova-editiile-2010-2021-9688_59475.html

	sustainable management of chemicals.				not hamper reform processes Involved Moldovan institutions have sufficient staff and cooperate with each other Smooth and effective cooperation between all parties involved in the project
Mandatory results/outputs by components	Mandatory Result 1 / Component 1: Air quality² management, control and enforcement strengthened	<ul style="list-style-type: none"> - Increased alignment of National legislation with EU acquis for ambient air quality and industrial emissions - # Number of legal texts drafted with expert support - National Integrated Air Quality Monitoring and Management System operational: <ul style="list-style-type: none"> - Air quality data availability, quality and public accessibility increased - More effective inspection (improved risk assessment, sampling, inspection) - Increased number and timeliness of control and enforcement actions; 	<p>Annual air quality reports, Annual sampling and control plans, Laboratory Internal audit reports, Centrul National de acreditare (MOLDAC) reports</p> <p>Project documents and publications, e.g.:</p> <ul style="list-style-type: none"> - Methodology for forecasting/modelling emission and atmospheric air quality; - Methodology for drawing up air quality plans and air quality maintenance plans; - Data collection and reporting framework internal procedures and protocols; 	Unclear responsibilities, conflicting staff assignments (high overall workload), lack of sufficient information cause delays in effective preparation of activities/ STEs inputs	Required investments into air quality measurement stations and laboratory are made; Human resources at the MoE, EA, AI and Reference laboratory are stable / reinforced to actively engage in Twinning activities and assimilate provided expertise

² Environmental strategy 2014-23 and Action plan for implementation, objective ‘Creation of an integrated air quality management system, reduction of pollutants emissions and greenhouse gases’

		<ul style="list-style-type: none"> - Readiness of the air quality reference laboratory for ISO/IEC 17020 and ISO 17025 accreditation improved / no. of findings addressed - Training, event, study tour reports and participants satisfaction and progress evaluations 	<ul style="list-style-type: none"> - ‘Inspection report’ for ISO/IEC 17020 and ISO 17025 Conformity assessments of the Air quality laboratory (‘simulation’ and follow up); - Training, event, study tour reports and participants satisfaction and progress evaluations 		
Sub-results per component (optional and indicative)	Sub-result 1.1 National legal and regulatory framework on ambient air quality, industrial emissions, pollution prevention and control aligned with EU acquis and good practises	<ul style="list-style-type: none"> - Gap-analysis of National legislation versus EU acquis for ambient air quality and industrial emissions with Road map and Action plan prepared # Number of legal texts drafted with expert support - Full readiness of the draft secondary legislation necessary for implementing Law no. 98/2022 and Law no. 227/2022. 	legal texts, administrative procedures, checklists; Project documents and publications		
	Sub-result 1.2 (Re)design of the National air quality measurement network	<ul style="list-style-type: none"> - RNMCA assessment regime – document 	Project documents		
	Sub-result 1.3 Air quality management and air pollution reduction strengthened	<ul style="list-style-type: none"> - National Air Pollution Monitoring and Control Programme formulated - Methodology for forecasting/modelling emission and atmospheric air quality; - Methodology for drawing up air quality plans and air quality maintenance plans; 	Project documents		

		<ul style="list-style-type: none"> - Data collection and reporting framework internal procedures and protocols; - - National air quality report published 			
	Sub-result 1.4 Environmental Reference Laboratory for air quality strengthened, aligned with International and European standards and accreditation	<ul style="list-style-type: none"> - ISO/IEC 17020 and ISO 17025 Conformity assessments of the Air quality laboratory ('simulation' and follow up); - Number of joint inspections 	Project documents, Inspections/simulation reports		
	Sub-result 1.5 Intersectoral and multi-stakeholder cooperation enhanced	<ul style="list-style-type: none"> - Intersectoral coordination mechanism defined and structures established - Increased knowledge and awareness of air quality legal framework, compliance and control measures: # number of joint inspections conducted, events, participants (by type and gender), level of achievement of learning objectives 	Project documents		
Mandatory results/outputs by components	Mandatory Result 2 / Component 2: Integrated environmental data system improved	<ul style="list-style-type: none"> - Quality, timeliness and public accessibility of environmental reports on environmental indicators; 	Publication of environmental reports	Unclear responsibilities, conflicting staff assignments (high overall workload), lack of sufficient information cause delays in effective preparation of activities/ STEs inputs; Technical/IT solutions are required that exceed available	Intra-Governmental Cooperation regarding data access and exchange

				budget/ financial and human resources;	
Sub-results per component (optional and indicative)	Sub-result 2.1 Analysis of existing data sets related to the environment conducted	- Comparative analysis of Moldovan data sets on environment respective requirements and future reporting obligations arising from EU accession	Project document		
	Sub-result 2.2 Conceptualising a Moldovan integrated environmental data system - development of the <u>concept</u> of integration of environmental data developed	- Concept and roadmap for development of the Moldovan Integrated environmental data system	Project document		
	Sub-result 2.3 Environmental data and information data sets and reporting framework created	- Data specifics defined and sample data set created.	Project document		
	Sub-result 2.4 Technical implementation improved – linking data systems with ongoing administrative procedures	- Internal procedures for functioning of the Integrated environmental data system defined	Internal procedure guide, checklists		
Mandatory results/outputs by components	Mandatory Result 3 / Component 3: Circular Economy – waste management systems strengthened	- More detailed and quality permits; - More effective inspection (improved risk assessment, sampling, inspection); - Updated / more complete registers of establishments;	Project documents	Institutional capacities insufficient to extend or develop new activities / strengthen control and enforcement	Complementary public and private investments are made in infrastructure, equipment and services; Willingness of public and private sector

		- Increased number and timeliness of control and enforcement actions;			representatives to cooperate
Sub-results per component (optional and indicative)	Sub-result 3.1 Waste management gap-analysis of legal and regulatory framework conducted	- Gap-analysis of legal and regulatory framework and roadmap/action plan for its improvement	Project document		
	Sub-result 3.2 <u>Permitting system</u> for undertakings carrying out <u>disposal or recovery operations</u> established, with specific obligations for hazardous wastes management	- Critical review of permit system ('legal and practise') for waste disposal or recovery operations and recommendations for improvement	Project document		
	3.3 Assessment of the register of waste collection and transport establishments and undertakings for establishments or undertakings conducted	- Assessment of the register of waste collection and transport establishments, including recommendations for improvement (based on good/best practises).	Project document		
	3.4 Extended Producer Responsibility (EPR) strengthened	- Concept for implementation of the Extended Producer Responsibility schemes for various waste streams # number of methodologies, guidelines, inventories for monitoring, enforcement and control of implementation of EPR mechanisms - Mechanism for payments and cost recovery (calculations, formulas) in line with the polluter pays principle	Project documents		

	3.5 Circular economy strengthened - waste planning and recycling	- Concept note/guidelines on development of a market for used materials	Project document		
	Sub-result 3.6 Environmental inspection activities regarding waste reinforced	- Internal procedures and protocols for inspections and control actions formulated # number of simulations of 'in-situ' inspections conducted (practical trainings) # number of trainings, experience sharing events and exchange visits (in days;hours)	Project documents, Training, event, study tour reports and participants satisfaction and progress evaluations		
	Sub-result 3.7 Awareness raising and environmental education promoted	- Information material produced and events organized (# number of persons reached)	Publications, Event agendas and participant lists		
Mandatory results/outputs by components	Mandatory Result 4 / Component 4: Environmentally sound management of chemicals strengthened	- # of legal acts drafted with EU support % of Road map implementation / # number of concrete actions implemented	legal texts, administrative procedures, checklists; Training, event, study tour reports and participants satisfaction and progress evaluations	Unclear responsibilities, conflicting staff assignments (high overall workload), lack of sufficient information cause delays in effective preparation of activities/ STEs inputs;	Intra-Governmental Cooperation regarding data access and exchange; Willingness to engage in Public-private dialogue
Sub-results per component (optional and indicative)	Sub-result 4.1 Legal and regulatory framework gap-analysis conducted	- Gap-analysis of legal and regulatory framework and roadmap/action plan for its improvement	Project documents		

	Sub-result 4.2 Institution building – monitoring and control reinforced	<ul style="list-style-type: none"> - Analysis of management and state control of chemicals (report) - Road map and list of concrete actions # number of training actions and participants	Project documents Training, event, study tour reports and participants satisfaction and progress evaluations		
	Sub-result 4.3 Moldova's Seveso Law on the control of major accident hazards involving dangerous substances implementing framework created	<ul style="list-style-type: none"> - Road map and list of concrete actions # number of training actions and participants	Project documents Training, event, study tour reports and participants satisfaction and progress evaluations		